



Pima Environmental Services, LLC
5614 N. Lovington Hwy.
Hobbs, NM 88240
575-964-7740

July 21st, 2023

NMOCD District 2
811 S. First Street
Artesia, NM 88210

Bureau of Land Management
620 East Green Street
Carlsbad, NM 88220

Re: Site Assessment, Remediation, and Closure Report
Liza Jane Federal #1
API No. 30-041-20972
GPS: Latitude 33.8552152 Longitude -103.4096054
UL "I", Sec. 19, T5S, R34E
Roosevelt County, NM
NMOCD Ref. No. NAPP2307454854

Pima Environmental Services, LLC (Pima) has been contracted by Armstrong Energy Corporation to perform a spill assessment, remediation activities, and submit this closure report for a crude oil release that occurred at the Liza Jane Federal #1 (Liza Jane). The initial C-141 was submitted on March 27th, 2023 (Appendix C). This incident was assigned Incident ID NAPP2307454854, by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Liza Jane is located approximately five (5) miles west of Pep, NM. This spill site is in Unit I, Section 19, Township 5S, Range 34E, Latitude 33.8552152, Longitude -103.4096054, Roosevelt County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Older alluvial deposits of upland plains, piedmont areas, calcic soils, eolian cover sediments of high plains (Middle to lower Pleistocene). The soil in this area is made up of Ratliff sandy clay loam, 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 Liza Jane (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 115 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 97 feet BGS. The closest waterway is an unnamed salt playa located approximately 8.43 miles to the southwest of this location. 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' (No 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

NAPP2307454854: On March 15th, 2023, a backpressure valve was inspected, and pieces of rubber were found within it. Packing appears to have deteriorated and sent pieces of rubber into the backpressure valve downstream, which resulted in the valve not opening properly. This likely lead to an overpressure of the stuffing box packing upstream and subsequent failure. Approximately 10 barrels of crude oil were released, 2 barrels were recovered. All fluid stayed on location.

Site Assessment and Soil Sampling Results

On March 15th, 2023, Armstrong Energy Corporation mobilized personnel to the site to assess the area. Armstrong immediately scraped up the affected area using a backhoe and transported the contaminated material to an NMOCD approved landfill for disposal. Approximately 130 cubic yards of contaminated material was removed. All supporting documentation of remedial work can be found in Appendix F.

On March 21st, 2023, Pima Environmental Services mobilized personnel to the site to conduct delineation activities. Pima sampled the area between the point of release and the extent of the engineered pad. Laboratory results of this sampling event can be found in the following data table.

Bases on analytical results, the area overlapping soil sample S2 and SW1 will be excavated to a depth of 3.5 feet. Soil sample S3 and SW2 will be excavated to a depth of 0.5 foot. Soil sample S4 and SW3 and SW4 will be excavated to a depth of 2 feet bgs. Based on our side wall samples we isolated the horizontal footprint of the remaining contamination to an area measuring approximately 45 feet by 15 feet wide. The initial side map can be found in Figure 4.

3-21-2023 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
ARMSTRONG ENERGY CORPORATION - Liza Jane Federal #1								
Sample Date: 3/21/23		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	Surface	ND	ND	ND	ND	ND	0	52.2
	1'	ND	ND	ND	ND	ND	0	41.1
	2'	ND	ND	ND	ND	ND	25	69
	3'	ND	ND	ND	ND	ND	25.8	103
	4'	ND	ND	ND	ND	ND	0	ND
S2	Surface	ND	ND	ND	ND	ND	0	30.8
	1'	ND	ND	ND	ND	ND	0	ND
	2'	ND	ND	ND	ND	ND	788	48.8
	3'	ND	ND	ND	ND	ND	149.7	85.7
	4'	ND	ND	ND	ND	ND	0	ND
S3	Surface	ND	ND	ND	ND	ND	3474.89	62.2
	1'	ND	ND	ND	ND	ND	71.2	58.1
	2'	ND	ND	ND	ND	ND	56.4	61.6
	3'	ND	ND	ND	ND	ND	0	125
	4'	ND	ND	ND	ND	ND	0	ND
S4	Surface	ND	ND	ND	ND	ND	1319.0475	1770
	1'	ND	ND	ND	ND	ND	0	1920
	2'	ND	ND	ND	ND	ND	83.9	59.6
	3'	ND	ND	ND	ND	ND	47.2	97.6
	4'	ND	ND	ND	ND	ND	0	ND
SW1	6"	ND	ND	ND	ND	ND	0	ND
SW2	6"	ND	ND	ND	ND	ND	0	ND
SW3	6"	ND	ND	ND	ND	ND	0	ND
SW4	6"	ND	ND	ND	ND	ND	0	ND

Nd: Non-Detect

Remediation Activities

On April 5th, 2023, Pima mobilized personnel and equipment to conduct remedial activities. We excavated the area overlapping soil sample (S2) to a depth of 3.5 feet, measuring approximately 15 feet by 15 feet by 3.5 feet. Soil sample (S3) was excavated an additional 6 inches, measuring approximately 18 feet by 10 feet by 0.5 feet. Soil sample (S4) was excavated to a depth of one 2 feet, measuring approximately 17 feet by 14 feet by 2 feet bgs. Approximately 35 cubic yards of contaminated material were removed and transported to an NMOCD approved landfill. All supporting documentation of remedial work can be found in Appendix F.

On April 9th, 2023, after submitting the 48-hour notification (Appendix C), Pima collected 5-point composite confirmation samples. Each confirmation sample represents no more than 200 square feet of the excavated area. Confirmation sample CS1 was collected at 3.5 feet in depth, CS2 and CS3 were collected at 0.5 feet in depth, CS4 and CS5 were collected at 2 feet in depth. Side wall sample CSW1 and CSW5 were collected from surface to 2 feet in depth, CSW2 and CSW4 were collected from surface down to 0.5 feet in depth, CSW3 was collected from surface to 3.5 feet in depth. The laboratory results of this sampling event can be found in the following data table. Photographic documentation of the excavation along with the dates associated with each photograph can be found in Appendix D. A in depth confirmation map can be found in Figure 5.

4-9-23 Confirmation Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
ARMSTRONG ENERGY CORPORATION - Liza Jane Federal #1								
Sample Date: 4/9/23		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	CI mg/kg
CS1	3.5'	ND	ND	ND	ND	ND	ND	ND
CS2	0.5'	ND	ND	ND	ND	ND	ND	ND
CS3	0.5'	ND	ND	ND	ND	ND	ND	ND
CS4	2'	ND	ND	ND	ND	ND	ND	ND
CS5	2'	ND	ND	ND	ND	ND	ND	ND
CSW1	0-2'	ND	ND	ND	ND	ND	ND	ND
CSW2	0-0.5'	ND	ND	ND	ND	ND	ND	ND
CSW3	0-3.5'	ND	ND	ND	ND	ND	ND	ND
CSW4	0-0.5'	ND	ND	ND	ND	ND	ND	ND
CSW5	0-2'	ND	ND	ND	ND	ND	ND	ND

ND- Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Closure Request

After careful review, Pima requests that this incident, NAPP2307454854, be closed. Armstrong Energy Corporation has complied with the applicable closure requirements set forth in rule 19.15.19.12 NMAC.

Should you have any questions or need additional information, please feel free to contact Sebastian Orozco at 619-721-4813 or Sebastian@pimaoil.com.

Respectfully,

Sebastian Orozco

Sebastian Orozco
Environmental Project Manager
Pima Environmental Services, LLC

Attachments

Figures:

1- Location Map

- 2- Topographic Map
- 3- Karst Map
- 4- Site Map
- 5- Confirmation Map

Appendices:

Appendix A – Referenced Water Surveys

Appendix B – Soil Survey and Geological Data

Appendix C – C-141 Form and 48-Hour Notification

Appendix D – Photographic Documentation

Appendix E – Laboratory Reports

Appendix F – Disposal Documentation



Pima Environmental Services

Figures:

