



402 E. Wood Avenue
Carlsbad, New Mexico 88220
Tel. 432.701.2159
www.ntglobal.com

March 10, 2022

Mike Bratcher
District Supervisor
Oil Conservation Division, District 2
811 S. First Street
Artesia, New Mexico 88210

**Re: Closure Report
Spud Muffin 31 CTB 1 (01.29.2022)
Devon Energy Production Company
Site Location: Unit O-03-25S-31E
(Lat 32.255755°, Long -104.026245°)
Eddy County, New Mexico
Incident ID: nAPP2203240100**

Mr. Bratcher:

On behalf of Devon Energy Production Company (Devon), New Tech Global Environmental, LLC (NTGE) has prepared this letter to document the liner inspection activities for the Spud Muffin 31 CTB 1 (Site). The Site is located in Eddy County approximately 4.9 miles southeast of Loving, New Mexico (Figures 1 and 2).

Background

Based on the initial C-141 obtained from the New Mexico Oil Conservation Division (NMOCD), the release was discovered on December 22, 2021. The release was the result of a leaking pump within the tank battery. The leak resulted in the releases of approximately 5.53 barrels (bbls) of produced water of which 5 bbls was recovered. The initial C-141 form is attached.

Site Characterization

The Site is located within a medium karst area. Based on a review of the New Mexico Office of State Engineers and USGS databases, there is one water well within a 0.5 mile radius of the Site. The nearest identified well is located approximately 0.45 miles southeast of the Site in S6, T24S, R29E. The well has a reported depth to groundwater of 36 feet below ground surface (ft bgs).

Review of USGS topographic map (Figure 2) and National Flood Hazard Layer (NFHL) data identified a significant watercourse within a 0.5 mile of the Site. The Pecos river is located approximately 0.37 miles north of the Site.

A copy of the site characterization information and the associated *Point of Diversion Summary* report for the nearest water well is attached.

Mr. Mike Bratcher
March 10, 2022
Page 2 of 2

Regulatory Criteria

In accordance with the NMOCD regulatory criteria established in 19.15.29.12 NMAC, the following criteria are applicable to the Site.

- Benzene: 10 milligrams per kilogram (mg/kg).
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg.
- TPH: 100 mg/kg (GRO + DRO + MRO).
- Chloride: 600 mg/kg.

Liner Inspection

On March 4, 2022, NTGE conducted liner inspection activities to assess the liners integrity within the facility. NTGE personnel conducted a visual inspection of the liner and found the liner to be intact with no integrity issues. A photographic log documenting the condition of the liner at the time of the inspection is attached. Additionally, a copy of the 48-hour advance notification of the liner inspection activities provided to the NMOCD is also attached.

Conclusions

Based on the finding of the liner inspection, no further actions are required at the Site. The final C-141 is attached and Devon formally requests a no further action designation for the release. If you have any questions regarding this report or need additional information, please contact us at 432-701-2159.

Sincerely,
NTG Environmental



Ethan Sessums
Jr. Project Manager

Attachments:

Initial C-141
Site Characterization Information
Figures
Photographic Log
NMOCD 48-Hour Advance Notification

INITIAL AND FINAL C-141

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

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

Nature and Volume of Release

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

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

Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

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

Initial Response

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

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: _____	Title: _____
Signature: <u>Kendra DeHoyos</u>	Date: _____
email: _____	Telephone: _____
<u>OCD Only</u>	
Received by: <u>Ramona Marcus</u>	Date: <u>2/15/2022</u>

NAPP2203240100

Spills In Lined Containment	
Measurements Of Standing Fluid	
Length(Ft)	42
Width(Ft)	20
Depth(in.)	0.5
Total Capacity without tank displacements (bbls)	6.23
No. of 500 bbl Tanks In Standing Fluid	0.5
No. of Other Tanks In Standing Fluid	
OD Of Other Tanks In Standing Fluid(feet)	
Total Volume of standing fluid accounting for tank displacement.	5.53

Incident ID	
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?	_____ (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input 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 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 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 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 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 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 type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input 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.

Oil Conservation Division

Incident ID	
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: _____ Title: _____

Signature: Wesley Mathews Date: 07/18/2022

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

Incident ID	
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: _____ Title: _____

Signature: Wesley Mathews Date: 07/18/2022

email: _____ Telephone: _____

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: Jennifer Nobui Date: _____

