



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

Attachments

Figures:

- 1- Location Map
- 2- Topographic Map
- 3- Karst Map
- 4- Confirmation Sample Map (05/08/2024)

Appendices:

- Appendix A – Referenced Water Surveys
- Appendix B – Soil Survey and Geological Data
- Appendix C – 48 Hour Sampling Notification
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Reports



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

June 4, 2024

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

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

**Re: Site Assessment, Remediation, and Closure Report
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. NAPP2410959069**

Pima Environmental Services, LLC (Pima) has been contracted by Armstrong Energy Corporation to perform a spill assessment, remediation activities, and submit this closure report for a crude oil release at the Government E #007 (Government) site. The initial C-141 was submitted on April 24, 2024 (Appendix C). This incident was assigned Incident ID NAPP2410959069, by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Government is located approximately 14.14 miles northwest of Monument, 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 Eolian and Piedmont deposits (Holocene to middle Pleistocene). The soil in this area is made up of Pyote and Maljamar fine sand, 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 Government (Figure 3). Additionally, no BLM survey was required for this location.

Based on the well water data from the New Mexico Office of the State Engineer water well (CP 00683 POD1), the depth to the nearest groundwater in this vicinity measures 28 feet below grade surface (BGS), positioned roughly 0.84 miles away from the Government, drilled on July 18, 1985. Conversely, as per the United States Geological Survey well water data (USGS323855103294001), the nearest groundwater depth in this region is recorded at 68 feet BGS, situated approximately 1.50 miles away from the Government, with the last gauge conducted on January 27, 1971. For detailed references to water surveys and the precise locations of water wells, please refer to Appendix A, inclusive of the relevant maps. Notably, the Government is situated within an area with a low potential for karst, as illustrated in Figure 3. Additionally, a comprehensive Topographic Map is available for reference in Figure 2.

Table 1 NMAC and Closure Criteria 19.15.29

Depth to Groundwater (Appendix A)	Constituent & Limits				
	Chlorides	Total TPH	GRO+DRO	BTEX	Benzene
<50' (NO GW DATA)	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
51-100'	10,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg
>100'	20,000 mg/kg	2,500 mg/kg	1,000 mg/kg	50 mg/kg	10 mg/kg

Reference Figure 2 for a Topographic map.

Release Information

NAPP2410959069: On April 17, 2024, a circulating line failure caused crude oil to be released from the storage tank into the unlined containment area located in the northeast corner of the engineered pad beneath the vertical separator. Upon discovery, the release area was secured, and the standing fluid was recovered using a vacuum truck. A total of 165 barrels of oil were released, with 65 barrels recovered, resulting in a loss of 100 barrels. All the fluid remained within the unlined containment and did not spill onto the engineered pad or neighboring pasture.

Site Assessment and Soil Sampling Results

From April 18 to May 1, Armstrong Energy conducted an urgent excavation of the affected area within the unlined containment to prevent crude oil from seeping further into the soil. They used a track hoe and belly dumps to remove the contaminated material from the site. The excavation covered approximately 1,106 square feet and reached depths of 7 feet and 4 feet below ground surface (bgs). In total, 940 cubic yards of contaminated material were removed and transported to an NMOCD-approved landfill for disposal.

On May 6, 2024, Armstrong Energy proactively submitted a 48-hour sampling notification as part of the preliminary preparations for the final confirmation sampling event. This precautionary step was taken with the expectation that all sampling results would fall below the closure criteria established by the New Mexico Oil Conservation Division (NMOCD). If the results confirm compliance, the closure process will proceed. Additional details can be referenced in Appendix C.

On May 8, 2024, Pima Environmental collected 5 composite bottom samples (labeled CS1-CS5) and 5 composite sidewall samples (labeled CSW1-CSW5). All confirmation samples consist of a five-point composite sample from the excavated area. The bottom samples (CS1 and CS2) were collected at a depth of 4 feet below ground surface (bgs), while the bottom samples (CS3-CS5) were collected at a depth of 7 feet bgs. Sidewall samples (CSW1-CSW3) were collected from depths ranging from the surface to 7 feet bgs, and sidewall samples (CSW4 and CSW5) were collected from depths ranging from the surface to 4 feet bgs. Each bottom sample represented no more than 200 square feet of the excavated area, and each sidewall sample represented no more than 50 linear feet. The soil samples were bagged, placed on ice, and transported to Envirotech in Farmington, NM, for analytical analysis. The laboratory results from this sampling event are presented in the following data table. Figure 4 provides a confirmation site map showing the location of each soil sample.

Sample Results (05-08-2024)

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
ARMSTRONG ENERGY GOVERNMENT E #007								
Date: 5-8-24		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	CI mg/kg
CS1	4'	ND	ND	ND	ND	ND	0	ND
CS2	4'	ND	ND	ND	ND	ND	0	ND
CS3	7'	ND	ND	ND	ND	ND	0	ND
CS4	7'	ND	ND	ND	ND	ND	0	ND
CS5	7'	ND	ND	ND	ND	ND	0	ND
CSW1	0-7'	ND	ND	ND	ND	ND	0	ND
CSW2	0-7'	ND	ND	ND	ND	ND	0	ND
CSW3	0-7'	ND	ND	ND	ND	ND	0	ND
CSW4	0-4'	ND	ND	ND	ND	ND	0	ND
CSW5	0-4'	ND	ND	ND	ND	ND	0	ND

ND: NON-DETECT

Once it was confirmed that all soil samples were below the NMOCD closure criteria, the excavated area was backfilled with clean material and restored to its original contour. Approximately 960 cubic yards of clean material were brought in to fill the open excavation.

Closure Request

After careful review, Pima requests that this incident, NAPP2410959069, 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



Pima Environmental Services

Figures:

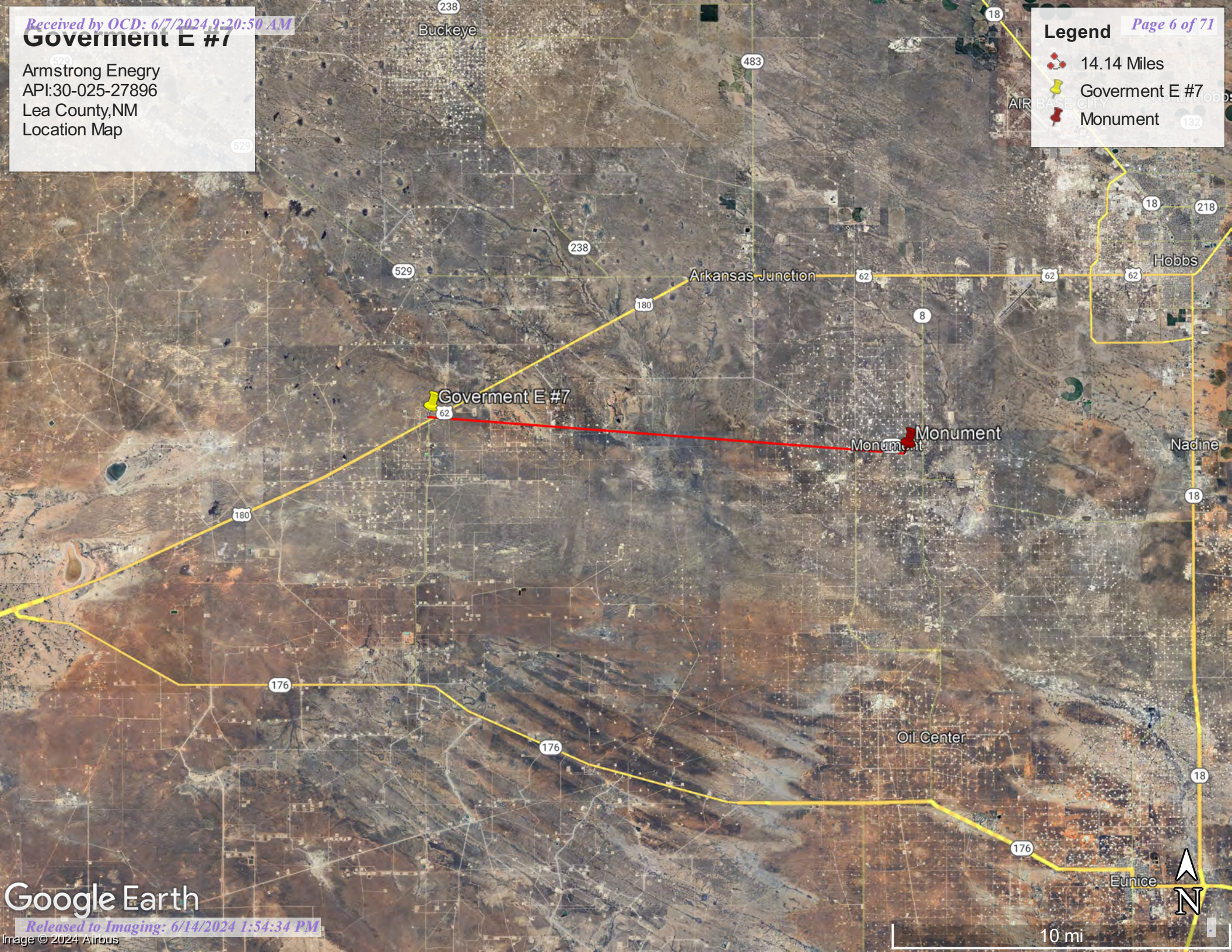
1. Locaton Map
2. Topographic Map
3. Karst Map
4. Confirmation Sample Map (05/08/2024)