1-Location Map

2-Topographic Map

3-Karst Map

4-Site Map

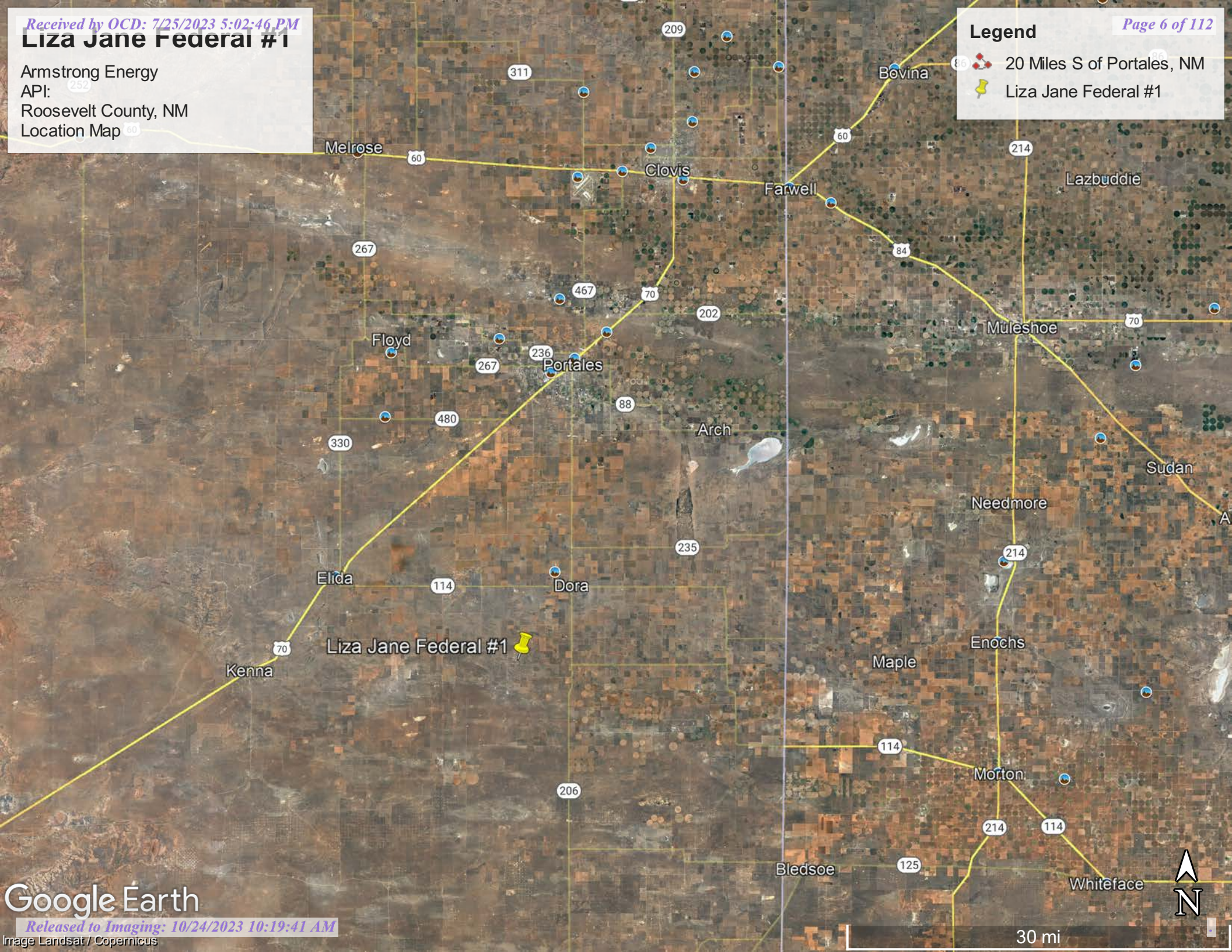
5-Confirmation Sample Map

Liza Jane Federal #1

Armstrong Energy
API:
Roosevelt County, NM
Location Map

Legend

- 20 Miles S of Portales, NM
- Liza Jane Federal #1



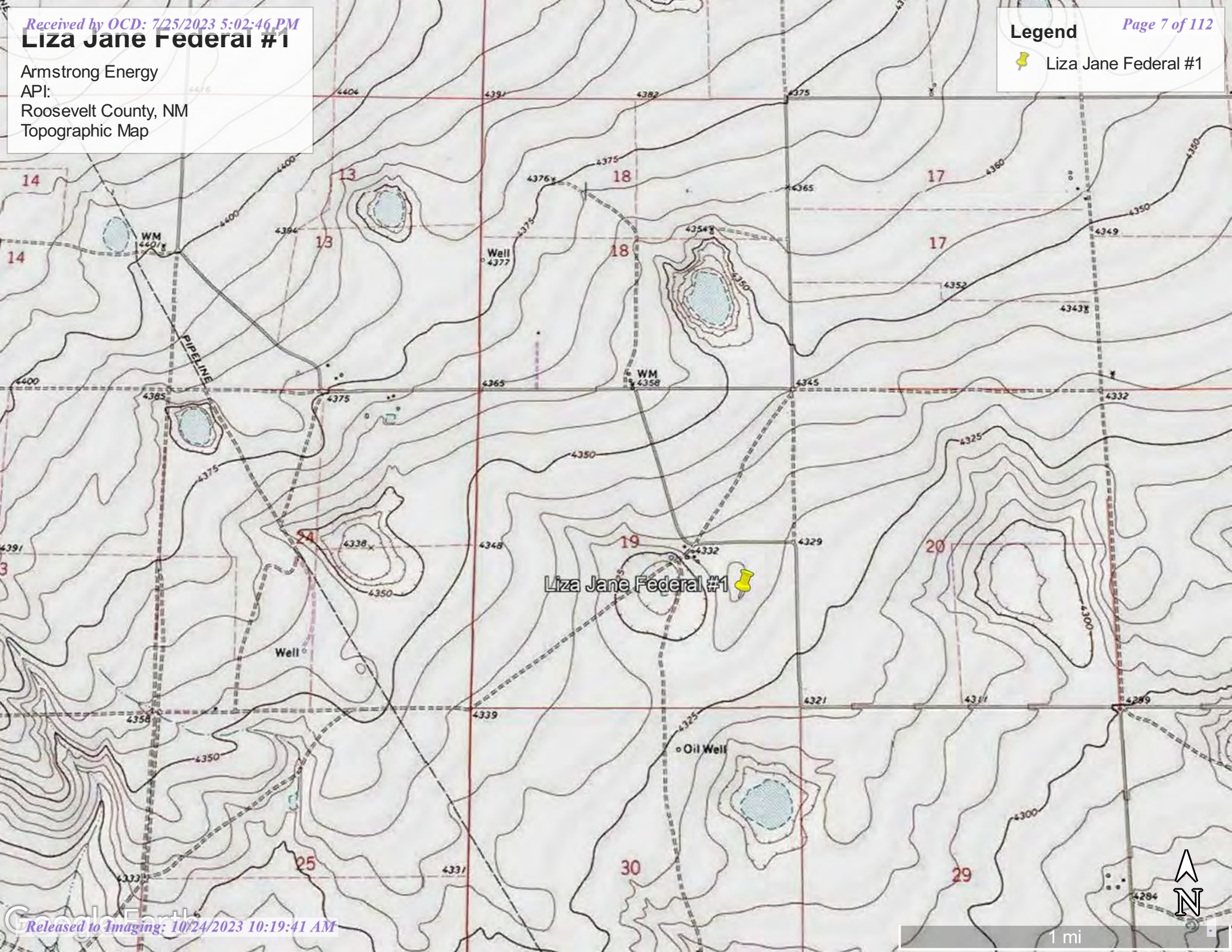
30 mi

Liza Jane Federal #1

Armstrong Energy
API:
Roosevelt County, NM
Topographic Map

Legend



 Liza Jane Federal #1

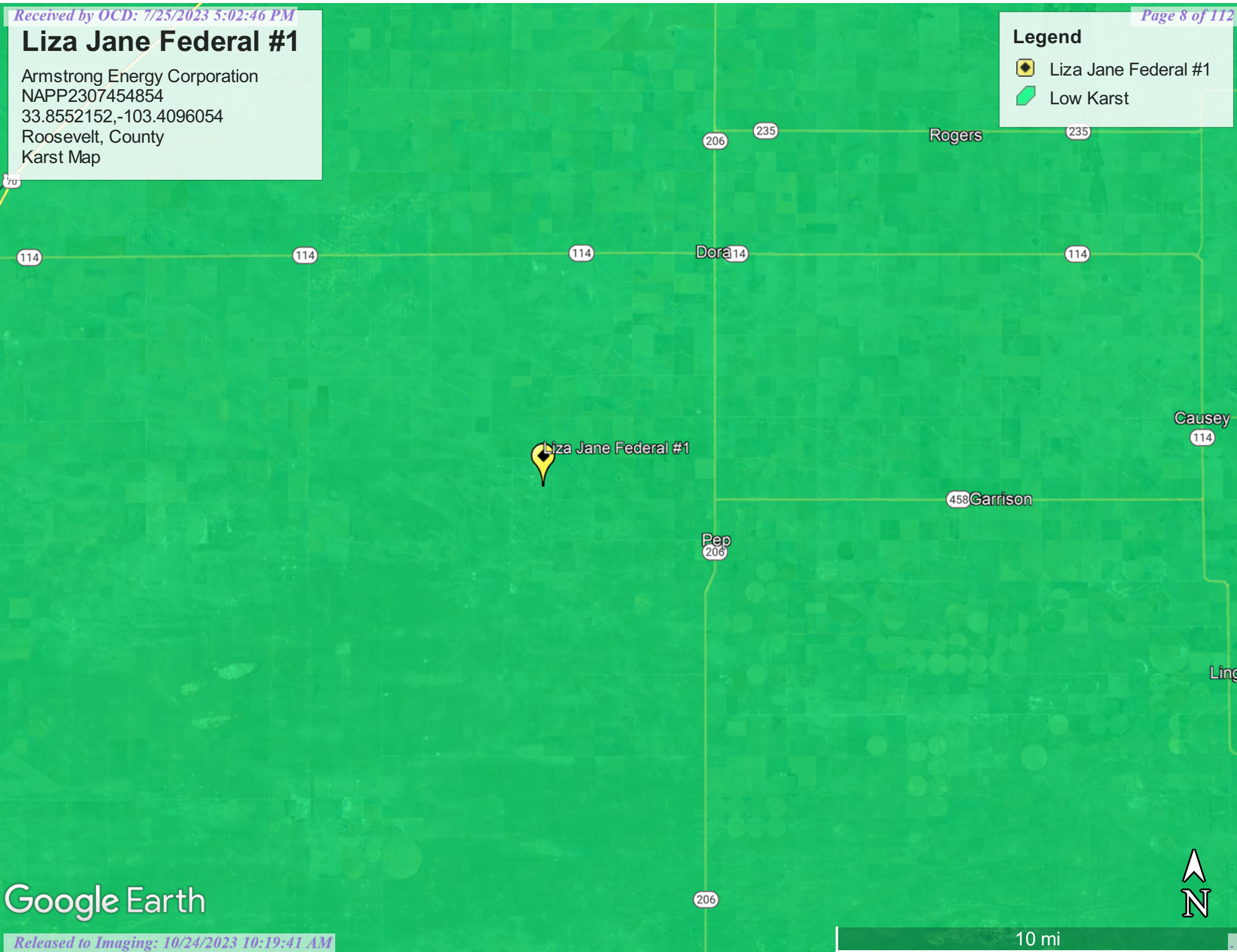


Liza Jane Federal #1

Armstrong Energy Corporation
NAPP2307454854
33.8552152,-103.4096054
Roosevelt, County
Karst Map

Legend

-  Liza Jane Federal #1
-  Low Karst



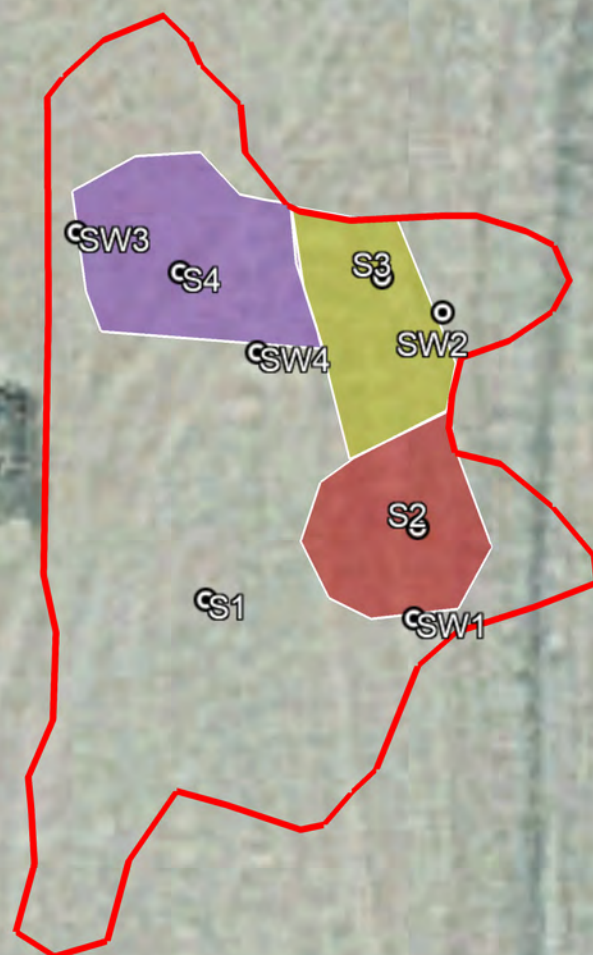
Google Earth

Liza Jane Federal #1

Armstrong Energy Corporation
NAPP2307454854
33.8552152,-103.4096054
Roosevelt, County
Site Map