Printed Name: _____ Title: _____

SITE CHARACTERIZATION INFORMATION

Medium Karst

Devon Energy

739

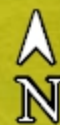
Legend

-  HIGH
-  MEDIUM
-  Site Location

Spud Muffin 31 CTB 1

Pecos River

738

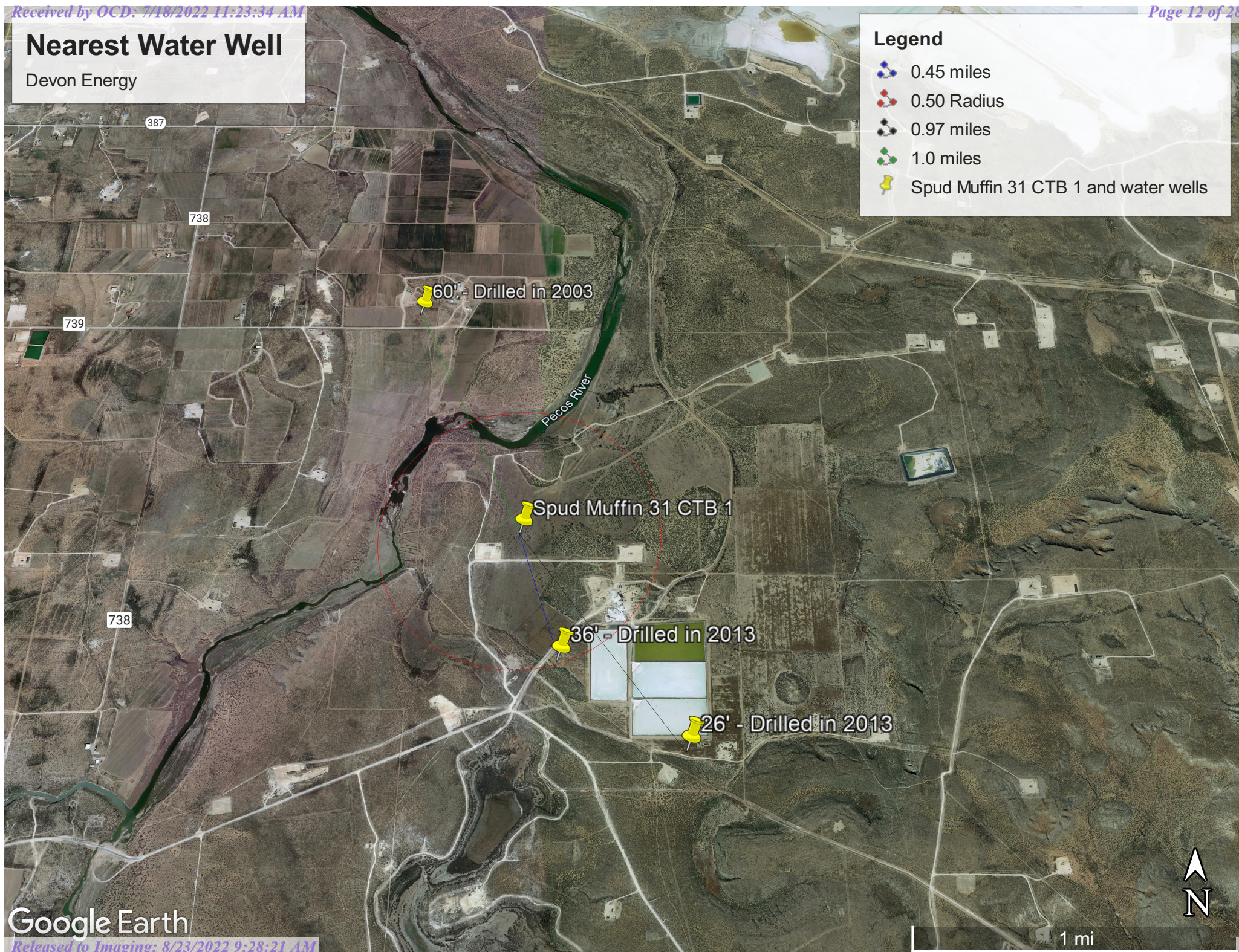


Nearest Water Well

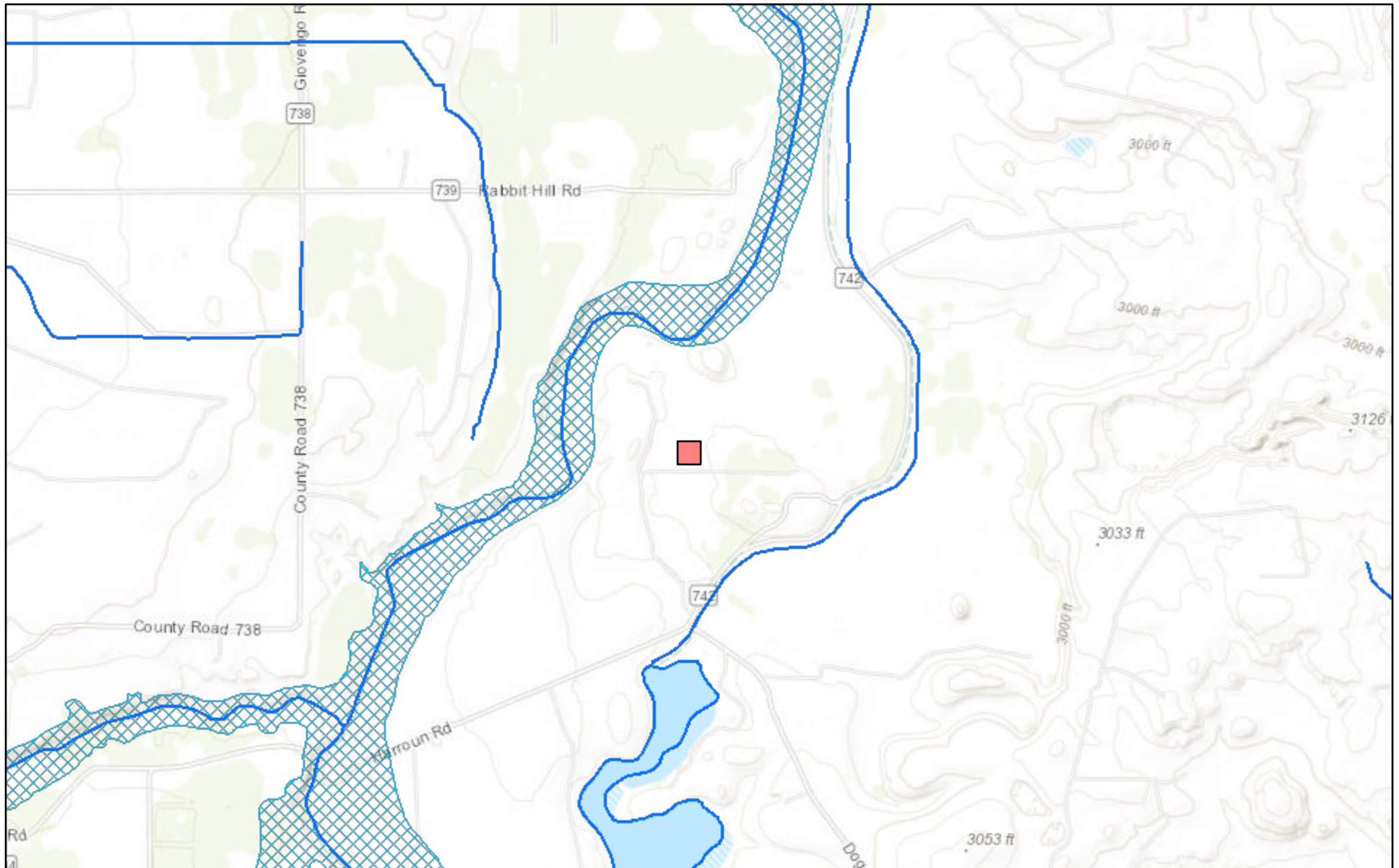
Devon Energy

Legend

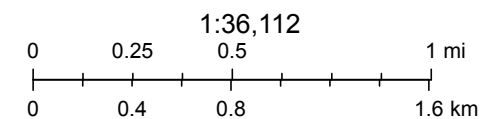
- 0.45 miles
- 0.50 Radius