Government E #7

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

Legend

- 14.14 Miles
- Government E #7
- Monument

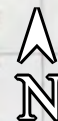
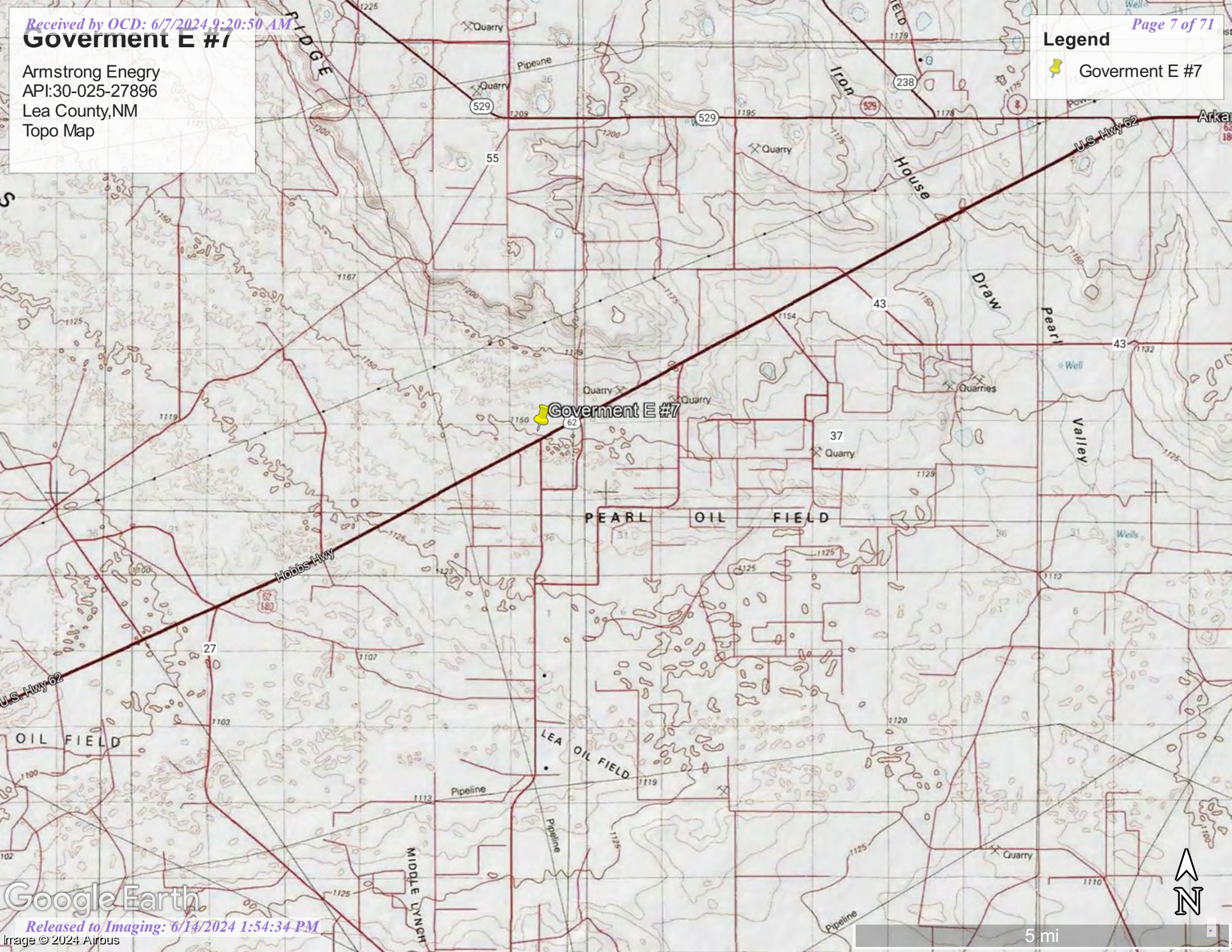