Legend

- 0.5' Excavation
- 1.5' Excavation
- 3.5' Excavation
- Release Area
- Soil Samples



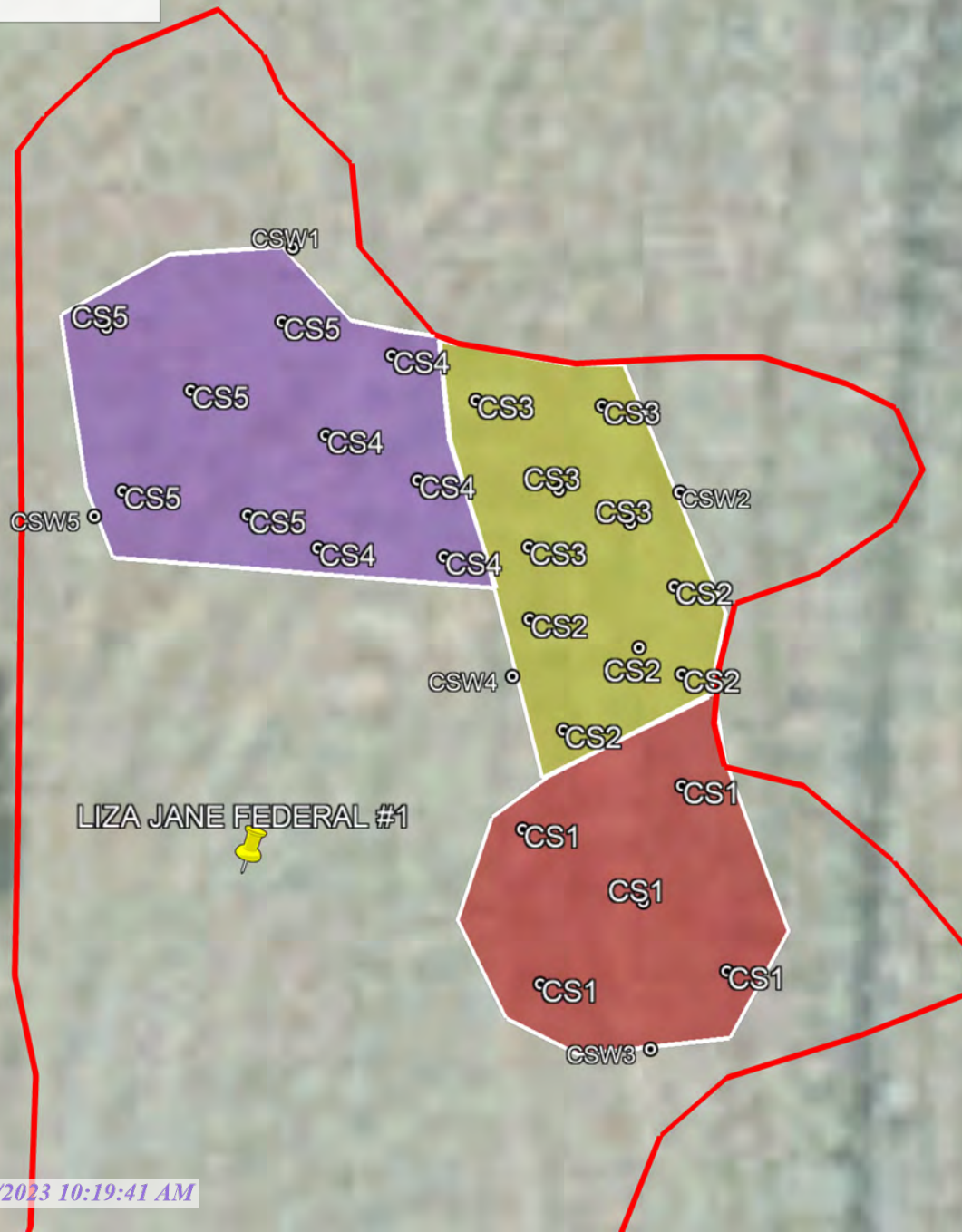
50 ft

Liza Jane Federal #1

Armstrong Energy Corporation
NAPP2307454854
33.8552152,-103.4096054
Roosevelt, County
Confirmation Map

Legend

- 0.5' Excavation
- 2' Excavation
- 3.5' Excavation
- 5 point confirmation sample
- Release Area



LIZA JANE FEDERAL #1



20 ft



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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	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CL 00398 POD1		CL	RO	3	1	2	19	05S	34E	646718	3748134	955	268		
CL 00156 POD1		CL	RO	1	1	2	24	05S	33E	645169	3748205*	2196	130		
CL 00158 POD1		CL	RO	2	2	4	13	05S	33E	645760	3749020*	2228	169		
CL 00157 POD1		CL	RO	3	3	4	13	05S	33E	645163	3748407*	2293	130		
CL 00369 POD1		CL	RO	3	2	1	34	05S	34E	651171	3744838	4696	90		
CL 00099 POD1		CL	RO		2	2	14	05S	34E	653698	3749861*	7019	165		
CL 00100 POD1		CL	RO		2	2	14	05S	34E	653698	3749861*	7019	185	115	70
CL 00388 POD1		CL	RO	4	4	2	03	05S	34E	652146	3752647	7314	188	58	130
CL 00374 POD1		CL	RO	2	2	4	02	05S	34E	653730	3752424	8332	120		
CL 00377 POD1		CL	RO	3	3	4	35	04S	34E	653222	3753313	8540	130		
CL 00168 POD2		CL	RO	4	4	4	10	06S	35E	653597	3741597	8589	108	57	51
CL 00168 POD1		CL	RO	4	4	4	10	06S	35E	653618	3741566	8625	113	58	55
CL 00413 POD1		CL	RO	2	2	1	29	05S	33E	638552	3746524	8648	120		
CL 00129 POD2		CL	RO	2	1	3	30	05S	35E	655881	3745972*	8814	204		
CL 00129 POD1		CL	RO	4	3	3	30	05S	35E	655887	3745370*	8929	140		
CL 00376 POD1		CL	RO	1	1	1	01	05S	34E	653860	3753236	8954	125		

Average Depth to Water: **72 feet**

Minimum Depth: **57 feet**

Maximum Depth: 115 feet

Record Count: 16

UTMNAD83 Radius Search (in meters):

Easting (X): 647165.98

Northing (Y): 3747290.55

Radius: 9000

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

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.

3/21/23 4:23 PM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



[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 =

- 335109103255801

Minimum number of levels = 1

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

USGS 335109103255801 05S.33E.24.32230

Available data for this site

Groundwater: Field measurements



GO

Roosevelt County, New Mexico

Hydrologic Unit Code 12050001

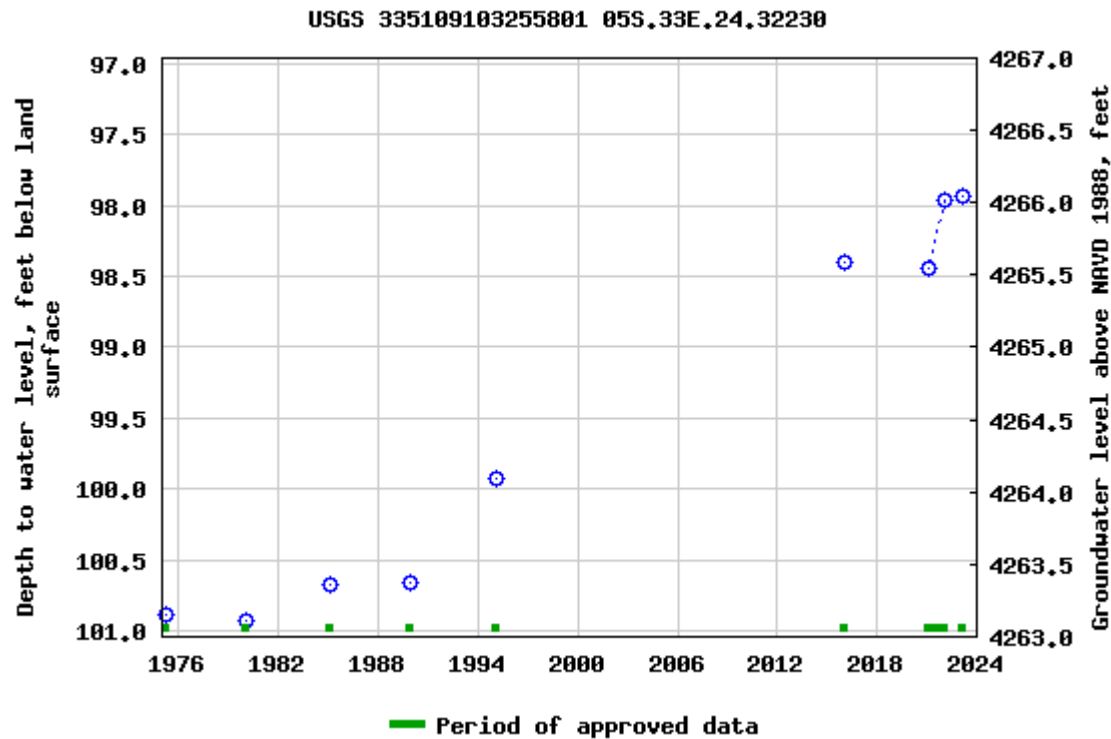
Latitude 33°51'23.3", Longitude 103°25'59.8" NAD83

Land-surface elevation 4,364 feet above NAVD88

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

This well is completed in the Ogallala Formation (121OGLL) local 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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[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

[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: 2023-03-17 08:18:21 EDT


0.6 0.48 nadww02

Liza Jane Federal #1

Armstrong Energy
API:
Roosevelt County, NM
Surface Water Map

Legend

 8.43 Miles

 Liza Jane Federal #1





Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Map Unit Description: Ratliff sandy clay loam, 0 to 3 percent slopes---Roosevelt County, New Mexico

Roosevelt County, New Mexico

RtB—Ratliff sandy clay loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 1idyf

Elevation: 2,500 to 4,800 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

Ratliff and similar soils: 85 percent

Minor components: 15 percent

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

Description of Ratliff

Setting

Landform: Playa steps, plains

Down-slope shape: Convex, linear

Across-slope shape: Linear

Parent material: Calcareous loamy eolian deposits

Typical profile

A - 0 to 8 inches: sandy clay loam

Bw - 8 to 25 inches: clay loam

Bk1 - 25 to 67 inches: clay loam

Bk2 - 67 to 80 inches: clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water

(Ksat): Moderately high to high (0.57 to 1.98 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 50 percent

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Sodium adsorption ratio, maximum: 2.0

