

Incident ID	NGRL1031435971
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>245</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NGRL1031435971
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: Dale Woodall Title: EHS Professional
Signature: *Dale Woodall* Date: 3/8/2023
email: dale.woodall@dnv.com Telephone: 405-318-4697

OCD Only

Received by: Jocelyn Harimon Date: 03/08/2023

Incident ID	NGRL1031435971
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: Dale Woodall Title: EHS Professional
Signature: Dale Woodall Date: 3/8/2023
email: dale.woodall@dvn.com Telephone: 405-318-4697

OCD Only

Received by: Jocelyn Harimon Date: 03/08/2023

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: Brittany Hall Date: 3/20/2023

Printed Name: Brittany Hall Title: Environmental Specialist



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

February 23rd, 2023

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

Re: Site Assessment, Remediation, and Closure Report
Mad Dog 15 Federal Com #001
API No. 30-025-36778
GPS: Latitude 32.299202 Longitude -103.451499
UL -- P, Sec. 15, T23S, R34E
Lea County, NM
NMOCD Ref. No. NGRL1031435971

Pima Environmental Services, LLC. (Pima) has been contracted by Devon Energy Production Company, LP (Devon) to perform a spill assessment, remediation activities, and submit this closure report for a produced water release that occurred at the Mad Dog 15 Federal Com #001 (Mad Dog). The initial C-141 was submitted on June 4th, 2010 (Appendix C). This incident was assigned Incident ID NGRL1031435971 by the New Mexico Oil Conservation Division (NMOCD).

Site Characterization

The Mad Dog is located approximately twenty-one (21) miles southwest of Eunice, NM. This spill site is in Unit P, Section 15, Township 23S, Range 34E, Latitude 32.299202 Longitude -103.451499, Lea County, NM. Figure 1 references a Location Map.

Per the New Mexico Bureau of Geology and Mineral Resources, the geology is in the Piedmont alluvial deposits (Holocene to lower Pleistocene). The soil in this area is made up of Simona fine sandy loam, 0 to 3 percent slopes according to the United States Department of Agriculture Natural Resources Conservation Service soil survey (Appendix B). The drainage courses in this area are well-drained. There is a low potential for karst geology to be present in the area of the Mad Dog (Figure 3).

According to the New Mexico Office of the State Engineer, depth to the nearest groundwater in this area is 245 feet below grade surface (BGS). According to the United States Geological Survey (USGS), the nearest groundwater is greater than 282 feet BGS. The closest waterway is an unnamed salt playa, located approximately 2.36 miles to the east 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'	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

NGRL1031435971: On June 1st, 2010, a hairline fracture developed in a transfer line releasing 15 bbls of produced water. The area impacted was 40 feet in diameter with some overspray.

Remediation Activities, Site Assessment, and Soil Sampling Results

On February 14th, 2023, Pima Environmental mobilized personnel to the now reclaimed site to assess the impacted area. Pima sampled the areas surrounding the flowline release and collected a total of fourteen soil samples for laboratory analysis. Five bottom samples (S1-S5) were collected at depths of 1 and 3 feet to determine vertical delineation. Additionally, side wall samples (SW1-SW4) were collected at a depth of 6 inches to determine horizontal delineation. An initial site map can be found in Figure 4.

2-14-23 Soil Sample Results

NMOCD Table 1 Closure Criteria 19.15.29 NMAC (Depth to Groundwater is >100')								
DEVON ENERGY - MAD DOG 15 FED 1								
Date 2/14/23		NM Approved Laboratory Results						
Sample ID	Depth (BGS)	BTEX mg/kg	Benzene mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg	CI mg/kg
S-1	1'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-2	1'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-3	1'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-4	1'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
S-5	1'	ND	ND	ND	ND	ND	ND	ND
	3'	ND	ND	ND	ND	ND	ND	ND
SW 1	6"	ND	ND	ND	ND	ND	ND	ND
SW 2	6"	ND	ND	ND	ND	ND	ND	ND
SW 3	6"	ND	ND	ND	ND	ND	ND	ND
SW 4	6"	ND	ND	ND	ND	ND	ND	ND

ND: Analyte Non-Detect

Based on the sample results, the bottoms and sidewalls are below NMOCD Closure Criteria 19.15.29 NMAC. We believe the impacted area has been adequately remediated during the reclamation event. See Appendix D for Photographic Documentation.

Closure Request

Due to analytical levels falling below NMOCD closure criteria, no further action is required.

After careful review, Pima requests that this incident, NGRL1031435971 be closed. Devon 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 Professional
Pima Environment Services, LLC

Attachments

Figures:

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

Appendices:

- Appendix A – Referenced Water Surveys
- Appendix B – Soil Survey and Geological Data
- Appendix C – C-141 Form
- Appendix D – Photographic Documentation
- Appendix E – Laboratory Reports



Pima Environmental Services

Figures:

1-Location Map

2-Topographic Map


3-Karst Map

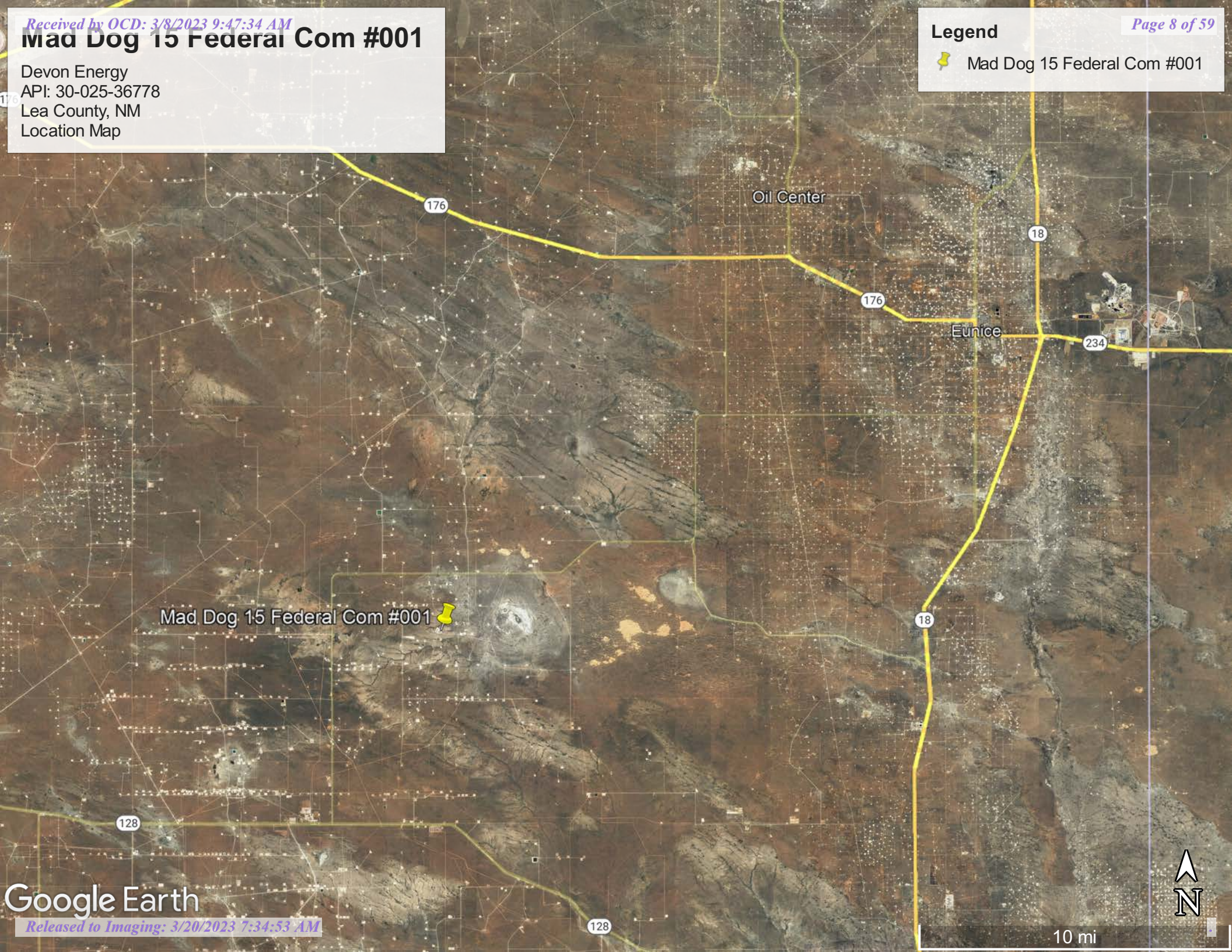
4-Site Map


Mad Dog 15 Federal Com #001

Devon Energy
API: 30-025-36778
Lea County, NM
Location Map

Legend

 Mad Dog 15 Federal Com #001



Mad Dog 15 Federal Com #001 

Google Earth

10 mi

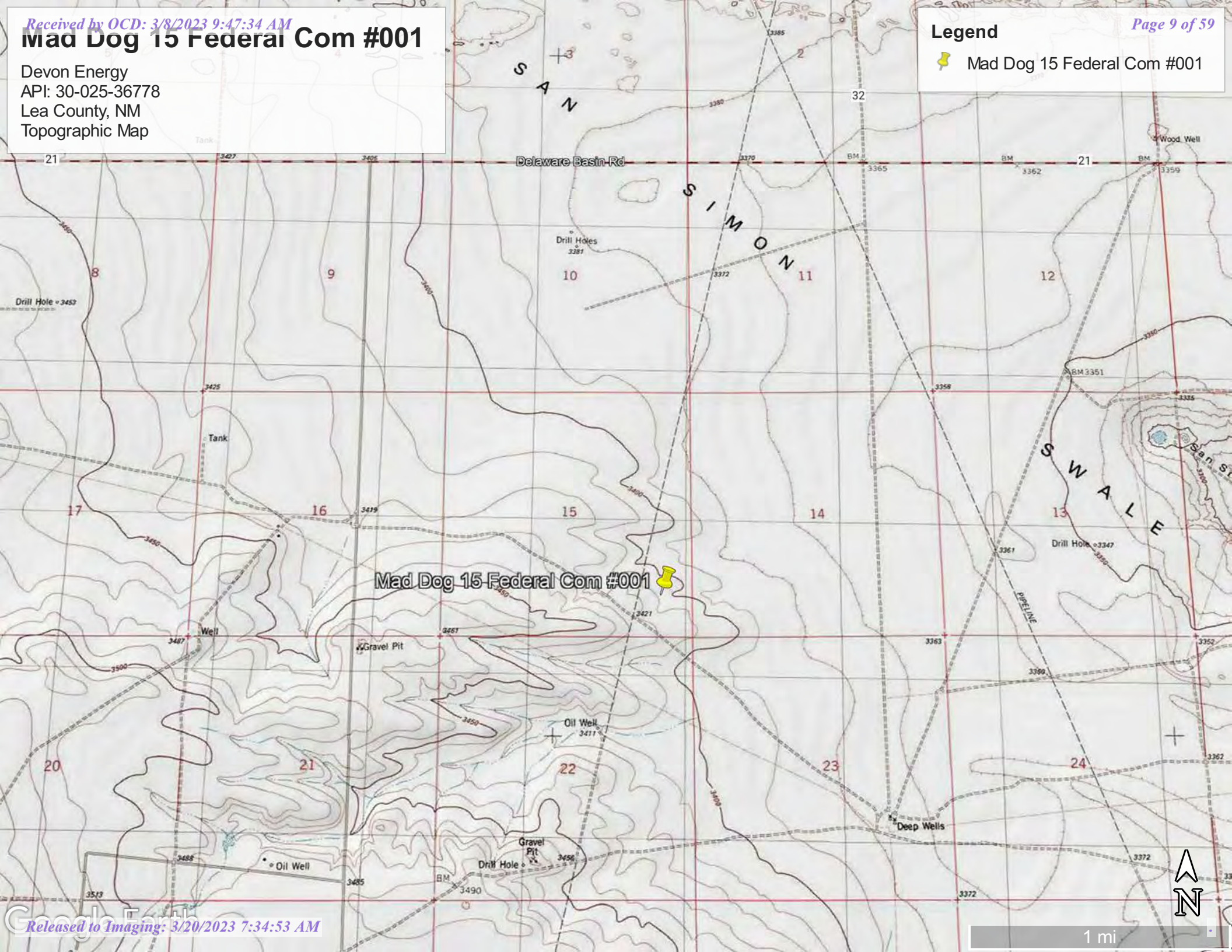
Mad Dog 15 Federal Com #001

Devon Energy
API: 30-025-36778
Lea County, NM
Topographic Map

Legend





Mad Dog 15 Federal Com #001

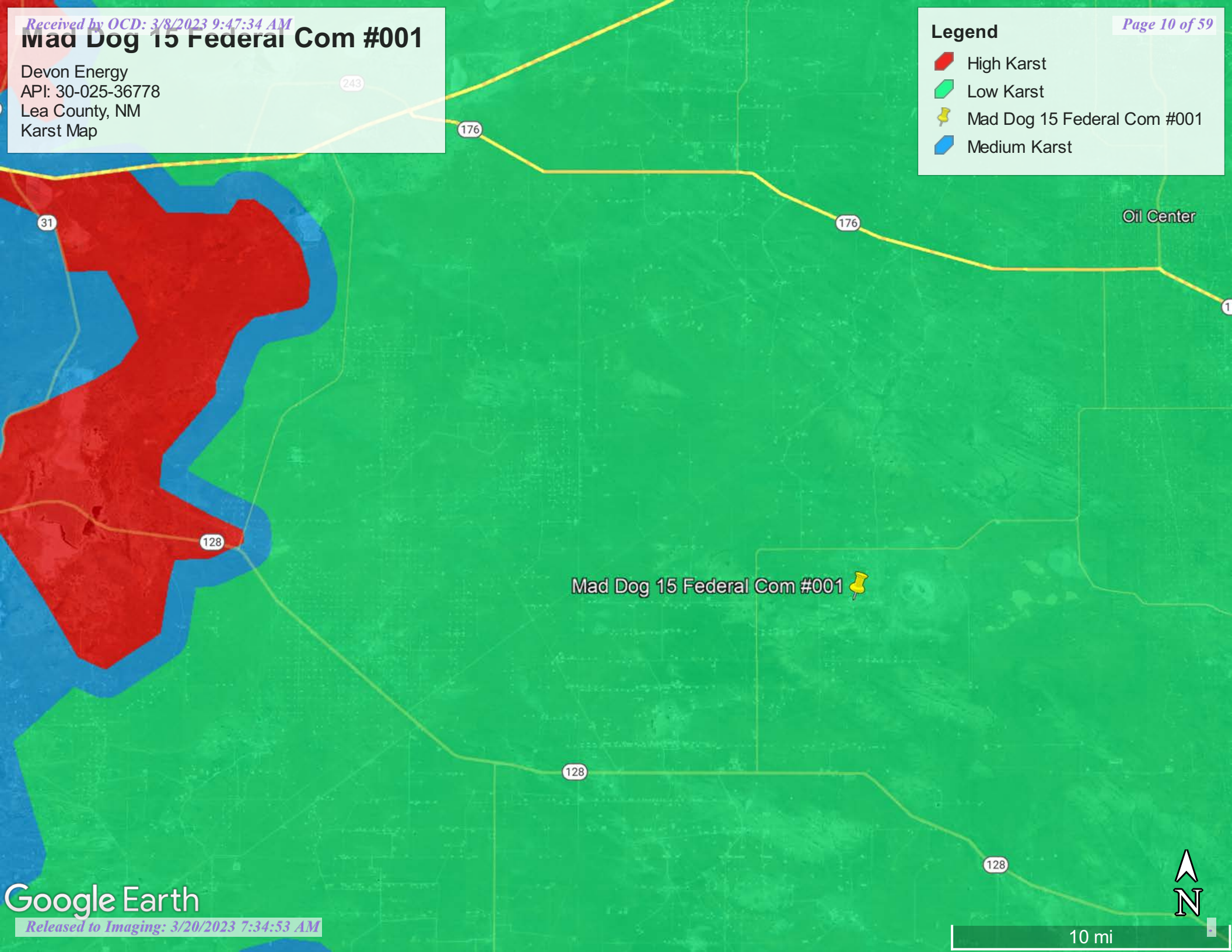


Mad Dog 15 Federal Com #001

Devon Energy
API: 30-025-36778
Lea County, NM
Karst Map

Legend




-  High Karst
-  Low Karst
-  Mad Dog 15 Federal Com #001
-  Medium Karst

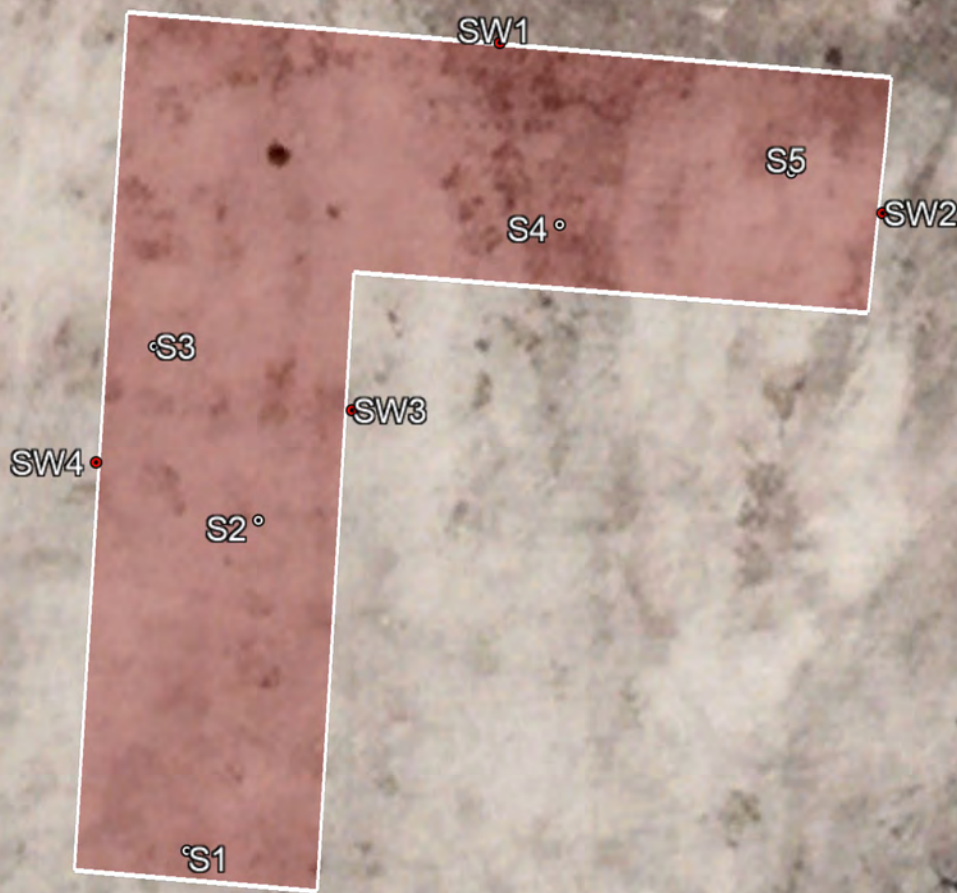


Mad Dog 15 Federal Com #001

Devon Energy
API: 30-025-36778
Lea County, NM
Site Map

Legend

-  Release Area
-  Side Wall Sample
-  Soil Samples





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	Q 4	Sec	Tws	Rng	X	Y	Distance	DepthWell	DepthWater	Water Column
CP 00637		CP	LE	3	3	4	15	23S	34E		645293	3574541*	515	430	430	0
CP 01785 POD1		CP	LE	4	1	3	14	23S	34E		646203	3575003	537	488	245	243
CP 01120 POD1		CP	LE	2	3	3	14	23S	34E		646366	3574753	579	397	318	79
CP 00618		CP	LE	1	2	4	22	23S	34E		645713	3573539*	1117	428	295	133
CP 00606		CP	LE		4	1	23	23S	34E		646613	3573854*	1143	650	265	385
CP 01258 POD1		CP	LE	1	4	3	22	23S	34E		645015	3573221	1630	25		
