



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

January 5th, 2023

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

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

Re: Site Assessment, Remediation, and Closure Report
Government E #007
API No. 30-025-27896
GPS: Latitude 32.6368332 Longitude -103.5160294
UL "C.," Sec. 25, T19S, R34E
Lea County, NM
NMOCD Ref. No. NPAC0603847027

Armstrong Energy Corporation have contracted Pima Environmental Services LLC (Pima) to perform a spill assessment, remediation activities, and submit this closure report for a crude oil release that occurred at the Government E #007. The initial C-141 was submitted on January 4th, 2023 (Appendix C). This incident was assigned Incident ID NPAC0603847027, by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Government E #007 is located approximately 23 miles west of Hobbs, NM. This spill site is in Unit C, Section 25, Township 19S, Range 34E, Latitude 32.6368332, Longitude -103.5160294, Lea County, NM. Figure 1 references a location map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is made up of Interlayered eolian sands and piedmont-slope deposits. The soil in this area consists of Pyote and Maljimar fine sand, 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 Government E #007 (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 28 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is 67.78 feet BGS. The closest waterway is a salt playa located approximately 5.15 miles to the west 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' (Lack of GW)	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

NPAC0603847027: On January 30th, 2006, Armstrong personnel was treating the well with corrosion inhibitor, operator shut wellhead valves. The operator forgot to open valves leading to a buildup of pressure in the stuffing box. Packing leaked and sprayed approximately 1/4 bbl of fluid around wellhead. Operator proceeded to shut well down and replaced packing.

Site Assessment and Soil Sampling Results

On October 5th, October 18th, and October 31st, 2022, Pima Environmental Services mobilized personnel to the site to conduct delineation activities. Pima sampled the area surrounding the well head and stuffing box. The following data table include the results of this sampling event.

10-5-2022 / 10-18-2022/ 10-31-2022 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')									
ARMSTRONG ENERGY - GOVERNMENT E #007									
NM Approved Laboratory Results									
Sample ID	Sample Date	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	Cl mg/kg
S-1	10/5/2022	1'	ND	ND	ND	530	622	1152	107
	10/18/2022	2'	ND	ND	ND	228	223	451	355
		3'	ND	ND	ND	76.6	75.6	152.2	436
		4'	ND	ND	ND	ND	ND	0	ND
S-2	10/5/2022	1'	ND	ND	ND	736	1170	1906	48.8
	10/18/2022	2'	ND	ND	ND	649	1130	1779	142
		3'	ND	ND	ND	51.6	ND	51.6	258
SW 1	10/5/2022	6"	ND	ND	ND	ND	ND	0	ND
SW 2	10/5/2022	6"	ND	ND	ND	ND	ND	0	ND
SW 3	10/5/2022	6"	ND	ND	ND	ND	ND	0	ND
SW 4	10/5/2022	6"	ND	ND	ND	ND	ND	0	ND
BG 1	10/5/2022	6"	ND	ND	ND	ND	ND	0	ND
BG 2	10/5/2022	6"	ND	ND	ND	ND	ND	0	ND

ND: Non-Detect

Remediation Activities

On November 30th, 2022, Pima mobilized personnel and equipment to conduct remedial activities. Pima excavated the area overlapping soil samples (S1 & S2) to a depth of four feet Bgs. All contaminated soil was removed and transported to a NMOCD approved landfill for disposal. Photographic documentation can be found in Appendix D.

On December 1st, 2022, after submitting the 48-hour notification (Appendix C), Pima collected confirmation samples. The laboratory results of this sampling event can be found in the following data table. Clean material was brought in and used to backfill the affected area and returned to its previous contour.

12-1-22 Confirmation Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')									
ARMSTRONG ENERGY -GOVERNMENT E #007									
NM Approved Laboratory Results									
Sample ID	Sample Date	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	12/1/2022	4'	ND	ND	ND	ND	ND	0	ND
S2	12/1/2022		ND	ND	ND	ND	ND	0	ND
SW1	12/1/2022	0-4'	ND	ND	ND	ND	ND	0	ND
SW2	12/1/2022		ND	ND	ND	ND	ND	0	ND
SW3	12/1/2022		ND	ND	ND	ND	ND	0	ND
SW4	12/1/2022		ND	ND	ND	ND	ND	0	ND

ND- Analyte Not Detected

Complete laboratory reports can be found in Appendix E.

Closure Request

After careful review, Pima requests that this incident, NPAC0603847027, 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



Pima Environmental Services

Figures:

1-Location Map

2-Topographic Map

3-Karst Map


4-Site Map

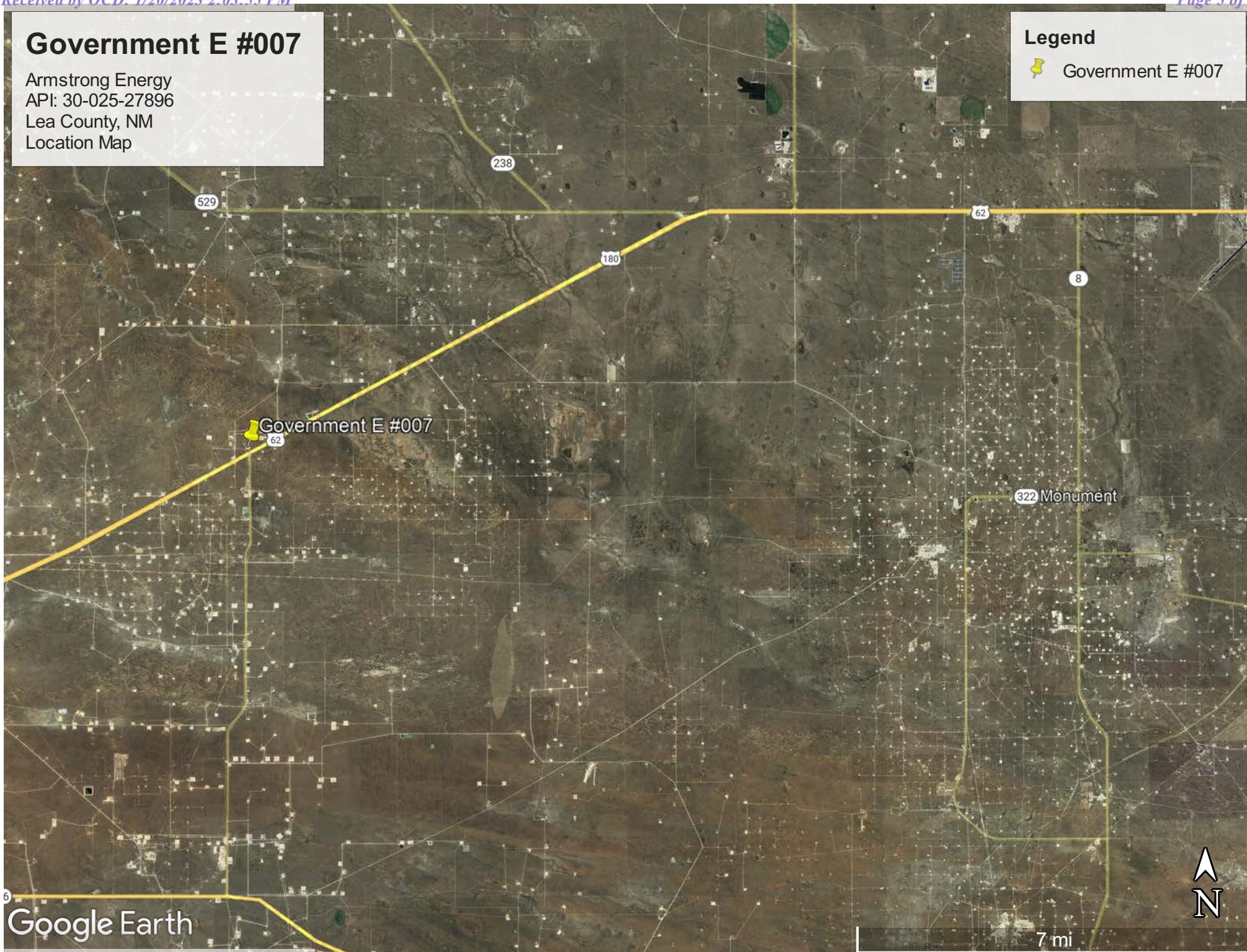
5- Confirmation Map

Government E #007

Armstrong Energy
API: 30-025-27896
Lea County, NM
Location Map

Legend


 Government E #007

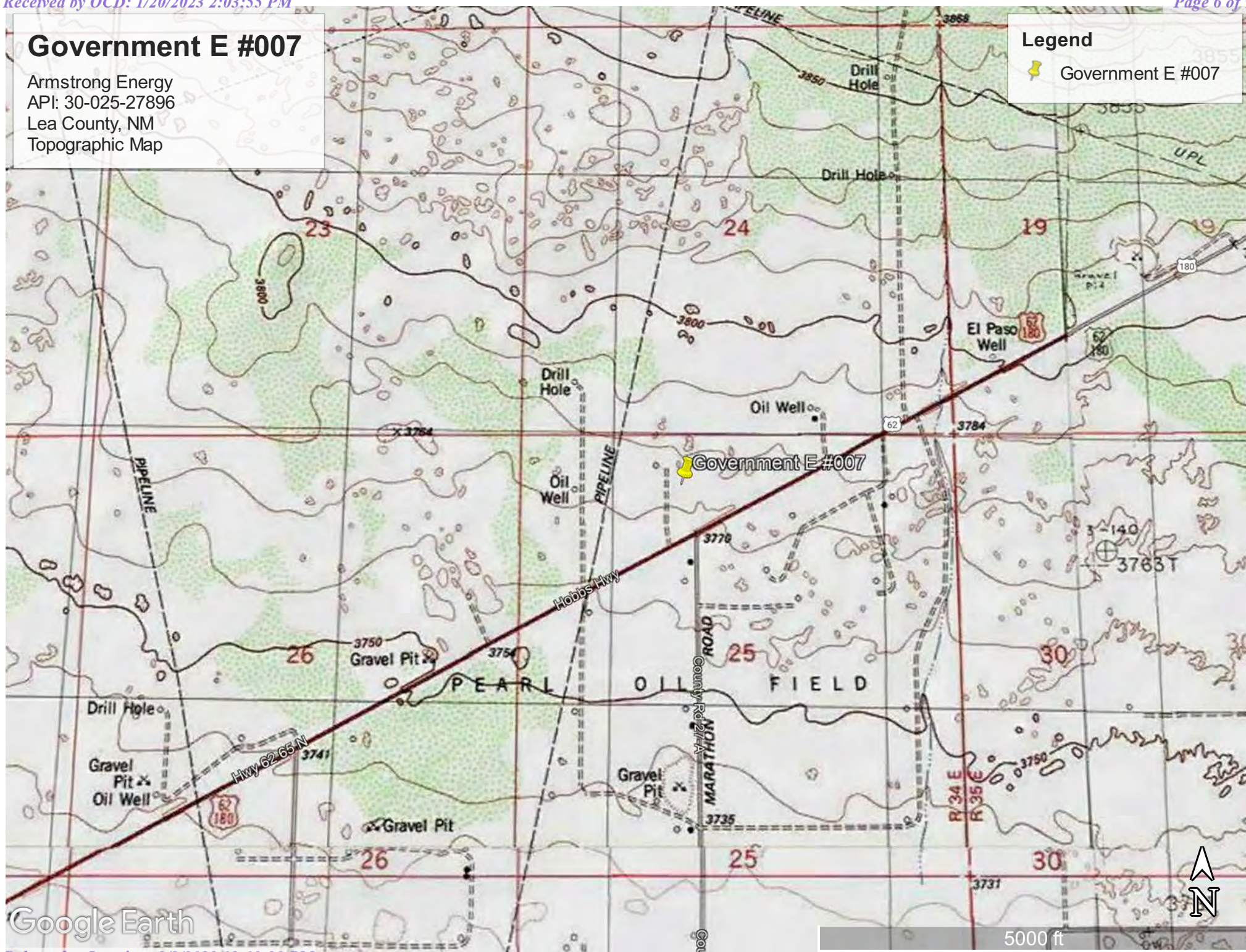


Government E #007

Armstrong Energy
API: 30-025-27896
Lea County, NM
Topographic Map

Legend

 Government E #007




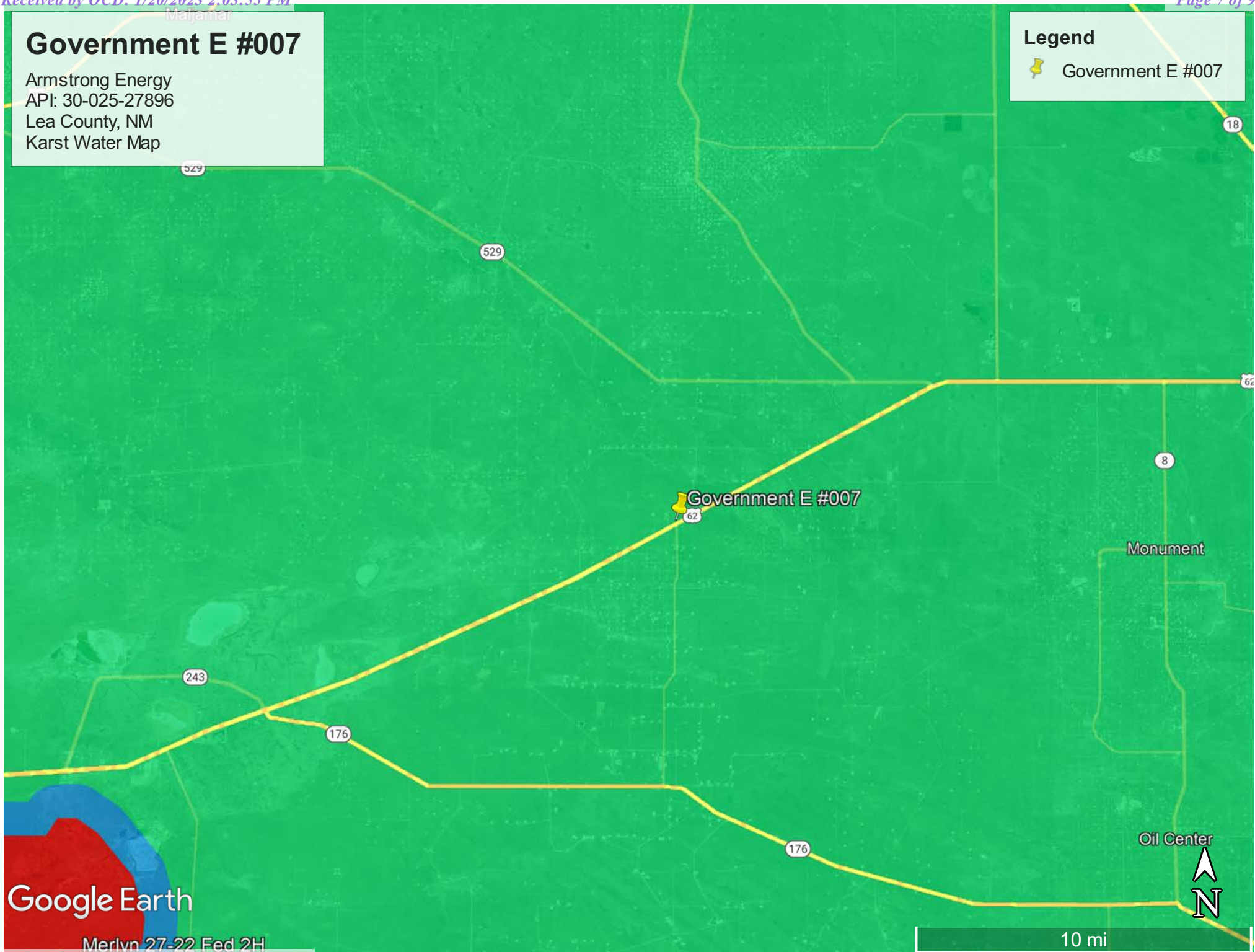
Google Earth

Government E #007

Armstrong Energy
API: 30-025-27896
Lea County, NM
Karst Water Map

Legend

 Government E #007






Google Earth

Merlyn 27-22 Fed 2H

Government E #007

Armstrong Enrgy
API:30-025-27896
Lea County, NM
Site Map

Legend

-  GOvernment E 007
-  Release Area
-  Soil Samples



Government E #007

Armstrong Enrgy
API:30-025-27896
Lea County, NM
Confirmation Map

Legend

- Confirmation Samples
- Government E 007
- Remediated Area





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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		Q Q Q											Water	
POD Number	Code	Sub-basin	County	64	16	4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Column	
CP 00683 POD1		CP	LE	3	3	4	25	19S	34E	639530	3610685* 	1355	120	28	92	
L 08941		L	LE	2	3	3	19	19S	35E	640510	3612523 	1411	600	286	314	
CP 01672 POD1		CP	LE	1	3	1	36	19S	34E	638736	3610009 	2042	100			
L 08234 S		L	LE	4	4	1	18	19S	35E	640871	3614751* 	3220	106	60	46	
L 08234 S2		L	LE				3	17	19S	35E	642192	3614259* 	3750	126	80	46
L 09569		L	LE		4	3	17	19S	35E	642394	3614063* 	3803	80	30	50	
L 15106 POD3		L	LE	2	1	2	32	19S	35E	642875	3610512 	3965	55	28	27	

Average Depth to Water: **85 feet**

Minimum Depth: **28 feet**

Maximum Depth: **286 feet**

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 639198.91

Northing (Y): 3611999.13

Radius: 4000

*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.

1/5/23 9:28 AM

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 =

- 323855103294001

Minimum number of levels = 1

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

USGS 323855103294001 19S.35E.19.21110

Available data for this site

Groundwater: Field measurements

GO

Lea County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°38'55", Longitude 103°29'40" NAD27

