BURTON FLAT DEEP UNIT 44 SWD OCD INCIDENT nAPP2410758305 4/16/2024

Spill Volume(Bbls) Calculator					
Inputs in blue, Outputs in red					
Col	ntaminated S	Soil measurement			
Area (so	q feet)	Depth (in)			
<u>3,500</u>	0.00	<u>3.00</u>			
Cubic Feet of S	oil Impacted	<u>875.00</u>			
Barrels of So	il Impacted	<u>155.97</u>			
Soil T	уре	Clay/Sand			
Barrels of Oi 100% Sat	J	23.40			
Saturation	Fluid	present when squeezed			
Estimated Ba Relea		11.70			
	Free Stand	ing Fluid Only			
Area (so	q feet)	Depth (inches))			
4,000) <u>.00</u>	<u>0.360</u>			
Standin	g fluid	<u>21.34</u>			
Total fluid	ls spilled	<u>33.04</u>			

Inputs in blue, Outputs in Contaminated Soil measure Area (sq feet) 3,000.00 Cubic Feet of Soil Impacted Barrels of Soil Impacted			
Area (sq feet) 3,000.00 Cubic Feet of Soil Impacted	Depth (in) 1.20 300.00		
3,000.00 Cubic Feet of Soil Impacted	1.20 300.00		
Cubic Feet of Soil Impacted	300.00		
· ·			
Barrels of Soil Impacted	<u>53.48</u>		
Soil Type	Clay		
Barrels of Oil Assuming 100% Saturation	<u>5.35</u>		
Saturation Fluid present v	with shovel/backhoe		
Estimated Barrels of Oil Released	5.35		
Free Standing Fluid Only	,		
Area (sq feet)	Depth (inches))		
	0.000		
Standing fluid	0.00		
<u>Total fluids spilled</u>	<u>5.35</u>		



209 W. McKay Street Carlsbad, New Mexico 88220 Tel. 432-701-2159 www.ntgenvironmental.com

June 4, 2024

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

Re: Site Characterization and Remediation Work Plan

Burton Flat Deep Unit 44 SWD

Unit L, Section 3, Township 21S, Range 27E Site Coordinates: 32.51149125, -104.180632

Eddy County, New Mexico Incident ID: nAPP2410758305

Introduction

On behalf of Devon Energy Production Company (Devon), New Tech Global Environmental, LLC (NTGE) has prepared this Site Characterization and Remediation Work Plan for submittal to the New Mexico Oil Conservation Division (NMCOD) District 2 Office in Artesia, New Mexico to document site assessment and sample analysis results for the Burton Flat Deep Unit 44 SWD (Site). The Site is located within Unit Letter L, Section 3, of Township 21 South and Range 27 East in Eddy County, New Mexico. The GPS coordinates for the release site are 32.51149125° N latitude and 104.180632° W longitude. The Site location with respect to the nearest town is shown in Figure 1 and the topography of the area is shown in Figure 2.

Background

Based on the Release Notification C-141 Form, the release occurred on April 16, 2024, due to equipment failure. Upon discovery, the Site was shut-in and repairs ensued. The spill resulted in a release of approximately thirty-eight (38) barrels (bbl) of produced water of which thirty (30) bbls were recovered for an approximate net loss of eight (8) bbl of produced water. The release area is shown in Figure 3.

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Groundwater and Site Characterization

Based on a review of the New Mexico Office of State Engineers and USGS databases, there is one water well (C-02907) located within a ½-mile radius of the site. Groundwater was encountered at a recorded depth of 14 feet below ground surface (ft bgs). No other receptors (playas, wetlands, waterways, lakebeds, or ordinance boundaries) are located within each specific boundary or distance from the Site. According to the Karst Potential Map, the Site is located within a high Karst area. The Site characterization documentation (Points of Diversion, Karst Potential, Significant Watercourse Map, Wetlands Map, and FEMA Map) are attached to the report.

NTGE characterized the Site according to Table I, Closure Criteria for Soils Impacted by a Release, from the New Mexico Administrative Code (NMCA) Title 19, Chapter 15, Part 29, Section 12 (NMAC 19.15.29.12).