CP 01258 POD3		CP	LE	1	4	3	22	23S	34E		644938	3573097	1776	25		
CP 00580		CP	LE	3	4	3	23	23S	34E		646524	3572948*	1854	220		
CP 01258 POD2		CP	LE	1	4	3	22	23S	34E		644941	3572883	1964	65		
E 07616 POD1		E	TO								646466	3576970	2412	500	300	200
CP 01760 POD1		CP	LE	3	1	2	16	23S	34E		643627	3575897	2500	767	290	477
CP 01730 POD1		CP	LE	2	2	1	16	23S	34E		643549	3575824	2533	594	200	394
CP 01830 POD1		CP	LE	3	3	3	18	23S	35E		649289	3574568	3494	460	270	190
CP 00556 POD1		CP	LE	4	4	3	08	23S	34E		641762	3576206	4321	497	255	242
CP 01622 POD1		CP	LE	1	3	3	04	23S	34E		642830	3577872	4377	575	285	290
C 04667 POD1		CUB	LE	3	4	3	20	23S	34E		641770	3572915	4384			
CP 01502 POD2		CP	LE	4	3	3	05	23S	34E		642074	3577676	4795	680	300	380
Average Depth to Water:															287 feet	
Minimum Depth:															200 feet	
Maximum Depth:															430 feet	

Record Count: 17

UTM NAD83 Radius Search (in meters):

Easting (X): 645795.68

Northing (Y): 3574653

Radius: 5000

*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.


2/16/23 9:12 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)				(NAD83 UTM in meters)			
		(quarters are smallest to largest)							
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
20F8C	CP 01785 POD1	4	1	3	14	23S	34E	646203	3575003 
Driller License:		1706		Driller Company:			ELITE DRILLERS CORPORATION		
Driller Name:		WALLACE, BRYCE J.LEE.NER							
