

**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. NAB1906042331
GPS: Latitude 33.665939 Longitude -103.545737
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 a produced water release at the Haley Water Facility (Haley). This incident was assigned Incident ID NAB1906042331, by the New Mexico Oil Conservation Division (NMOCD).

Site Information and Site Characterization

The Haley Water Facility is located approximately eleven (11) miles northwest of Milnesand, NM. This spill site is in Unit H, Section 34, Township 07S, Range 33E, Latitude 33.665939 Longitude -103.545737, 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 222 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

NAB1906042331: On February 13, 2019, it was discovered that a pump malfunction had occurred releasing 50 bbls of produced water. A vacuum truck was called and was able to recover 30 bbls of standing fluid.

Site Assessment

On February 3, 2024, Pima mobilized personnel to perform a site assessment and collect soil samples. Grab soil samples were collected around the impacted area utilizing a hand auger. 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 NAB1906042331								
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
S1	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	ND
	3'	ND	ND	ND	ND	ND	0	ND
	4'	ND	ND	ND	25.8	ND	25.8	ND
S2	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	0	ND
	3'	ND	ND	ND	ND	ND	0	ND
	4'	ND	ND	ND	ND	ND	0	ND
S3	1'	ND	ND	ND	59.9	90.2	150.1	ND
	2'	ND	ND	ND	ND	ND	0	ND
	3'	ND	ND	ND	138	173	311	ND
	4'	ND	ND	ND	ND	ND	0	ND
S4	1'	ND	ND	ND	113	126	239	ND
	2'	ND	ND	ND	ND	ND	0	35.4
	3'	ND	ND	ND	ND	ND	0	ND
	4'	ND	ND	ND	ND	ND	0	ND
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
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 from S3 is based on a 200 square foot area at an average depth of 3' bgs, approximately 22 cubic yards.
3. The estimated volume of soil to be remediated from S4 is based on a 200 square foot area at an average depth of 1' bgs, approximately 7 cubic yards.
4. We propose to excavate the affected area using mechanical and hand equipment and dispose of the contaminated soil at an NMOCD-approved facility, a Site Map can be found in figure 4.
5. After Ridgeway submits a 48-hour notification, we will collect 5-point composite samples from the excavated areas. These sample points will be base samples from excavated areas, and sidewall samples from the walls of each excavations representative of no more than 200 square feet.
6. Upon final receipt of lab reports showing contamination levels are under the regulatory limits of Table 1 NMAC 19.15.29, the excavation will be backfilled with clean, like material, and a remediation closure report will be drafted and submitted to the NMOCD portal for review and approval.
7. 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
- 5- Proposed Excavation 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:

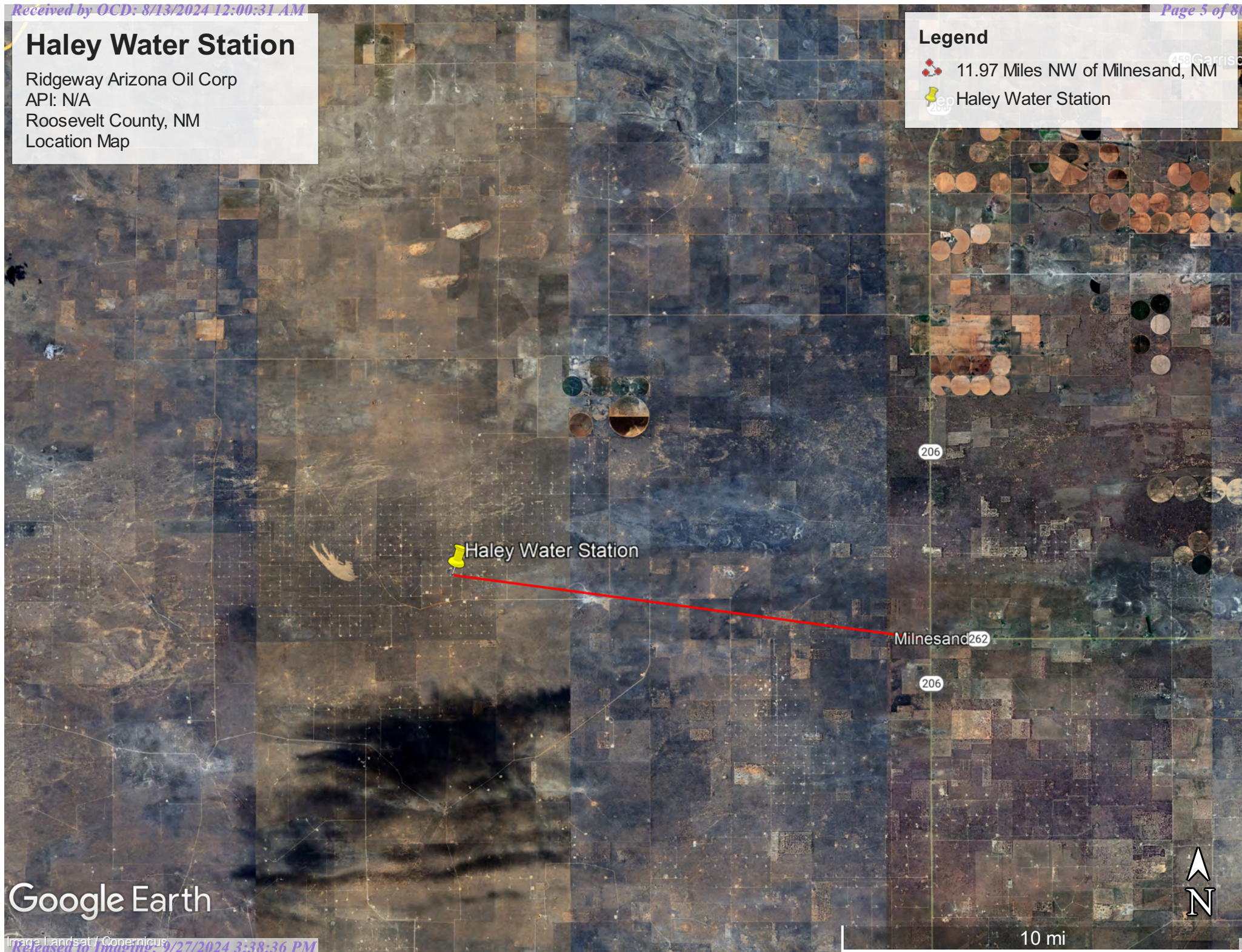
1. Location Map
2. Topographic Map
3. Karst Map
4. Site Map
5. Proposed Excavation Map