- 0.97 miles
- 1.0 miles
- Spud Muffin 31 CTB 1 and water wells



New Mexico NFHL Data




February 22, 2022



FEMA, Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey,

nmflood.org is made possible through a collaboration with NMDHSEM,

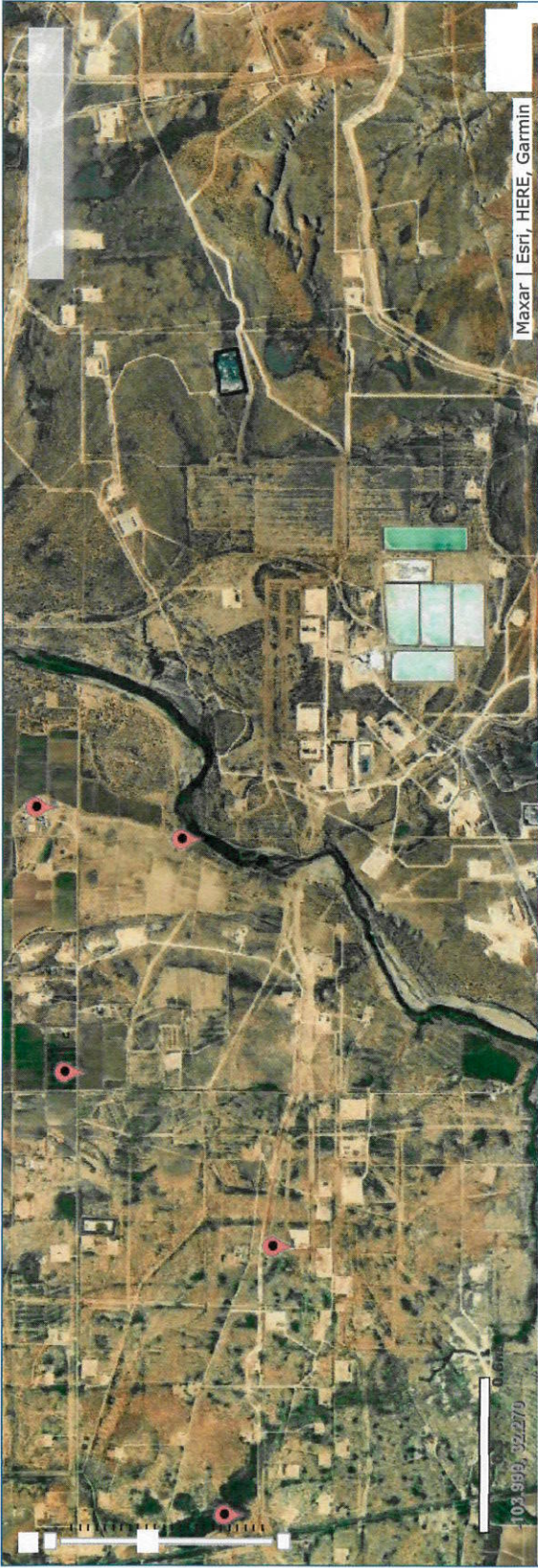
This is a non-regulatory product for informational use only. Please consult your local floodplain administrator for further information.