Available water supply, 0 to 60 inches: Moderate (about 8.4 inches)

Interpretive groups

Land capability classification (irrigated): 3e

Land capability classification (nonirrigated): 6e

Map Unit Description: Ratliff sandy clay loam, 0 to 3 percent slopes---Roosevelt County, New Mexico

Hydrologic Soil Group: B
Ecological site: R077DY042TX - Limy Upland 12-17" PZ
Hydric soil rating: No

Minor Components

Chavaro

Percent of map unit: 10 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R077DY042TX - Limy Upland 12-17" PZ
Hydric soil rating: No

Kenhill

Percent of map unit: 5 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077DY038TX - Clay Loam 12-17" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Roosevelt County, New Mexico
Survey Area Data: Version 19, Sep 8, 2022

Map Unit Description: Arvana fine sandy loam, 0 to 1 percent slopes---Roosevelt County, New Mexico

Roosevelt County, New Mexico

AvA—Arvana fine sandy loam, 0 to 1 percent slopes

Map Unit Setting

National map unit symbol: f5rn

Elevation: 2,600 to 5,100 feet

Mean annual precipitation: 16 to 21 inches

Mean annual air temperature: 57 to 63 degrees F

Frost-free period: 185 to 220 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Arvana and similar soils: 85 percent

Minor components: 15 percent

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

Description of Arvana

Setting

Landform: Plains

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Loamy eolian deposits

Typical profile

Ap - 0 to 11 inches: fine sandy loam

Bt - 11 to 26 inches: sandy clay loam

Bkkm - 26 to 37 inches: cemented material

Bkk - 37 to 80 inches: very gravelly loam

Properties and qualities

Slope: 0 to 1 percent

Depth to restrictive feature: 20 to 40 inches to petrocalcic

Drainage class: Well drained

Runoff class: Medium

Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 80 percent

Maximum salinity: Nonsaline to slightly saline (0.0 to 5.0 mmhos/cm)

Sodium adsorption ratio, maximum: 5.0

Available water supply, 0 to 60 inches: Low (about 4.0 inches)

Interpretive groups

Land capability classification (irrigated): 2e

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: C

Map Unit Description: Arvana fine sandy loam, 0 to 1 percent slopes---Roosevelt County, New Mexico

Ecological site: R077CY036TX - Sandy Loam 16-21" PZ
Hydric soil rating: No

Minor Components

Sharvana

Percent of map unit: 7 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Convex
Ecological site: R077CY037TX - Very Shallow 16-21" PZ
Hydric soil rating: No

Amarillo

Percent of map unit: 6 percent
Landform: Plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R077CY036TX - Sandy Loam 16-21" PZ
Hydric soil rating: No

Posey

Percent of map unit: 2 percent
Landform: Playa slopes, plains
Down-slope shape: Concave, convex
Across-slope shape: Linear
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

Data Source Information

Soil Survey Area: Roosevelt County, New Mexico
Survey Area Data: Version 19, Sep 8, 2022

National Flood Hazard Layer FIRMette



103°24'53"W 33°51'34"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 D
		NO SCREEN Area of Minimal Flood Hazard Zone X
OTHER AREAS		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		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.

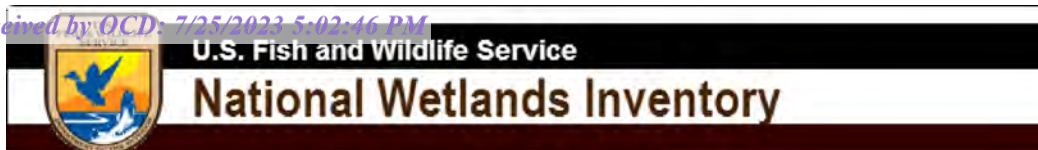
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/17/2023 at 5:25 PM 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.

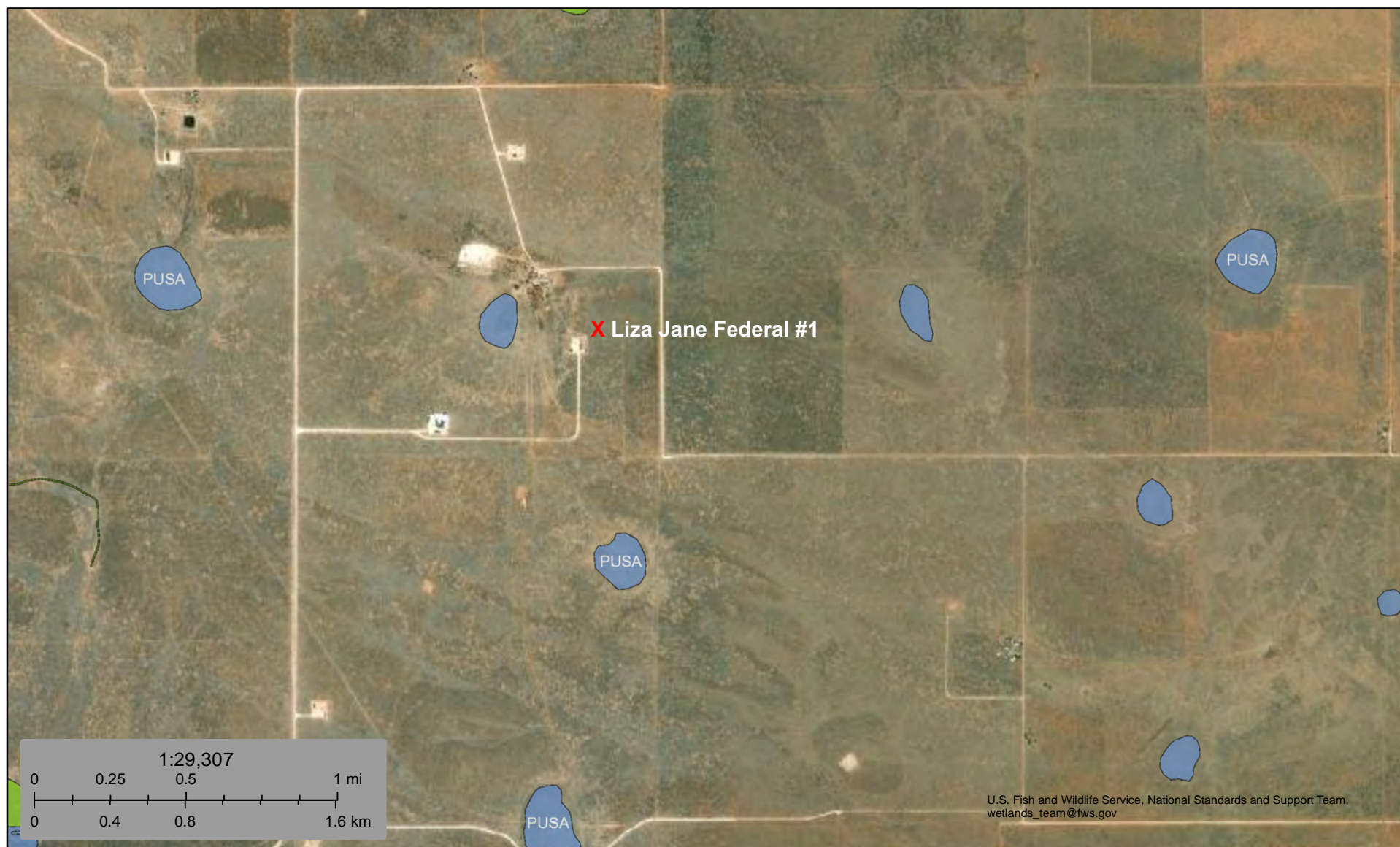
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

Released to Imaging: 10/24/2023 10:19:41 AM

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



Wetlands Map



March 17, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- 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

C-141 Form

48-Hour Notification

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2307454854
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Armstrong Energy Corporation	OGRID	1092
Contact Name	Jeffery Tew	Contact Telephone	575-625-2222
Contact email	Jtew@aecnrm.com	Incident # (assigned by OCD)	nAPP2307454854
Contact mailing address	P.O. Box 1973, Roswell, NM 88202-1973		

Location of Release Source

Latitude 33.8552152 Longitude -103.4096054
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Liza Jane Federal #1	Site Type	
Date Release Discovered	3/15/2023	API# (if applicable)	30-041-20972

Unit Letter	Section	Township	Range	County
I	19	5S	34E	Roosevelt

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 10	Volume Recovered (bbls) 2
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release


Equipment failure, backpressure valve was inspected and pieces of rubber were found within it, leading us to believe defective stuffing box packing was root cause. Packing appears to have deteriorated and sent pieces of rubber into the backpressure valve downstream, which resulted in the valve not opening properly. This likely led to an overpressure of the stuffing box packing upstream and subsequent failure.

Incident ID	nAPP2307454854
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Jeffery Tew</u>	Title: <u>Operations Engineer</u>
Signature: <u></u>	Date: <u>3/27/2023</u>
email: <u>Jtew@aecnm.com</u>	Telephone: <u>575-625-2222</u>
<u>OCD Only</u>	
Received by: <u>Jocelyn Harimon</u>	Date: <u>03/27/2023</u>

Incident ID	NAPP2307454854
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u><50</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAPP2307454854
District RP	
Facility ID	
Application ID	

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

Printed Name: Jeffery Tew Title: Operations Engineer
Signature: Jeffery Tew Date: 7/24/2023
email: Jtew@aecnm.com Telephone: 575-625-2222

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2307454854
District RP	
Facility ID	
Application ID	


Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Jeffery Tew Title: Operations Engineer
Signature:  Date: 7/24/2023
email: Jtew@aecn.com Telephone: 575-625-2222

OCD Only

Received by: _____ Date: _____

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

Closure Approved by:  Date: 10/24/2023
Printed Name: Nelson Velez Title: Environmental Specialist - Adv

From: sebastian@pimaoil.com
To: ocdonline@state.nm.us
Cc: Polly@pimaoil.com; "Gio PimaOil"; tom@pimaoil.com
Subject: Liza Jane Federal #001 NAPP2307454854 - Confirmation Sampling Event
Date: Thursday, April 6, 2023 1:32:16 PM
Attachments: [image001.png](#)

Good afternoon,

Pima Environmental would like to notify that we will be conducting a confirmation sampling event at the Liza Jane Federal #001 (NAPP2307454854), on April 9th, 2023. Pima personnel will be on location approximately at 7:00 am. Thank you.