Drill Start Date:		04/21/2019		Drill Finish Date:			04/23/2019		Plug Date:
Log File Date:		06/03/2019		PCW Rev Date:			Source:		Shallow
Pump Type:		Pipe Discharge Size:			Estimated Yield:			225 GPM	
Casing Size:		7.50		Depth Well:			488 feet		Depth Water:
									245 feet
Water Bearing Stratifications:				Top	Bottom	Description			
				200	280	Sandstone/Gravel/Conglomerate			
				280	370	Sandstone/Gravel/Conglomerate			
				370	390	Sandstone/Gravel/Conglomerate			
				390	480	Sandstone/Gravel/Conglomerate			
				480	488	Shale/Mudstone/Siltstone			
Casing Perforations:				Top	Bottom				
				250	488				

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

2/22/23 3:25 PM

POINT OF DIVERSION SUMMARY



[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 =

- 321714103270301

Minimum number of levels = 1

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

USGS 321714103270301 23S.34E.22.421434

Available data for this site

Groundwater: Field measurements



GO

Lea County, New Mexico

Hydrologic Unit Code 13070007

Latitude 32°17'18", Longitude 103°27'08" NAD27

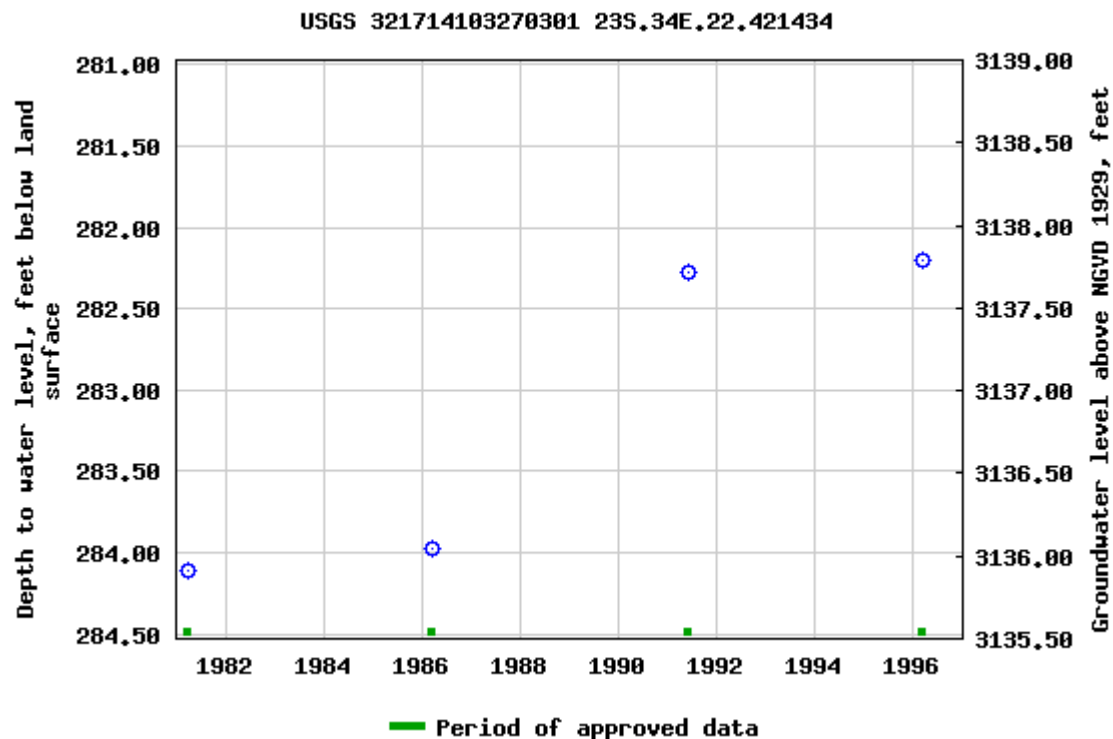
Land-surface elevation 3,420.00 feet above NGVD29

The depth of the well is 428 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Santa Rosa Sandstone (231SNRS) 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](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)


[Data Tips](#)


[Explanation of terms](#)