Government E #7

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

Legend





 Government E #7

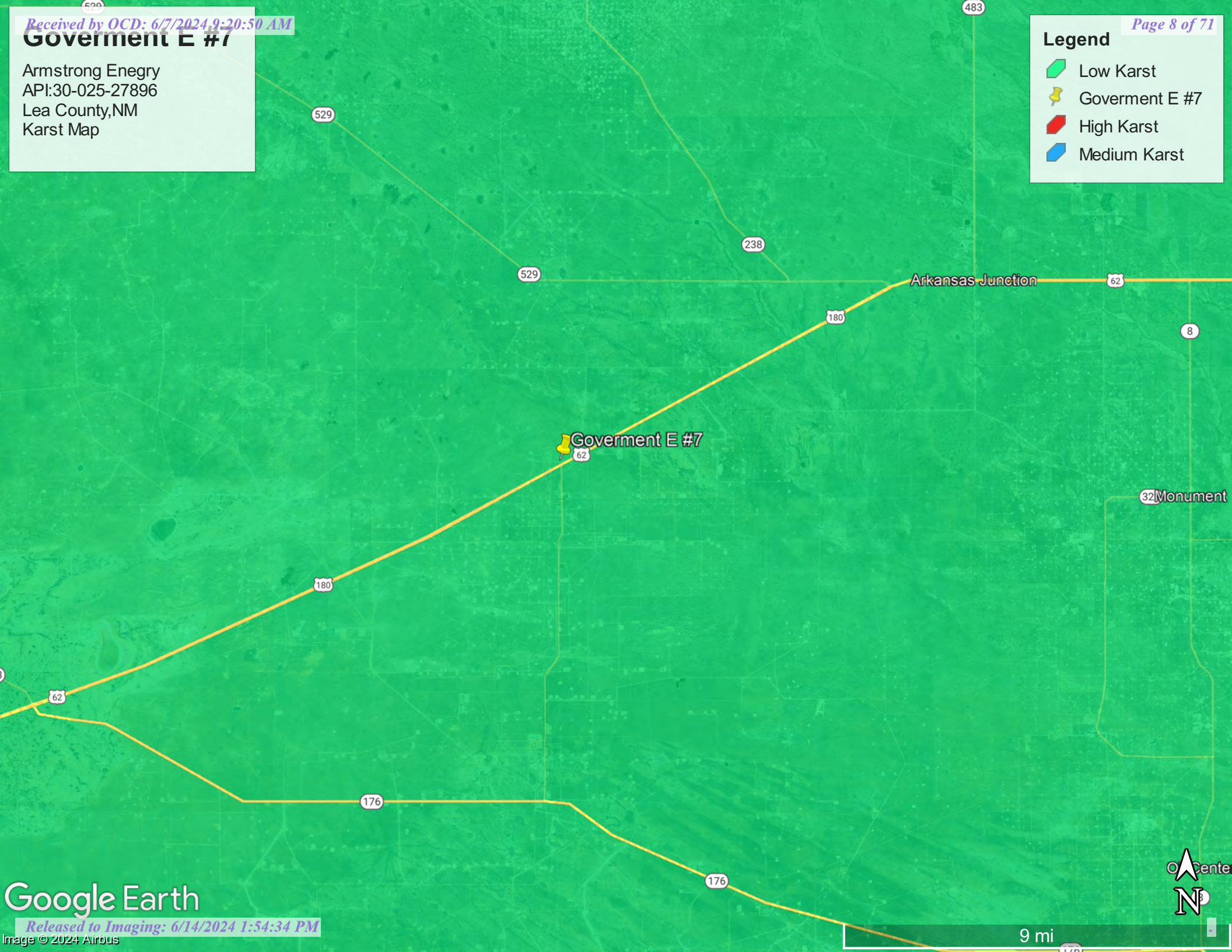


Government E #7

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

Legend

-  Low Karst
-  Government E #7
-  High Karst
-  Medium Karst



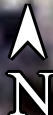
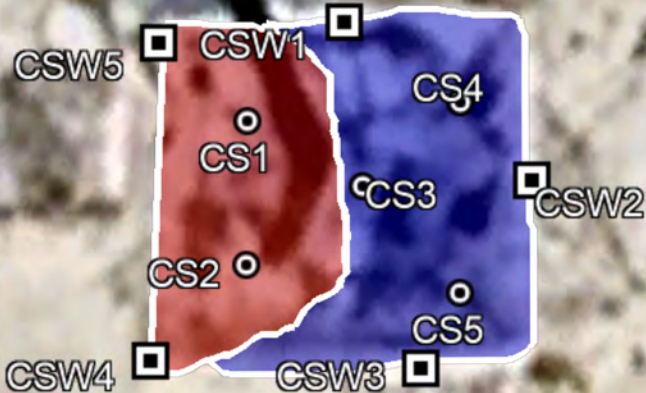
Government E #7

Armstrong Energy
API:30-025-27896
Lea County, NM
Confirmation Sample Map (05/08/2024)

Legend

- 4' Excavation
- 7' Excavation
- Confirmation Bottom Sample
- Confirmation Side Wall Sample

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is <50')								
ARMSTRONG ENERGY GOVERNMENT E #007								
Date: 5-8-24		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	CI mg/kg
CS1	4'	ND	ND	ND	ND	ND	0	ND
CS2	4'	ND	ND	ND	ND	ND	0	ND
CS3	7'	ND	ND	ND	ND	ND	0	ND
CS4	7'	ND	ND	ND	ND	ND	0	ND
CS5	7'	ND	ND	ND	ND	ND	0	ND
CSW1	0-7'	ND	ND	ND	ND	ND	0	ND
CSW2	0-7'	ND	ND	ND	ND	ND	0	ND
CSW3	0-7'	ND	ND	ND	ND	ND	0	ND
CSW4	0-4'	ND	ND	ND	ND	ND	0	ND
CSW5	0-4'	ND	ND	ND	ND	ND	0	ND





Pima Environmental Services

Appendix A

Water Surveys:

OSE

USGS

Surface Water Map



New Mexico Office of the State Engineer

Water Column/Average Depth to Water








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

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

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

(NAD83 UTM in meters)

(In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Distance	Depth	Well	Depth	Water 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.


5/2/24 8:51 AM

WATER COLUMN/ AVERAGE DEPTH TO
WATER



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)		(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	CP 00683 POD1	3	3	4	25	19S	34E	639530	3610685* 
<hr/>									
Driller License: 46		Driller Company: ABBOTT BROTHERS COMPANY							
Driller Name: MURRELL ABBOTT									
Drill Start Date: 07/18/1985		Drill Finish Date: 07/20/1985		Plug Date:					
Log File Date: 08/16/1985		PCW Rcv Date:		Source: Shallow					
Pump Type:		Pipe Discharge Size:		Estimated Yield: 1 GPM					
Casing Size: 4.00		Depth Well: 120 feet		Depth Water: 28 feet					

*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.

5/2/24 8:52 AM

POINT OF DIVERSION SUMMARY

Government E #7

Armstrong Enegrgy
API:30-025-27896
Lea County,NM
OSE Location

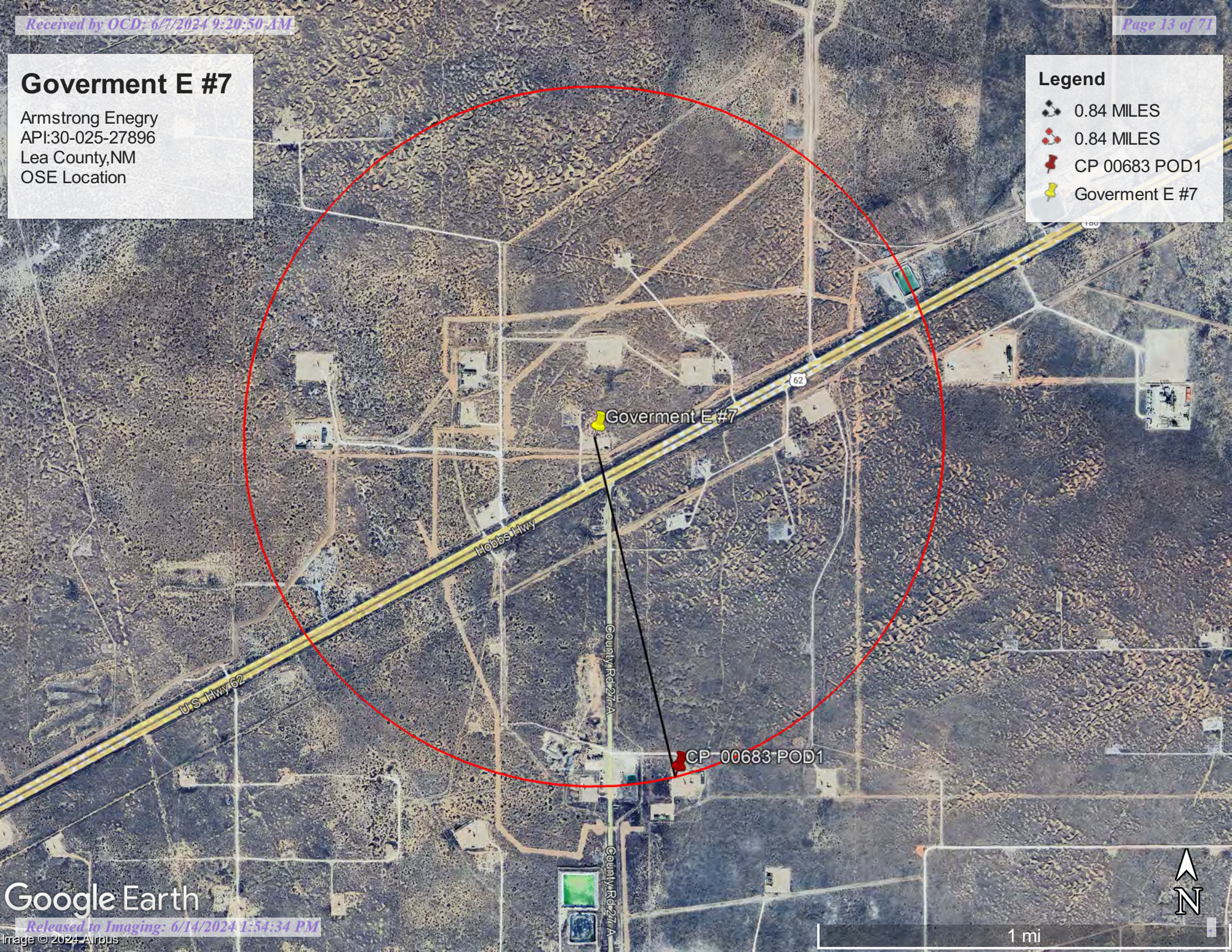
Legend

 0.84 MILES

 0.84 MILES

 CP 00683 POD1

 Government E #7





USGS Home
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National Water Information System: Web Interface