General Site Characterization and Groundwater:

Site Characterization	Average Groundwater Depth (ft)
High Karst	14

Table 3.1 Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29.12 & 19.15.29.13)

Regulatory Standard	Chloride	TPH	TPH	BTEX	Benzene
		(GRO+DRO+MRO	(GRO+MRO)		
19.15.29.13 Restoration,					
Reclamation and Re-	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
Vegetation (Impacted Area					
0-4 Feet)					
19.15.23.12 Remediation					
and Closure Criteria for	600 mg/kg	100 mg/kg		50 mg/kg	10 mg/kg
Soils Impacted by a Release					
(>4 Feet)					
Notes:					
= not defined					

Initial Soil Delineation Assessment Summary and Findings

On April 25th, 2024, NTGE conducted site assessment activities to assess the extent of impacts at the Site. A total of fifteen (15) vertical delineation points (V-1 through V-15) and nine (9) horizontal delineation points (H-1 through H-9) were installed within and adjacent to the release area in order to characterize the impact. Soil samples were collected at half (0.5) feet (ft) to one (1) ft intervals to a maximum depth of eight and a half (8.5) ft below grade surface (bgs), with a geotechnical hand auger. The samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA method 8021B, total petroleum hydrocarbon (TPH) by method 8015M, and chloride by EPA method SM4500Cl-B by Cardinal Laboratories in Hobbs, New Mexico. The analytical results indicated that chloride concentrations exceeded the NMOCD regulatory limits in the areas of V-1 and V-5 up to four and half (4.5) ft bgs, V-2, V-8, V-12, and V-15 to a half (0.5) ft bgs, V-3 and V-4 to one and a half (1.5) ft bgs, V-6 and V-7 to eight and a half (8.5) ft bgs, All other samples were below NMOCD regulatory limits.

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On May 29th 2024, NTGE returned to the Site to complete vertical delineation. A total of four (4) vertical sample points (i.e., V-1, V-5, V-6, and V-7) were re-installed within the release area and collected at one (1) ft intervals ranging from six (6) ft bgs to eleven (11) ft bgs with a backhoe. The samples were analyzed for BTEX by EPA method 8021B, TPH by method 8015M, and chloride by EPA method SM4500Cl-B. Analytical results indicated that chloride concentrations exceeded the NMOCD regulatory limits in the areas of V-6 at ten (10) ft bgs, but was delineated at eleven (11) ft bgs.. All other samples were below NMOCD regulatory limits.

Analytical results are included in Table 1, while sampling locations are shown in Figure 3.

Proposed Work Plan

After receiving and evaluating the soil boring data, NTGE proposes to excavate the soils in the areas of V-1 and V-5 to a depth of six (6) ft bgs, V-2, V-8, V-12, and V-15 to a depth of one (1) ft bgs, V-3 and V-4 to a depth of two (2) ft bgs, V-6 to a depth of eleven (11) ft bgs, and V-7 to a depth of nine (9) ft bgs to ensure that the impacted soil has been removed. A minimum of approximately 3,576 cubic yards of impacted material will be removed to remediate the impacted area. Confirmation samples will be taken with a five (5) point composite sample and represent an area no greater than 200 square feet to comply with NMAC 19.15.23.12 and 19.15.29.13. Discrete soil samples will be collected from the sidewalls and bottom of the excavation if any staining is observed.

All confirmation samples will be taken to a certified laboratory and analyzed for BTEX by EPA Method 8021B, TPH by EPA Method 8015M Modified and chloride by EPA 300.0/9056A. If any of the confirmation samples collected exhibit concentrations above regulatory standards set by NMAC 19.15.23.12 and 19.15.23.13 the areas will be further excavated until concentrations are below Table 3.1 Closure Criteria. Remediation will be complete within 90 days of approval from the NMOCD to proceed.

If you have any questions regarding this letter, please contact us at (432)-701-2159.

Sincerely,

NTG Environmental

all with

Ethan Sessums

Project Manager

Attachments:

Table Figures

Site Characterization Documentation

Photographic Log

Laboratory Reports and Chain-of-Custody Documents

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TABLE

Table 1 Summary of Soil Analytical Data - Delineation Samples Burton Flat Deep Unit 44 SWD Devon Energy Production Company Eddy County, New Mexico