Land-surface elevation 3,841 feet above NAVD88

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

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

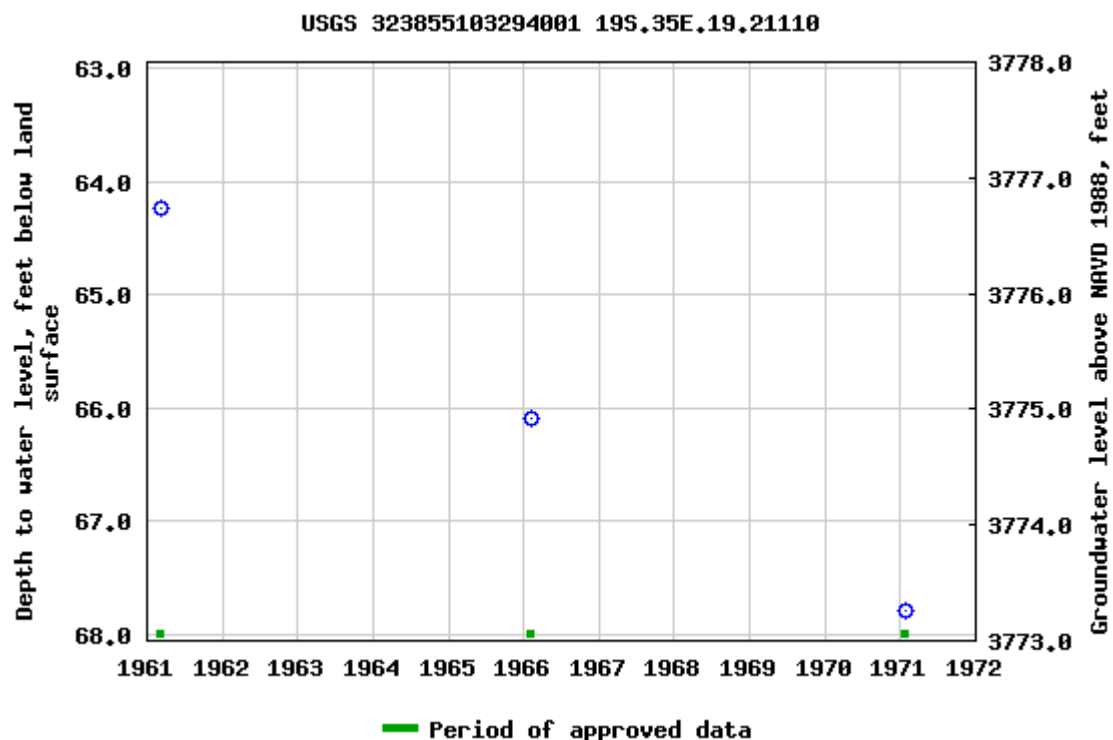
Output formats

[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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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: 2022-10-11 12:37:49 EDT



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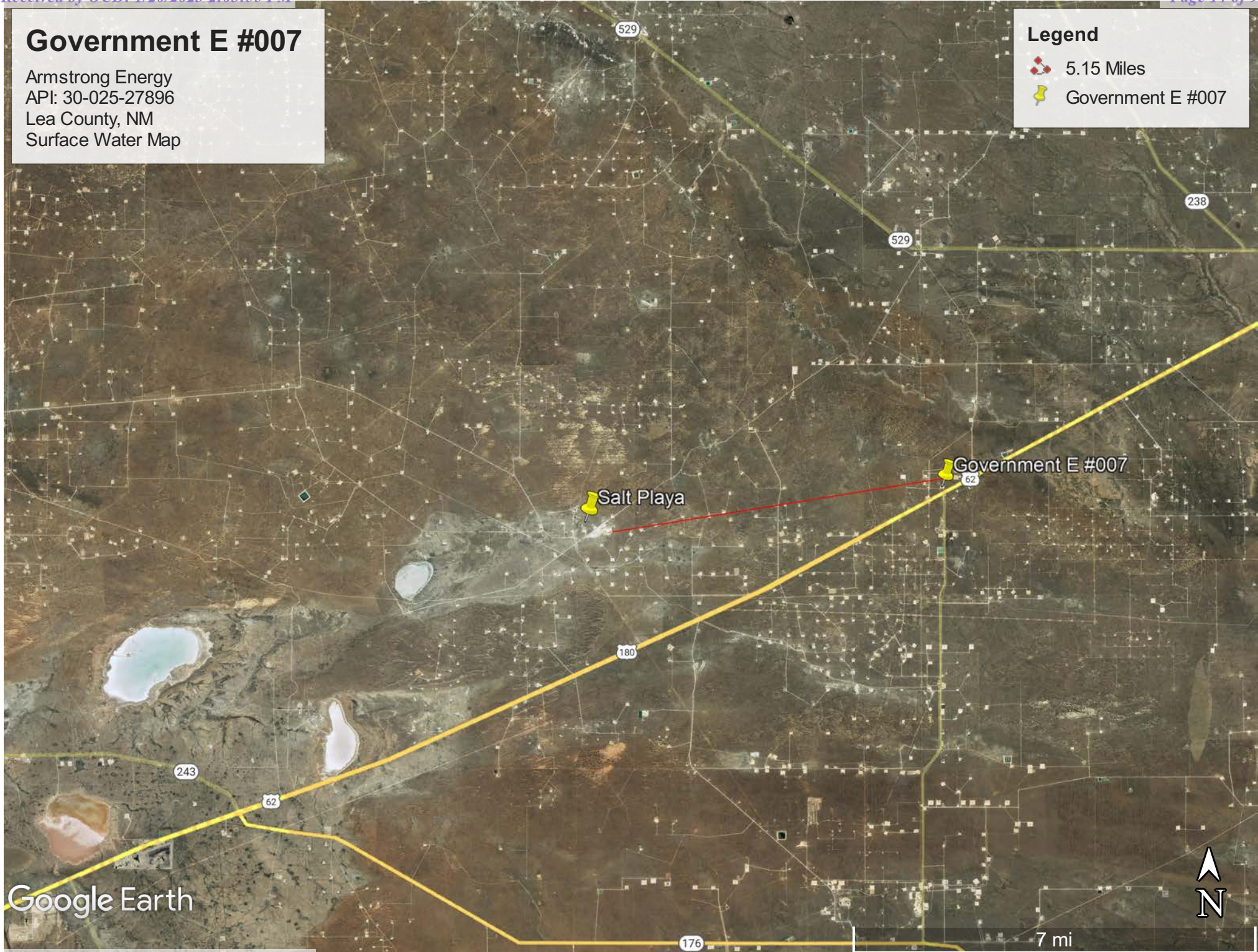


Government E #007

Armstrong Energy
API: 30-025-27896
Lea County, NM
Surface Water Map

Legend

-  5.15 Miles
-  Government E #007





Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Map Unit Description: Pyote and Maljamar fine sands---Lea County, New Mexico

Lea County, New Mexico

PU—Pyote and Maljamar fine sands

Map Unit Setting

National map unit symbol: dmqq

Elevation: 3,000 to 3,900 feet

Mean annual precipitation: 10 to 12 inches

Mean annual air temperature: 60 to 62 degrees F

Frost-free period: 190 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Pyote and similar soils: 46 percent

Maljamar and similar soils: 44 percent

Minor components: 10 percent

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

Description of Pyote

Setting

Landform: Plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 30 inches: fine sand

Bt - 30 to 60 inches: fine sandy loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Well drained

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High
(2.00 to 6.00 in/hr)

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 5 percent

Gypsum, maximum content: 1 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: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e

Map Unit Description: Pyote and Maljamar fine sands---Lea County, New Mexico

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Description of Maljamar

Setting

Landform: Plains
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 24 inches: fine sand
Bt - 24 to 50 inches: sandy clay loam
Bkm - 50 to 60 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 60 inches to petrocalcic
Drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 1 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: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: B
Ecological site: R070BD003NM - Loamy Sand
Hydric soil rating: No

Minor Components

Kermit

Percent of map unit: 10 percent
Ecological site: R070BC022NM - Sandhills

Map Unit Description: Pyote and Maljamar fine sands---Lea County, New Mexico

Hydric soil rating: No

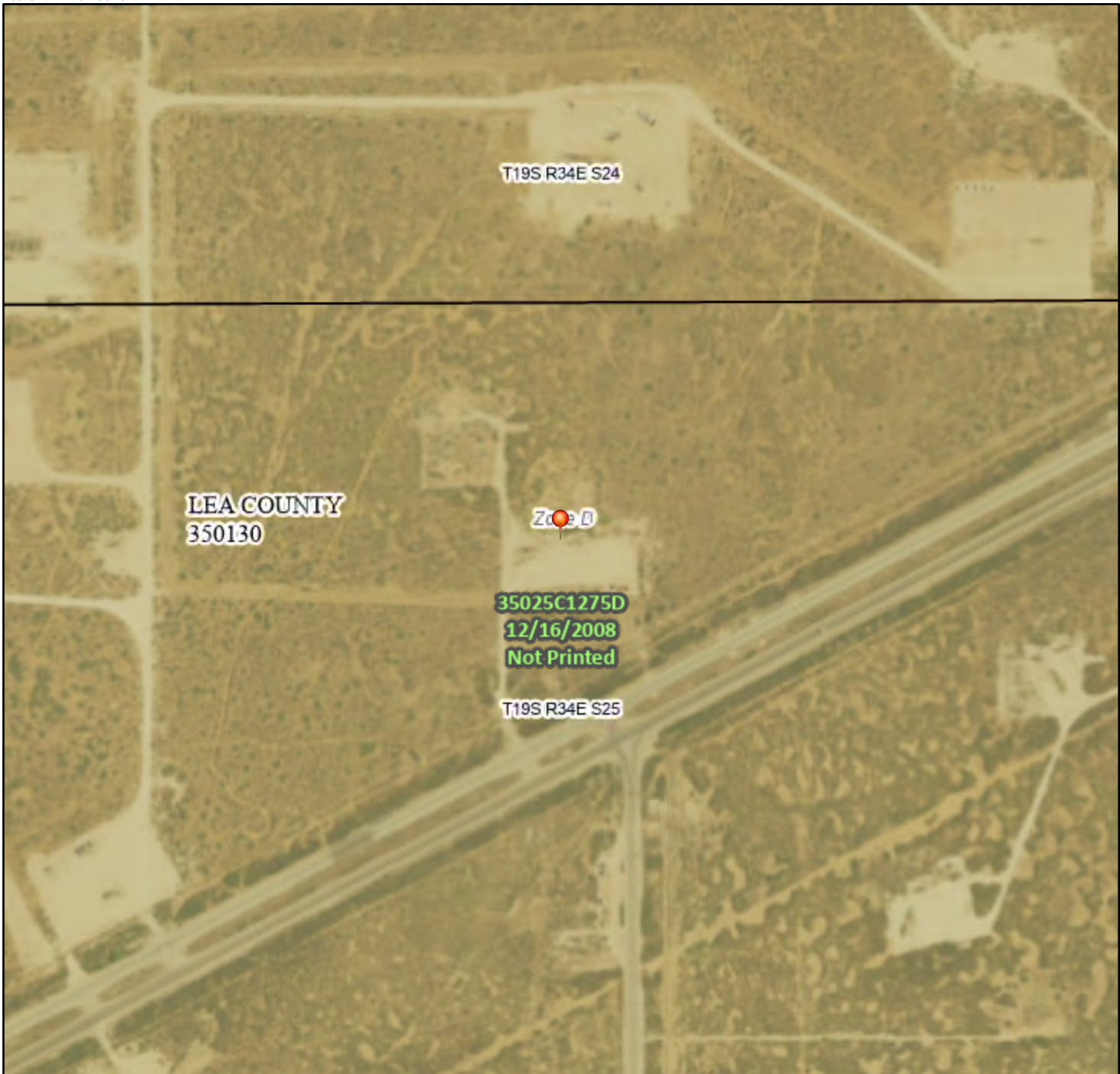
Data Source Information

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

National Flood Hazard Layer FIRMette



103°31'17"W 32°38'28"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
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped