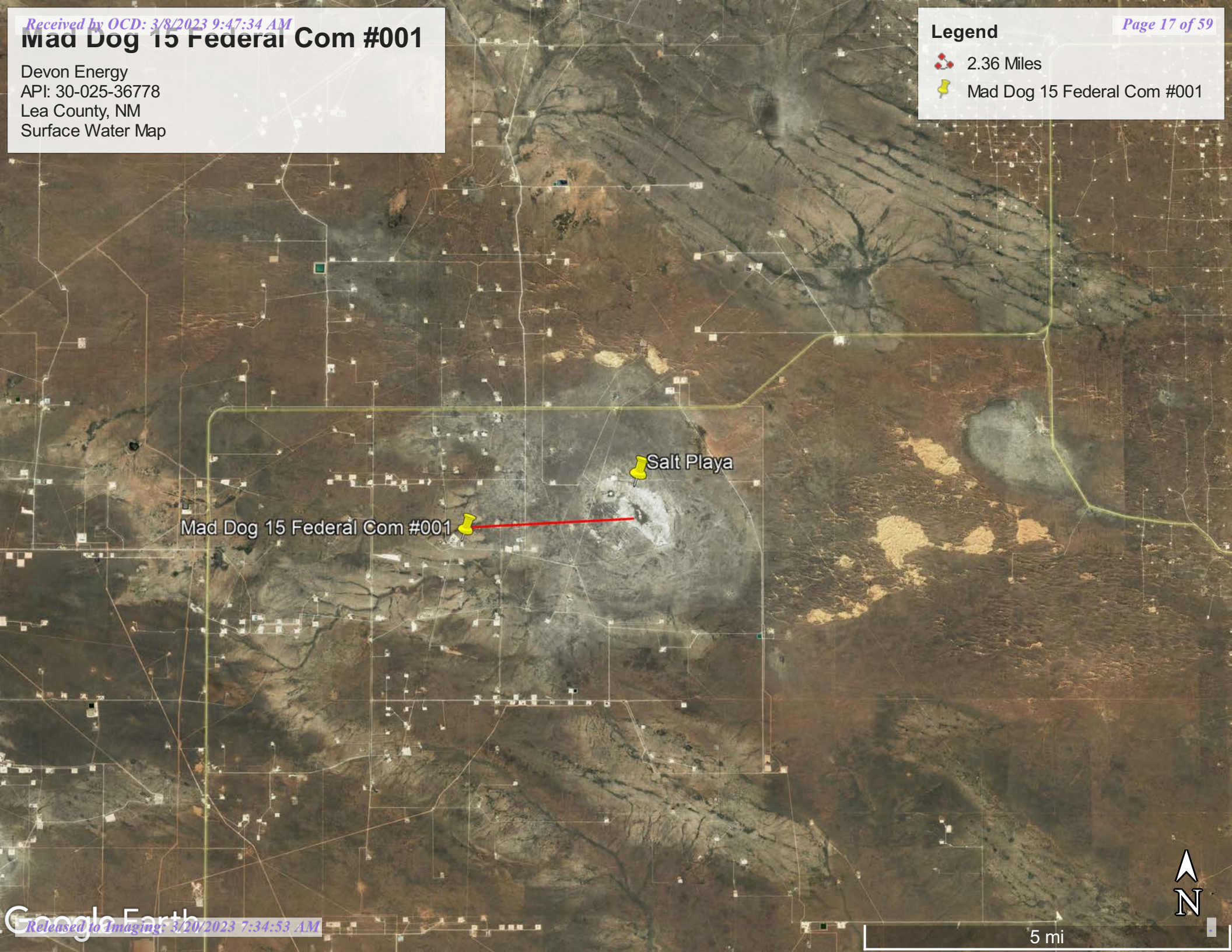
Mad Dog 15 Federal Com #001

Devon Energy
API: 30-025-36778
Lea County, NM
Surface Water Map

Legend

 2.36 Miles

 Mad Dog 15 Federal Com #001



Mad Dog 15 Federal Com #001

Salt Playa



Pima Environmental Services

Appendix B

Soil Survey & Geological Data

FEMA Flood Map

Wetlands Map

Map Unit Description: Simona fine sandy loam, 0 to 3 percent slopes---Lea County, New Mexico

Lea County, New Mexico

SE—Simona fine sandy loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: dmr2

Elevation: 3,000 to 4,200 feet

Mean annual precipitation: 10 to 15 inches

Mean annual air temperature: 58 to 62 degrees F

Frost-free period: 190 to 205 days

Farmland classification: Not prime farmland

Map Unit Composition

Simona and similar soils: 85 percent

Minor components: 15 percent

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

Description of Simona

Setting

Landform: Plains

Landform position (three-dimensional): Rise

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Calcareous eolian deposits derived from sedimentary rock

Typical profile

A - 0 to 8 inches: fine sandy loam

Bk - 8 to 16 inches: gravelly fine sandy loam

Bkm - 16 to 26 inches: cemented material

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 7 to 20 inches to petrocalcic

Drainage class: Well drained

Runoff class: Very high

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: 35 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: Very low (about 2.0 inches)

Interpretive groups

Land capability classification (irrigated): 6s

Map Unit Description: Simona fine sandy loam, 0 to 3 percent slopes---Lea County, New Mexico

Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: D
Ecological site: R070BD002NM - Shallow Sandy
Hydric soil rating: No

Minor Components

Kimbrough

Percent of map unit: 8 percent
Ecological site: R077CY037TX - Very Shallow 16-21" PZ
Hydric soil rating: No

Lea

Percent of map unit: 7 percent
Ecological site: R077CY028TX - Limy Upland 16-21" PZ
Hydric soil rating: No