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




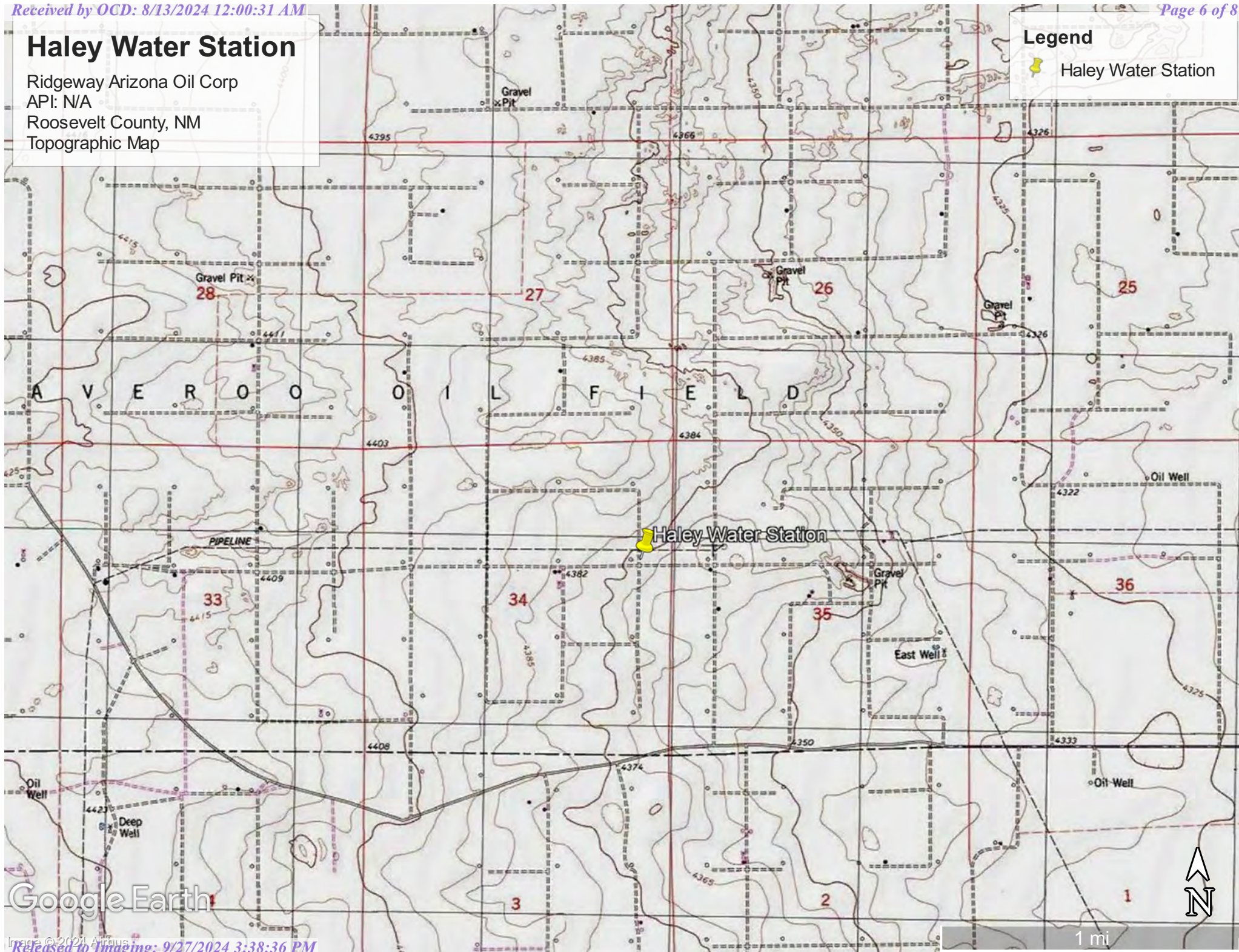
Google Earth

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

 Haley Water Facility





 Spill 2,661 SQ ft

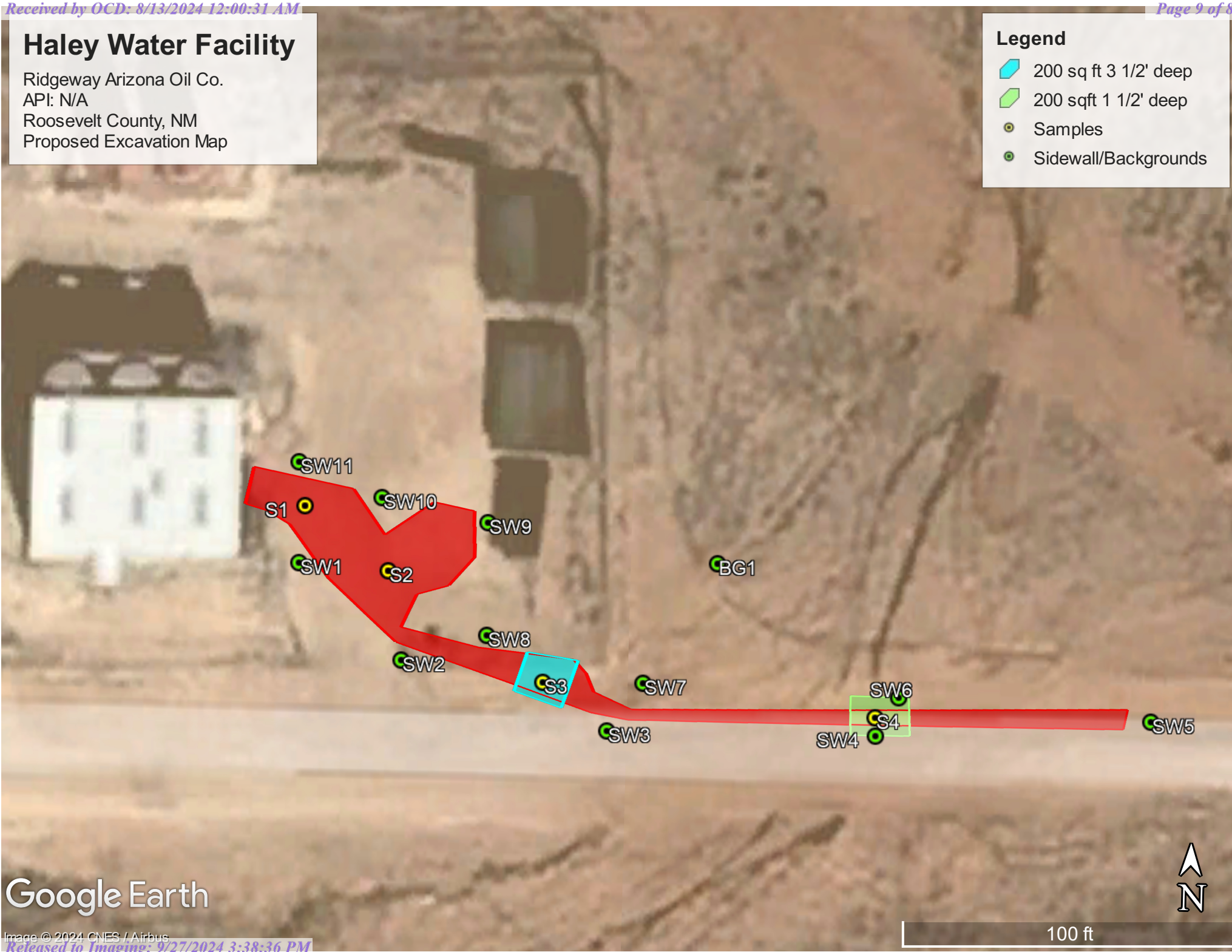


Haley Water Facility

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

Legend

-  200 sq ft 3 1/2' deep
-  200 sqft 1 1/2' deep
-  Samples
-  Sidewall/Backgrounds



Google Earth



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

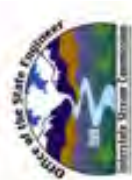
UTMNAD83 Radius Search (in meters):

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)

Well Tag

POD Number

L 13691 POD1

Q64

Q16

Q4

Sec

Tws

Rng

1

1

4

22

09S

32E

X

Y

637362

3725298

(NAD83 UTM in meters)

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 Rev 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



1 mi



[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 =

- 333942103313401

Minimum number of levels = 1

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

USGS 333942103313401 07S.33E.35.424143

Available data for this site

Groundwater: Field measurements

GO

Roosevelt County, New Mexico

Hydrologic Unit Code 12080001

Latitude 33°39'43", Longitude 103°31'42" NAD27

Land-surface elevation 4,337.00 feet above NGVD29

The depth of the well is 258 feet below land surface.