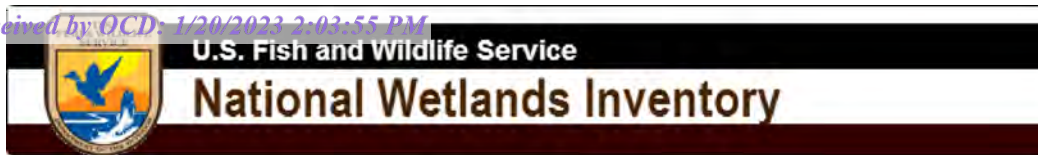


The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

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 10/11/2022 at 2:33 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.



Wetlands Map



December 9, 2022

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	NPAC0603847027
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Armstrong Energy Corp	OGRID	1092
Contact Name	Jeffery Tew	Contact Telephone	575-420-7600
Contact email	jtew@aecnm.com	Incident # (assigned by OCD)	NPAC0603847027
Contact mailing address	P.O Box 1972 Roswell, NM 88202		

Location of Release Source

Latitude 32.6368332 Longitude -103.5160294
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	GOVERNMENT E #007	Site Type	Oil
Date Release Discovered	01/30/2006	API# (if applicable)	30-025-27896

Unit Letter	Section	Township	Range	County
C	25	19S	34E	Lea

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) 0.25 bbl	Volume Recovered (bbls)
<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


While treating well with corrosion inhibitor, operator shut wellhead valves. Forgot to open valves and pressured up stuffing box. Packing leaked and sprayed approximately 1/4 bbl of fluid around wellhead. Shut well down and replaced packing. Area immediately around wellhead. Prep to clean wellhead, pumping unit and remove stained soil.

Incident ID	NPAC0603847027
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: Jeffery Tew	Title: Operations Engineer
Signature: 	Date: 1/4/2023
email: jtew@aecn.com	Telephone: 575-420-7600
<u>OCD Only</u>	
Received by: _____	Date: _____

Incident ID	NPAC0603847027
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?	28 (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

Incident ID	NPAC0603847027
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: Kyle Alpers Title: EHS Professional
Signature: *Kyle Alpers* Date: 1/19/23
email: kalpers@aecn.com Telephone: 575-626-2727

OCD Only

Received by: Jocelyn Harimon Date: 01/23/2023

Incident ID	NPAC0603847027
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: Kyle Alpers Title: EHS Professional
Signature: Kyle Alpers Date: 1/19/23
email: kalpers@aecn.com Telephone: 575-626-2727

OCD Only

Received by: Jocelyn Harimon Date: 01/23/2023

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: Jennifer Nobui Date: 02/09/2023
Printed Name: Jennifer Nobui Title: Environmental Specialist A

Sebastian@pimaoil.com

From: sebastian@pimaoil.com
Sent: Monday, November 28, 2022 3:24 PM
To: ocdonline@state.nm.us
Cc: tom@pimaoil.com; 'Gio PimaOil'; jtew@aecnm.com; kalpers@aecnm.com
Subject: Government E 007 (NPAC0603847027) 48 Hour Notification

All,

Pima Environmental would like to notify you that we will begin collecting confirmation samples at the Government E 007 for incident NPAC0603847027 . Pima personnel are scheduled to be on site for this sampling event at approximately 8:00 a.m. on Thursday, December 1st, 2022, if you have any questions or concerns, please feel free to reach out. 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 COMPANY
GOVERNMENT E 007

Pre-Treatment





Post Remediation







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: Govt E #7

Work Order: E210035

Job Number: 21064-0001

Received: 10/7/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/13/22

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.
Envirotech Inc. holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 10/13/22

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Govt E #7
Workorder: E210035
Date Received: 10/7/2022 10:30:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/7/2022 10:30:00AM, under the Project Name: Govt E #7.

The analytical test results summarized in this report with the Project Name: Govt E #7 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:	Govt E #7	Reported: 10/13/22 12:56
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 1'	E210035-01A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.
S2 1'	E210035-02A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.
SW 1	E210035-03A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.
SW 2	E210035-04A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.
SW 3	E210035-05A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.
SW 4	E210035-06A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.
BG 1	E210035-07A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.
BG 2	E210035-08A	Soil	10/05/22	10/07/22	Glass Jar, 2 oz.



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

S1 1'

E210035-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	98.3 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	103 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	98.3 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	95.5 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	103 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	530	125	5	10/11/22	10/11/22	
Oil Range Organics (C28-C36)	622	250	5	10/11/22	10/11/22	
Surrogate: n-Nonane	118 %	50-200		10/11/22	10/11/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	107	20.0	1	10/11/22	10/12/22	



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

S2 1'

E210035-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	96.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	104 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	96.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	104 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	736	50.0	2	10/11/22	10/12/22	
Oil Range Organics (C28-C36)	1170	100	2	10/11/22	10/12/22	
Surrogate: n-Nonane	116 %	50-200		10/11/22	10/12/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	48.8	20.0	1	10/11/22	10/12/22	



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

SW 1

E210035-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	94.3 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	93.3 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	103 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	94.3 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	93.3 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	103 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	ND	25.0	1	10/11/22	10/11/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/11/22	10/11/22	
Surrogate: n-Nonane	110 %	50-200		10/11/22	10/11/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	ND	20.0	1	10/11/22	10/12/22	



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

SW 2

E210035-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	97.2 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	95.9 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	104 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	97.2 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	95.9 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	104 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	ND	25.0	1	10/11/22	10/11/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/11/22	10/11/22	
Surrogate: n-Nonane	112 %	50-200		10/11/22	10/11/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	ND	20.0	1	10/11/22	10/12/22	



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

SW 3

E210035-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	97.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	104 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	97.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	101 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	104 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	ND	25.0	1	10/11/22	10/11/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/11/22	10/11/22	
Surrogate: n-Nonane	110 %	50-200		10/11/22	10/11/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	ND	20.0	1	10/11/22	10/12/22	



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

SW 4

E210035-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	96.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	96.5 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	105 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	96.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	96.5 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	105 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	ND	25.0	1	10/11/22	10/12/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/11/22	10/12/22	
Surrogate: n-Nonane	110 %	50-200		10/11/22	10/12/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	ND	20.0	1	10/11/22	10/12/22	



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

BG 1

E210035-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	96.5 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	105 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	96.5 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	99.4 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	105 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	ND	25.0	1	10/11/22	10/12/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/11/22	10/12/22	
Surrogate: n-Nonane	111 %	50-200		10/11/22	10/12/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	ND	20.0	1	10/11/22	10/12/22	



Sample Data

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

Project Name: Govt E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/13/2022 12:56:12PM

BG 2

E210035-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Benzene	ND	0.0250	1	10/10/22	10/11/22	
Ethylbenzene	ND	0.0250	1	10/10/22	10/11/22	
Toluene	ND	0.0250	1	10/10/22	10/11/22	
o-Xylene	ND	0.0250	1	10/10/22	10/11/22	
p,m-Xylene	ND	0.0500	1	10/10/22	10/11/22	
Total Xylenes	ND	0.0250	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	97.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	96.0 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	105 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2242004
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/10/22	10/11/22	
Surrogate: Bromofluorobenzene	97.7 %	70-130		10/10/22	10/11/22	
Surrogate: 1,2-Dichloroethane-d4	96.0 %	70-130		10/10/22	10/11/22	
Surrogate: Toluene-d8	105 %	70-130		10/10/22	10/11/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2242016
Diesel Range Organics (C10-C28)	ND	25.0	1	10/11/22	10/12/22	
Oil Range Organics (C28-C36)	ND	50.0	1	10/11/22	10/12/22	
Surrogate: n-Nonane	110 %	50-200		10/11/22	10/12/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2242028
Chloride	ND	20.0	1	10/11/22	10/12/22	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Govt E #7	Reported: 10/13/2022 12:56:12PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Volatile Organic Compounds by EPA 8260B

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 (2242004-BLK1)

Prepared: 10/10/22 Analyzed: 10/11/22

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	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

LCS (2242004-BS1)

Prepared: 10/10/22 Analyzed: 10/11/22

Benzene	2.19	0.0250	2.50		87.4	70-130			
Ethylbenzene	2.14	0.0250	2.50		85.7	70-130			
Toluene	2.15	0.0250	2.50		85.9	70-130			
o-Xylene	2.04	0.0250	2.50		81.6	70-130			
p,m-Xylene	4.01	0.0500	5.00		80.1	70-130			
Total Xylenes	6.05	0.0250	7.50		80.6	70-130			
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.483		0.500		96.5	70-130			
Surrogate: Toluene-d8	0.525		0.500		105	70-130			