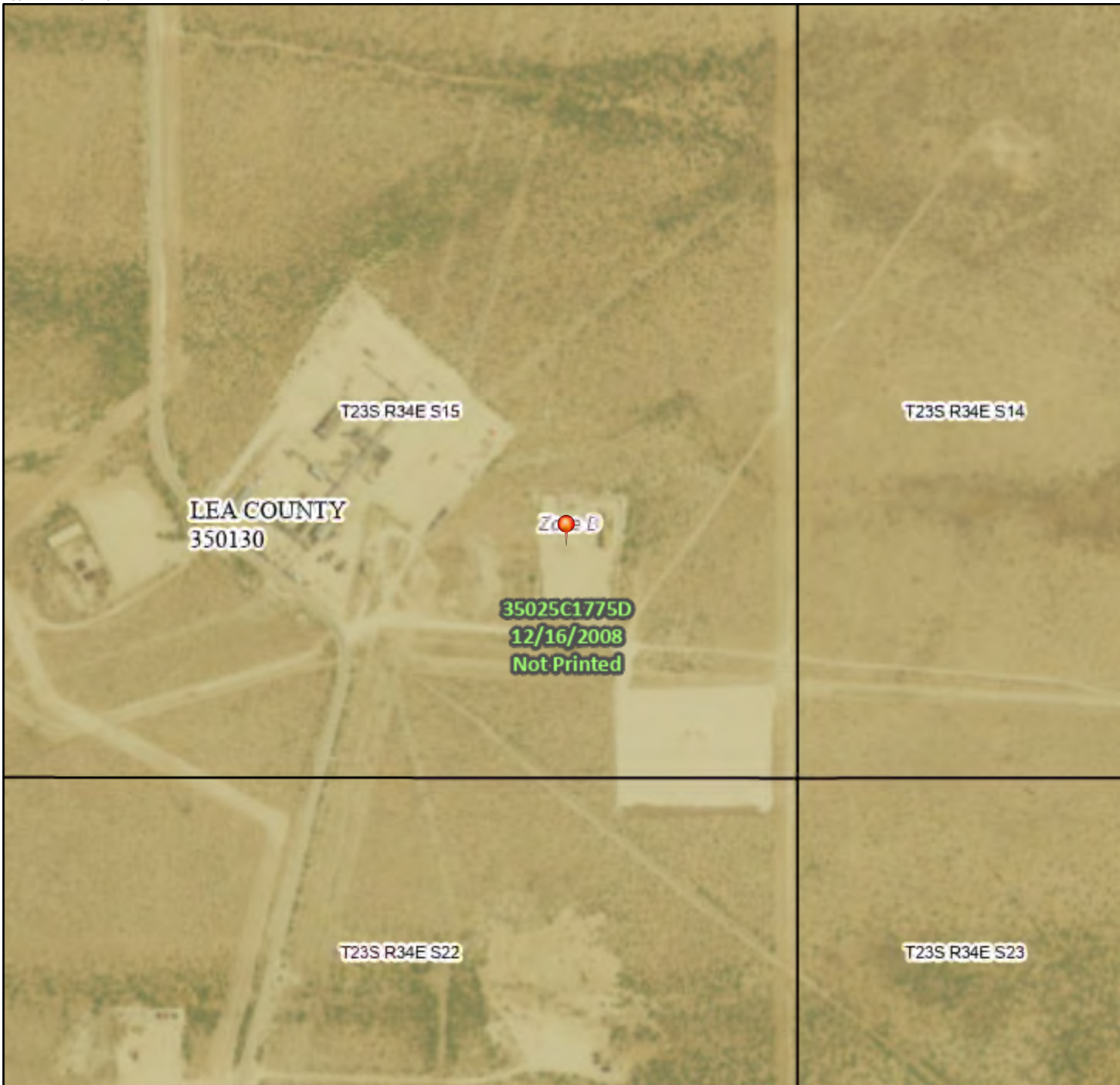
Data Source Information

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

National Flood Hazard Layer FIRMette



103°27'24"W 32°18'12"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 103°26'47"W 32°17'42"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 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
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 2/16/2023 at 11:14 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.



Wetlands Map



February 22, 2023

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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



Pima Environmental Services

Appendix C

C-141 Form

48-Hour Notification

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

RECEIVED

JUL 08 2010

HOBBSOCD

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action**OPERATOR**
☒ Initial Report ☐ Final Report

Name of Company Devon Energy	Contact <input type="checkbox"/> Roger Hernandez
Address P. O. Box 250 Artesia, NM 88211	Telephone No. <input type="checkbox"/> 575-748-5238
Facility Name Mad Dog 15 Federal #1	Facility Type <input type="checkbox"/> Gas Well
Surface Owner	Mineral Owner
Lease No. <input type="checkbox"/>	

LOCATION OF RELEASE

API # 30-025-36778-00-00

Unit Letter P	Section 15	Township 23S	Range 34E	Feet from the 660	North/South Line South	Feet from the 660	East/West Line East	County Lea County, NM
------------------	---------------	-----------------	--------------	----------------------	---------------------------	----------------------	------------------------	--------------------------

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 15 BPW	Volume Recovered <input type="checkbox"/> 0 BPW
Source of Release Hairline split in water transfer line	Date and Hour of Occurrence 6-1-2010 7:00 AM	Date and Hour of Discovery 6-1-2010 7:00 AM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Trishia BadBear (BLM-Hobbs)	
By Whom? <input type="checkbox"/> Roger Hernandez	Date and Hour <input type="checkbox"/> 6-1-2010 9:30 AM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

N/A

WATER @ 280'

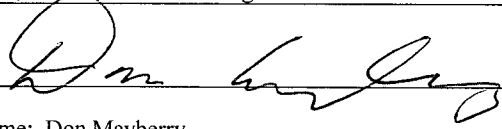
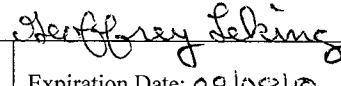
Describe Cause of Problem and Remedial Action Taken.*

15 bbls of Produced water was released due to a hairline fracture in a transfer line.

Describe Area Affected and Cleanup Action Taken.*

Area impacted was 40' in diameter with some overspray; soil samples of affected area, horizontally and vertically, will be taken for analysis. The remediation will be based off of lab results. The transfer line was scheduled for replacement June 2, 2010; it has been replaced at this time.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD 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 NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD 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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Don Mayberry	Approved by <input type="checkbox"/> District Supervisor: 	
Title: Superintendent	Approval Date: 07/08/10	Expiration Date: 09/08/10
Date: June 4, 2010 Phone: 575-748-5235	Conditions of Approval: SUBMIT FINAL	Attached <input type="checkbox"/>

* Attach Additional Sheets If Necessary

C-141 BY 09/08/10.

IRP-1110-2644

Incident ID	NGRL1031435971
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>245</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NGRL1031435971
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: Dale Woodall Title: EHS Professional

Signature: Dale Woodall Date: 3/8/2023

email: dale.woodall@dnv.com Telephone: 405-318-4697

OCD Only

Received by: _____ Date: _____

Incident ID	NGRL1031435971
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: Dale Woodall Title: EHS Professional
Signature: Dale Woodall Date: 3/8/2023
email: dale.woodall@dvn.com Telephone: 405-318-4697

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



Pima Environmental Services

Appendix D

Photographic Documentation



**SITE PHOTOGRAPHS
PIMA ENVIRONMENTAL**

Mad Dog 15 Fed #001







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: Mad dog 15 Fed 1

Work Order: E302079

Job Number: 01058-0007

Received: 2/17/2023

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
2/21/23

5796 U.S. Hwy 64
Farmington, NM 87401

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



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

Date Reported: 2/21/23

Tom Bynum
PO Box 247
Plains, TX 79355-0247



Project Name: Mad dog 15 Fed 1
Workorder: E302079
Date Received: 2/17/2023 8:15:00AM

Tom Bynum,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 2/17/2023 8:15:00AM, under the Project Name: Mad dog 15 Fed 1.

The analytical test results summarized in this report with the Project Name: Mad dog 15 Fed 1 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

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

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

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

Respectfully,

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

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

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

Field Offices:

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

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

Envirotech Web Address: www.envirotech-inc.com

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Sample Summary

Pima Environmental Services-Carlsbad	Project Name:	Mad dog 15 Fed 1	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	02/21/23 12:00

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
S1-1'	E302079-01A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S1-3'	E302079-02A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S2-1'	E302079-03A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S2-3'	E302079-04A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S3-1'	E302079-05A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S3-3'	E302079-06A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S4-1'	E302079-07A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S4-3'	E302079-08A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S5-1'	E302079-09A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
S5-3'	E302079-10A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
SW1	E302079-11A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
SW2	E302079-12A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
SW3	E302079-13A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.
SW4	E302079-14A	Soil	02/14/23	02/17/23	Glass Jar, 2 oz.