USGS Water Resources

Data Category:
Site Information

Geographic Area:
United States

GO

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- [Full News](#) 

USGS 323855103294001 19S.35E.19.21110

Available data for this site

SUMMARY OF ALL AVAILABLE DATA

GO

Well Site

DESCRIPTION:

Latitude 32°38'55", Longitude 103°29'40" NAD27
Lea County, New Mexico , Hydrologic Unit 13060011
Well depth: not determined.
Land surface altitude: 3,841 feet above NAVD88.
Well completed in "High Plains aquifer" (N100HGHPLN) national aquifer.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1961-03-08	1971-01-27	3
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)

[Questions or Comments](#)

[Automated retrievals](#)

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Title: NWIS Site Information for USA: Site Inventory

URL: https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=323855103294001



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

Page Last Modified: 2024-05-02 10:40:09 EDT

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National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater ▼

Geographic Area:

United States ▼

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- [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

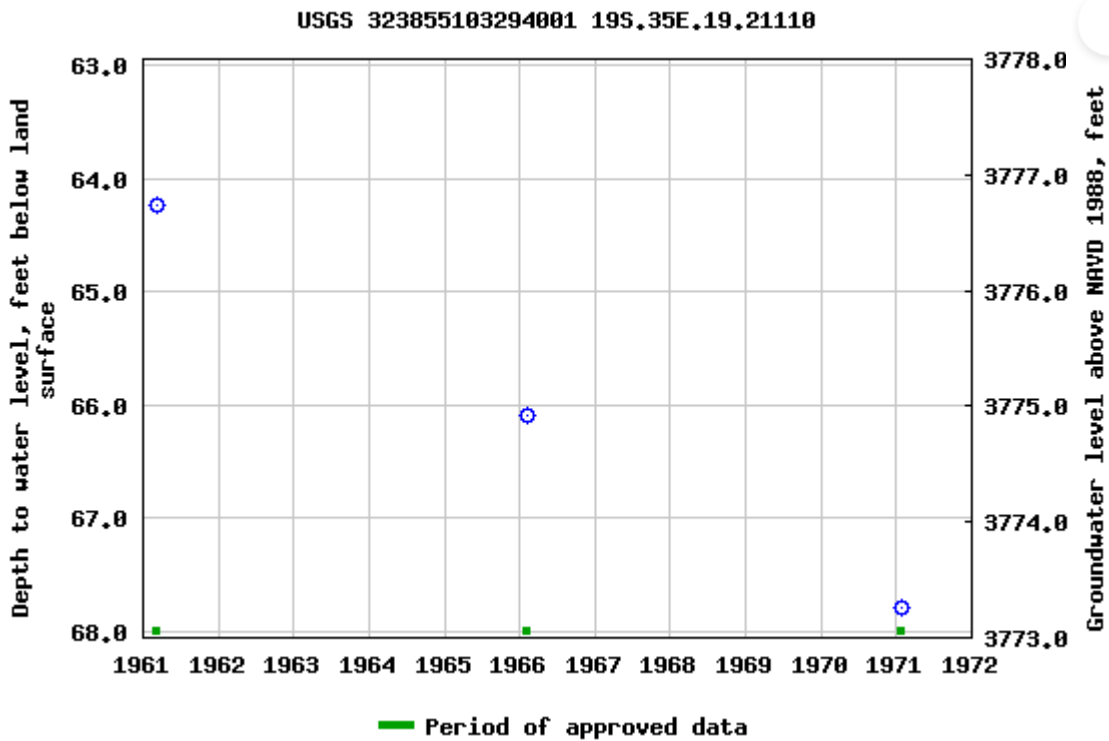
Land-surface elevation 3,841 feet above NAVD88

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.

[Download a presentation-quality graph](#)

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

Title: Groundwater for USA: Water Levels

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

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

Page Last Modified: 2024-05-02 10:58:07 EDT

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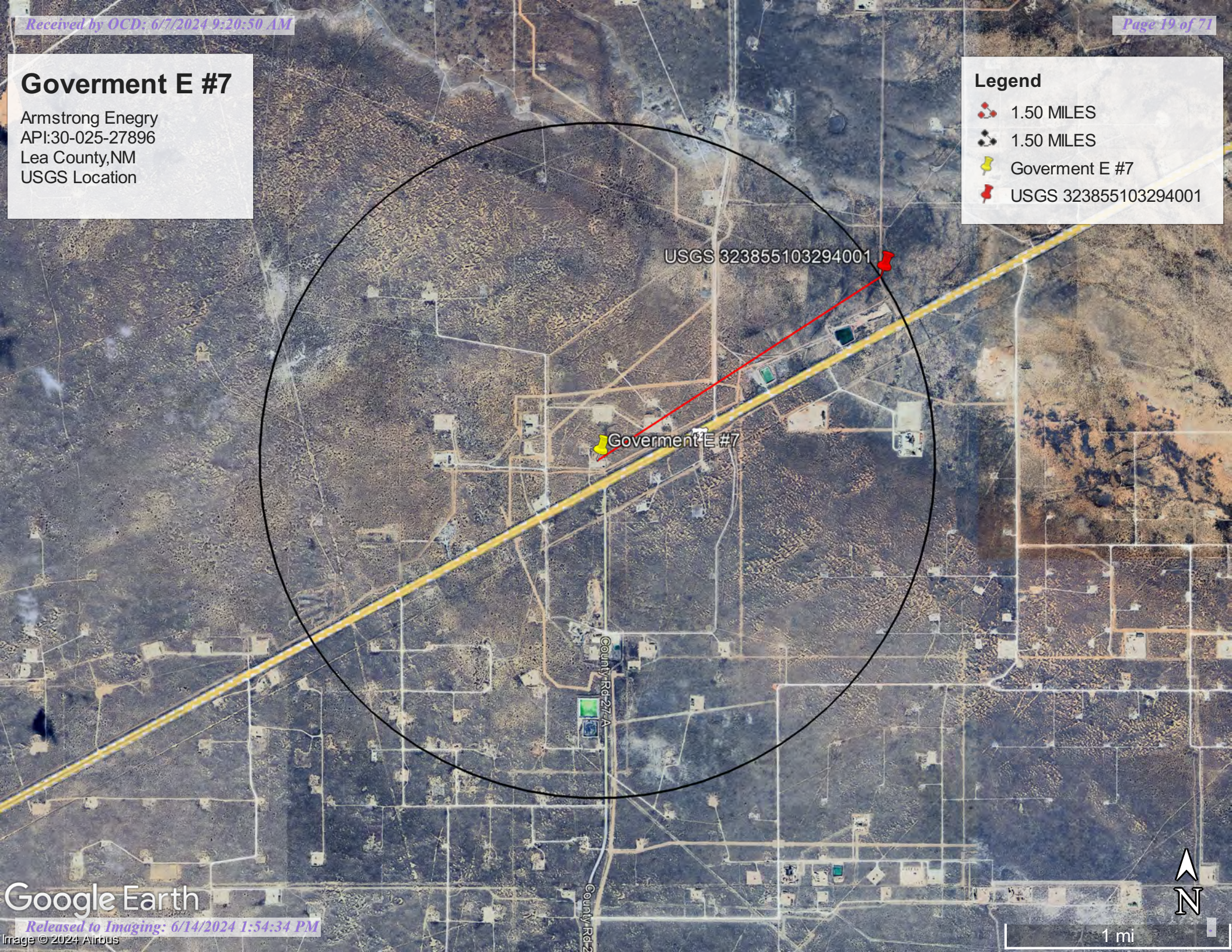