	Eddy County, New Mexico												
			Benzene	Toluene	Ethylbenzene	Xylenes	BTEX	GRO	DRO	TPH GRO + DRO	MRO	Total	Chloride
Sample ID	Sample Date	Depth (ft bgs)				, , ,		(C6-C-10)	(C10-C28)	(C6-C28)	(C28-C35)	GRO/DRO/MRO (C6-C35)	
		((mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg) undwater 19.15	(mg/kg)	(mg/kg)	(mg/kg)
			10 mg/kg		-		50 mg/kg					100 mg/kg	600 mg/kg
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,220
	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	656
V-1	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	704
	4/25/2024 4/25/2024	3-3.5' 4-4.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	640 640
	5/29/2024	6'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,160
	4/25/2024	1-1.5'	< 0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
V-2	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
	4/25/2024	3-3.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
	4/25/2024 4/25/2024	4-4.5' 0-6"	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300	<10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	48.0 10,900
	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300 <0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,600
V-3	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	352
	4/25/2024	3-3.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	576
	4/25/2024	4-4.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	256
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	22,000
V-4	4/25/2024	1-1.5' 2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,000
v-4	4/25/2024 4/25/2024	3-3.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	256 256
	4/25/2024	4-4.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	400
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	22,400
	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	12,400
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	720
V-5	4/25/2024	3-3.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	720
	4/25/2024 5/29/2024	4-4.5' 6'	<0.050 <0.050	<0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0	<10.0	624 96
	5/29/2024	7'	<0.050	<0.050 <0.050	<0.050	<0.150	<0.300	<10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	96 560
	5/29/2024	8'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80
	4/25/2024	0-6"	<0.050	< 0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	33,600
	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,280
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	24,000
	4/25/2024	3-3.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	20,000
	4/25/2024	4-4.5' 5-5.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,400
V-6	4/25/2024 4/25/2024	6-6.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	1,800 1,250
	4/25/2024	7-7.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,420
	4/25/2024	8-8.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,400
	5/29/2024	9'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
	5/29/2024	10'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,930
	5/29/2024	11'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
	4/25/2024 4/25/2024	0-6" 1-1.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	27,600 17,000
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	23,600
	4/25/2024	3-3.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	11,600
V-7	4/25/2024	4-4.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	12,800
	4/25/2024	5-5.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,330
	4/25/2024	6-6.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
	4/25/2024 4/25/2024	7-7.5' 8-8.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	992 912
	5/29/2024	9'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	352
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	640
V-8	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	208
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
V-9	4/25/2024	0-6" 1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
V-3	4/25/2024 4/25/2024	2-2.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	224 160
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
V-10	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
V/ **	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
V-11	4/25/2024 4/25/2024	1-1.5' 2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0 <10.0	<10.0	48.0
	4/25/2024	0-6"	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	128 704
V-12	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	432
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	352
V-13	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
V-14	4/25/2024 4/25/2024	0-6" 1-1.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150 <0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	64.0 144
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
	4/25/2024	0-6"	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	800
V-15	4/25/2024	1-1.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	512
	4/25/2024	2-2.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	448
11.4	4/25/2024	0.051		.0		Horizontal							407
H-1 H-2	4/25/2024 4/25/2024	0-0.5' 0-0.5'	<0.050 <0.050	<0.050 <0.050	<0.050 <0.050	<0.150	<0.300 <0.300	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	<10.0 <10.0	112 352
H-3	4/25/2024	0-0.5'	<0.050	<0.050	<0.050	<0.150 <0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288
H-4	4/25/2024	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
H-5	4/25/2024	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
H-6	4/25/2024	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
H-7	4/25/2024	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0
H-8	4/25/2024	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0
H-9 Notes:	4/25/2024	0-0.5'	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	336

Notes:

1. Values reported in mg/kg
2.<= Value Less Than Reporting Limit (RL)
3. Bold indicates Analyte Detected
4. BTEX analyses by EPA Method SW 8021B
SP-1
Sample Point Excavated