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

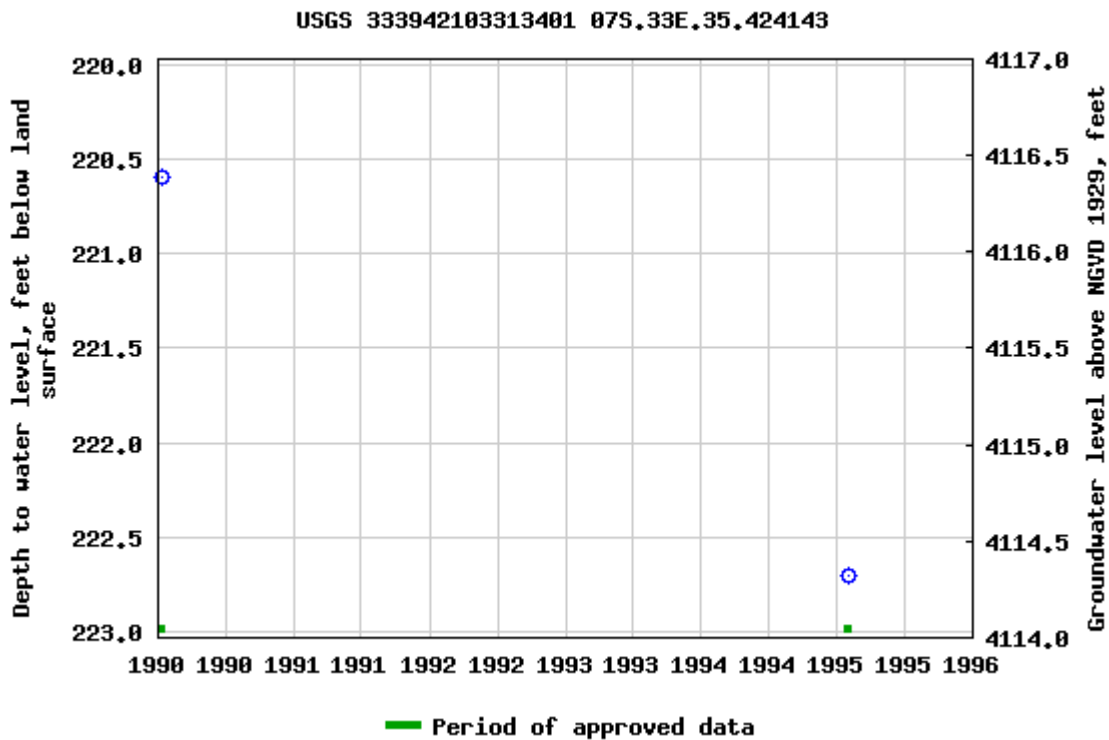
Output formats

[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: 2024-02-26 10:01:19 EST

0.64 0.58 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

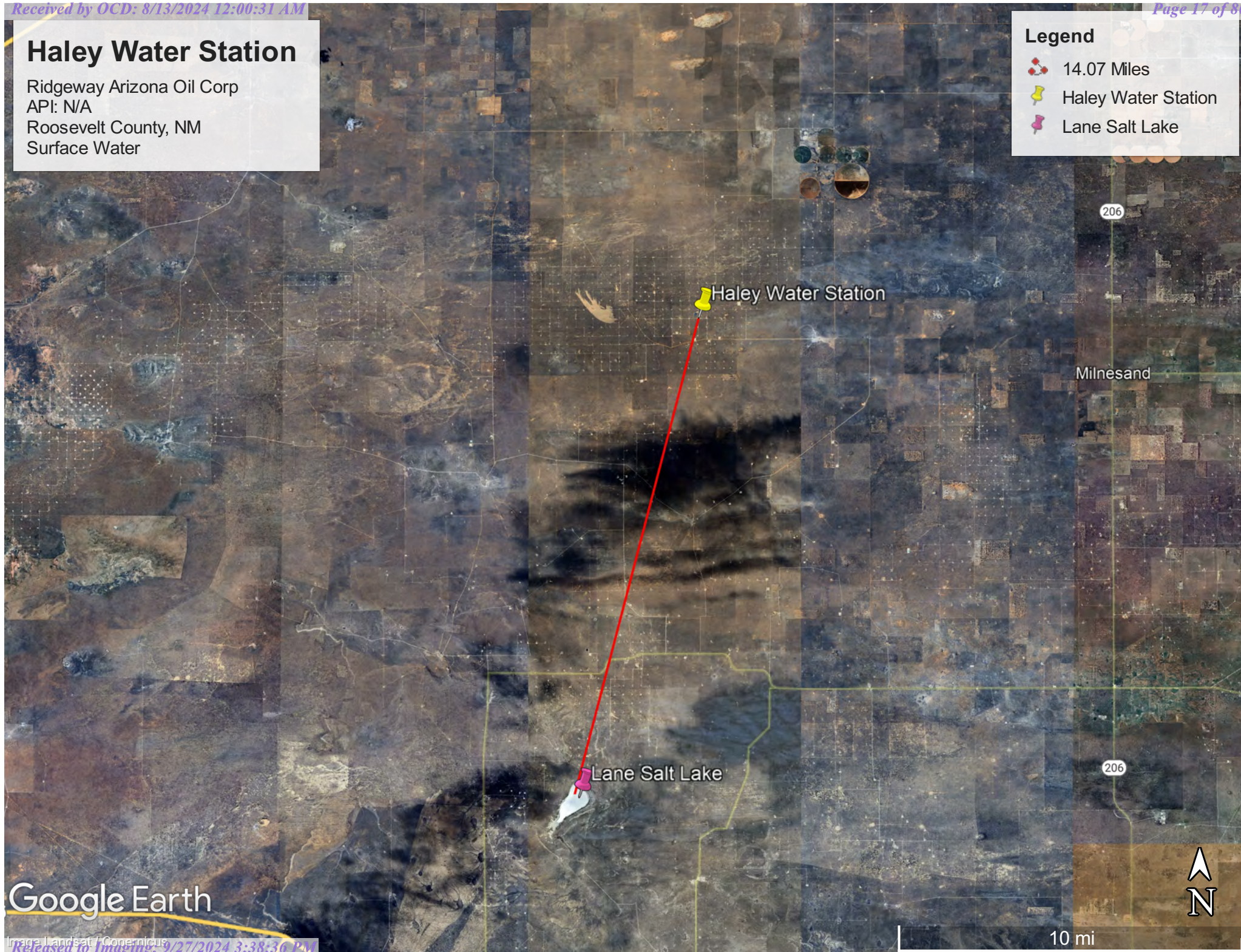


Haley Water Station

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

Legend

-  14.07 Miles
-  Haley Water Station
-  Lane Salt Lake



Google Earth



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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