LCS Dup (2242004-BSD1)

Prepared: 10/10/22 Analyzed: 10/11/22

Benzene	2.22	0.0250	2.50		88.6	70-130	1.41	23	
Ethylbenzene	2.20	0.0250	2.50		88.2	70-130	2.81	27	
Toluene	2.19	0.0250	2.50		87.5	70-130	1.85	24	
o-Xylene	2.09	0.0250	2.50		83.6	70-130	2.32	27	
p,m-Xylene	4.12	0.0500	5.00		82.5	70-130	2.90	27	
Total Xylenes	6.21	0.0250	7.50		82.8	70-130	2.71	27	
Surrogate: Bromofluorobenzene	0.509		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.5	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Govt E #7	Reported: 10/13/2022 12:56:12PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

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 (2242004-BLK1)

Prepared: 10/10/22 Analyzed: 10/11/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.519		0.500		104	70-130			

LCS (2242004-BS2)

Prepared: 10/10/22 Analyzed: 10/11/22

Gasoline Range Organics (C6-C10)	46.8	20.0	50.0		93.6	70-130			
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.481		0.500		96.1	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

LCS Dup (2242004-BSD2)

Prepared: 10/10/22 Analyzed: 10/11/22

Gasoline Range Organics (C6-C10)	48.6	20.0	50.0		97.1	70-130	3.68	20	
Surrogate: Bromofluorobenzene	0.491		0.500		98.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.478		0.500		95.5	70-130			
Surrogate: Toluene-d8	0.532		0.500		106	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Govt E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/13/2022 12:56:12PM

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 (2242016-BLK1)

Prepared: 10/11/22 Analyzed: 10/11/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	52.1		50.0		104	50-200			

LCS (2242016-BS1)

Prepared: 10/11/22 Analyzed: 10/11/22

Diesel Range Organics (C10-C28)	255	25.0	250		102	38-132			
Surrogate: n-Nonane	53.7		50.0		107	50-200			

Matrix Spike (2242016-MS1)

Source: E210035-06

Prepared: 10/11/22 Analyzed: 10/11/22

Diesel Range Organics (C10-C28)	263	25.0	250	ND	105	38-132			
Surrogate: n-Nonane	53.1		50.0		106	50-200			

Matrix Spike Dup (2242016-MSD1)

Source: E210035-06

Prepared: 10/11/22 Analyzed: 10/11/22

Diesel Range Organics (C10-C28)	257	25.0	250	ND	103	38-132	2.30	20	
Surrogate: n-Nonane	54.7		50.0		109	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Govt E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/13/2022 12:56:12PM

Anions by EPA 300.0/9056A

Analyst: RAS

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 (2242028-BLK1)

Prepared: 10/11/22 Analyzed: 10/12/22

Chloride	ND	20.0
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LCS (2242028-BS1)

Prepared: 10/11/22 Analyzed: 10/12/22

Chloride	246	20.0	250	98.5	90-110
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Matrix Spike (2242028-MS1)

Source: E210035-01

Prepared: 10/11/22 Analyzed: 10/12/22

Chloride	349	20.0	250	107	96.6	80-120
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Matrix Spike Dup (2242028-MSD1)

Source: E210035-01

Prepared: 10/11/22 Analyzed: 10/12/22

Chloride	348	20.0	250	107	96.2	80-120	0.285	20
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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:	Govt E #7	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/13/22 12:56

- 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 Project: GOVT E #1 Project Manager: Tom Bynum Address: 5614 N. Lovington Hwy. City, State, Zip: Hobbs, NM, 88240 Phone: 580-748-1613 Email: tom@pimaoil.com Report due by:					Bill To Attention: Pima Address: City, State, Zip: Phone: Email: Pima Project #					Lab Use Only						TAT				EPA Program			
										Lab WO# E210035		Job Number 21004-0001		1D	2D	3D	Standard	CWA	SDWA				
										Analysis and Method										State			
										DRO/ORO by 8015 GRO/DRO by 8015 BTEX by 8021 VOC by 8260 Metals 6010 Chloride 300.0 BDOC NM BDOC TX										NM CO UT AZ TX			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number																		
9:00	10/5/22	S	1	S1 1'	1																		
9:05				S2 1'	2																		
9:10				SW1	3																		
9:15				SW2	4																		
9:20				SW3	5																		
9:25				SW4	6																		
9:30				BQ1	7																		
9:35				BQ2	8																		
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.												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		Lab Use Only Received on Ice: <u>21 N</u>											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		T1 _____ T2 _____ T3 _____											
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time		AVG Temp °C <u>4</u>											
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA											
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																							

Envirotech Analytical Laboratory

Printed: 10/7/2022 12:16:35PM

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:	10/07/22 10:30	Work Order ID:	E210035
Phone:	(575) 631-6977	Date Logged In:	10/07/22 12:11	Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	10/13/22 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: UPSComments/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.

Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Government E #7

Work Order: E210114

Job Number: 21064-0001

Received: 10/20/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
10/26/22

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.
Envirotech Inc. holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 10/26/22

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Government E #7
Workorder: E210114
Date Received: 10/20/2022 11:00:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/20/2022 11:00:00AM, under the Project Name: Government E #7.

The analytical test results summarized in this report with the Project Name: Government E #7 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

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Technical Representative
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Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/26/22 16:05

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1 - 2'	E210114-01A	Soil	10/18/22	10/20/22	Glass Jar, 2 oz.
S1 - 3'	E210114-02A	Soil	10/18/22	10/20/22	Glass Jar, 2 oz.
S2 - 2'	E210114-03A	Soil	10/18/22	10/20/22	Glass Jar, 2 oz.
S2 - 3'	E210114-04A	Soil	10/18/22	10/20/22	Glass Jar, 2 oz.



Sample Data

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

Project Name: Government E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/26/2022 4:05:47PM

S1 - 2'

E210114-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Benzene	ND	0.0250	1	10/20/22	10/21/22	
Ethylbenzene	ND	0.0250	1	10/20/22	10/21/22	
Toluene	ND	0.0250	1	10/20/22	10/21/22	
o-Xylene	ND	0.0250	1	10/20/22	10/21/22	
p,m-Xylene	ND	0.0500	1	10/20/22	10/21/22	
Total Xylenes	ND	0.0250	1	10/20/22	10/21/22	
<i>Surrogate: Bromofluorobenzene</i>	97.6 %	70-130		10/20/22	10/21/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	104 %	70-130		10/20/22	10/21/22	
<i>Surrogate: Toluene-d8</i>	102 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/20/22	10/21/22	
<i>Surrogate: Bromofluorobenzene</i>	97.6 %	70-130		10/20/22	10/21/22	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	104 %	70-130		10/20/22	10/21/22	
<i>Surrogate: Toluene-d8</i>	102 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2243101
Diesel Range Organics (C10-C28)	228	25.0	1	10/21/22	10/22/22	
Oil Range Organics (C28-C36)	223	50.0	1	10/21/22	10/22/22	
<i>Surrogate: n-Nonane</i>	104 %	50-200		10/21/22	10/22/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2243104
Chloride	355	20.0	1	10/21/22	10/22/22	



Sample Data

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

Project Name: Government E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/26/2022 4:05:47PM

S1 - 3'

E210114-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Benzene	ND	0.0250	1	10/20/22	10/21/22	
Ethylbenzene	ND	0.0250	1	10/20/22	10/21/22	
Toluene	ND	0.0250	1	10/20/22	10/21/22	
o-Xylene	ND	0.0250	1	10/20/22	10/21/22	
p,m-Xylene	ND	0.0500	1	10/20/22	10/21/22	
Total Xylenes	ND	0.0250	1	10/20/22	10/21/22	
Surrogate: Bromofluorobenzene	96.0 %	70-130		10/20/22	10/21/22	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		10/20/22	10/21/22	
Surrogate: Toluene-d8	100 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/20/22	10/21/22	
Surrogate: Bromofluorobenzene	96.0 %	70-130		10/20/22	10/21/22	
Surrogate: 1,2-Dichloroethane-d4	105 %	70-130		10/20/22	10/21/22	
Surrogate: Toluene-d8	100 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2243101
Diesel Range Organics (C10-C28)	76.6	25.0	1	10/21/22	10/22/22	
Oil Range Organics (C28-C36)	75.6	50.0	1	10/21/22	10/22/22	
Surrogate: n-Nonane	105 %	50-200		10/21/22	10/22/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2243104
Chloride	436	20.0	1	10/21/22	10/22/22	



Sample Data

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

Project Name: Government E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/26/2022 4:05:47PM

S2 - 2'

E210114-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Benzene	ND	0.0250	1	10/20/22	10/21/22	
Ethylbenzene	ND	0.0250	1	10/20/22	10/21/22	
Toluene	ND	0.0250	1	10/20/22	10/21/22	
o-Xylene	ND	0.0250	1	10/20/22	10/21/22	
p,m-Xylene	ND	0.0500	1	10/20/22	10/21/22	
Total Xylenes	ND	0.0250	1	10/20/22	10/21/22	
Surrogate: Bromofluorobenzene	95.1 %	70-130		10/20/22	10/21/22	
Surrogate: 1,2-Dichloroethane-d4	113 %	70-130		10/20/22	10/21/22	
Surrogate: Toluene-d8	99.5 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/20/22	10/21/22	
Surrogate: Bromofluorobenzene	95.1 %	70-130		10/20/22	10/21/22	
Surrogate: 1,2-Dichloroethane-d4	113 %	70-130		10/20/22	10/21/22	
Surrogate: Toluene-d8	99.5 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2243101
Diesel Range Organics (C10-C28)	649	250	10	10/21/22	10/22/22	
Oil Range Organics (C28-C36)	1130	500	10	10/21/22	10/22/22	
Surrogate: n-Nonane	98.3 %	50-200		10/21/22	10/22/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2243104
Chloride	142	20.0	1	10/21/22	10/22/22	