National Water Information System: Mapper

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[Help](#)[Info](#)



Maxar | Esri, HERE, Garmin

403 999, 92/27/9

Site Information



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																	
		Sub-	Q Q Q										Depth Depth Water				
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y		Distance	Well	Water	Column	
C 03615 POD1		CUB	ED	1	3	2	06	24S	29E	591964	3568500		740	60	36	24	
C 03615 POD2		CUB	ED	4	2	4	06	24S	29E	592661	3568013		1513	60	26	34	
C 00571 CLW241602	O	CUB	ED	3	3	3	30	23S	29E	591241	3570757*		1628	89	38	51	
C 00136 A		CUB	ED	4	4	4	25	23S	28E	591037	3570753*		1696	100	60	40	
C 00571		CUB	ED	1	3	3	30	23S	29E	591241	3570957*		1820	90	38	52	
C 02198		C	ED				1	01	24S	28E	589940	3568611*		1877	78		
C 02182		C	ED				4	30	23S	29E	592328	3571048*		1944	75	30	45

Average Depth to Water: **38 feet**

Minimum Depth: **26 feet**

Maximum Depth: **60 feet**

Record Count: 7

UTMNAD83 Radius Search (in meters):

Easting (X): 591722

Northing (Y): 3569200.78

Radius: 2000

*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.

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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
C	03615 POD2	4	2	4	06	24S	29E	592661	3568013

Driller License:	1348	Driller Company:	TAYLOR WATER WELL SERVICE	
Driller Name:	TAYLOR, CLINTON E. (LD)			
Drill Start Date:	05/01/2013	Drill Finish Date:	05/01/2013	Plug Date:
Log File Date:	05/10/2013	PCW Rcv Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield: 10 GPM
Casing Size:	2.00	Depth Well:	60 feet	Depth Water: 26 feet


Water Bearing Stratifications:	Top	Bottom	Description
	45	57	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	45	60



New Mexico Office of the State Engineer

Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)						(NAD83 UTM in meters)	
		(quarters are smallest to largest)						X	Y
		Q64	Q16	Q4	Sec	Tws	Rng		
C	00136 A	4	4	4	25	23S	28E	591037	3570753* 

Driller License:**Driller Company:****Driller Name:** EXISTING WELL**Drill Start Date:** 09/25/2003**Drill Finish Date:** 09/27/2003**Plug Date:****Log File Date:** 10/27/2003**PCW Rcv Date:** 03/15/2004**Source:** Shallow**Pump Type:** TURBIN**Pipe Discharge Size:** 8**Estimated Yield:** 1181 GPM**Casing Size:** 16.00**Depth Well:** 100 feet**Depth Water:** 60 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.

2/22/22 3:31 PM

Page 1 of 1

POD SUMMARY - C 00136 A



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)

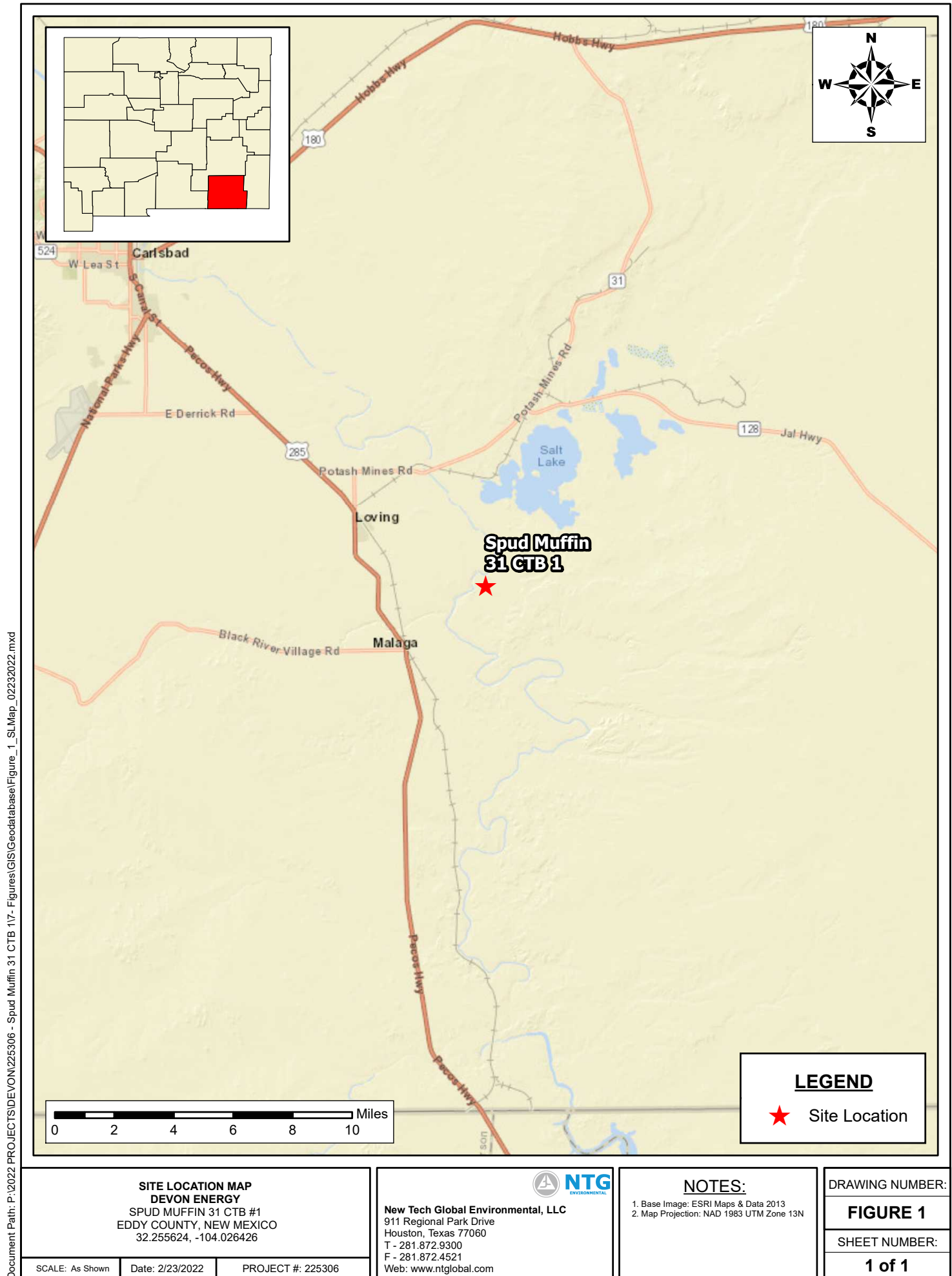
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	03615 POD1	1	3	2	06	24S	29E	591964	3568500