Sample Data

Pima Environmental Services-Carlsbad	Project Name:	Mad dog 15 Fed 1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/21/2023 12:00:39PM

S1-1'

E302079-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analyst: SL		Batch: 2307045	
Benzene	ND	0.0250	1	02/17/23	02/17/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/17/23	
Toluene	ND	0.0250	1	02/17/23	02/17/23	
o-Xylene	ND	0.0250	1	02/17/23	02/17/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/17/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2307045	
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		86.9 %	70-130	02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: KM		Batch: 2307040	
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>		108 %	50-200	02/17/23	02/17/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2307046	
Chloride	ND	40.0	2	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S1-3'

E302079-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/17/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/17/23	
Toluene	ND	0.0250	1	02/17/23	02/17/23	
o-Xylene	ND	0.0250	1	02/17/23	02/17/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/17/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.6 %	70-130		02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	84.3 %	70-130		02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	103 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S2-1'

E302079-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/17/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/17/23	
Toluene	ND	0.0250	1	02/17/23	02/17/23	
o-Xylene	ND	0.0250	1	02/17/23	02/17/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/17/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		101 %	70-130	02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		87.8 %	70-130	02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
		110 %	50-200	02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S2-3'

E302079-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/17/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/17/23	
Toluene	ND	0.0250	1	02/17/23	02/17/23	
o-Xylene	ND	0.0250	1	02/17/23	02/17/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/17/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		85.2 %	70-130	02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
		105 %	50-200	02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S3-1'

E302079-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/17/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/17/23	
Toluene	ND	0.0250	1	02/17/23	02/17/23	
o-Xylene	ND	0.0250	1	02/17/23	02/17/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/17/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.3 %	70-130		02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.9 %	70-130		02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S3-3'

E302079-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/17/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/17/23	
Toluene	ND	0.0250	1	02/17/23	02/17/23	
o-Xylene	ND	0.0250	1	02/17/23	02/17/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/17/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/17/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.2 %	70-130		02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/17/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.8 %	70-130		02/17/23	02/17/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	107 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S4-1'

E302079-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.2 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.3 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S4-3'

E302079-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.2 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.7 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	108 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S5-1'

E302079-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.3 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.2 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

S5-3'

E302079-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	96.9 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	86.3 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	106 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

SW1

E302079-11

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	98.0 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.2 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/17/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/17/23	
<i>Surrogate: n-Nonane</i>						
	111 %	50-200		02/17/23	02/17/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

SW2

E302079-12

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		100 %	70-130	02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		84.5 %	70-130	02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/18/23	
<i>Surrogate: n-Nonane</i>						
		110 %	50-200	02/17/23	02/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

SW3

E302079-13

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
		102 %	70-130	02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
		86.0 %	70-130	02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/18/23	
<i>Surrogate: n-Nonane</i>						
		112 %	50-200	02/17/23	02/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



Sample Data

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

Project Name: Mad dog 15 Fed 1
Project Number: 01058-0007
Project Manager: Tom Bynum

Reported:
2/21/2023 12:00:39PM

SW4

E302079-14

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Benzene	ND	0.0250	1	02/17/23	02/18/23	
Ethylbenzene	ND	0.0250	1	02/17/23	02/18/23	
Toluene	ND	0.0250	1	02/17/23	02/18/23	
o-Xylene	ND	0.0250	1	02/17/23	02/18/23	
p,m-Xylene	ND	0.0500	1	02/17/23	02/18/23	
Total Xylenes	ND	0.0250	1	02/17/23	02/18/23	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>						
	99.6 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: SL		Batch: 2307045
Gasoline Range Organics (C6-C10)	ND	20.0	1	02/17/23	02/18/23	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>						
	88.3 %	70-130		02/17/23	02/18/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: KM		Batch: 2307040
Diesel Range Organics (C10-C28)	ND	25.0	1	02/17/23	02/18/23	
Oil Range Organics (C28-C36)	ND	50.0	1	02/17/23	02/18/23	
<i>Surrogate: n-Nonane</i>						
	113 %	50-200		02/17/23	02/18/23	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: BA		Batch: 2307046
Chloride	ND	20.0	1	02/17/23	02/17/23	



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Mad dog 15 Fed 1	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/21/2023 12:00:39PM

Volatile Organics by EPA 8021B

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2307045-BLK1)

Prepared: 02/17/23 Analyzed: 02/17/23

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.99		8.00		99.9	70-130			

LCS (2307045-BS1)

Prepared: 02/17/23 Analyzed: 02/17/23

Benzene	4.46	0.0250	5.00		89.2	70-130			
Ethylbenzene	4.60	0.0250	5.00		91.9	70-130			
Toluene	4.68	0.0250	5.00		93.7	70-130			
o-Xylene	4.74	0.0250	5.00		94.8	70-130			
p,m-Xylene	9.34	0.0500	10.0		93.4	70-130			
Total Xylenes	14.1	0.0250	15.0		93.9	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.97		8.00		99.6	70-130			

Matrix Spike (2307045-MS1)

Source: E302079-01

Prepared: 02/17/23 Analyzed: 02/17/23

Benzene	4.73	0.0250	5.00	ND	94.6	54-133			
Ethylbenzene	4.88	0.0250	5.00	ND	97.5	61-133			
Toluene	4.96	0.0250	5.00	ND	99.3	61-130			
o-Xylene	5.04	0.0250	5.00	ND	101	63-131			
p,m-Xylene	9.91	0.0500	10.0	ND	99.1	63-131			
Total Xylenes	15.0	0.0250	15.0	ND	99.7	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.25		8.00		103	70-130			

Matrix Spike Dup (2307045-MSD1)

Source: E302079-01

Prepared: 02/17/23 Analyzed: 02/17/23

Benzene	4.53	0.0250	5.00	ND	90.6	54-133	4.34	20	
Ethylbenzene	4.68	0.0250	5.00	ND	93.6	61-133	4.11	20	
Toluene	4.76	0.0250	5.00	ND	95.2	61-130	4.17	20	
o-Xylene	4.84	0.0250	5.00	ND	96.7	63-131	4.20	20	
p,m-Xylene	9.53	0.0500	10.0	ND	95.3	63-131	3.97	20	
Total Xylenes	14.4	0.0250	15.0	ND	95.8	63-131	4.05	20	
Surrogate: 4-Bromochlorobenzene-PID	8.26		8.00		103	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Mad dog 15 Fed 1	Reported: 2/21/2023 12:00:39PM
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: SL

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2307045-BLK1) Prepared: 02/17/23 Analyzed: 02/17/23

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.03		8.00		87.8	70-130			

LCS (2307045-BS2) Prepared: 02/17/23 Analyzed: 02/17/23

Gasoline Range Organics (C6-C10)	42.9	20.0	50.0		85.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.26		8.00		90.7	70-130			