Government E #7

Armstrong Enegrgy
API:30-025-27896
Lea County,NM
USGS Location

Legend

- 1.50 MILES
- 1.50 MILES
- Government E #7
- USGS 323855103294001



Government E #7

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

- 9.26 Miles
- Government E #7
- Laguna Tonto





Pima Environmental Services

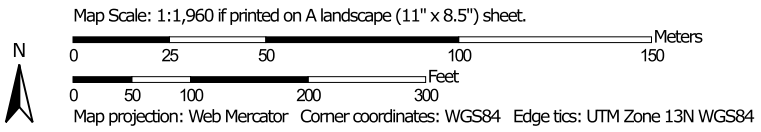
Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map


Soil Map—Lea County, New Mexico
(GOVERNMENT E #007)



Soil Map—Lea County, New Mexico
(GOVERNMENT E #007)

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lea County, New Mexico
Survey Area Data: Version 20, Sep 6, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Feb 7, 2020—May 12, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
KM	Kermit soils and Dune land, 0 to 12 percent slopes	4.7	24.7%
PU	Pyote and Maljamar fine sands	13.4	70.6%
PY	Pyote soils and Dune land	0.9	4.8%
Totals for Area of Interest		19.0	100.0%

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

GOVERNMENT E #007

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

GOVERNMENT E #007

Hydric soil rating: No

Data Source Information

Soil Survey Area: Lea County, New Mexico

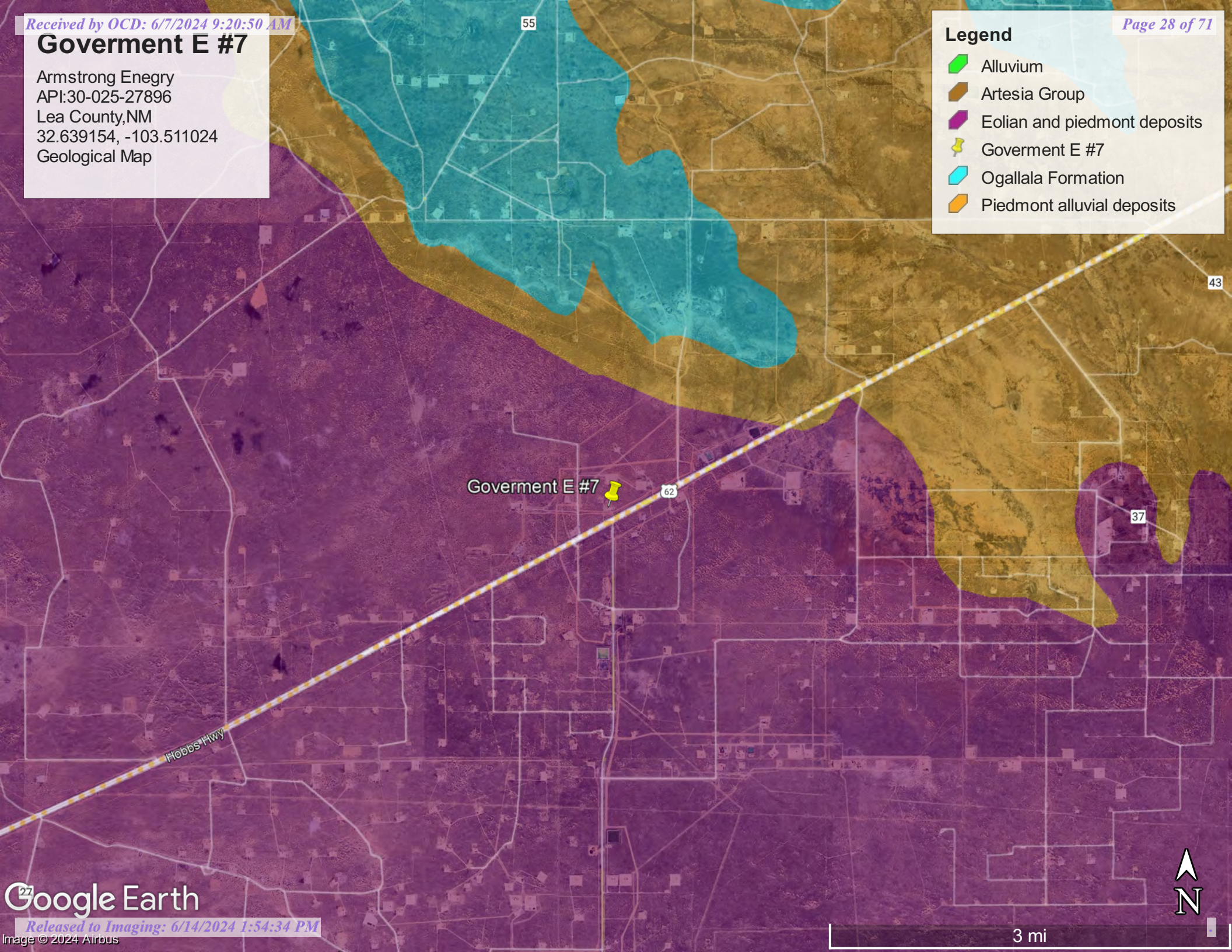
Survey Area Data: Version 20, Sep 6, 2023

Government E #7

Armstrong Energy
API:30-025-27896
Lea County,NM
32.639154, -103.511024
Geological Map

Legend

- Alluvium
- Artesia Group
- Eolian and piedmont deposits
- Government E #7
- Ogallala Formation
- Piedmont alluvial deposits



(<https://www.usgs.gov/>)

Mineral Resources (<https://www.usgs.gov/energy-and-minerals/mineral-resources-program>)
/ Online Spatial Data (/) / Geology (/geology/) / by state (/geology/state/)
/ New Mexico (/geology/state/state.php?state=NM)

Eolian and piedmont deposits

XML (/geology/state/xml/NMQep;0)

JSON (/geology/state/json/NMQep;0)

Shapefile (/geology/state/unit-shape.php?unit=NMQep;0)

Interlayered eolian sands and piedmont-slope deposits along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits.

State	New Mexico (/geology/state/state.php?state=NM)		
Name	Eolian and piedmont deposits		
Geologic age	Holocene to middle Pleistocene		
Lithologic constituents	Major Unconsolidated (Eolian) Interlayered eolian sands and piedmont-slope deposits		
References	New Mexico Bureau of Geology and Mineral Resources, 2003, Geologic Map of New Mexico, scale 1:500,000 (includes some new polygons, faults, and attributes not in NM001 - heads up digitizing by JHorton).		
NGMDB product	NGMDB product page for 22974 (https://ngmdb.usgs.gov/Prodesc/proddesc_22974.htm)		