Driller License:	1348	Driller Company:	TAYLOR WATER WELL SERVICE	
Driller Name:	TAYLOR, CLINTON E. (LD)			
Drill Start Date:	05/04/2013	Drill Finish Date:	05/04/2013	Plug Date:
Log File Date:	05/10/2013	PCW Rcv Date:		Source: Shallow
Pump Type:		Pipe Discharge Size:		Estimated Yield: 5 GPM
Casing Size:	2.00	Depth Well:	60 feet	Depth Water: 36 feet

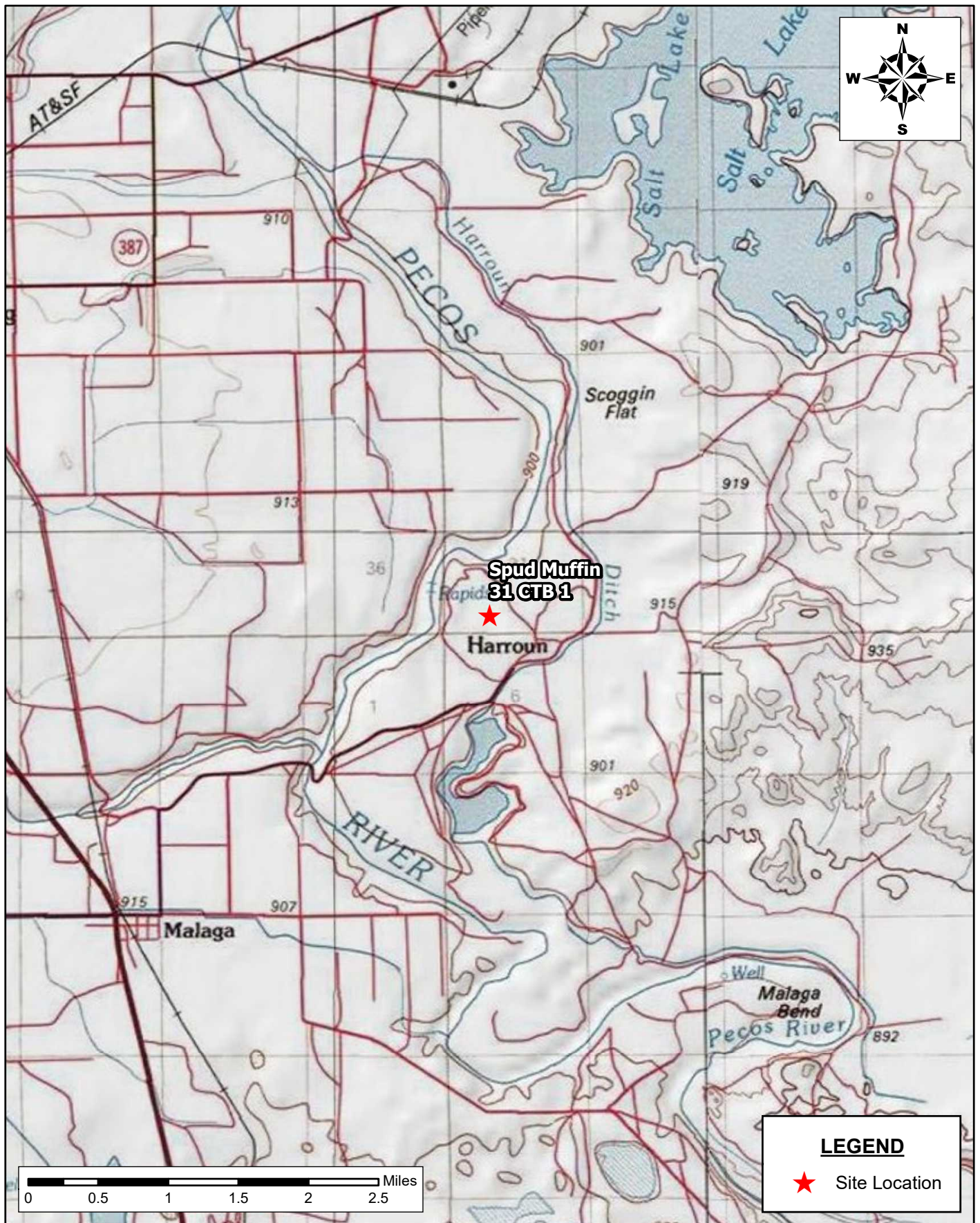
Water Bearing Stratifications:	Top	Bottom	Description
	50	60	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	50	60