Respectfully,
Sebastian Orozco
Environmental Professional
5614 N Lovington Hwy,
Hobbs, NM 88240
Sebastian@pimaoil.com
619-721-4813 cell





Pima Environmental Services

Appendix D

Photographic Documentation



**SITE PHOTOGRAPHS
ARMSTRONG ENERGY
LIZA JANE FEDERAL #1**

Site Assessment

Date: 3/15/2023



Date: 3/21/2023



Date: 3/21/2023



Date: 3/21/2023



Date: 3/21/2023



Date: 3/21/2023



Excavation and Post Remediation

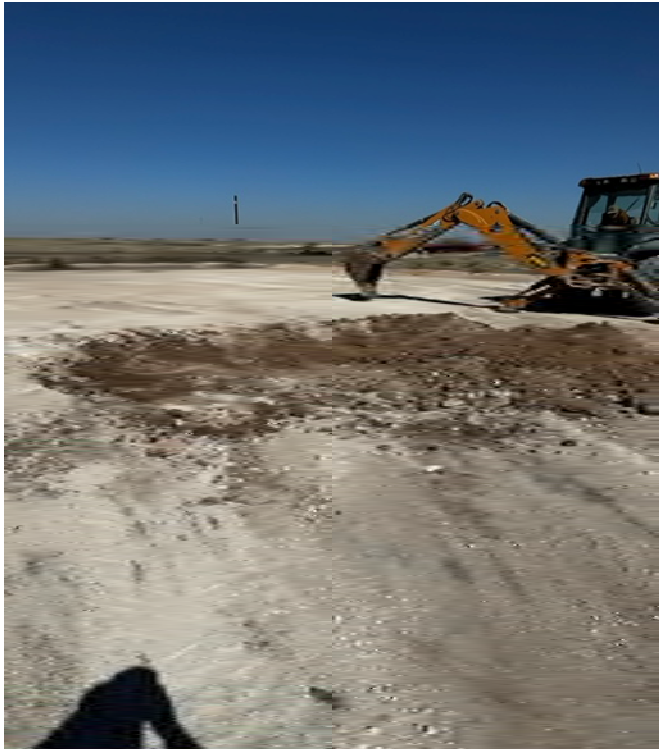
Date:4/9/2023



Date:4/9/2023



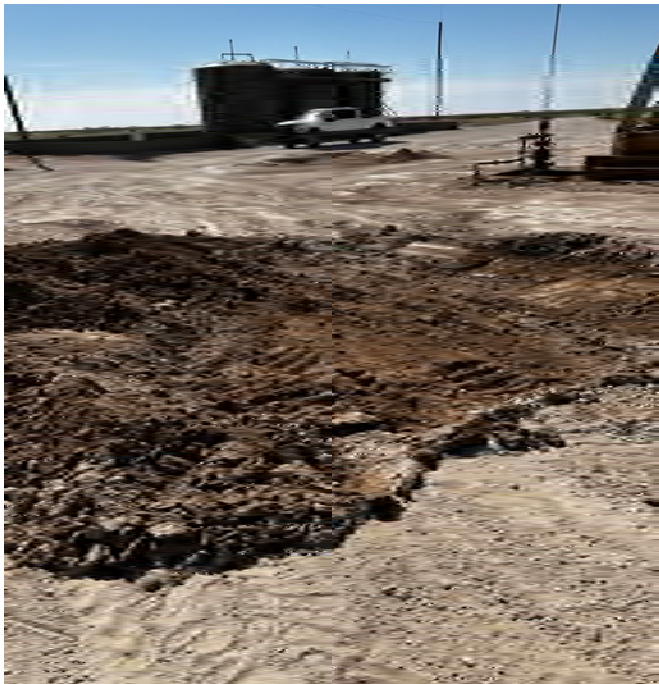
Date:4/9/2023



Date:4/9/2023



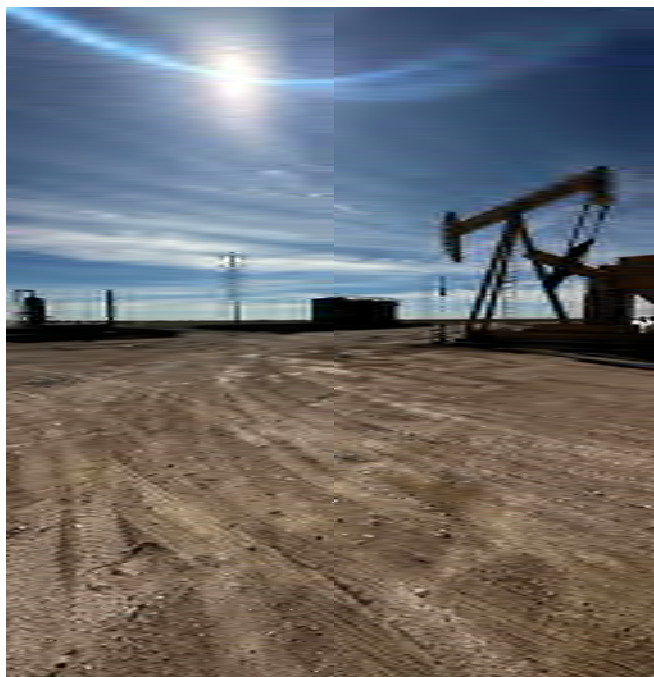
Date:4/9/2023



Date:4/9/2023



Date:4/9/2023





Pima Environmental Services

Appendix E

Laboratory Reports

Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Liza Jane Federal #1

Work Order: E303077

Job Number: 21064-0001

Received: 3/22/2023

Revision: 2

Report Reviewed By:

Walter Hinchman
Laboratory Director
3/30/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 3/30/23

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Liza Jane Federal #1
Workorder: E303077
Date Received: 3/22/2023 12:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 3/22/2023 12:00:00AM, under the Project Name: Liza Jane Federal #1.

The analytical test results summarized in this report with the Project Name: Liza Jane Federal #1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

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

Field Offices:

Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported: 03/30/23 11:03
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1-Surface	E303077-01A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S1-1'	E303077-02A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S1-2'	E303077-03A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S1-3'	E303077-04A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S1-4'	E303077-05A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S2-Surface	E303077-06A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S2-1'	E303077-07A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S2-2'	E303077-08A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S2-3'	E303077-09A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S2-4'	E303077-10A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S3-Surface	E303077-11A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S3-1'	E303077-12A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S3-2'	E303077-13A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S3-3'	E303077-14A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S3-4'	E303077-15A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S4-Surface	E303077-16A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S4-1'	E303077-17A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S4-2'	E303077-18A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S4-3'	E303077-19A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
S4-4'	E303077-20A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
SW1	E303077-21A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
SW2	E303077-22A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
SW3	E303077-23A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.
SW4	E303077-24A	Soil	03/21/23	03/22/23	Glass Jar, 2 oz.



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S1-Surface

E303077-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2312029	
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	88.5 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	92.0 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2312029	
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	88.5 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	92.0 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2312040	
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	80.2 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2312033	
Chloride	52.2	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S1-1'

E303077-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	91.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	93.9 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	91.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	93.9 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	78.6 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	41.1	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S1-2'

E303077-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	93.7 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	100 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	93.7 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	100 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	25.0	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	71.6 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	69.0	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S1-3'

E303077-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.8 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.8 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	25.8	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	78.0 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	103	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S1-4'

E303077-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	91.0 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.8 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	105 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	91.0 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.8 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	105 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	84.3 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	ND	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S2-Surface

E303077-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.4 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.4 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	92.7 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	30.8	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S2-1'

E303077-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	94.2 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	94.2 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	78.6 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	ND	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S2-2'

E303077-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	513	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	275	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	86.7 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	48.8	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S2-3'

E303077-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.3 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.4 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	98.3 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.3 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.4 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	98.3 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	90.5	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	59.2	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	72.6 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	85.7	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S2-4'

E303077-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	94.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.2 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	94.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.2 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	93.8 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	ND	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S3-Surface

E303077-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	0.198	0.0250	1	03/22/23	03/23/23	
Toluene	0.0425	0.0250	1	03/22/23	03/23/23	
o-Xylene	1.03	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	1.16	0.0500	1	03/22/23	03/23/23	
Total Xylenes	2.19	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.4 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.4 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	62.7	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.4 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.4 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	2370	125	5	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	1040	250	5	03/22/23	03/23/23	
Surrogate: n-Nonane	102 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	62.2	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S3-1'

E303077-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.4 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.4 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.1 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	71.2	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	87.5 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	58.1	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S3-2'

E303077-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	96.6 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	99.9 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	96.6 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.3 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	99.9 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	56.4	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	71.4 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	61.6	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S3-3'

E303077-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.5 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.2 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.5 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.2 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	99.0 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	84.9 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	125	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S3-4'

E303077-15

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.8 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.8 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	97.1 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	91.5 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	ND	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S4-Surface

E303077-16

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	0.0475	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	0.0475	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	96.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.0 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	96.1 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.0 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	101 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	882	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	437	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	93.5 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	1770	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S4-1'

E303077-17

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	91.4 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	103 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	91.4 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	100 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	103 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	80.8 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	1920	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S4-2'

E303077-18

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.7 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	99.7 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.7 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	96.7 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	99.7 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	83.9	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	86.5 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	59.6	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S4-3'

E303077-19

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.9 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	92.9 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	98.2 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	104 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	47.2	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	82.4 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	97.6	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

S4-4'

E303077-20

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Benzene	ND	0.0250	1	03/22/23	03/23/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/23/23	
Toluene	ND	0.0250	1	03/22/23	03/23/23	
o-Xylene	ND	0.0250	1	03/22/23	03/23/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/23/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.6 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	100 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2312029
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/23/23	
Surrogate: Bromofluorobenzene	95.6 %	70-130		03/22/23	03/23/23	
Surrogate: 1,2-Dichloroethane-d4	99.5 %	70-130		03/22/23	03/23/23	
Surrogate: Toluene-d8	100 %	70-130		03/22/23	03/23/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2312040
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/23/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/23/23	
Surrogate: n-Nonane	91.3 %	50-200		03/22/23	03/23/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312033
Chloride	ND	20.0	1	03/22/23	03/22/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

SW1

E303077-21

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Benzene	ND	0.0250	1	03/22/23	03/22/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/22/23	
Toluene	ND	0.0250	1	03/22/23	03/22/23	
o-Xylene	ND	0.0250	1	03/22/23	03/22/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/22/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	93.3 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	103 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	93.3 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	103 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2312041
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	93.6 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312035
Chloride	ND	20.0	1	03/22/23	03/23/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

SW2

E303077-22

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Benzene	ND	0.0250	1	03/22/23	03/22/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/22/23	
Toluene	ND	0.0250	1	03/22/23	03/22/23	
o-Xylene	ND	0.0250	1	03/22/23	03/22/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/22/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	95.9 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	95.9 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2312041
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	95.2 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312035
Chloride	ND	20.0	1	03/22/23	03/23/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

SW3

E303077-23

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Benzene	ND	0.0250	1	03/22/23	03/22/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/22/23	
Toluene	ND	0.0250	1	03/22/23	03/22/23	
o-Xylene	ND	0.0250	1	03/22/23	03/22/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/22/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	94.5 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	94.5 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	102 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	102 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2312041
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	90.2 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312035
Chloride	ND	20.0	1	03/22/23	03/23/23	