Sample Data

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

Project Name: Government E #7
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
10/26/2022 4:05:47PM

S2 - 3'

E210114-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Benzene	ND	0.0250	1	10/20/22	10/21/22	
Ethylbenzene	ND	0.0250	1	10/20/22	10/21/22	
Toluene	ND	0.0250	1	10/20/22	10/21/22	
o-Xylene	ND	0.0250	1	10/20/22	10/21/22	
p,m-Xylene	ND	0.0500	1	10/20/22	10/21/22	
Total Xylenes	ND	0.0250	1	10/20/22	10/21/22	
Surrogate: Bromofluorobenzene	98.4 %	70-130		10/20/22	10/21/22	
Surrogate: 1,2-Dichloroethane-d4	114 %	70-130		10/20/22	10/21/22	
Surrogate: Toluene-d8	100 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2243095
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/20/22	10/21/22	
Surrogate: Bromofluorobenzene	98.4 %	70-130		10/20/22	10/21/22	
Surrogate: 1,2-Dichloroethane-d4	114 %	70-130		10/20/22	10/21/22	
Surrogate: Toluene-d8	100 %	70-130		10/20/22	10/21/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2243101
Diesel Range Organics (C10-C28)	51.6	50.0	2	10/21/22	10/22/22	
Oil Range Organics (C28-C36)	ND	100	2	10/21/22	10/22/22	
Surrogate: n-Nonane	92.9 %	50-200		10/21/22	10/22/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: RAS		Batch: 2243104
Chloride	258	20.0	1	10/21/22	10/22/22	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/26/2022 4:05:47PM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

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

Blank (2243095-BLK1)

Prepared: 10/20/22 Analyzed: 10/21/22

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	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.527		0.500		105	70-130			
Surrogate: Toluene-d8	0.500		0.500		99.9	70-130			

LCS (2243095-BS1)

Prepared: 10/20/22 Analyzed: 10/21/22

Benzene	2.25	0.0250	2.50		89.8	70-130			
Ethylbenzene	2.26	0.0250	2.50		90.4	70-130			
Toluene	2.28	0.0250	2.50		91.2	70-130			
o-Xylene	2.34	0.0250	2.50		93.6	70-130			
p,m-Xylene	4.63	0.0500	5.00		92.6	70-130			
Total Xylenes	6.97	0.0250	7.50		92.9	70-130			
Surrogate: Bromofluorobenzene	0.496		0.500		99.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.545		0.500		109	70-130			
Surrogate: Toluene-d8	0.490		0.500		98.0	70-130			

Matrix Spike (2243095-MS1)

Source: E210114-01

Prepared: 10/20/22 Analyzed: 10/21/22

Benzene	2.13	0.0250	2.50	ND	85.3	48-131			
Ethylbenzene	2.11	0.0250	2.50	ND	84.6	45-135			
Toluene	2.13	0.0250	2.50	ND	85.1	48-130			
o-Xylene	2.23	0.0250	2.50	ND	89.1	43-135			
p,m-Xylene	4.41	0.0500	5.00	ND	88.2	43-135			
Total Xylenes	6.64	0.0250	7.50	ND	88.5	43-135			
Surrogate: Bromofluorobenzene	0.508		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.558		0.500		112	70-130			
Surrogate: Toluene-d8	0.493		0.500		98.6	70-130			

Matrix Spike Dup (2243095-MSD1)

Source: E210114-01

Prepared: 10/20/22 Analyzed: 10/21/22

Benzene	2.31	0.0250	2.50	ND	92.5	48-131	8.08	23	
Ethylbenzene	2.37	0.0250	2.50	ND	94.8	45-135	11.4	27	
Toluene	2.41	0.0250	2.50	ND	96.4	48-130	12.4	24	
o-Xylene	2.48	0.0250	2.50	ND	99.4	43-135	10.9	27	
p,m-Xylene	4.89	0.0500	5.00	ND	97.9	43-135	10.4	27	
Total Xylenes	7.38	0.0250	7.50	ND	98.4	43-135	10.6	27	
Surrogate: Bromofluorobenzene	0.496		0.500		99.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.535		0.500		107	70-130			
Surrogate: Toluene-d8	0.493		0.500		98.5	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/26/2022 4:05:47PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

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 (2243095-BLK1)

Prepared: 10/20/22 Analyzed: 10/21/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.527		0.500		105	70-130			
Surrogate: Toluene-d8	0.500		0.500		99.9	70-130			

LCS (2243095-BS2)

Prepared: 10/20/22 Analyzed: 10/21/22

Gasoline Range Organics (C6-C10)	50.4	20.0	50.0		101	70-130			
Surrogate: Bromofluorobenzene	0.493		0.500		98.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.553		0.500		111	70-130			
Surrogate: Toluene-d8	0.504		0.500		101	70-130			

Matrix Spike (2243095-MS2)

Source: E210114-01

Prepared: 10/20/22 Analyzed: 10/21/22

Gasoline Range Organics (C6-C10)	47.3	20.0	50.0	ND	94.6	70-130			
Surrogate: Bromofluorobenzene	0.494		0.500		98.7	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.553		0.500		111	70-130			
Surrogate: Toluene-d8	0.497		0.500		99.4	70-130			

Matrix Spike Dup (2243095-MSD2)

Source: E210114-01

Prepared: 10/20/22 Analyzed: 10/21/22

Gasoline Range Organics (C6-C10)	46.6	20.0	50.0	ND	93.1	70-130	1.54	20	
Surrogate: Bromofluorobenzene	0.502		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.552		0.500		110	70-130			
Surrogate: Toluene-d8	0.510		0.500		102	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported: 10/26/2022 4:05:47PM
PO Box 247	Project Number:	21064-0001	
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 (2243101-BLK1)

Prepared: 10/21/22 Analyzed: 10/22/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	51.0		50.0		102	50-200			

LCS (2243101-BS1)

Prepared: 10/21/22 Analyzed: 10/22/22

Diesel Range Organics (C10-C28)	256	25.0	250		102	38-132			
Surrogate: n-Nonane	50.3		50.0		101	50-200			

Matrix Spike (2243101-MS1)

Source: E210113-24

Prepared: 10/21/22 Analyzed: 10/22/22

Diesel Range Organics (C10-C28)	260	25.0	250	ND	104	38-132			
Surrogate: n-Nonane	52.7		50.0		105	50-200			

Matrix Spike Dup (2243101-MSD1)

Source: E210113-24

Prepared: 10/21/22 Analyzed: 10/22/22

Diesel Range Organics (C10-C28)	256	25.0	250	ND	102	38-132	1.84	20	
Surrogate: n-Nonane	49.4		50.0		98.9	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/26/2022 4:05:47PM

Anions by EPA 300.0/9056A

Analyst: RAS

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

Blank (2243104-BLK1)					Prepared: 10/21/22 Analyzed: 10/22/22				
Chloride	ND	20.0							
LCS (2243104-BS1)					Prepared: 10/21/22 Analyzed: 10/22/22				
Chloride	256	20.0	250		102	90-110			
Matrix Spike (2243104-MS1)					Source: E210114-01		Prepared: 10/21/22 Analyzed: 10/22/22		
Chloride	636	20.0	250	355	112	80-120			
Matrix Spike Dup (2243104-MSD1)					Source: E210114-01		Prepared: 10/21/22 Analyzed: 10/22/22		
Chloride	606	20.0	250	355	100	80-120	4.88	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:	Government E #7	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	10/26/22 16:05

- 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.





Envirotech Analytical Laboratory

Printed: 10/20/2022 11:37:41AM

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:	10/20/22 11:00	Work Order ID:	E210114
Phone:	(575) 631-6977	Date Logged In:	10/20/22 11:33	Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	10/26/22 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: UPSComments/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.

Report to:
Sebastian Orozzo



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Government E #7

Work Order: E211005

Job Number: 21064-0001

Received: 11/1/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
11/4/22

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.
Envirotech Inc. holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 11/4/22

Sebastian Orozzo
PO Box 247
Plains, TX 79355-0247



Project Name: Government E #7
Workorder: E211005
Date Received: 11/1/2022 10:24:00AM

Sebastian Orozzo,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 11/1/2022 10:24:00AM, under the Project Name: Government E #7.