Counties	Chaves (/geology/state/fips-unit.php?code=f35005) - DeBaca (/geology/state/fips-unit.php?code=f35011) - Eddy (/geology/state/fips-unit.php?code=f35015) - Lea (/geology/state/fips-unit.php?code=f35025) - Roosevelt (/geology/state/fips-unit.php?code=f35041)
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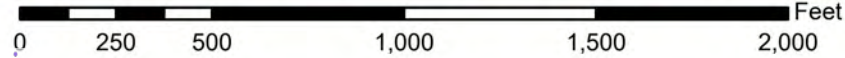
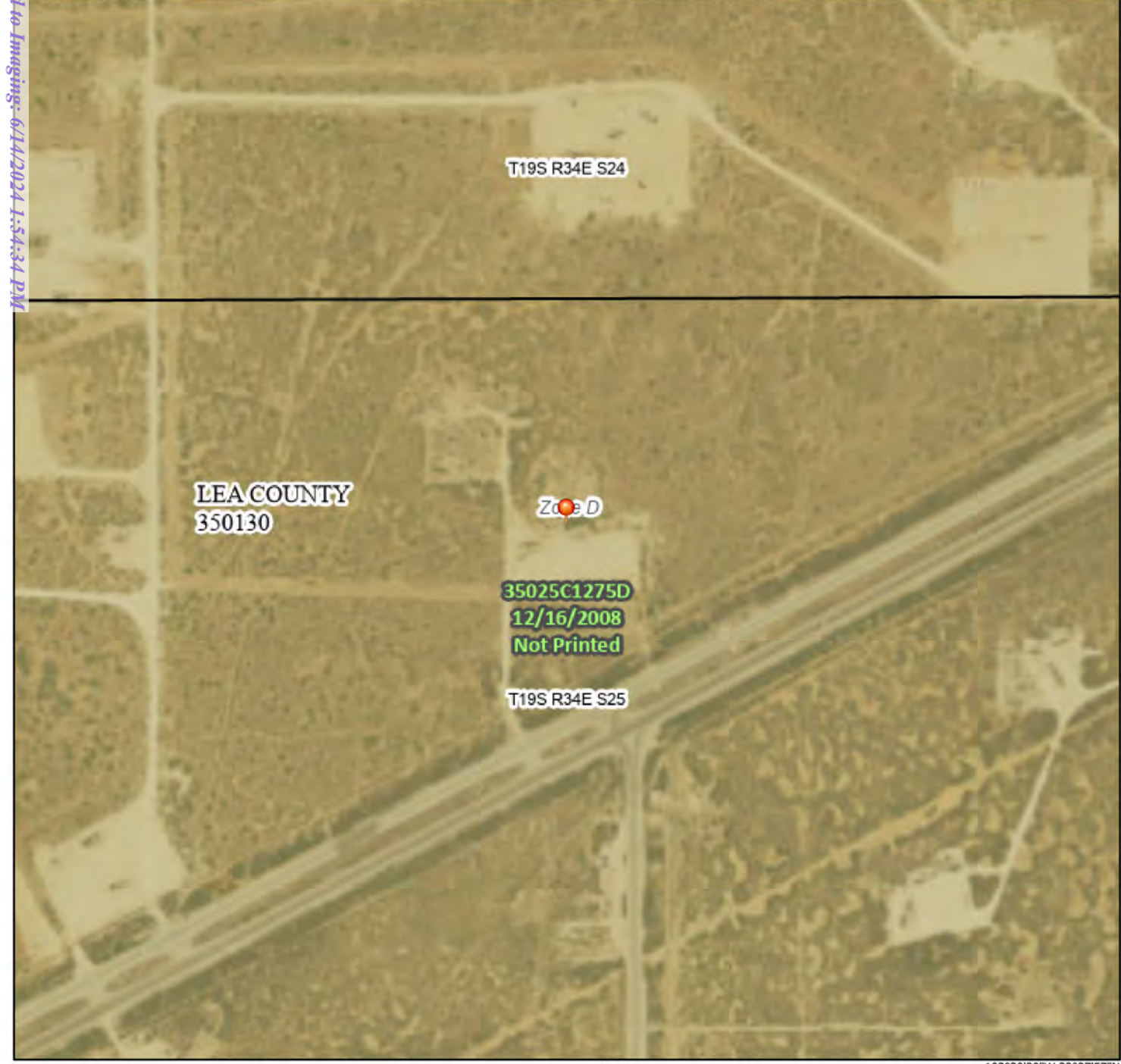
[DOI Privacy Policy \(https://www.doi.gov/privacy\)](https://www.doi.gov/privacy) | [Legal \(https://www.usgs.gov/laws/policies_notices.html\)](https://www.usgs.gov/laws/policies_notices.html) | [Accessibility \(https://www2.usgs.gov/laws/accessibility.html\)](https://www2.usgs.gov/laws/accessibility.html) | [Site Map \(https://www.usgs.gov/sitemap.html\)](https://www.usgs.gov/sitemap.html) | [Contact USGS \(https://answers.usgs.gov/\)](https://answers.usgs.gov/)

[U.S. Department of the Interior \(https://www.doi.gov/\)](https://www.doi.gov/) | [DOI Inspector General \(https://www.doioig.gov/\)](https://www.doioig.gov/) | [White House \(https://www.whitehouse.gov/\)](https://www.whitehouse.gov/) | [E-gov \(https://www.whitehouse.gov/omb/management/egov/\)](https://www.whitehouse.gov/omb/management/egov/) | [No Fear Act \(https://www.doi.gov/pmb/eeo/no-fear-act\)](https://www.doi.gov/pmb/eeo/no-fear-act) | [FOIA \(https://www2.usgs.gov/foia\)](https://www2.usgs.gov/foia)

National Flood Hazard Layer FIRMette



31°16'W 32°38'28"N



1:6,000

103°30'39"W 32°37'57"N

Basemap Imagery Source: USGS National Map 2023

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
		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
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
OTHER FEATURES		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 **5/2/2024 at 11:53 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

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

Released to Imaging: 6/14/2024 1:54:34 PM

Received by OCD: 6/14/2024 9:20:50 AM



May 2, 2024

Wetlands

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

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



Pima Environmental Services

Appendix C
48-Hour Notification

OCD Permitting

[NOTIFY] Notification Of Sampling (C-141N) Application

Submission Information

Submission ID:	341086	Districts:	Hobbs
Operator:	[1092] ARMSTRONG ENERGY CORP	Counties:	Lea
Description:	ARMSTRONG ENERGY CORP [1092] , Government E #007 , nAPP2410959069		
Status:	APPROVED		
Status Date:	05/06/2024		
References (2):	30-025-27896, nAPP2410959069		

Forms

This application type does not have attachments.

Questions

Prerequisites

Incident ID (n#)	nAPP2410959069
Incident Name	NAPP2410959069 GOVERNMENT E #007 @ 30-025-27896
Incident Type	Oil Release
Incident Status	Initial C-141 Approved
Incident Well	[30-025-27896] GOVERNMENT E #007

Location of Release Source

Site Name	Government E #007
Date Release Discovered	04/17/2024
Surface Owner	Federal

Sampling Event General Information

Please answer all the questions in this group.

What is the sampling surface area in square feet	1,106
What is the estimated number of samples that will be gathered	9
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/08/2024
Time sampling will commence	11:00 AM
<div>Warning: Notification can not be less than two business days prior to conducting final sampling.</div>	
Please provide any information necessary for observers to contact samplers	Sebastian Orozco 619-721-4813 cell
Please provide any information necessary for navigation to sampling site	The Government E #007 is located approximately 23 miles west of Hobbs, NM. This spill site is in Unit C, Sect 19S, Range 34E, Latitude 32.6368332, Longitude -103.5160294, Lea County, NM.

Comments

No comments found for this submission.

Conditions

Summary: *jteu (5/6/2024)*. Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.

Reasons

No reasons found for this submission.

Go Back



Pima Environmental Services

Appendix D

Photographic Documentation



**SITE PHOTOGRAPHS
PIMA ENVIRONMENTAL**

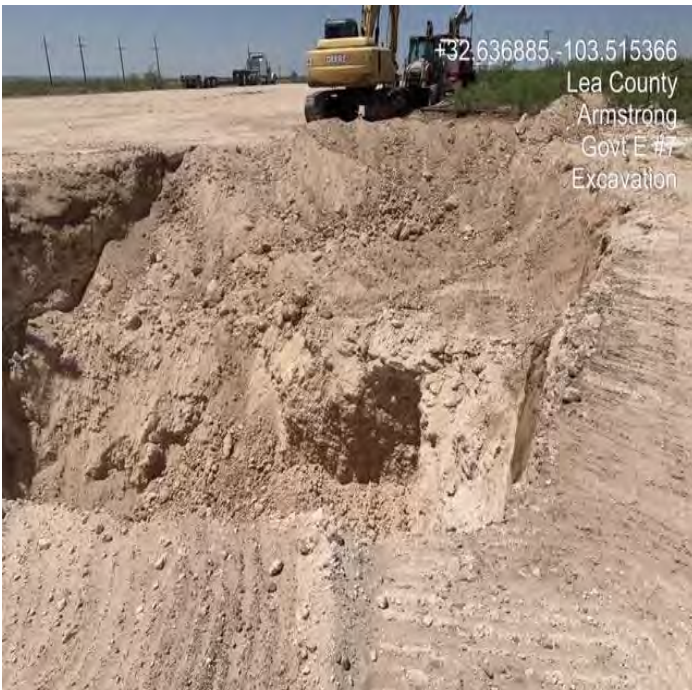
Government E #007

Initial Release:





Excavation:





+32.636801,-103.515411
Lea County
Armstrong
Govt E #7
Excavation





+32.636801,-103.515411
Lea County
Armstrong
Govt E #7
Excavation





Post Excavation:







Pima Environmental Services

Appendix E

Laboratory Reports

Report to:
Gio Gomez



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Pima Environmental Services-Carlsbad

Project Name: Government E #007

Work Order: E405160

Job Number: 22093-0001

Received: 5/13/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
5/20/24

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 5/20/24

Gio Gomez
PO Box 247
Plains, TX 79355-0247



Project Name: Government E #007
Workorder: E405160
Date Received: 5/13/2024 6:15:00AM

Gio Gomez,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 5/13/2024 6:15:00AM, 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
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
Laboratory Technical Representative
Office: 505-421-LABS(5227)
Cell: 505-320-4759
ljjarboe@envirotech-inc.com

Michelle Golzaes
Client Representative
Office: 505-421-LABS(5227)
Cell: 505-947-8222
mgonzales@envirotech-inc.com

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:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	05/20/24 15:01

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS1	E405160-01A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CS2	E405160-02A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CS3	E405160-03A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CS4	E405160-04A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CS5	E405160-05A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CSW1	E405160-06A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CSW2	E405160-07A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CSW3	E405160-08A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.
CSW4	E405160-09A	Soil	05/08/24	05/13/24	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad PO Box 247 Plains TX, 79355-0247	Project Name: Government E #007 Project Number: 22093-0001 Project Manager: Gio Gomez	Reported: 5/20/2024 3:01:29PM
---	---	----------------------------------

CS1
E405160-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		110 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		109 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		110 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		103 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		109 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2420140	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane		96.5 %	50-200	05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2420163	
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

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

Project Name: Government E #007
Project Number: 22093-0001
Project Manager: Gio Gomez

Reported:
5/20/2024 3:01:29PM

CS2

E405160-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2420040
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		109 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2420040
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		109 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		97.5 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2420140
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane		95.6 %	50-200	05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2420163
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 5/20/2024 3:01:29PM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	

CS3

E405160-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		110 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		110 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		102 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2420140	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane		94.1 %	50-200	05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2420163	
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 5/20/2024 3:01:29PM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	

CS4

E405160-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		111 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		111 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		101 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2420140	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane		93.6 %	50-200	05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2420163	
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

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

Project Name: Government E #007
Project Number: 22093-0001
Project Manager: Gio Gomez

Reported:
5/20/2024 3:01:29PM

CS5

E405160-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: EG		Batch: 2420040
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		106 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		99.1 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		109 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: EG		Batch: 2420040
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		106 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		99.1 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		109 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2420140
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane		95.7 %	50-200	05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: IY		Batch: 2420163
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 5/20/2024 3:01:29PM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	

CSW1

E405160-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		107 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		109 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		107 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		96.8 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		109 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2420140	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane		94.5 %	50-200	05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2420163	
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 5/20/2024 3:01:29PM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	

CSW2

E405160-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4	95.2 %	70-130		05/14/24	05/18/24	
Surrogate: Toluene-d8	110 %	70-130		05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene	108 %	70-130		05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4	95.2 %	70-130		05/14/24	05/18/24	
Surrogate: Toluene-d8	110 %	70-130		05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2420140	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane	94.6 %	50-200		05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2420163	
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 5/20/2024 3:01:29PM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	

CSW3

E405160-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene	109 %	70-130		05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4	94.6 %	70-130		05/14/24	05/18/24	
Surrogate: Toluene-d8	110 %	70-130		05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene	109 %	70-130		05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4	94.6 %	70-130		05/14/24	05/18/24	
Surrogate: Toluene-d8	110 %	70-130		05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2420140	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane	95.0 %	50-200		05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2420163	
Chloride	ND	20.0	1	05/17/24	05/18/24	



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 5/20/2024 3:01:29PM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	

CSW4

E405160-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Benzene	ND	0.0250	1	05/14/24	05/18/24	
Ethylbenzene	ND	0.0250	1	05/14/24	05/18/24	
Toluene	ND	0.0250	1	05/14/24	05/18/24	
o-Xylene	ND	0.0250	1	05/14/24	05/18/24	
p,m-Xylene	ND	0.0500	1	05/14/24	05/18/24	
Total Xylenes	ND	0.0250	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		111 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		98.1 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: EG		Batch: 2420040	
Gasoline Range Organics (C6-C10)	ND	20.0	1	05/14/24	05/18/24	
Surrogate: Bromofluorobenzene		111 %	70-130	05/14/24	05/18/24	
Surrogate: 1,2-Dichloroethane-d4		98.1 %	70-130	05/14/24	05/18/24	
Surrogate: Toluene-d8		108 %	70-130	05/14/24	05/18/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: KM		Batch: 2420140	
Diesel Range Organics (C10-C28)	ND	25.0	1	05/16/24	05/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	05/16/24	05/19/24	
Surrogate: n-Nonane		94.8 %	50-200	05/16/24	05/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: IY		Batch: 2420163	
Chloride	ND	20.0	1	05/17/24	05/18/24	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported:
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	5/20/2024 3:01:29PM

Volatile Organic Compounds by EPA 8260B

Analyst: EG

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

Blank (2420040-BLK1) Prepared: 05/14/24 Analyzed: 05/18/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		95.9	70-130			
Surrogate: Toluene-d8	0.544		0.500		109	70-130			

LCS (2420040-BS1) Prepared: 05/14/24 Analyzed: 05/18/24

Benzene	2.47	0.0250	2.50		98.7	70-130			
Ethylbenzene	2.63	0.0250	2.50		105	70-130			
Toluene	2.55	0.0250	2.50		102	70-130			
o-Xylene	2.73	0.0250	2.50		109	70-130			
p,m-Xylene	5.52	0.0500	5.00		110	70-130			
Total Xylenes	8.25	0.0250	7.50		110	70-130			
Surrogate: Bromofluorobenzene	0.527		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.490		0.500		98.0	70-130			
Surrogate: Toluene-d8	0.534		0.500		107	70-130			

Matrix Spike (2420040-MS1) Source: E405160-04 Prepared: 05/14/24 Analyzed: 05/18/24

Benzene	2.41	0.0250	2.50	ND	96.5	48-131			
Ethylbenzene	2.59	0.0250	2.50	ND	104	45-135			
Toluene	2.50	0.0250	2.50	ND	100	48-130			
o-Xylene	2.65	0.0250	2.50	ND	106	43-135			
p,m-Xylene	5.35	0.0500	5.00	ND	107	43-135			
Total Xylenes	8.00	0.0250	7.50	ND	107	43-135			
Surrogate: Bromofluorobenzene	0.522		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.487		0.500		97.3	70-130			
Surrogate: Toluene-d8	0.530		0.500		106	70-130			

Matrix Spike Dup (2420040-MSD1) Source: E405160-04 Prepared: 05/14/24 Analyzed: 05/18/24

Benzene	2.53	0.0250	2.50	ND	101	48-131	4.64	23	
Ethylbenzene	2.70	0.0250	2.50	ND	108	45-135	4.25	27	
Toluene	2.62	0.0250	2.50	ND	105	48-130	4.65	24	
o-Xylene	2.74	0.0250	2.50	ND	110	43-135	3.60	27	
p,m-Xylene	5.56	0.0500	5.00	ND	111	43-135	3.86	27	
Total Xylenes	8.30	0.0250	7.50	ND	111	43-135	3.77	27	
Surrogate: Bromofluorobenzene	0.517		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.2	70-130			
Surrogate: Toluene-d8	0.532		0.500		106	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported: 5/20/2024 3:01:29PM
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: EG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2420040-BLK1) Prepared: 05/14/24 Analyzed: 05/18/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.549		0.500		110	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.480		0.500		95.9	70-130			
Surrogate: Toluene-d8	0.544		0.500		109	70-130			