Sample Data

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

Project Name: Liza Jane Federal #1
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
3/30/2023 11:03:16AM

SW4

E303077-24

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Benzene	ND	0.0250	1	03/22/23	03/22/23	
Ethylbenzene	ND	0.0250	1	03/22/23	03/22/23	
Toluene	ND	0.0250	1	03/22/23	03/22/23	
o-Xylene	ND	0.0250	1	03/22/23	03/22/23	
p,m-Xylene	ND	0.0500	1	03/22/23	03/22/23	
Total Xylenes	ND	0.0250	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	94.7 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	103 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2312028
Gasoline Range Organics (C6-C10)	ND	20.0	1	03/22/23	03/22/23	
Surrogate: Bromofluorobenzene	94.7 %	70-130		03/22/23	03/22/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		03/22/23	03/22/23	
Surrogate: Toluene-d8	103 %	70-130		03/22/23	03/22/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2312041
Diesel Range Organics (C10-C28)	ND	25.0	1	03/22/23	03/22/23	
Oil Range Organics (C28-C36)	ND	50.0	1	03/22/23	03/22/23	
Surrogate: n-Nonane	94.5 %	50-200		03/22/23	03/22/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2312035
Chloride	ND	20.0	1	03/22/23	03/23/23	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

Volatile Organic Compounds by EPA 8260B

Analyst: SL

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

Blank (2312028-BLK1)

Prepared: 03/22/23 Analyzed: 03/22/23

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	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

LCS (2312028-BS1)

Prepared: 03/22/23 Analyzed: 03/23/23

Benzene	2.09	0.0250	2.50		83.4	70-130			
Ethylbenzene	2.20	0.0250	2.50		88.0	70-130			
Toluene	2.18	0.0250	2.50		87.1	70-130			
o-Xylene	2.25	0.0250	2.50		90.1	70-130			
p,m-Xylene	4.46	0.0500	5.00		89.3	70-130			
Total Xylenes	6.72	0.0250	7.50		89.6	70-130			
Surrogate: Bromofluorobenzene	0.500		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.469		0.500		93.8	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			

Matrix Spike (2312028-MS1)

Source: E303073-21

Prepared: 03/22/23 Analyzed: 03/22/23

Benzene	2.09	0.0250	2.50	ND	83.8	48-131			
Ethylbenzene	2.18	0.0250	2.50	ND	87.2	45-135			
Toluene	2.18	0.0250	2.50	ND	87.0	48-130			
o-Xylene	2.25	0.0250	2.50	ND	90.0	43-135			
p,m-Xylene	4.44	0.0500	5.00	ND	88.8	43-135			
Total Xylenes	6.69	0.0250	7.50	ND	89.2	43-135			
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		97.9	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike Dup (2312028-MSD1)

Source: E303073-21

Prepared: 03/22/23 Analyzed: 03/22/23

Benzene	2.15	0.0250	2.50	ND	86.0	48-131	2.69	23	
Ethylbenzene	2.27	0.0250	2.50	ND	90.7	45-135	3.98	27	
Toluene	2.25	0.0250	2.50	ND	90.0	48-130	3.37	24	
o-Xylene	2.33	0.0250	2.50	ND	93.1	43-135	3.41	27	
p,m-Xylene	4.61	0.0500	5.00	ND	92.2	43-135	3.69	27	
Total Xylenes	6.94	0.0250	7.50	ND	92.5	43-135	3.60	27	
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.497		0.500		99.4	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

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 (2312029-BLK1)

Prepared: 03/22/23 Analyzed: 03/23/23

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	0.465		0.500		93.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.5	70-130			

LCS (2312029-BS1)

Prepared: 03/22/23 Analyzed: 03/23/23

Benzene	2.39	0.0250	2.50		95.6	70-130			
Ethylbenzene	2.36	0.0250	2.50		94.2	70-130			
Toluene	2.45	0.0250	2.50		97.8	70-130			
o-Xylene	2.50	0.0250	2.50		99.8	70-130			
p,m-Xylene	4.78	0.0500	5.00		95.6	70-130			
Total Xylenes	7.28	0.0250	7.50		97.0	70-130			
Surrogate: Bromofluorobenzene	0.467		0.500		93.3	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.2	70-130			
Surrogate: Toluene-d8	0.511		0.500		102	70-130			

Matrix Spike (2312029-MS1)

Source: E303077-01

Prepared: 03/22/23 Analyzed: 03/23/23

Benzene	2.47	0.0250	2.50	ND	98.6	48-131			
Ethylbenzene	2.47	0.0250	2.50	ND	98.7	45-135			
Toluene	2.55	0.0250	2.50	ND	102	48-130			
o-Xylene	2.61	0.0250	2.50	ND	104	43-135			
p,m-Xylene	5.00	0.0500	5.00	ND	99.9	43-135			
Total Xylenes	7.61	0.0250	7.50	ND	101	43-135			
Surrogate: Bromofluorobenzene	0.476		0.500		95.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			

Matrix Spike Dup (2312029-MSD1)

Source: E303077-01

Prepared: 03/22/23 Analyzed: 03/23/23

Benzene	2.39	0.0250	2.50	ND	95.7	48-131	3.07	23	
Ethylbenzene	2.29	0.0250	2.50	ND	91.6	45-135	7.50	27	
Toluene	2.36	0.0250	2.50	ND	94.5	48-130	7.57	24	
o-Xylene	2.44	0.0250	2.50	ND	97.5	43-135	6.93	27	
p,m-Xylene	4.65	0.0500	5.00	ND	93.0	43-135	7.21	27	
Total Xylenes	7.09	0.0250	7.50	ND	94.5	43-135	7.11	27	
Surrogate: Bromofluorobenzene	0.472		0.500		94.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.458		0.500		91.5	70-130			
Surrogate: Toluene-d8	0.501		0.500		100	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

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 (2312028-BLK1)

Prepared: 03/22/23 Analyzed: 03/22/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.470		0.500		93.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.491		0.500		98.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

LCS (2312028-BS2)

Prepared: 03/22/23 Analyzed: 03/22/23

Gasoline Range Organics (C6-C10)	48.2	20.0	50.0		96.3	70-130			
Surrogate: Bromofluorobenzene	0.479		0.500		95.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.7	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike (2312028-MS2)

Source: E303073-21

Prepared: 03/22/23 Analyzed: 03/22/23

Gasoline Range Organics (C6-C10)	46.0	20.0	50.0	ND	92.1	70-130			
Surrogate: Bromofluorobenzene	0.487		0.500		97.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

Matrix Spike Dup (2312028-MSD2)

Source: E303073-21

Prepared: 03/22/23 Analyzed: 03/22/23

Gasoline Range Organics (C6-C10)	47.5	20.0	50.0	ND	94.9	70-130	3.02	20	
Surrogate: Bromofluorobenzene	0.485		0.500		97.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.498		0.500		99.6	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

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 (2312029-BLK1)

Prepared: 03/22/23 Analyzed: 03/23/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.465		0.500		93.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.498		0.500		99.5	70-130			

LCS (2312029-BS2)

Prepared: 03/22/23 Analyzed: 03/23/23

Gasoline Range Organics (C6-C10)	51.0	20.0	50.0		102	70-130			
Surrogate: Bromofluorobenzene	0.461		0.500		92.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.3	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike (2312029-MS2)

Source: E303077-01

Prepared: 03/22/23 Analyzed: 03/23/23

Gasoline Range Organics (C6-C10)	54.4	20.0	50.0	ND	109	70-130			
Surrogate: Bromofluorobenzene	0.455		0.500		90.9	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.460		0.500		92.0	70-130			
Surrogate: Toluene-d8	0.526		0.500		105	70-130			

Matrix Spike Dup (2312029-MSD2)

Source: E303077-01

Prepared: 03/22/23 Analyzed: 03/23/23

Gasoline Range Organics (C6-C10)	54.3	20.0	50.0	ND	109	70-130	0.319	20	
Surrogate: Bromofluorobenzene	0.460		0.500		92.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.464		0.500		92.7	70-130			
Surrogate: Toluene-d8	0.532		0.500		106	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

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 (2312040-BLK1)

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	41.5		50.0		83.1	50-200			

LCS (2312040-BS1)

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	216	25.0	250		86.4	38-132			
Surrogate: n-Nonane	41.9		50.0		83.8	50-200			

Matrix Spike (2312040-MS1)

Source: E303077-01

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132			
Surrogate: n-Nonane	39.1		50.0		78.3	50-200			

Matrix Spike Dup (2312040-MSD1)

Source: E303077-01

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	263	25.0	250	ND	105	38-132	1.35	20	
Surrogate: n-Nonane	35.8		50.0		71.6	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

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 (2312041-BLK1)

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	49.6		50.0		99.2	50-200			

LCS (2312041-BS1)

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	240	25.0	250		96.0	38-132			
Surrogate: n-Nonane	39.6		50.0		79.2	50-200			

Matrix Spike (2312041-MS1)

Source: E303075-01

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	230	25.0	250	ND	92.1	38-132			
Surrogate: n-Nonane	36.2		50.0		72.4	50-200			

Matrix Spike Dup (2312041-MSD1)

Source: E303075-01

Prepared: 03/22/23 Analyzed: 03/22/23

Diesel Range Organics (C10-C28)	222	25.0	250	ND	88.9	38-132	3.62	20	
Surrogate: n-Nonane	36.1		50.0		72.3	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

Anions by EPA 300.0/9056A

Analyst: BA

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

Blank (2312033-BLK1)					Prepared: 03/22/23 Analyzed: 03/22/23				
Chloride	ND	20.0							
LCS (2312033-BS1)					Prepared: 03/22/23 Analyzed: 03/22/23				
Chloride	250	20.0	250		100	90-110			
Matrix Spike (2312033-MS1)					Source: E303077-01		Prepared: 03/22/23 Analyzed: 03/22/23		
Chloride	306	20.0	250	52.2	101	80-120			
Matrix Spike Dup (2312033-MSD1)					Source: E303077-01		Prepared: 03/22/23 Analyzed: 03/22/23		
Chloride	312	20.0	250	52.2	104	80-120	1.97	20	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane Federal #1	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	3/30/2023 11:03:16AM

Anions by EPA 300.0/9056A

Analyst: BA

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

Blank (2312035-BLK1)					Prepared: 03/22/23 Analyzed: 03/23/23				
Chloride	ND	20.0							
LCS (2312035-BS1)					Prepared: 03/22/23 Analyzed: 03/23/23				
Chloride	254	20.0	250		102	90-110			
Matrix Spike (2312035-MS1)					Source: E303077-21		Prepared: 03/22/23 Analyzed: 03/23/23		
Chloride	259	20.0	250	ND	104	80-120			
Matrix Spike Dup (2312035-MSD1)					Source: E303077-21		Prepared: 03/22/23 Analyzed: 03/23/23		
Chloride	262	20.0	250	ND	105	80-120	1.14	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:	Liza Jane Federal #1	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	03/30/23 11:03