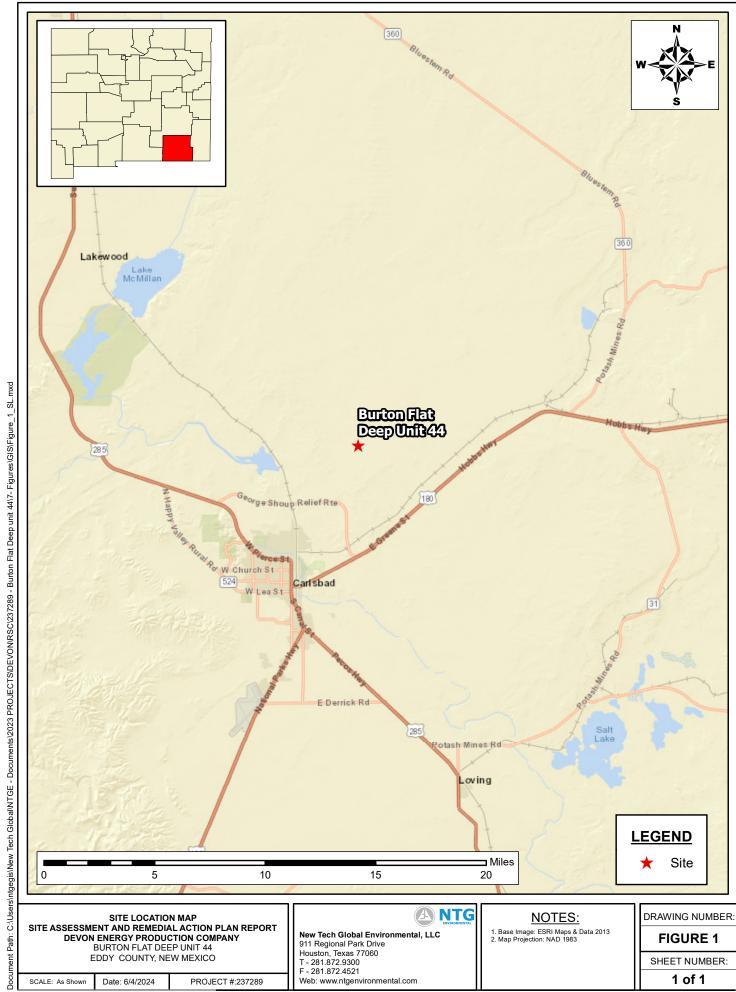
5. TPH analyses by EPA Method SW 8015 Mod.

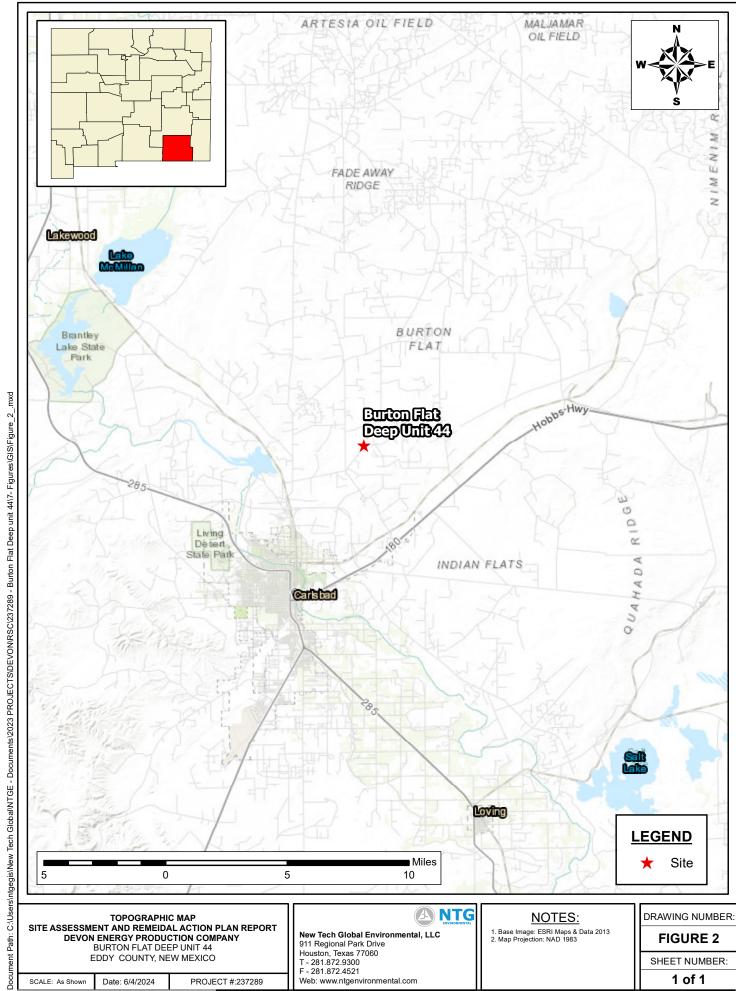
5. Irrn allaryses by Era Mictious aw Qual's MOL.
6. GRO/DRO/MRO- Gasoline/Diesel/Motor Oil
7. Yellow shaded cells indicate analytical samples that exceed the NMAC 19.15.29.12 Table I Closure Criteria for the site.