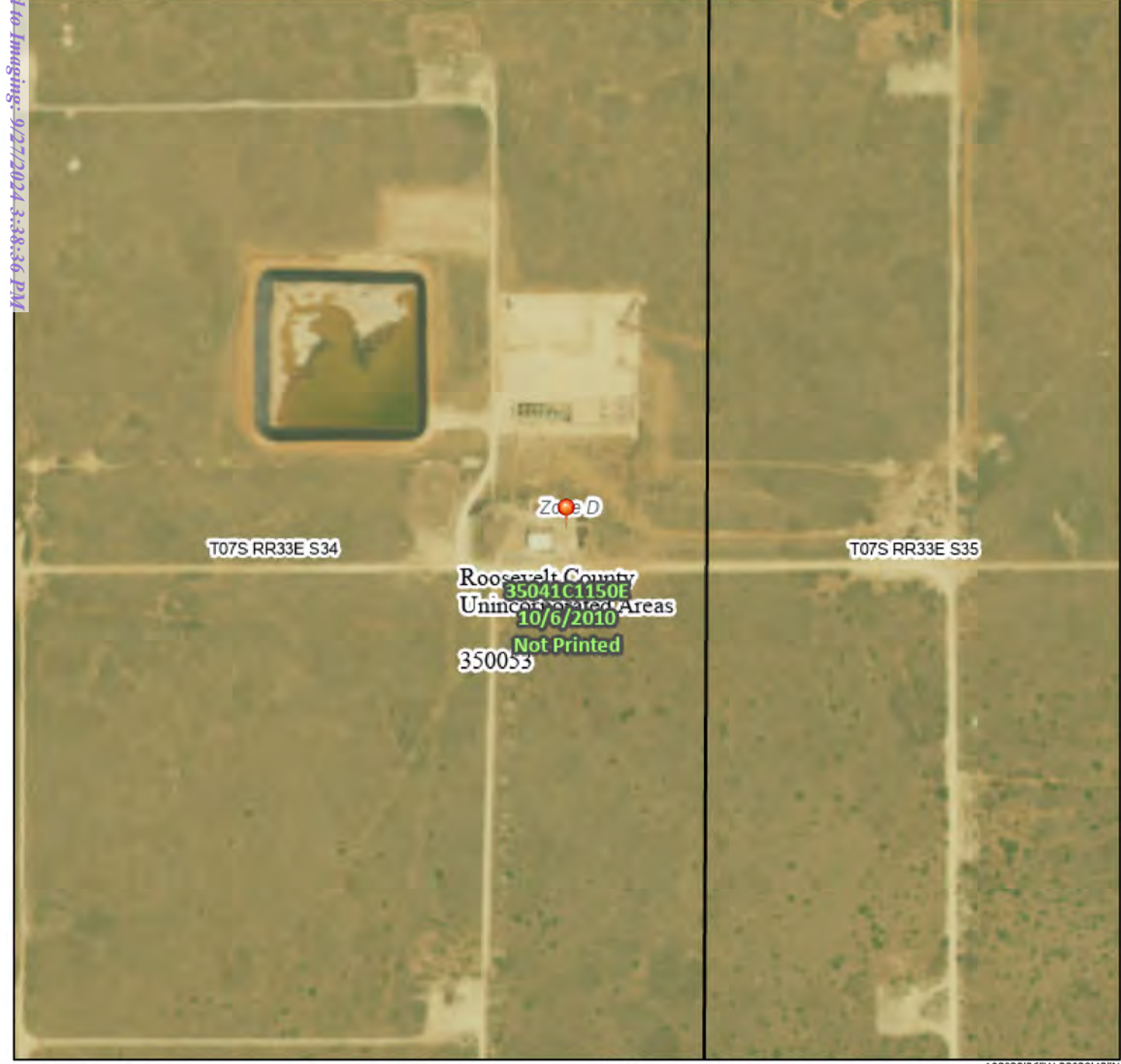
Data Source Information

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 X
		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.

Released to Imaging: 9/27/2024 3:38:36 PM







Received by OCD: 8/15/2024 12:00:31 AM

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





+33.666070,-103.545668
Roosevelt County
Ridgeway
HALEY CHAVEROO SA UNIT WATER
INJECTION FACILITY



+33.666070,-103.545668
Roosevelt County
Ridgeway
HALEY CHAVEROO SA UNIT WATER
INJECTION FACILITY



+33.666070,-103.545668
Roosevelt County
Ridgeway
HALEY CHAVEROO SA UNIT WATER
INJECTION FACILITY



+33.666070,-103.545668
Roosevelt County
Ridgeway
HALEY CHAVEROO SA UNIT WATER
INJECTION FACILITY





Pima Environmental Services

Appendix D

Laboratory Reports

Report to:
Tom Bynum



5796 U.S. Hwy 64
Farmington, NM 87401

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



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Haley Chavaroo SA Unit Water
Injection facility

Work Order: E402054

Job Number: 21064-0001

Received: 2/6/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/13/24

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: E402054
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
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Cell: 505-947-8222
mgonzales@envirotech-inc.com

Envirotech Web Address: www.envirotech-inc.com

Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
S1 - 2'	7
S1 - 3'	8
S1 - 4'	9
S2 - 1'	10
S2 - 2	11
S2-3'	12
S2-4'	13
S3-1'	14
S3-2'	15
S3-3'	16
S3-4'	17
S4-1'	18
S4-2'	19
S4-3'	20
S4-4'	21
SW1	22
SW2	23
SW3	24
SW4	25
SW5	26
SW6	27

Table of Contents (continued)

SW7	28
SW8	29
SW9	30
SW10	31
SW11	32
BG1	33
QC Summary Data	34
QC - Volatile Organic Compounds by EPA8260B	34
QC - Nonhalogenated Organics by EPA 8015D - GRO	36
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	38
QC - Anions by EPA 300.0/9056A	40
Definitions and Notes	42
Chain of Custody etc.	43

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 14:58

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1 - 1'	E402054-01A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S1 - 2'	E402054-02A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S1 - 3'	E402054-03A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S1 - 4'	E402054-04A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2 - 1'	E402054-05A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2 - 2	E402054-06A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2-3'	E402054-07A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S2-4'	E402054-08A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-1'	E402054-09A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-2'	E402054-10A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-3'	E402054-11A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S3-4'	E402054-12A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-1'	E402054-13A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-2'	E402054-14A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-3'	E402054-15A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
S4-4'	E402054-16A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW1	E402054-17A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW2	E402054-18A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW3	E402054-19A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW4	E402054-20A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW5	E402054-21A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW6	E402054-22A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW7	E402054-23A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW8	E402054-24A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW9	E402054-25A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW10	E402054-26A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
SW11	E402054-27A	Soil	02/03/24	02/06/24	Glass Jar, 2 oz.
BG1	E402054-28A	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 2:58:09PM

S1 - 1'

E402054-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	95.3 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene	108 %	70-130		02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4	98.9 %	70-130		02/06/24	02/07/24	
Surrogate: Toluene-d8	95.3 %	70-130		02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane	112 %	50-200		02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S1 - 2'

E402054-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		106 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		106 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S1 - 3'

E402054-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		112 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S1 - 4'

E402054-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.0 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		96.6 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.0 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	25.8	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		116 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S2 - 1'

E402054-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		111 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S2 - 2

E402054-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		96.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		96.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S2-3'

E402054-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		99.4 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		112 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S2-4'

E402054-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	ND	25.0	1	02/08/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/08/24	02/08/24	
Surrogate: n-Nonane		112 %	50-200	02/08/24	02/08/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S3-1'

E402054-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		99.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.6 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		99.3 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.6 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	59.9	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	90.2	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		111 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S3-2'

E402054-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		110 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		107 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM
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S3-3'

E402054-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		106 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
Diesel Range Organics (C10-C28)	138	50.0	2	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	173	100	2	02/08/24	02/09/24	
Surrogate: n-Nonane		113 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S3-4'