The analytical test results summarized in this report with the Project Name: Government E #7 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
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Cell: 775-287-1762
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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Sebastian Orozzo	11/04/22 13:11

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1-4'	E211005-01A	Soil	11/01/22	11/01/22	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Government E #7 Project Number: 21064-0001 Project Manager: Sebastian Orozzo	Reported: 11/4/2022 1:11:56PM
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S1-4'

E211005-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY			Batch: 2245024
Benzene	ND	0.0250	1	11/02/22	11/03/22	
Ethylbenzene	ND	0.0250	1	11/02/22	11/03/22	
Toluene	ND	0.0250	1	11/02/22	11/03/22	
o-Xylene	ND	0.0250	1	11/02/22	11/03/22	
p,m-Xylene	ND	0.0500	1	11/02/22	11/03/22	
Total Xylenes	ND	0.0250	1	11/02/22	11/03/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	11/02/22	11/03/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY			Batch: 2245024
Gasoline Range Organics (C6-C10)	ND	20.0	1	11/02/22	11/03/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		82.0 %	70-130	11/02/22	11/03/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL			Batch: 2245018
Diesel Range Organics (C10-C28)	ND	25.0	1	11/02/22	11/02/22	
Oil Range Organics (C28-C36)	ND	50.0	1	11/02/22	11/02/22	
<i>Surrogate: n-Nonane</i>		114 %	50-200	11/02/22	11/02/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: KL			Batch: 2245020
Chloride	ND	20.0	1	11/02/22	11/02/22	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported: 11/4/2022 1:11:56PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Sebastian Orozco	

Volatile Organics by EPA 8021B

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 (2245024-BLK1)

Prepared: 11/02/22 Analyzed: 11/03/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.19		8.00		102	70-130			

LCS (2245024-BS1)

Prepared: 11/02/22 Analyzed: 11/03/22

Benzene	5.17	0.0250	5.00		103	70-130			
Ethylbenzene	4.32	0.0250	5.00		86.3	70-130			
Toluene	4.55	0.0250	5.00		91.0	70-130			
o-Xylene	4.42	0.0250	5.00		88.3	70-130			
p,m-Xylene	8.77	0.0500	10.0		87.7	70-130			
Total Xylenes	13.2	0.0250	15.0		87.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.41		8.00		105	70-130			

LCS Dup (2245024-BS1)

Prepared: 11/02/22 Analyzed: 11/03/22

Benzene	4.91	0.0250	5.00		98.2	70-130	5.24	20	
Ethylbenzene	4.08	0.0250	5.00		81.7	70-130	5.55	20	
Toluene	4.31	0.0250	5.00		86.2	70-130	5.40	20	
o-Xylene	4.18	0.0250	5.00		83.6	70-130	5.55	20	
p,m-Xylene	8.31	0.0500	10.0		83.1	70-130	5.36	20	
Total Xylenes	12.5	0.0250	15.0		83.3	70-130	5.42	20	
Surrogate: 4-Bromochlorobenzene-PID	8.40		8.00		105	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported: 11/4/2022 1:11:56PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Sebastian Orozco	

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 (2245024-BLK1) Prepared: 11/02/22 Analyzed: 11/03/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.82		8.00		85.3	70-130			

LCS (2245024-BS2) Prepared: 11/02/22 Analyzed: 11/03/22

Gasoline Range Organics (C6-C10)	47.1	20.0	50.0		94.3	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.90		8.00		86.3	70-130			

LCS Dup (2245024-BSD2) Prepared: 11/02/22 Analyzed: 11/03/22

Gasoline Range Organics (C6-C10)	44.3	20.0	50.0		88.6	70-130	6.18	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.76		8.00		84.5	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Sebastian Orozco	11/4/2022 1:11:56PM

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 (2245018-BLK1)

Prepared: 11/02/22 Analyzed: 11/02/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: <i>n</i> -Nonane	53.0		50.0		106	50-200			

LCS (2245018-BS1)

Prepared: 11/02/22 Analyzed: 11/02/22

Diesel Range Organics (C10-C28)	229	25.0	250		91.5	38-132			
Surrogate: <i>n</i> -Nonane	54.2		50.0		108	50-200			

Matrix Spike (2245018-MS1)

Source: E211008-03

Prepared: 11/02/22 Analyzed: 11/02/22

Diesel Range Organics (C10-C28)	236	25.0	250	ND	94.5	38-132			
Surrogate: <i>n</i> -Nonane	52.7		50.0		105	50-200			

Matrix Spike Dup (2245018-MSD1)

Source: E211008-03

Prepared: 11/02/22 Analyzed: 11/02/22

Diesel Range Organics (C10-C28)	245	25.0	250	ND	98.0	38-132	3.68	20	
Surrogate: <i>n</i> -Nonane	54.1		50.0		108	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #7	Reported: 11/4/2022 1:11:56PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Sebastian Orozco	

Anions by EPA 300.0/9056A

Analyst: KL

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 (2245020-BLK1)					Prepared: 11/02/22 Analyzed: 11/02/22				
Chloride	ND	20.0							
LCS (2245020-BS1)					Prepared: 11/02/22 Analyzed: 11/02/22				
Chloride	250	20.0	250		99.9	90-110			
Matrix Spike (2245020-MS1)					Source: E211008-01		Prepared: 11/02/22 Analyzed: 11/02/22		
Chloride	3470	40.0	250	3170	121	80-120			M4
Matrix Spike Dup (2245020-MSD1)					Source: E211008-01		Prepared: 11/02/22 Analyzed: 11/02/22		
Chloride	3500	40.0	250	3170	134	80-120	0.929	20	M4

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:	Government E #7	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Sebastian Orozzo	11/04/22 13:11

- M4 Matrix spike recovery value is suspect since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS spike recovery was acceptable.
- 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

Client: <u>PIMA Environmental</u>				Bill To				Lab Use Only				TAT				EPA Program	
Project: <u>Government E #7</u>				Attention: _____				Lab WO# <u>E 211005</u>		Job Number <u>21064-001</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: <u>Sebastian Orozco</u>				Address: _____				Analysis and Method									
Address: _____				City, State, Zip _____													
City, State, Zip _____				Phone: _____												RCRA	
Phone: _____				Email: _____												State	
Email: <u>Sebastian@Pimaoil.com</u>																NM CO UT AZ TX	
Report due by: _____																X	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0			BGDOC - NM		TCEQ 1005 TX-TPH	Remarks
	10/31/22	Soil	1-202	S1-4'	1									X			
Additional Instructions: <u>Bill Pima Directly vis Ice in cooler - ly</u>																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.					
Relinquished by: (Signature) _____		Date	Time	Received by: (Signature) _____		Date	Time	Lab Use Only									
Relinquished by: (Signature) _____		Date	Time	Received by: (Signature) _____		Date	Time	Received on ice: <u>Y</u> / N									
Relinquished by: (Signature) _____		Date	Time	Received by: (Signature) _____		Date	Time	T1 _____ T2 _____ T3 _____									
		Date	Time			Date	Time	AVG Temp °C <u>4.0</u>									
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other <u>S</u>												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 Analytical Laboratory

Printed: 11/1/2022 12:44:47PM

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: 11/01/22 10:24

Work Order ID: E211005

Phone: (575) 631-6977

Date Logged In: 11/01/22 12:39

Logged In By: Irene Yazzie

Email: tom@pimaoil.com

Due Date: 11/08/22 17:00 (5 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? No
 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: UPSSample 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? No
 - 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

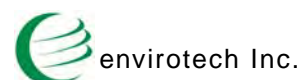
28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client InstructionComments/Resolution

Bill Pima Directly

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

Date



Report to:
Tom Bynum



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Government E #007

Work Order: E212029

Job Number: 21064-0001

Received: 12/5/2022

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
12/8/22

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.
Envirotech Inc. holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 12/8/22

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Government E #007
Workorder: E212029
Date Received: 12/5/2022 8:15:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 12/5/2022 8:15:00AM, under the Project Name: Government E #007.

The analytical test results summarized in this report with the Project Name: Government E #007 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

Raina Schwanz
Laboratory Administrator
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Alexa Michaels
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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:	Government E #007	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	12/08/22 13:49

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1	E212029-01A	Soil	12/01/22	12/05/22	Glass Jar, 2 oz.
S2	E212029-02A	Soil	12/01/22	12/05/22	Glass Jar, 2 oz.
SW1	E212029-03A	Soil	12/01/22	12/05/22	Glass Jar, 2 oz.
SW2	E212029-04A	Soil	12/01/22	12/05/22	Glass Jar, 2 oz.
SW3	E212029-05A	Soil	12/01/22	12/05/22	Glass Jar, 2 oz.
SW4	E212029-06A	Soil	12/01/22	12/05/22	Glass Jar, 2 oz.



Sample Data

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

Project Name: Government E #007
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
12/8/2022 1:49:50PM

S1

E212029-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2250014	
Benzene	ND	0.0250	1	12/05/22	12/06/22	
Ethylbenzene	ND	0.0250	1	12/05/22	12/06/22	
Toluene	ND	0.0250	1	12/05/22	12/06/22	
o-Xylene	ND	0.0250	1	12/05/22	12/06/22	
p,m-Xylene	ND	0.0500	1	12/05/22	12/06/22	
Total Xylenes	ND	0.0250	1	12/05/22	12/06/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	104 %	70-130		12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2250014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/22	12/06/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	96.5 %	70-130		12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: JL		Batch: 2250045	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/06/22	12/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/06/22	12/07/22	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		12/06/22	12/07/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: BA		Batch: 2250048	
Chloride	ND	20.0	1	12/07/22	12/08/22	



Sample Data

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

Project Name: Government E #007
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
12/8/2022 1:49:50PM

S2

E212029-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: IY		Batch: 2250014	
Benzene	ND	0.0250	1	12/05/22	12/06/22	
Ethylbenzene	ND	0.0250	1	12/05/22	12/06/22	
Toluene	ND	0.0250	1	12/05/22	12/06/22	
o-Xylene	ND	0.0250	1	12/05/22	12/06/22	
p,m-Xylene	ND	0.0500	1	12/05/22	12/06/22	
Total Xylenes	ND	0.0250	1	12/05/22	12/06/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		105 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2250014	
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/22	12/06/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.6 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: JL		Batch: 2250045	
Diesel Range Organics (C10-C28)	ND	25.0	1	12/06/22	12/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/06/22	12/07/22	
<i>Surrogate: n-Nonane</i>		109 %	50-200	12/06/22	12/07/22	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2250048	
Chloride	ND	20.0	1	12/07/22	12/08/22	



Sample Data

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

Project Name: Government E #007
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
12/8/2022 1:49:50PM