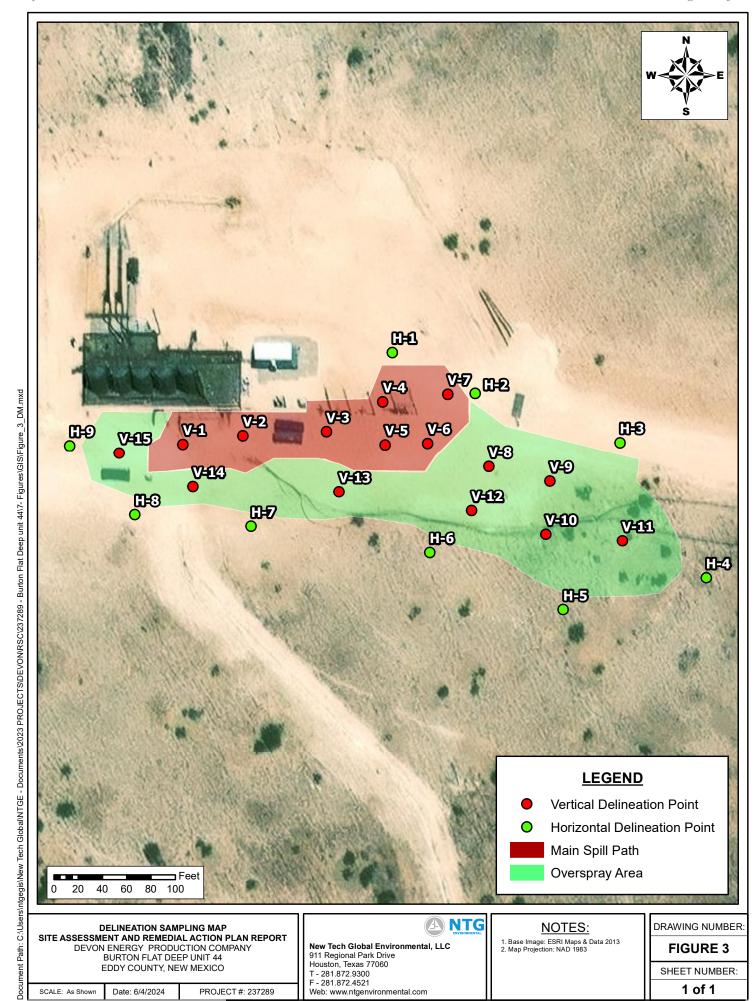
8. Peach shaded cells indicate analytical samples that exceed the NMAC 19.15.29.13 Table I Closure Criteria for the site (Surface to 4 Feet Below Grade).