E402054-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.4 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.4 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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		116 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S4-1'

E402054-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.7 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
Diesel Range Organics (C10-C28)	113	25.0	1	02/08/24	02/09/24	
Oil Range Organics (C28-C36)	126	50.0	1	02/08/24	02/09/24	
Surrogate: n-Nonane		117 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S4-2'

E402054-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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		114 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	35.4	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S4-3'

E402054-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.1 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

S4-4'

E402054-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.3 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.3 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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		113 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

SW1

E402054-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.2 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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		113 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Haley Chavaroo SA Unit Water Injection facility	Reported: 2/13/2024 2:58:09PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

SW2

E402054-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.9 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406039	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		107 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.9 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2406078	
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		115 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2406057	
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

SW3

E402054-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		108 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		104 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		95.5 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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		112 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

SW4

E402054-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Benzene	ND	0.0250	1	02/06/24	02/07/24	
Ethylbenzene	ND	0.0250	1	02/06/24	02/07/24	
Toluene	ND	0.0250	1	02/06/24	02/07/24	
o-Xylene	ND	0.0250	1	02/06/24	02/07/24	
p,m-Xylene	ND	0.0500	1	02/06/24	02/07/24	
Total Xylenes	ND	0.0250	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406039
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/06/24	02/07/24	
Surrogate: Bromofluorobenzene		109 %	70-130	02/06/24	02/07/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	02/06/24	02/07/24	
Surrogate: Toluene-d8		94.8 %	70-130	02/06/24	02/07/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406078
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		114 %	50-200	02/08/24	02/09/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406057
Chloride	ND	20.0	1	02/06/24	02/07/24	



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 2:58:09PM

SW5

E402054-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.9 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		106 %	50-200	02/07/24	02/08/24	
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	



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 2:58:09PM

SW6

E402054-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.3 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.3 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		106 %	50-200	02/07/24	02/08/24	
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	



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 2:58:09PM

SW7

E402054-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		115 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		115 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		98.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		106 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		107 %	50-200	02/07/24	02/08/24	
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	



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 2:58:09PM

SW8

E402054-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		114 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		105 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		114 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		92.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		105 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		105 %	50-200	02/07/24	02/08/24	
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	



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 2:58:09PM

SW9

E402054-25

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		107 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		91.1 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		107 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		107 %	50-200	02/07/24	02/08/24	
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	



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 2:58:09PM

SW10

E402054-26

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		112 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		93.0 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		105 %	50-200	02/07/24	02/08/24	
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	



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 2:58:09PM

SW11

E402054-27

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.5 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		111 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		111 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		90.5 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		111 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		103 %	50-200	02/07/24	02/08/24	
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	



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 2:58:09PM

BG1

E402054-28

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Benzene	ND	0.0250	1	02/07/24	02/09/24	
Ethylbenzene	ND	0.0250	1	02/07/24	02/09/24	
Toluene	ND	0.0250	1	02/07/24	02/09/24	
o-Xylene	ND	0.0250	1	02/07/24	02/09/24	
p,m-Xylene	ND	0.0500	1	02/07/24	02/09/24	
Total Xylenes	ND	0.0250	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		113 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2406069
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/07/24	02/09/24	
Surrogate: Bromofluorobenzene		113 %	70-130	02/07/24	02/09/24	
Surrogate: 1,2-Dichloroethane-d4		95.2 %	70-130	02/07/24	02/09/24	
Surrogate: Toluene-d8		109 %	70-130	02/07/24	02/09/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2406073
Diesel Range Organics (C10-C28)	ND	25.0	1	02/07/24	02/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	02/07/24	02/08/24	
Surrogate: n-Nonane		108 %	50-200	02/07/24	02/08/24	
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 2:58:09PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

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

Blank (2406039-BLK1)Prepared: 02/06/24 Analyzed: 02/07/24

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: Bromofluorobenzene	0.540		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.475		0.500		94.9	70-130			

LCS (2406039-BS1)Prepared: 02/06/24 Analyzed: 02/07/24

Benzene	3.01	0.0250	2.50		120	70-130			
Ethylbenzene	2.57	0.0250	2.50		103	70-130			
Toluene	2.55	0.0250	2.50		102	70-130			
o-Xylene	2.52	0.0250	2.50		101	70-130			
p,m-Xylene	4.94	0.0500	5.00		98.8	70-130			
Total Xylenes	7.46	0.0250	7.50		99.5	70-130			
Surrogate: Bromofluorobenzene	0.519		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.472		0.500		94.4	70-130			

Matrix Spike (2406039-MS1)Source: E402054-06Prepared: 02/06/24 Analyzed: 02/07/24

Benzene	3.04	0.0250	2.50	ND	122	48-131			
Ethylbenzene	2.61	0.0250	2.50	ND	104	45-135			
Toluene	2.57	0.0250	2.50	ND	103	48-130			
o-Xylene	2.56	0.0250	2.50	ND	103	43-135			
p,m-Xylene	5.08	0.0500	5.00	ND	102	43-135			
Total Xylenes	7.65	0.0250	7.50	ND	102	43-135			
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500		102	70-130			
Surrogate: Toluene-d8	0.474		0.500		94.8	70-130			

Matrix Spike Dup (2406039-MSD1)Source: E402054-06Prepared: 02/06/24 Analyzed: 02/07/24

Benzene	3.09	0.0250	2.50	ND	124	48-131	1.48	23	
Ethylbenzene	2.68	0.0250	2.50	ND	107	45-135	2.42	27	
Toluene	2.66	0.0250	2.50	ND	107	48-130	3.42	24	
o-Xylene	2.68	0.0250	2.50	ND	107	43-135	4.31	27	
p,m-Xylene	5.27	0.0500	5.00	ND	105	43-135	3.62	27	
Total Xylenes	7.95	0.0250	7.50	ND	106	43-135	3.85	27	
Surrogate: Bromofluorobenzene	0.530		0.500		106	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.501		0.500		100	70-130			
Surrogate: Toluene-d8	0.481		0.500		96.1	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 2:58:09PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