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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

Client: Pima Environmental Services					Bill To		Lab Use Only				TAT				EPA Program		
Project: <u>Lisa Jane Federal #1</u>					Attention:		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA	
Project Manager: Tom Bynum					Address:		<u>E303077</u>		<u>21004000</u>					X			
Address: 5614 N. Lovington Hwy.					City, State, Zip		Analysis and Method								RCRA		
City, State, Zip: <u>Hobbs, NM, 88240</u>					Phone:		DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0					
Phone: 580-748-1613					Email:								BGDOC NM	BGDOC TX			
Email: <u>tom@pimaoil.com</u>					Pima Project #												
Report due by:																	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											Remarks	
	3/21/23	Soil	1-202	S1-Surface	1								X				
				S1-1'	2												
				S1-2'	3												
				S1-3'	4												
				S1-4'	5												
				S2-Surface	6												
				S2-1'	7												
				S2-2'	8												
				S2-3'	9												
				S2-4'	10												
Additional Instructions:																	
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. <u>Sampled by:</u> <u>Bill Pima</u>																	
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5 °C on subsequent days.																	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only									
<u>Leahann J.</u>		3-21-23	1430	<u>Michelle Camp</u>		3-21-23	1430	Received on ice: <u>Y</u> N									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3									
<u>Michelle Camp</u>		3-21-23	1730	<u>Andrew MFSO</u>		3-24-23	5:30										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C									
<u>Andrew MFSO</u>		3-21-23	11:30	<u>Andrew MFSO</u>		3-22-23	5:00	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.																	

Project Information

Chain of Custody

Page 2 of 3

Client: Pima Environmental Services					Bill To		Lab Use Only				TAT				EPA Program						
Project:					Attention:		Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA					
Project Manager: Tom Bynum					Address:		E303077		210004-0001					X							
Address: 5614 N. Lovington Hwy.					City, State, Zip		Analysis and Method											RCRA			
City, State, Zip: Hobbs, NM, 88240					Phone:												State				
Phone: 580-748-1613					Email:												NM	CO	UT	AZ	TX
Email: tom@pimaoil.com					Pima Project #												X				
Report due by:																					
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0		BGDOC NM	BGDOC TX		Remarks					
	3/21/23	Soil	1-202	S3-Surface	11								X								
				S3-1'	12																
				S3-2'	13																
				S3-3'	14																
				S3-4'	15																
				S4-Surface	16																
				S4-1'	17																
				S4-2'	18																
				S4-3'	19																
				S4-4'	20																
Additional Instructions: Bill Pima																					
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.											Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 5 °C on subsequent days.										
Sampled by:																					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only													
[Signature]		3-21-23	1430	Michelle Camacho		3-21-23	1430	Received on ice: Y / N													
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3													
Michelle Camacho		3-21-23	1730	Andrew MBS		3-21-23	5:30														
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C													
Andrew MBS		3-21-23	11:30	[Signature]		3-22-23	5:00	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.																					

Project Information

Chain of Custody

Page 3 of 3

Client: Pima Environmental Services		Bill To		Lab Use Only		TAT		EPA Program					
Project: <u>Lisa Jane Federal #1</u>		Attention:		Lab WO# <u>E363077</u>		Job Number <u>21004-0001</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum		Address:		Analysis and Method									
Address: <u>5614 N. Lovington Hwy.</u>		City, State, Zip											RCRA
City, State, Zip <u>Hobbs, NM, 88240</u>		Phone:											
Phone: <u>580-748-1613</u>		Email:											
Email: <u>tom@pimaoil.com</u>		Pima Project #											
Report due by:													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
	3/21/23	Soil	1-202	SW1	21							X		
	I	I	I	SW2	22							I		
	I	I	I	SW3	23							I		
	I	I	I	SW4	24							I		

Additional Instructions:						Bill Pima					
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Relinquished by: (Signature) <u>Leathea J.</u>						Received by: (Signature) <u>Michelle Camp</u>					
Date		Time		Date		Time		Date		Time	
3-21-23		1430		3-21-23		1430		3-21-23		1430	
Relinquished by: (Signature) <u>Michelle Camp</u>						Received by: (Signature) <u>Andrew Messo</u>					
Date		Time		Date		Time		Date		Time	
3-21-23		1730		3-21-23		5:30		3-21-23		5:30	
Relinquished by: (Signature) <u>Andrew Messo</u>						Received by: (Signature) <u>Alvin</u>					
Date		Time		Date		Time		Date		Time	
3-21-23		11:30		3-22-23		5:00		3-22-23		5:00	
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.											

Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Liza Jane

Work Order: E304039

Job Number: 22093-0001

Received: 4/11/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
4/17/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 4/17/23

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Liza Jane
Workorder: E304039
Date Received: 4/11/2023 7:15:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 4/11/2023 7:15:00AM, under the Project Name: Liza Jane.

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

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

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

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

Respectfully,

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

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

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

Field Offices:

Southern New Mexico Area
Lynn Jarboe
Technical Representative/Client Services
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

West Texas Midland/Odessa Area
Rayny Hagan
Technical Representative
Office: 505-421-LABS(5227)

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane	Reported: 04/17/23 09:29
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS1	E304039-01A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CS2	E304039-02A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CS3	E304039-03A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CS4	E304039-04A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CS5	E304039-05A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CSW1	E304039-06A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CSW2	E304039-07A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CSW3	E304039-08A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CSW4	E304039-09A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.
CSW5	E304039-10A	Soil	04/09/23	04/11/23	Glass Jar, 2 oz.



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CS1

E304039-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	101 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	101 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	97.6 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane	87.2 %	50-200		04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CS2

E304039-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	101 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	99.4 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	101 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane	93.5 %	50-200		04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CS3

E304039-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	98.8 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	107 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	103 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	98.8 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	107 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	103 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane	100 %	50-200		04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CS4

E304039-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	98.0 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	98.0 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	99.9 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane	101 %	50-200		04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CS5

E304039-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	98.8 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	100 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	98.8 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	103 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	100 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane	95.9 %	50-200		04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CSW1

E304039-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	97.1 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	99.8 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	97.1 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	99.8 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane	97.2 %	50-200		04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CSW2

E304039-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	93.1 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	103 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	93.1 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	103 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane	96.3 %	50-200		04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CSW3

E304039-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene		100 %	70-130	04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	04/11/23	04/11/23	
Surrogate: Toluene-d8		102 %	70-130	04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene		100 %	70-130	04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4		97.7 %	70-130	04/11/23	04/11/23	
Surrogate: Toluene-d8		102 %	70-130	04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/12/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/12/23	
Surrogate: n-Nonane		97.9 %	50-200	04/11/23	04/12/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CSW4

E304039-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene		100 %	70-130	04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4		99.3 %	70-130	04/11/23	04/11/23	
Surrogate: Toluene-d8		103 %	70-130	04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene		100 %	70-130	04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4		99.3 %	70-130	04/11/23	04/11/23	
Surrogate: Toluene-d8		103 %	70-130	04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/13/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/13/23	
Surrogate: n-Nonane		99.2 %	50-200	04/11/23	04/13/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



Sample Data

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

Project Name: Liza Jane
Project Number: 22093-0001
Project Manager: Tom Bynum

Reported:
4/17/2023 9:29:41AM

CSW5

E304039-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Benzene	ND	0.0250	1	04/11/23	04/11/23	
Ethylbenzene	ND	0.0250	1	04/11/23	04/11/23	
Toluene	ND	0.0250	1	04/11/23	04/11/23	
o-Xylene	ND	0.0250	1	04/11/23	04/11/23	
p,m-Xylene	ND	0.0500	1	04/11/23	04/11/23	
Total Xylenes	ND	0.0250	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	99.3 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	95.6 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2315018
Gasoline Range Organics (C6-C10)	ND	20.0	1	04/11/23	04/11/23	
Surrogate: Bromofluorobenzene	99.3 %	70-130		04/11/23	04/11/23	
Surrogate: 1,2-Dichloroethane-d4	95.6 %	70-130		04/11/23	04/11/23	
Surrogate: Toluene-d8	102 %	70-130		04/11/23	04/11/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2315048
Diesel Range Organics (C10-C28)	ND	25.0	1	04/11/23	04/13/23	
Oil Range Organics (C28-C36)	ND	50.0	1	04/11/23	04/13/23	
Surrogate: n-Nonane	86.7 %	50-200		04/11/23	04/13/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2315034
Chloride	ND	20.0	1	04/11/23	04/11/23	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane	Reported: 4/17/2023 9:29:41AM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Volatile Organic Compounds by EPA 8260B

Analyst: SL

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 (2315018-BLK1)

Prepared: 04/10/23 Analyzed: 04/10/23

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	0.494		0.500		98.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.2	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2315018-BS1)

Prepared: 04/10/23 Analyzed: 04/10/23

Benzene	2.12	0.0250	2.50		85.0	70-130			
Ethylbenzene	2.04	0.0250	2.50		81.5	70-130			
Toluene	2.07	0.0250	2.50		82.7	70-130			
o-Xylene	2.03	0.0250	2.50		81.1	70-130			
p,m-Xylene	3.99	0.0500	5.00		79.8	70-130			
Total Xylenes	6.02	0.0250	7.50		80.2	70-130			
Surrogate: Bromofluorobenzene	0.493		0.500		98.6	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.510		0.500		102	70-130			
Surrogate: Toluene-d8	0.507		0.500		101	70-130			

Matrix Spike (2315018-MS1)

Source: E304039-04

Prepared: 04/11/23 Analyzed: 04/11/23

Benzene	2.55	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.43	0.0250	2.50	ND	97.4	45-135			
Toluene	2.47	0.0250	2.50	ND	98.6	48-130			
o-Xylene	2.42	0.0250	2.50	ND	96.9	43-135			
p,m-Xylene	4.82	0.0500	5.00	ND	96.5	43-135			
Total Xylenes	7.25	0.0250	7.50	ND	96.6	43-135			
Surrogate: Bromofluorobenzene	0.485		0.500		97.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.503		0.500		101	70-130			
Surrogate: Toluene-d8	0.511		0.500		102	70-130			

Matrix Spike Dup (2315018-MSD1)