9. — Not Analyzed

FIGURES







F - 281.872.4521

Web: www.ntgenvironmental.com

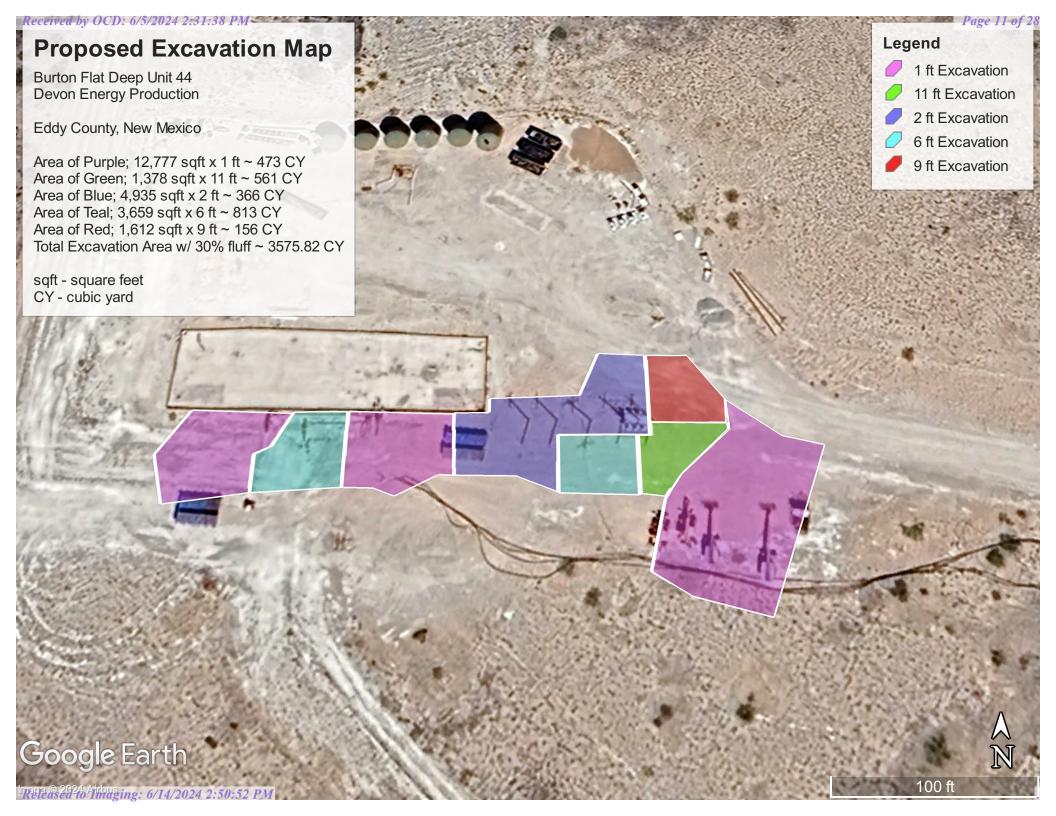
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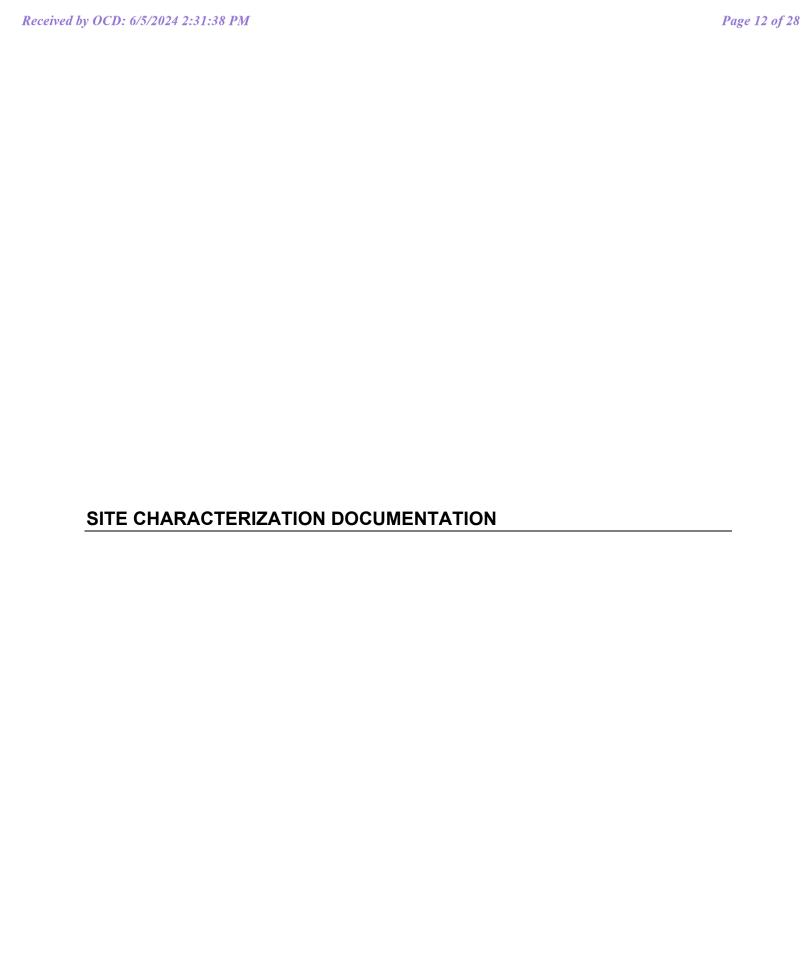
Date: 6/4/2024

PROJECT #: 237289

SCALE: As Shown

1 of 1





National Flood Hazard Layer FIRMette





SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 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 OTHER AREAS OF Area with Flood Risk due to Levee Zone D FLOOD HAZARD NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLIL Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** ---- 513---- Base Flood Elevation Line (BFE) Limit of Study Jurisdiction Boundary -- Coastal Transect Baseline OTHER **Profile Baseline FEATURES** Hydrographic Feature Digital Data Available No Digital Data Available