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

Blank (2406069-BLK1)

Prepared: 02/07/24 Analyzed: 02/10/24

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: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.453		0.500		90.5	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2406069-BS1)

Prepared: 02/07/24 Analyzed: 02/10/24

Benzene	2.42	0.0250	2.50		96.7	70-130			
Ethylbenzene	2.58	0.0250	2.50		103	70-130			
Toluene	2.49	0.0250	2.50		99.6	70-130			
o-Xylene	2.61	0.0250	2.50		104	70-130			
p,m-Xylene	5.17	0.0500	5.00		103	70-130			
Total Xylenes	7.78	0.0250	7.50		104	70-130			
Surrogate: Bromofluorobenzene	0.585		0.500		117	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.456		0.500		91.1	70-130			
Surrogate: Toluene-d8	0.530		0.500		106	70-130			

LCS Dup (2406069-BSD1)

Prepared: 02/07/24 Analyzed: 02/10/24

Benzene	2.51	0.0250	2.50		100	70-130	3.74	23	
Ethylbenzene	2.63	0.0250	2.50		105	70-130	2.05	27	
Toluene	2.54	0.0250	2.50		102	70-130	2.01	24	
o-Xylene	2.71	0.0250	2.50		109	70-130	4.00	27	
p,m-Xylene	5.32	0.0500	5.00		106	70-130	2.74	27	
Total Xylenes	8.03	0.0250	7.50		107	70-130	3.16	27	
Surrogate: Bromofluorobenzene	0.618		0.500		124	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.550		0.500		110	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 2:58:09PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

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 (2406039-BLK1) Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.540		0.500		108	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.505		0.500		101	70-130			
Surrogate: Toluene-d8	0.475		0.500		94.9	70-130			

LCS (2406039-BS2) Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	51.3	20.0	50.0		103	70-130			
Surrogate: Bromofluorobenzene	0.545		0.500		109	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.2	70-130			
Surrogate: Toluene-d8	0.481		0.500		96.1	70-130			

Matrix Spike (2406039-MS2) Source: E402054-06 Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	54.2	20.0	50.0	ND	108	70-130			
Surrogate: Bromofluorobenzene	0.551		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.484		0.500		96.8	70-130			

Matrix Spike Dup (2406039-MSD2) Source: E402054-06 Prepared: 02/06/24 Analyzed: 02/07/24

Gasoline Range Organics (C6-C10)	53.5	20.0	50.0	ND	107	70-130	1.26	20	
Surrogate: Bromofluorobenzene	0.548		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.8	70-130			
Surrogate: Toluene-d8	0.482		0.500		96.3	70-130			



QC Summary 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 2:58:09PM
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Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

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 (2406069-BLK1)

Prepared: 02/07/24 Analyzed: 02/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.534		0.500		107	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.453		0.500		90.5	70-130			
Surrogate: Toluene-d8	0.537		0.500		107	70-130			

LCS (2406069-BS2)

Prepared: 02/07/24 Analyzed: 02/10/24

Gasoline Range Organics (C6-C10)	53.8	20.0	50.0		108	70-130			
Surrogate: Bromofluorobenzene	0.569		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.450		0.500		90.0	70-130			
Surrogate: Toluene-d8	0.553		0.500		111	70-130			

LCS Dup (2406069-BSD2)

Prepared: 02/07/24 Analyzed: 02/10/24

Gasoline Range Organics (C6-C10)	52.9	20.0	50.0		106	70-130	1.51	20	
Surrogate: Bromofluorobenzene	0.576		0.500		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.450		0.500		89.9	70-130			
Surrogate: Toluene-d8	0.533		0.500		107	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 2:58:09PM

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 (2406073-BLK1)					Prepared: 02/07/24 Analyzed: 02/07/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.2		50.0		100	50-200			

LCS (2406073-BS1)					Prepared: 02/07/24 Analyzed: 02/07/24				
Diesel Range Organics (C10-C28)	257	25.0	250		103	38-132			
Surrogate: n-Nonane	52.0		50.0		104	50-200			

Matrix Spike (2406073-MS1)					Source: E402049-24		Prepared: 02/07/24 Analyzed: 02/07/24		
Diesel Range Organics (C10-C28)	256	25.0	250	ND	102	38-132			
Surrogate: n-Nonane	48.9		50.0		97.9	50-200			

Matrix Spike Dup (2406073-MSD1)					Source: E402049-24		Prepared: 02/07/24 Analyzed: 02/07/24		
Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132	1.69	20	
Surrogate: n-Nonane	49.0		50.0		97.9	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 2:58:09PM

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 (2406078-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	55.8		50.0		112	50-200			

LCS (2406078-BS1)					Prepared: 02/08/24 Analyzed: 02/08/24				
Diesel Range Organics (C10-C28)	278	25.0	250		111	38-132			
Surrogate: n-Nonane	56.2		50.0		112	50-200			

Matrix Spike (2406078-MS1)					Source: E402054-04		Prepared: 02/08/24 Analyzed: 02/09/24		
Diesel Range Organics (C10-C28)	335	25.0	250	25.8	124	38-132			
Surrogate: n-Nonane	52.6		50.0		105	50-200			

Matrix Spike Dup (2406078-MSD1)					Source: E402054-04		Prepared: 02/08/24 Analyzed: 02/09/24		
Diesel Range Organics (C10-C28)	299	25.0	250	25.8	109	38-132	11.4	20	
Surrogate: n-Nonane	52.1		50.0		104	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 2:58:09PM

Anions by EPA 300.0/9056A

Analyst: IY

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

Blank (2406057-BLK1)					Prepared: 02/06/24 Analyzed: 02/07/24				
Chloride	ND	20.0							
LCS (2406057-BS1)					Prepared: 02/06/24 Analyzed: 02/07/24				
Chloride	251	20.0	250		100	90-110			
Matrix Spike (2406057-MS1)					Source: E402054-03		Prepared: 02/06/24 Analyzed: 02/07/24		
Chloride	262	20.0	250	ND	105	80-120			
Matrix Spike Dup (2406057-MSD1)					Source: E402054-03		Prepared: 02/06/24 Analyzed: 02/07/24		
Chloride	262	20.0	250	ND	105	80-120	0.163	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 2:58:09PM