FIGURES



Document Path: P:\2022 PROJECTS\DEVON\225306 - Spud Muffin 31 CTB 1\7 - Figures\GIS\Geodatabase\Figure_2_AREAMap_02232022.mxd



AREA MAP
DEVON ENERGY
 SPUD MUFFIN 31 CTB #1
 EDDY COUNTY, NEW MEXICO
 32.255624, -104.026426

SCALE: As Shown

Date: 2/23/2022

PROJECT #: 225306



New Tech Global Environmental, LLC
 911 Regional Park Drive
 Houston, Texas 77060
 T - 281.872.9300
 F - 281.872.4521
 Web: www.ntglobal.com

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983 UTM Zone 13N

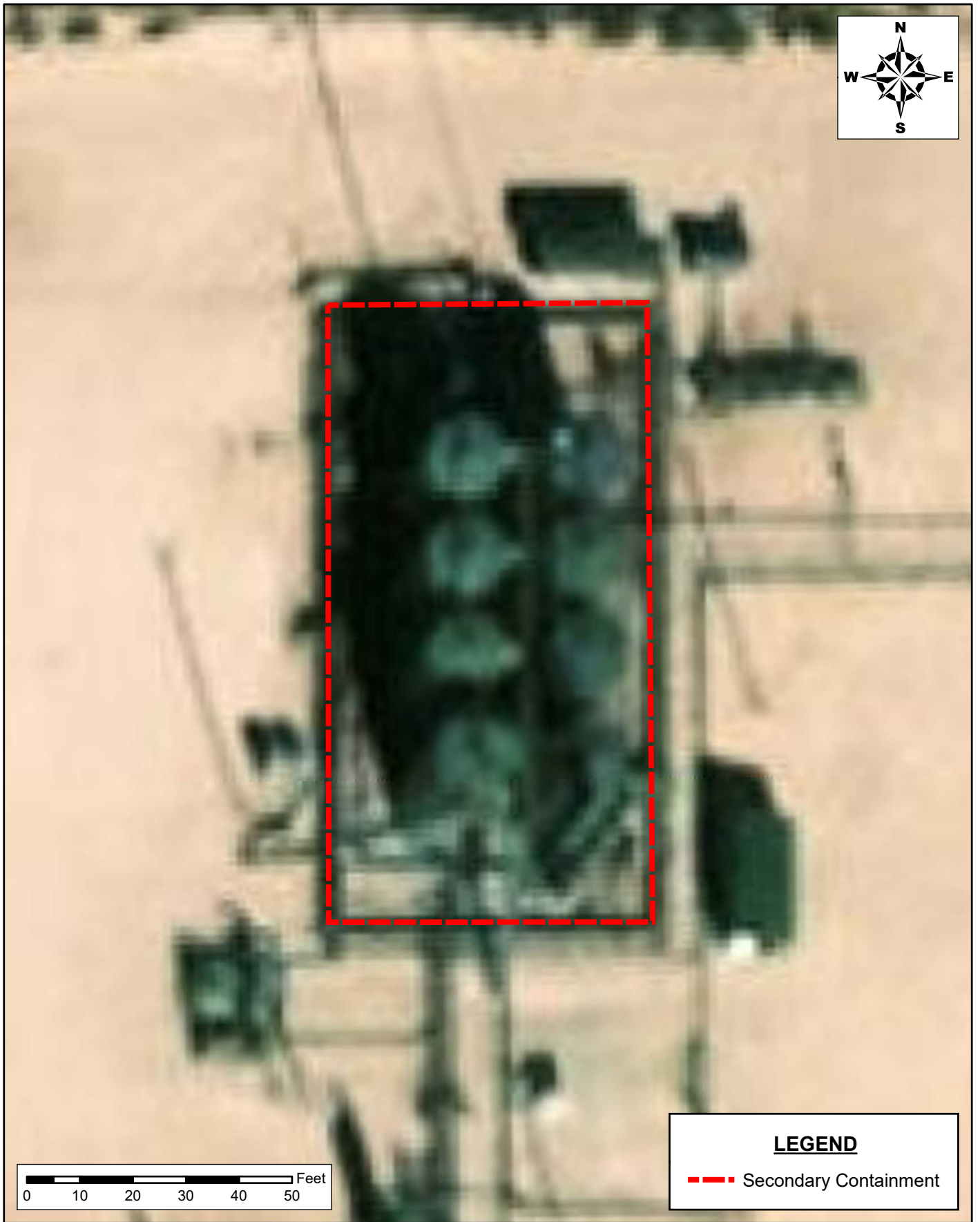
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FIGURE 2

SHEET NUMBER:

1 of 1

Document Path: P:\2022 PROJECTS\DEVON\225306 - Spud Muffin 31 CTB #1 (12.22.21)\7- Figures\GIS\Geodatabase\Figure_3_SecondaryContainmentMap_02242022.mxd