SW1

E212029-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Benzene	ND	0.0250	1	12/05/22	12/06/22	
Ethylbenzene	ND	0.0250	1	12/05/22	12/06/22	
Toluene	ND	0.0250	1	12/05/22	12/06/22	
o-Xylene	ND	0.0250	1	12/05/22	12/06/22	
p,m-Xylene	ND	0.0500	1	12/05/22	12/06/22	
Total Xylenes	ND	0.0250	1	12/05/22	12/06/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/22	12/06/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		97.1 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2250045
Diesel Range Organics (C10-C28)	ND	25.0	1	12/06/22	12/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/06/22	12/07/22	
<i>Surrogate: n-Nonane</i>						
		107 %	50-200	12/06/22	12/07/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2250048
Chloride	ND	20.0	1	12/07/22	12/08/22	



Sample Data

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

Project Name: Government E #007
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
12/8/2022 1:49:50PM

SW2

E212029-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Benzene	ND	0.0250	1	12/05/22	12/06/22	
Ethylbenzene	ND	0.0250	1	12/05/22	12/06/22	
Toluene	ND	0.0250	1	12/05/22	12/06/22	
o-Xylene	ND	0.0250	1	12/05/22	12/06/22	
p,m-Xylene	ND	0.0500	1	12/05/22	12/06/22	
Total Xylenes	ND	0.0250	1	12/05/22	12/06/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/22	12/06/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.6 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2250045
Diesel Range Organics (C10-C28)	ND	25.0	1	12/06/22	12/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/06/22	12/07/22	
<i>Surrogate: n-Nonane</i>						
		108 %	50-200	12/06/22	12/07/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2250048
Chloride	ND	20.0	1	12/07/22	12/08/22	



Sample Data

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

Project Name: Government E #007
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
12/8/2022 1:49:50PM

SW3

E212029-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Benzene	ND	0.0250	1	12/05/22	12/06/22	
Ethylbenzene	ND	0.0250	1	12/05/22	12/06/22	
Toluene	ND	0.0250	1	12/05/22	12/06/22	
o-Xylene	ND	0.0250	1	12/05/22	12/06/22	
p,m-Xylene	ND	0.0500	1	12/05/22	12/06/22	
Total Xylenes	ND	0.0250	1	12/05/22	12/06/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		104 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/22	12/06/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		96.5 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2250045
Diesel Range Organics (C10-C28)	ND	25.0	1	12/06/22	12/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/06/22	12/07/22	
<i>Surrogate: n-Nonane</i>						
		110 %	50-200	12/06/22	12/07/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2250048
Chloride	ND	20.0	1	12/07/22	12/08/22	



Sample Data

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

Project Name: Government E #007
Project Number: 21064-0001
Project Manager: Tom Bynum

Reported:
12/8/2022 1:49:50PM

SW4

E212029-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Benzene	ND	0.0250	1	12/05/22	12/06/22	
Ethylbenzene	ND	0.0250	1	12/05/22	12/06/22	
Toluene	ND	0.0250	1	12/05/22	12/06/22	
o-Xylene	ND	0.0250	1	12/05/22	12/06/22	
p,m-Xylene	ND	0.0500	1	12/05/22	12/06/22	
Total Xylenes	ND	0.0250	1	12/05/22	12/06/22	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		105 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2250014
Gasoline Range Organics (C6-C10)	ND	20.0	1	12/05/22	12/06/22	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		95.9 %	70-130	12/05/22	12/06/22	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: JL		Batch: 2250045
Diesel Range Organics (C10-C28)	ND	25.0	1	12/06/22	12/07/22	
Oil Range Organics (C28-C36)	ND	50.0	1	12/06/22	12/07/22	
<i>Surrogate: n-Nonane</i>						
		111 %	50-200	12/06/22	12/07/22	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2250048
Chloride	ND	20.0	1	12/07/22	12/08/22	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 12/8/2022 1:49:50PM
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Volatile Organics by EPA 8021B

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 (2250014-BLK1)

Prepared: 12/05/22 Analyzed: 12/05/22

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.15		8.00		102	70-130			

LCS (2250014-BS1)

Prepared: 12/05/22 Analyzed: 12/06/22

Benzene	5.77	0.0250	5.00		115	70-130			
Ethylbenzene	5.91	0.0250	5.00		118	70-130			
Toluene	6.02	0.0250	5.00		120	70-130			
o-Xylene	6.08	0.0250	5.00		122	70-130			
p,m-Xylene	11.9	0.0500	10.0		119	70-130			
Total Xylenes	18.0	0.0250	15.0		120	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.25		8.00		103	70-130			

LCS Dup (2250014-BS1)

Prepared: 12/05/22 Analyzed: 12/06/22

Benzene	4.76	0.0250	5.00		95.2	70-130	19.1	20	
Ethylbenzene	4.87	0.0250	5.00		97.4	70-130	19.4	20	
Toluene	4.96	0.0250	5.00		99.3	70-130	19.3	20	
o-Xylene	5.00	0.0250	5.00		100	70-130	19.5	20	
p,m-Xylene	9.85	0.0500	10.0		98.5	70-130	19.2	20	
Total Xylenes	14.9	0.0250	15.0		99.0	70-130	19.3	20	
Surrogate: 4-Bromochlorobenzene-PID	8.22		8.00		103	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	12/8/2022 1:49:50PM

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 (2250014-BLK1)

Prepared: 12/05/22 Analyzed: 12/05/22

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.75		8.00		96.9	70-130			

LCS (2250014-BS2)

Prepared: 12/05/22 Analyzed: 12/06/22

Gasoline Range Organics (C6-C10)	55.5	20.0	50.0		111	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.90		8.00		98.8	70-130			

LCS Dup (2250014-BSD2)

Prepared: 12/05/22 Analyzed: 12/06/22

Gasoline Range Organics (C6-C10)	55.7	20.0	50.0		111	70-130	0.276	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.93		8.00		99.1	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	12/8/2022 1:49:50PM

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 (2250045-BLK1)

Prepared: 12/06/22 Analyzed: 12/06/22

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	55.2		50.0		110	50-200			

LCS (2250045-BS1)

Prepared: 12/06/22 Analyzed: 12/06/22

Diesel Range Organics (C10-C28)	246	25.0	250		98.5	38-132			
Surrogate: n-Nonane	54.3		50.0		109	50-200			

Matrix Spike (2250045-MS1)

Source: E212040-24

Prepared: 12/06/22 Analyzed: 12/06/22

Diesel Range Organics (C10-C28)	251	25.0	250	ND	100	38-132			
Surrogate: n-Nonane	54.6		50.0		109	50-200			

Matrix Spike Dup (2250045-MSD1)

Source: E212040-24

Prepared: 12/06/22 Analyzed: 12/06/22

Diesel Range Organics (C10-C28)	261	25.0	250	ND	104	38-132	3.81	20	
Surrogate: n-Nonane	54.0		50.0		108	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported:
PO Box 247	Project Number:	21064-0001	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	12/8/2022 1:49:50PM

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 (2250048-BLK1)					Prepared: 12/07/22 Analyzed: 12/08/22				
Chloride	ND	20.0							
LCS (2250048-BS1)					Prepared: 12/07/22 Analyzed: 12/08/22				
Chloride	253	20.0	250		101	90-110			
Matrix Spike (2250048-MS1)					Source: E212028-01		Prepared: 12/07/22 Analyzed: 12/08/22		
Chloride	599	20.0	250	358	96.1	80-120			
Matrix Spike Dup (2250048-MSD1)					Source: E212028-01		Prepared: 12/07/22 Analyzed: 12/08/22		
Chloride	583	20.0	250	358	89.9	80-120	2.62	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:	Government E #007	
PO Box 247	Project Number:	21064-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	12/08/22 13:49

- 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 Project: <u>Government E #007</u> Project Manager: Tom Bynum Address: 5614 N. Lovington Hwy. City, State, Zip Hobbs, NM, 88240 Phone: 580-748-1613 Email: tom@pimaoil.com Report due by:					Bill To Attention: Address: City, State, Zip Phone: Email: Pima Project # <u>19-10</u>					Lab Use Only Lab WO# <u>E212029</u> Job Number <u>21004-0001</u> Analysis and Method					TAT 1D 2D 3D Standard <u>X</u>				EPA Program CWA SDWA RCRA	
										State NM CO UT AZ TX										
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks						
12:00	12/1/22	S	1	S1	1							X								
12:05				S2	2															
12:10				SW1	3															
12:15				SW2	4															
12:20				SW3	5															
12:25				SW4	6															
Additional Instructions: <u>Bill TO Pima</u>																				
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.																				
Relinquished by: (Signature) <u>Audriana B.</u> Date <u>12-2-22</u> Time <u>2:00</u>																				
Relinquished by: (Signature) <u>Michelle K. Lysle</u> Date <u>12-2-22</u> Time <u>1400</u>																				
Relinquished by: (Signature) <u>Michelle K. Lysle</u> Date <u>12-3-22</u> Time <u>1800</u>																				
Relinquished by: (Signature) <u>Michelle K. Lysle</u> Date <u>12-5-22</u> Time <u>8:15</u>																				
Received by: (Signature) <u>Michelle K. Lysle</u> Date <u>12-5-22</u> Time <u>8:15</u>																				
Received by: (Signature) <u>Michelle K. Lysle</u> Date <u>12-5-22</u> Time <u>8:15</u>																				
Received by: (Signature) <u>Michelle K. Lysle</u> Date <u>12-5-22</u> Time <u>8:15</u>																				
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other _____																				
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																				
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				

Envirotech Analytical Laboratory

Printed: 12/5/2022 12:36:59PM

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:	12/05/22 08:15	Work Order ID:	E212029
Phone:	(575) 631-6977	Date Logged In:	12/05/22 09:26	Logged In By:	Caitlin Christian
Email:	tom@pimaoil.com	Due Date:	12/09/22 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.

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 178068

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 178068
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	2/9/2023