Matrix Spike (2307045-MS2) Source: E302079-01 Prepared: 02/17/23 Analyzed: 02/17/23

Gasoline Range Organics (C6-C10)	45.8	20.0	50.0	ND	91.5	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.97		8.00		87.1	70-130			

Matrix Spike Dup (2307045-MSD2) Source: E302079-01 Prepared: 02/17/23 Analyzed: 02/17/23

Gasoline Range Organics (C6-C10)	42.8	20.0	50.0	ND	85.7	70-130	6.61	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	6.91		8.00		86.4	70-130			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Mad dog 15 Fed 1	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/21/2023 12:00:39PM

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 (2307040-BLK1)

Prepared: 02/17/23 Analyzed: 02/17/23

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	57.3		50.0		115	50-200			

LCS (2307040-BS1)

Prepared: 02/17/23 Analyzed: 02/17/23

Diesel Range Organics (C10-C28)	197	25.0	250		78.9	38-132			
Surrogate: n-Nonane	53.9		50.0		108	50-200			

Matrix Spike (2307040-MS1)

Source: E302079-05

Prepared: 02/17/23 Analyzed: 02/17/23

Diesel Range Organics (C10-C28)	220	25.0	250	ND	88.0	38-132			
Surrogate: n-Nonane	53.9		50.0		108	50-200			

Matrix Spike Dup (2307040-MSD1)

Source: E302079-05

Prepared: 02/17/23 Analyzed: 02/17/23

Diesel Range Organics (C10-C28)	210	25.0	250	ND	84.0	38-132	4.56	20	
Surrogate: n-Nonane	54.5		50.0		109	50-200			



QC Summary Data

Pima Environmental Services-Carlsbad	Project Name:	Mad dog 15 Fed 1	Reported:
PO Box 247	Project Number:	01058-0007	
Plains TX, 79355-0247	Project Manager:	Tom Bynum	2/21/2023 12:00:39PM

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 (2307046-BLK1)					Prepared: 02/17/23 Analyzed: 02/17/23				
Chloride	ND	20.0							
LCS (2307046-BS1)					Prepared: 02/17/23 Analyzed: 02/17/23				
Chloride	245	20.0	250		98.2	90-110			
Matrix Spike (2307046-MS1)					Source: E302079-01		Prepared: 02/17/23 Analyzed: 02/17/23		
Chloride	247	40.0	250	ND	98.7	80-120			
Matrix Spike Dup (2307046-MSD1)					Source: E302079-01		Prepared: 02/17/23 Analyzed: 02/17/23		
Chloride	244	40.0	250	ND	97.5	80-120	1.23	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:	Mad dog 15 Fed 1	
PO Box 247	Project Number:	01058-0007	Reported:
Plains TX, 79355-0247	Project Manager:	Tom Bynum	02/21/23 12:00

- 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 2

01058-0007 ce

Client: Pima Environmental Services		Bill To		Lab Use Only		TAT		EPA Program					
Project: Mad dog 15 Fed 1		Attention: Devon		Lab WO# F302579		Job Number 3020		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Tom Bynum		Address:		Analysis and Method								RCRA	
Address: 5614 N. Lovington Hwy.		City, State, Zip											
City, State, Zip: Hobbs, NM, 88240		Phone:											
Phone: 580-748-1613		Email:											
Email: tom@pimaoil.com		Pima Project # 1-170											
Report due by:													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
9:00	2-14-23	S	1	S1-1'	1							X		
9:05				S1-3'	2									
9:10				S2-1'	3									
9:15				S2-3'	4									
9:20				S3-1'	5									
9:25				S3-3'	6									
9:30				S4-1'	7									
9:35				S4-3'	8									
9:40				S5-1'	9									
9:45				S5-3'	10									

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.						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.					
Sampled by: Audriana Bernavidez						Lab Use Only					
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time	
AB		2-15-23		2:00		Michelle Cuyak		2-15-23		1400	
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time	
Michelle Cuyak		2-15-23		1700		Lorena Lee		2-16-23		1700	
Relinquished by: (Signature)		Date		Time		Received by: (Signature)		Date		Time	
Lorena Lee		2-16-23		2231		Cathy Chitt		2-17-23		8:15	
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other						Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA					
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.											



Project Information

Chain of Custody

Page 2 of 2

Client: Pima Environmental Services		Bill To		Lab Use Only		TAT		EPA Program					
Project: <u>Mad dog 15 Fed 1</u>		Attention: <u>Devon</u>		Lab WO# <u>E302079</u>		Job Number <u>01058-0007</u>		1D	2D	3D	Standard	CWA	SDWA
Project Manager: <u>Tom Bynum</u>		Address:		Analysis and Method									
Address: <u>56 14 N. Lovington Hwy.</u>		City, State, Zip											RCRA
City, State, Zip <u>Hobbs, NM, 88240</u>		Phone:											
Phone: <u>580-748-1613</u>		Email:											
Email: <u>tom@pimaoil.com</u>		Pima Project # <u>1-176</u>											
Report due by:													

Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	DRO/DRO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	BGDOC TX	Remarks
9:50	2/14/23	S	1	SW1	11							X		
9:55	↓	↓	↓	SW2	12							↓		
10:00	↓	↓	↓	SW3	13							↓		
10:05	↓	↓	↓	SW4	14							↓		

Additional Instructions:

Billing #: Devon

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: Audriana Benavidez

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

Relinquished by: (Signature) <u>AB</u>	Date <u>2-15-23</u>	Time <u>2:00</u>	Received by: (Signature) <u>Michelle Cays</u>	Date <u>2-15-23</u>	Time <u>1400</u>	Lab Use Only Received on ice: <u>Y</u> / N T1: _____ T2: _____ T3: _____ AVG Temp °C <u>4</u>
Relinquished by: (Signature) <u>Michelle Cays</u>	Date <u>2-15-23</u>	Time <u>1700</u>	Received by: (Signature) <u>Lorenza Rin</u>	Date <u>2-16-23</u>	Time <u>1700</u>	
Relinquished by: (Signature) <u>Lorenza Rin</u>	Date <u>2-16-23</u>	Time <u>2230</u>	Received by: (Signature) <u>Carla Chet</u>	Date <u>2-17-23</u>	Time <u>8:15</u>	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - OtherContainer 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: 2/17/2023 9:15:37AM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

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

Client:	Pima Environmental Services-Carlsbad	Date Received:	02/17/23 08:15	Work Order ID:	E302079
Phone:	(575) 631-6977	Date Logged In:	02/16/23 14:46	Logged In By:	Alexa Michaels
Email:	tom@pimaoil.com	Due Date:	02/22/23 07:00 (3 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? Yes

Sample Preservation

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

Multiphase Sample Matrix

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

Subcontract Laboratory

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

Client Instruction

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

Date



envirotech Inc.

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 194690

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 194690
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bhall	None	3/20/2023