LCS (2420040-BS2) Prepared: 05/14/24 Analyzed: 05/18/24

Gasoline Range Organics (C6-C10)	53.5	20.0	50.0		107	70-130			
Surrogate: Bromofluorobenzene	0.562		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.3	70-130			
Surrogate: Toluene-d8	0.544		0.500		109	70-130			

Matrix Spike (2420040-MS2) Source: E405160-04 Prepared: 05/14/24 Analyzed: 05/18/24

Gasoline Range Organics (C6-C10)	48.0	20.0	50.0	ND	95.9	70-130			
Surrogate: Bromofluorobenzene	0.555		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.536		0.500		107	70-130			

Matrix Spike Dup (2420040-MSD2) Source: E405160-04 Prepared: 05/14/24 Analyzed: 05/18/24

Gasoline Range Organics (C6-C10)	43.8	20.0	50.0	ND	87.6	70-130	9.04	20	
Surrogate: Bromofluorobenzene	0.556		0.500		111	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.1	70-130			
Surrogate: Toluene-d8	0.540		0.500		108	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported:
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	5/20/2024 3:01:29PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2420140-BLK1) Prepared: 05/16/24 Analyzed: 05/19/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	48.4		50.0		96.8	50-200			

LCS (2420140-BS1) Prepared: 05/16/24 Analyzed: 05/19/24

Diesel Range Organics (C10-C28)	254	25.0	250		101	38-132			
Surrogate: n-Nonane	47.7		50.0		95.3	50-200			

LCS Dup (2420140-BSD1) Prepared: 05/16/24 Analyzed: 05/19/24

Diesel Range Organics (C10-C28)	267	25.0	250		107	38-132	5.00	20	
Surrogate: n-Nonane	48.4		50.0		96.9	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Government E #007	Reported:
PO Box 247	Project Number:	22093-0001	
Plains TX, 79355-0247	Project Manager:	Gio Gomez	5/20/2024 3:01:29PM

Anions by EPA 300.0/9056A

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 (2420163-BLK1)					Prepared: 05/17/24 Analyzed: 05/18/24				
Chloride	ND	20.0							
LCS (2420163-BS1)					Prepared: 05/17/24 Analyzed: 05/18/24				
Chloride	257	20.0	250		103	90-110			
LCS Dup (2420163-BSD1)					Prepared: 05/17/24 Analyzed: 05/18/24				
Chloride	256	20.0	250		103	90-110	0.271	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:	22093-0001	Reported:
Plains TX, 79355-0247	Project Manager:	Gio Gomez	05/20/24 15:01

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



Project Information

Chain of Custody

Page 1 of 1

Client: **Pima Environmental Services**
 Project: **CONCRETE #007**
 Project Manager: **Glo Gomez**
 Address: **5614 N. Lovington Hwy.**
 City, State, Zip: **Hobbs, NM, 88240**
 Phone: **806-782-1151**
 Email: **glo@pimaoli.com**
 Report due by:

Bill To
 Attention: **Armstrong Energy**
 Address:
 City, State, Zip
 Phone:
 Email:
 Pima Project # **19-19**

E 405160 Job # **AP 513**
~~21064-001~~

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab. Number	Analysis and Method										TAT		EPA Program		Remarks
						DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	1D	2D	3D	Standard	CWA	SDWA	
11:00	5/8	S		CS1	1															
11:06				CS2	2															
11:17				CS3	3															
11:23				CS4	4															
11:31				CS5	5															
11:46				CSW1	6															
11:58				CSW2	7															
12:01				CSW3	8															
12:11				CSW4	9															

Additional Instructions:

Bill to Armstrong

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

Sampled by:

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>Kewin Arame</i>	5/10/24	11:15	<i>Michelle Gonzales</i>	5-10-24	11:15
<i>Michelle Gonzales</i>	5-10-24	16:58	<i>Andrew</i>	5-10-24	18:00
<i>Andrew</i>	5-10-24	2400	<i>Andrew</i>	5/13/24	06:15

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.

Received on ice: ☒ Y ☐ N

T1 T2 T3

AVG Temp °C 4

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

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: 5/13/2024 12:12:17PM

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:	05/13/24 06:15	Work Order ID:	E405160
Phone:	(575) 631-6977	Date Logged In:	05/10/24 14:55	Logged In By:	Angelina Pineda
Email:	gio@pimaoil.com	Due Date:	05/17/24 17:00 (4 day TAT)		

Chain of Custody (COC)

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

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

No. of containers is not documented by client

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

QUESTIONS

Action 351961

QUESTIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID:	1092
	Action Number:	351961
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2410959069
Incident Name	NAPP2410959069 GOVERNMENT E #007 @ 30-025-27896
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-025-27896] GOVERNMENT E #007

Location of Release Source	
Please answer all the questions in this group.	
Site Name	GOVERNMENT E #007
Date Release Discovered	04/17/2024
Surface Owner	Federal

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Equipment Failure Flow Line - Production Crude Oil Released: 165 BBL Recovered: 100 BBL Lost: 65 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

District I

1625 N. French Dr., Hobbs, NM 88240
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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

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Energy, Minerals and Natural Resources
Oil Conservation Division
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QUESTIONS, Page 2

Action 351961

QUESTIONS (continued)

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID:	1092
	Action Number:	351961
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

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

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

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

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

I hereby agree and sign off to the above statement	Name: Jeffery Tew Title: Operations Engineer Email: Jtew@aecnm.com Date: 04/24/2024
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QUESTIONS, Page 3

Action 351961

QUESTIONS (continued)

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID:	1092
	Action Number:	351961
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS**Site Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

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

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	0
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	04/18/2024
On what date will (or did) the final sampling or liner inspection occur	05/08/2024
On what date will (or was) the remediation complete(d)	05/01/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	1106
What is the estimated volume (in cubic yards) that will be remediated	940
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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1625 N. French Dr., Hobbs, NM 88240
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Santa Fe, NM 87505

QUESTIONS, Page 4
Action 351961

QUESTIONS (continued)

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 351961
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Jeffery Tew Title: Operations Engineer Email: Jtew@aecn.com Date: 06/07/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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QUESTIONS, Page 5

Action 351961

QUESTIONS (continued)

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID:	1092
	Action Number:	351961
	Action Type:	
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)	

QUESTIONS

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

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QUESTIONS, Page 6

Action 351961

QUESTIONS (continued)

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID:	1092
	Action Number:	351961
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	341086
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	05/08/2024
What was the (estimated) number of samples that were to be gathered	9
What was the sampling surface area in square feet	1106

Remediation Closure Request

Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1106
What was the total volume (cubic yards) remediated	940
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	From April 18 to May 1, Armstrong Energy conducted an urgent excavation of the affected area within the unlined containment to prevent crude oil from seeping further into the soil. They used a track hoe and belly dumps to remove the contaminated material from the site. The excavation covered approximately 1,106 square feet and reached depths of 7 feet and 4 feet below ground surface (bgs). In total, 940 cubic yards of contaminated material were removed and transported to an NMOCD-approved landfill for disposal.

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 (in .pdf format) 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.

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.

I hereby agree and sign off to the above statement	Name: Jeffery Tew Title: Operations Engineer Email: Jtew@aecnm.com Date: 06/07/2024
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QUESTIONS, Page 7

Action 351961

QUESTIONS (continued)

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID:	1092
	Action Number:	351961
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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1625 N. French Dr., Hobbs, NM 88240
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CONDITIONS

Action 351961

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID:
	1092
	Action Number: 351961
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
scott.rodgers	This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	6/14/2024
scott.rodgers	The reclamation report will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and a revegetation plan.	6/14/2024