SECONDARY CONTAINMENT MAP
DEVON ENERGY
SPUD MUFFIN 31 CTB #1
EDDY COUNTY, NEW MEXICO
32.255624, -104.026426

SCALE: As Shown Date: 2/24/2022 PROJECT #: 225306



New Tech Global Environmental, LLC
911 Regional Park Drive
Houston, Texas 77060
T - 281.872.9300
F - 281.872.4521
Web: www.ntglobal.com

NOTES:

1. Base Image: ESRI Maps & Data 2013
2. Map Projection: NAD 1983 UTM Zone 13N

DRAWING NUMBER:

FIGURE 3

SHEET NUMBER:

1 of 1

PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG

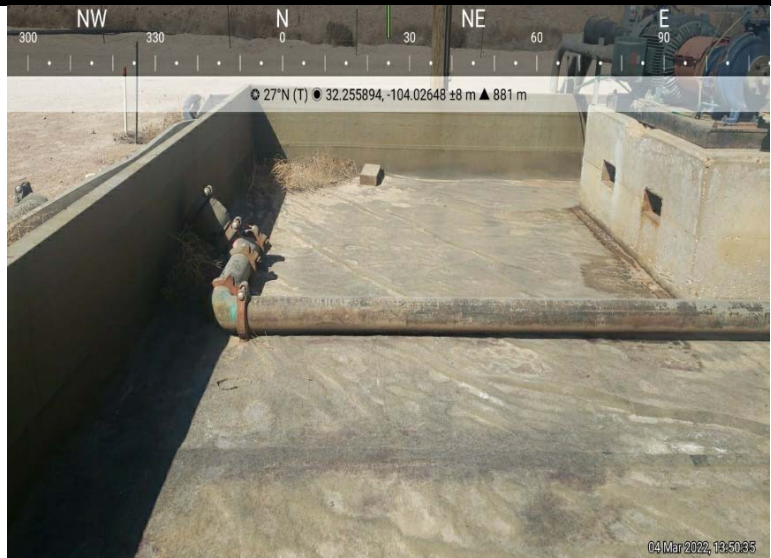
Devon Energy Production Company

Photograph No. 1

Facility: Spud Muffin 31 CTB 1

County: Eddy County, New Mexico

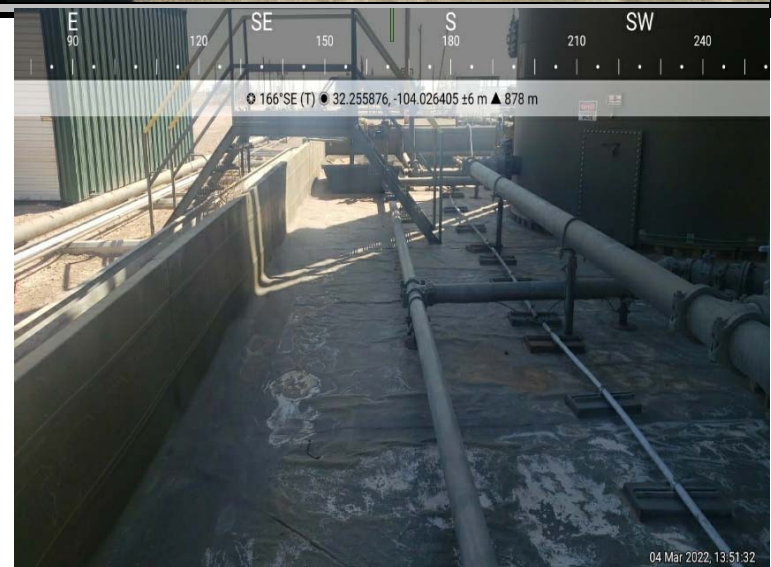
Description:
View of liner.

**Photograph No. 2**

Facility: Spud Muffin 31 CTB 1

County: Eddy County, New Mexico

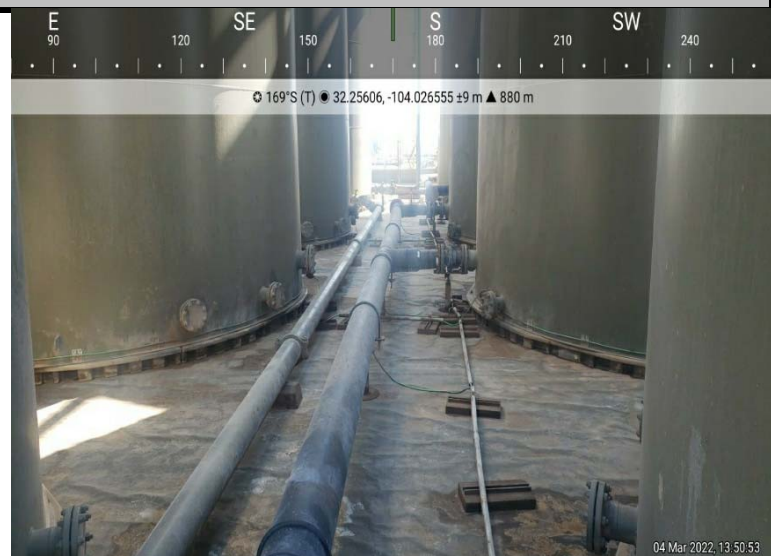
Description:
View of liner.

**Photograph No. 3**

Facility: Spud Muffin 31 CTB 1

County: Eddy County, New Mexico

Description:
View of liner.