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 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 14:58

- 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 3

Hailey 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: Ridgeway Arizona Oil Corp

Address:

City, State, Zip

Phone:

Email:

Pima Project # 7-301

Lab Use Only

Lab WO#

E 402054

Job Number

210104-0001

TAT

1D 2D 3D Standard

X

EPA Program

CWA SDWA

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
7:00	2/3	S	1	S1-1'	1							X		
7:05			1	S1-2'	2									
7:11				S1-3'	3									
7:19				S1-4'	4									
7:26				S2-1'	5									
7:31				S2-2'	6									
7:39				S2-3'	7									
7:41				S2-4'	8									
7:56				S3-1'	9									
8:11				S3-2'	10									

Additional Instructions:

Billing #0 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)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only
Ernie Rame	2/5/24	2:53	Michelle Gyl	2-5-24	1503	Received on ice: (Y) / N
Michelle Gyl	2-5-24	1730	Andrew Moss	2-5-24	1730	T1 T2 T3
Andrew Moss	2-5-24	2330	AD	2-5-24	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.

envirotech

Project Information

Chain of Custody

Page 7 of 3Haley 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: Ridgeway Arizona Oil Corp
 Address:
 City, State, Zip
 Phone:
 Email:
 Pima Project # 7-301

Lab Use Only		TAT				EPA Program	
Lab WO#	Job Number	1D	2D	3D	Standard	CWA	SDWA
<u>E402054</u>	<u>21064-0001</u>				<u>X</u>		
Analysis and Method							
DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX
						<u>X</u>	
State							
NM	CO	UT	AZ	TX			
<u>X</u>							
Remarks							
<u>8:17</u>	<u>2/3</u>	<u>5</u>	<u>1</u>	<u>S3-3'</u>	<u>11</u>		
<u>8:26</u>				<u>S3-4'</u>	<u>12</u>		
<u>8:35</u>				<u>S4-1'</u>	<u>13</u>		
<u>8:41</u>				<u>S4-2'</u>	<u>14</u>		
<u>8:56</u>				<u>S4-3'</u>	<u>15</u>		
<u>8:59</u>				<u>S4-4'</u>	<u>16</u>		
<u>9:01</u>				<u>SW1</u>	<u>17</u>		
<u>9:09</u>				<u>SW2</u>	<u>18</u>		
<u>9:12</u>				<u>SW3</u>	<u>19</u>		
<u>9:17</u>				<u>SW4</u>	<u>20</u>		

Additional Instructions:

Billing 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.

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)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only	
<u>Kerrine Adams</u>		<u>2/5/24</u>	<u>2:53</u>	<u>Michelle Bunt</u>		<u>2-5-24</u>	<u>1503</u>	Received on ice: <u>Y</u> / N	
<u>Michelle Bunt</u>		<u>2-5-24</u>	<u>1730</u>	<u>Michelle Bunt</u>		<u>2-5-24</u>	<u>1730</u>	T1 _____ T2 _____ T3 _____	
<u>Chadwick Adams</u>		<u>2-5-24</u>	<u>2330</u>	<u>Adri</u>		<u>2-5-24</u>	<u>0751</u>	AVG Temp °C <u>4</u>	

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.



Project Information

Chain of Custody

Page 3 of 3

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: Ridge Way Arizona Di Corp

Address:

City, State, Zip

Phone:

Email:

Pima Project # 7-301

Lab Use Only

Lab WO# E402054 Job Number 21004-0001

TAT

1D 2D 3D Standard X

EPA Program

CWA SDWA

RCRA

State

NM CO UT AZ TX

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
9:21	2/3	S	1	SW5	21							X		
9:36			1	SW6	22									
9:45				SW7	23									
9:51				SW8	24									
9:55				SW9	25									
10:01				SW10	26									
10:05				SW11	27									
10:11				BG1	28									

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

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Relinquished by: (Signature)

Date

Time

Received by: (Signature)

Date

Time

Lab Use Only

Received on ice: (Y) / N

T1

T2

T3

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.

envirotech

Envirotech Analytical Laboratory

Printed: 2/6/2024 4:09:57PM

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:	E402054
Phone:	(575) 631-6977	Date Logged In:	02/06/24 07:50	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? Yes

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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Energy, Minerals and Natural Resources
Oil Conservation Division
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Santa Fe, NM 87505

QUESTIONS

Action 372785

QUESTIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:
	164557
	Action Number:
	372785
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAB1906042331
Incident Name	NAB1906042331 HALEY WATER STATION @ 0
Incident Type	Produced Water Release
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 WATER STATION
Date Release Discovered	02/13/2019
Surface Owner	State

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pump Produced Water Released: 50 BBL Recovered: 30 BBL Lost: 20 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 372785

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:
	164557
	Action Number:
	372785
	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)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
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 372785

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:	164557
	Action Number:	372785
	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)	35.4
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	311
GRO+DRO (EPA SW-846 Method 8015M)	138
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	400
What is the estimated volume (in cubic yards) that will be remediated	29

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 372785

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID:	164557
	Action Number:	372785
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS**Remediation Plan (continued)**

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

This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	GANDY MARLEY LANDFARM/LANDFILL [FEEM0112338393]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	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.

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

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

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

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

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QUESTIONS, Page 5

Action 372785

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 372785
	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 372785

QUESTIONS (continued)

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 372785
	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 372785

CONDITIONS

Operator: RIDGEWAY ARIZONA OIL CORP. 575 N. Dairy Ashford Houston, TX 77079	OGRID: 164557
	Action Number: 372785
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
scwells	Remediation plan approved. Submit remediation closure report to the OCD by 12/26/2024.	9/27/2024