Source: E304039-04

Prepared: 04/11/23 Analyzed: 04/11/23

Benzene	2.55	0.0250	2.50	ND	102	48-131	0.0392	23	
Ethylbenzene	2.48	0.0250	2.50	ND	99.0	45-135	1.71	27	
Toluene	2.51	0.0250	2.50	ND	100	48-130	1.75	24	
o-Xylene	2.46	0.0250	2.50	ND	98.5	43-135	1.66	27	
p,m-Xylene	4.86	0.0500	5.00	ND	97.1	43-135	0.641	27	
Total Xylenes	7.32	0.0250	7.50	ND	97.6	43-135	0.982	27	
Surrogate: Bromofluorobenzene	0.474		0.500		94.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.492		0.500		98.4	70-130			
Surrogate: Toluene-d8	0.512		0.500		102	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane	Reported: 4/17/2023 9:29:41AM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

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 (2315018-BLK1)

Prepared: 04/10/23 Analyzed: 04/10/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.494		0.500		98.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.2	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

LCS (2315018-BS2)

Prepared: 04/11/23 Analyzed: 04/13/23

Gasoline Range Organics (C6-C10)	46.4	20.0	50.0		92.8	70-130			
Surrogate: Bromofluorobenzene	0.480		0.500		96.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			

Matrix Spike (2315018-MS2)

Source: E304039-04

Prepared: 04/11/23 Analyzed: 04/11/23

Gasoline Range Organics (C6-C10)	51.5	20.0	50.0	ND	103	70-130			
Surrogate: Bromofluorobenzene	0.494		0.500		98.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.524		0.500		105	70-130			

Matrix Spike Dup (2315018-MSD2)

Source: E304039-04

Prepared: 04/11/23 Analyzed: 04/11/23

Gasoline Range Organics (C6-C10)	49.2	20.0	50.0	ND	98.3	70-130	4.62	20	
Surrogate: Bromofluorobenzene	0.499		0.500		99.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.496		0.500		99.2	70-130			
Surrogate: Toluene-d8	0.520		0.500		104	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane	Reported: 4/17/2023 9:29:41AM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: JL

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 (2315048-BLK1)					Prepared: 04/11/23 Analyzed: 04/12/23				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	47.8		50.0		95.7	50-200			

LCS (2315048-BS1)					Prepared: 04/11/23 Analyzed: 04/12/23				
Diesel Range Organics (C10-C28)	252	25.0	250		101	38-132			
Surrogate: n-Nonane	45.0		50.0		89.9	50-200			

Matrix Spike (2315048-MS1)					Source: E304039-07		Prepared: 04/11/23 Analyzed: 04/12/23		
Diesel Range Organics (C10-C28)	264	25.0	250	ND	106	38-132			
Surrogate: n-Nonane	46.6		50.0		93.2	50-200			

Matrix Spike Dup (2315048-MSD1)					Source: E304039-07		Prepared: 04/11/23 Analyzed: 04/12/23		
Diesel Range Organics (C10-C28)	265	25.0	250	ND	106	38-132	0.374	20	
Surrogate: n-Nonane	46.8		50.0		93.6	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Liza Jane	Reported:
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	4/17/2023 9:29:41AM

Anions by EPA 300.0/9056A

Analyst: BA

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2315034-BLK1)

Prepared: 04/11/23 Analyzed: 04/11/23

Chloride ND 20.0

LCS (2315034-BS1)

Prepared: 04/11/23 Analyzed: 04/11/23

Chloride 247 20.0 250 98.7 90-110

Matrix Spike (2315034-MS1)

Source: E304038-21

Prepared: 04/11/23 Analyzed: 04/11/23

Chloride 252 20.0 250 ND 101 80-120

Matrix Spike Dup (2315034-MSD1)

Source: E304038-21

Prepared: 04/11/23 Analyzed: 04/11/23

Chloride 274 20.0 250 ND 109 80-120 8.24 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:	Liza Jane	
PO Box 247	Project Number:	22093-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	04/17/23 09:29

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite

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 1

Client: Pima Environmental Services					Bill To		Lab Use Only		TAT				EPA Program			
Project: Liza Jane					Attention: Arms Frong		Lab WO# E304039		Job Number 22093-001		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum					Address:		Analysis and Method								RCRA	
Address: 5614 N. Lovington Hwy.					City, State, Zip		DRO/DRO by 8015		GRO/DRO by 8015		BTEX by 8021		VOC by 8260		Metals 6010	
City, State, Zip Hobbs, NM, 88240					Phone:		Chloride 300.0									
Phone: 580-748-1613					Email:											
Email: tom@pimaoil.com					Pima Project # 19-14											
Report due by:																
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number											
9:00	4/9/23	S	1	CS1	1											
9:05				CS2	2											
9:10				CS3	3											
9:15				CS4	4											
9:20				CS5	5											
9:25				CSW1	6											
9:30				CSW2	7											
9:35				CSW3	8											
9:40				CSW4	9											
9:45				CSW5	10											
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 mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: Adnom Benandes																
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	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.								
4/10		4-10-23	2:00	Miguel Camacho		4-10-23	1640	Received on ice: Y/N								
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3								
Miguel Camacho		4-10-23	1830	Lorenz Leri		4-10-23	1830									
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C								
Lorenz Leri		4-11-23	2415	Adnom Benandes		4-11-23	7:15	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: 4/11/2023 1:09:20PM

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:	04/11/23 07:15	Work Order ID:	E304039
Phone:	(575) 631-6977	Date Logged In:	04/11/23 08:35	Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	04/17/23 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: CourierComments/ResolutionSample Turn Around Time (TAT)

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

Sample Cooler

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

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

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

Sample Container

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

Field Label

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.



Pima Environmental Services

Appendix F

Disposal Documentation



57033

GENERATOR

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin
 Lease/Well Liza Jane Fedem / #1
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMPIN: 4:57pm OUT: _____**DISPOSAL FACILITY****RECEIVING AREA**Name/No. Landfill

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202
 NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name TB35
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 1
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines**Non-Exempt E&P Waste/Service Identification and Amount**

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid _____ Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☐ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

GM inc.

56232

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

GENERATOR

Location of Origin
 Lease/Well Liza Jane Federal #1
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP

IN: 2:56pm OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. Landfill

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 518
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid _____ 12 Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.



56231

GENERATOR

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin Liza Jane Federal #1
 Lease/Well _____
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMPIN: 11:06 AM OUT: _____**DISPOSAL FACILITY****RECEIVING AREA**Name/No. Landfill

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 384
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines**Non-Exempt E&P Waste/Service Identification and Amount**

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY:

B - Barrels

L - Liquid

Y - Yards

E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.



56230

GENERATOR

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin
 Lease/Well Liza Jane Federal #1

Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP**DISPOSAL FACILITY****RECEIVING AREA**IN: 11:00AM OUT: _____Name/No. LandfillSite Name / Permit No. Commercial Landfill (NM-01-0019)Phone No. 575-347-0434Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp**TRANSPORTER**

Address _____

Print Name _____

Truck No. 518

Phone No. _____

Bin No. _____

Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE**OTHER NON-EXEMPT WASTE****WASTE GENERATION PROCESS:** ☐ Drilling☐ Completion☐ Production☐ Gathering Lines**Non-Exempt E&P Waste/Service Identification and Amount**

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid 12 Y - Yards _____ E - Each**C-138**

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

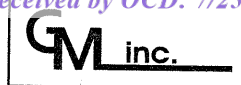
DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.



56217

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

GENERATOR

Location of Origin Lisa Jane Federal #1
 Lease/Well _____
 Name & No. _____
 County _____
 API No. 30-041-20972
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMPIN: 4:23pm OUT: _____**DISPOSAL FACILITY****RECEIVING AREA**Name/No. Landfill

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 518
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines**Non-Exempt E&P Waste/Service Identification and Amount**

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid 12 Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)

☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.



56328

GENERATOR

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin Lisa Jane Federal #1
 Lease/Well _____
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP**DISPOSAL FACILITY****RECEIVING AREA**IN: 6:14PM OUT: _____Name/No. Landfill

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202

Phone No. 575-347-0434

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 516
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE**OTHER NON-EXEMPT WASTE****WASTE GENERATION PROCESS:** ☐ Drilling☐ Completion☐ Production☐ Gathering Lines**Non-Exempt E&P Waste/Service Identification and Amount**

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid 12 Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

GM inc.

56292

Generator Name Barbara O'Connell
 Address Armstrong
 City, State, Zip _____
 Phone No. _____
 Company Man _____

GENERATOR

Location of Origin Lisa Jane Federal #1
 Lease/Well _____
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP

DISPOSAL FACILITY

RECEIVING AREA

IN: 2:27pm OUT: _____

Name/No. Landfill _____

Site Name / Permit No. Commercial Landfill (NM-01-0019)Phone No. 575-347-0434Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp

TRANSPORTER

Address _____

Print Name _____

Phone No. _____

Truck No. 516

Bin No. _____

Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY:

B - Barrels

L - Liquid

Y - Yards

E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

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☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

GM inc.

56291

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

GENERATOR

Location of Origin
 Lease/Well Lisa Jane Federal #1
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP

IN: 2:27pm OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. Landfill

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 378
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid 12 Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

GM inc.

56276

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

GENERATOR

Location of Origin Liza Jane Federal #1
 Lease/Well _____
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP

IN: 10:48 AM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. Landfill _____

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 516
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid _____ Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT:

Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached. (Check the appropriate items as provided.)

☐ MSDS Information☐ RCRA Hazardous Waste Analysis☐ Other (Provide Description Below)☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.



56275

GENERATOR

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin
 Lease/Well Lisa Jane Federal #1
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP

IN: 10:46 AM OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. Landfill

Site Name / Permit No. Commercial Landfill (NM-01-0019)
 Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Gandy Corp
 Address _____
 Phone No. _____

TRANSPORTER

Print Name _____
 Truck No. 58
 Bin No. _____
 Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil ✓ _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY:

B - Barrels

L - Liquid

Y - Yards

E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

☒ RCRA EXEMPT:

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☐ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

NAME (PRINT)

DATE

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

GM inc.

56193

GENERATOR

Generator Name Armstrong
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man Cory Hubbard

Location of Origin
 Lease/Well Liza Jane Fed #1
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP

IN: 6:20am OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. LandfillSite Name / Permit No. Commercial Landfill (NM-01-0019)Address P.O. Box 1658 Roswell, NM 88202

NORM Readings Taken? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Transporter's Name Patron Services

Address _____

Phone No. _____

TRANSPORTER

Print Name _____

Truck No. 170

Bin No. _____

Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE

DRIVER'S SIGNATURE

DELIVERY DATE

DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT WASTE

WASTE GENERATION PROCESS: ☐ Drilling☐ Completion☐ Production☐ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____

*Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid 14 Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

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(PRINT) AUTHORIZED AGENTS SIGNATURE

DATE

SIGNATURE

Nathan Marley

NAME (PRINT)

3-15-23

DATE

GMI

TITLE

SIGNATURE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

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

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

CONDITIONS

Action 244184

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 244184
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	10/24/2023