PHOTOGRAPHIC LOG

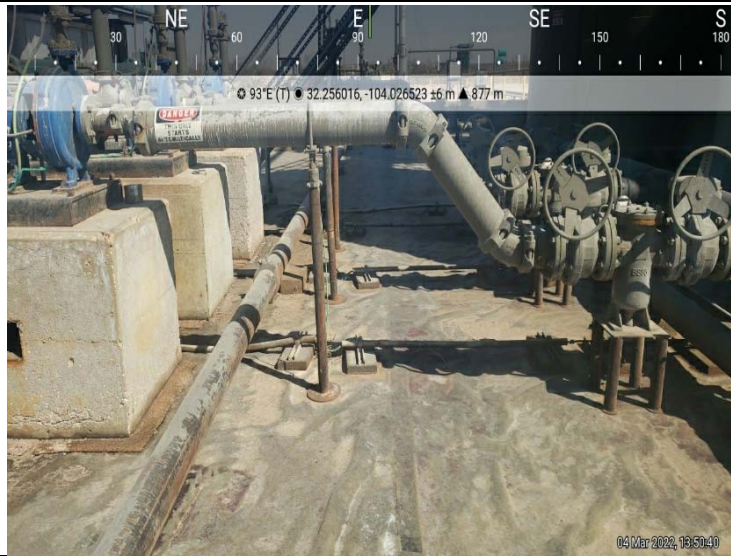
Devon Energy Production Company

Photograph No. 4

Facility: Spud Muffin 31 CTB 1

County: Eddy County, New Mexico

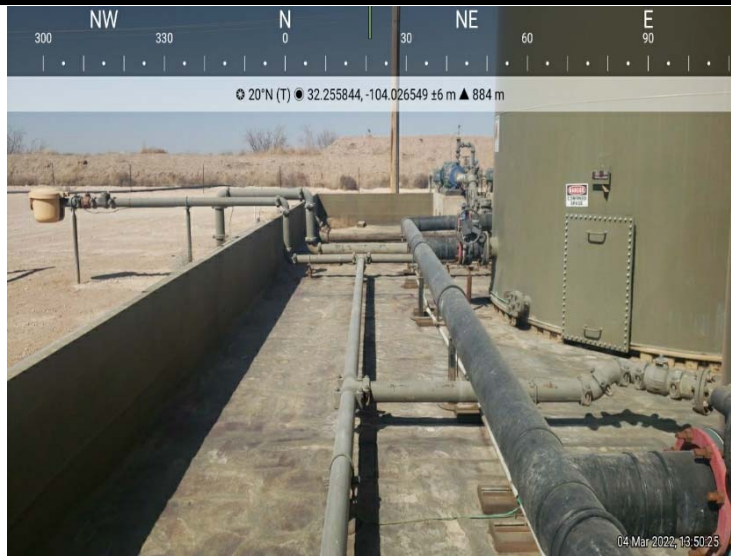
Description:
View of liner.

**Photograph No. 5**

Facility: Spud Muffin 31 CTB 1

County: Eddy County, New Mexico

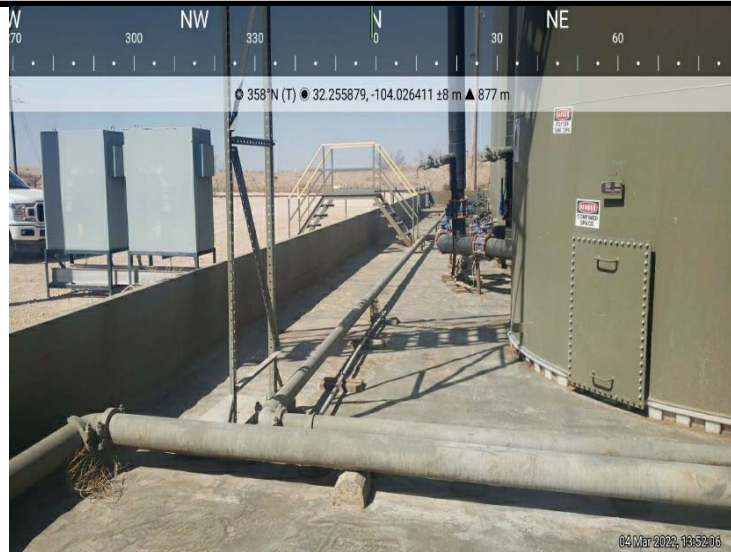
Description:
View of liner.

**Photograph No. 6**

Facility: Spud Muffin 31 CTB 1

County: Eddy County, New Mexico

Description:
View of liner.



NMOCD 48-HOUR ADVANCE NOTIFICATION

From: Ethan Sessums
Sent: Tuesday, March 1, 2022 2:19 PM
To: ocd.enviro@state.nm.us
Subject: Liner Inspection Notification

Good afternoon,

We will be conducting a liner inspection at the below-referenced site on 3/4/2022 around 1:00 p.m. Mountain time on behalf of Devon. If there are any questions or concerns, please feel free to reach out.

Site:
Devon – Spud Muffin 31 CTB 1
N-S31-T23S-R29E
32.255624, -104.026426
Eddy County, New Mexico

Ethan Sessums
Environmental Scientist
NTG Environmental New Mexico
402 E Wood Ave, Carlsbad, NM 88220
M: 254-266-5456 W: 432-701-2159
Email: esessums@ntglobal.com
<http://www.ntgenvironmental.com/>



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

CONDITIONS

Action 126258

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 126258
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Approved.	8/23/2022