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

Unmapped

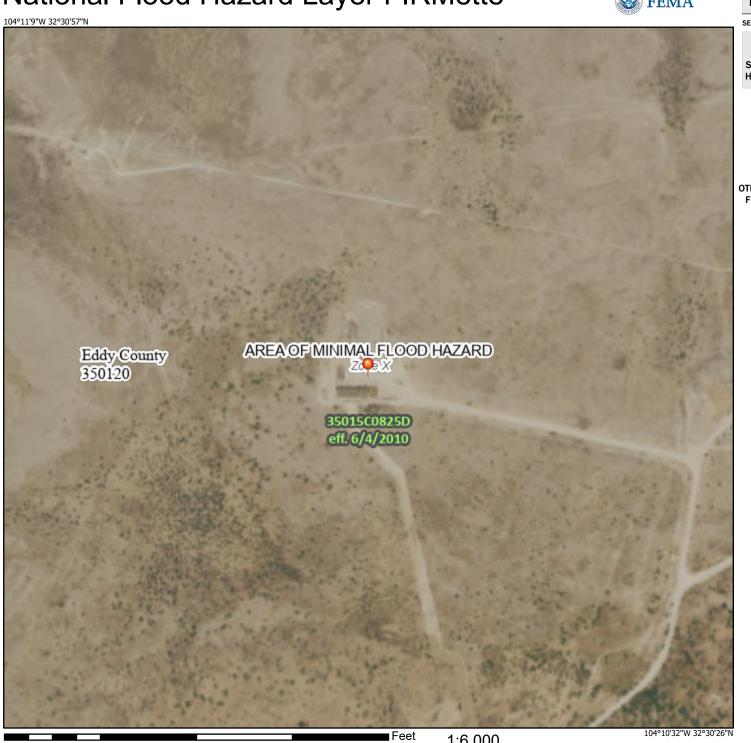
an authoritative property location.

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

MAP PANELS

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/25/2024 at 1:02 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

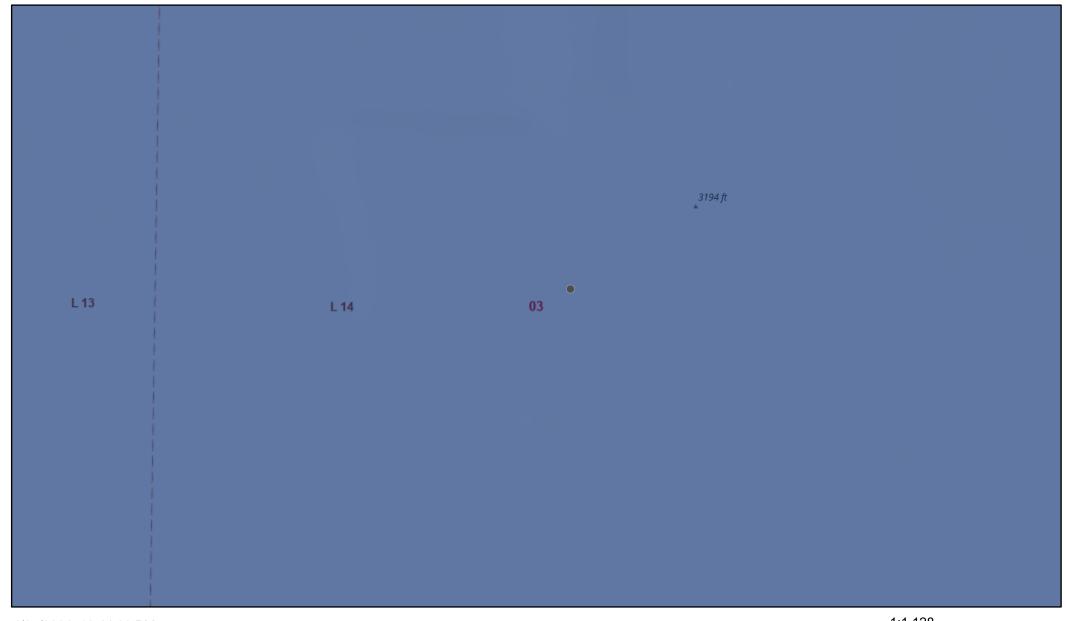
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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



ORelease To Imaging: 6/14/2024 200:52 PM

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Karst Potential Map



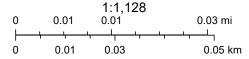
4/25/2024, 12:44:06 PM

Karst Occurrence Potential PLSS Second Division



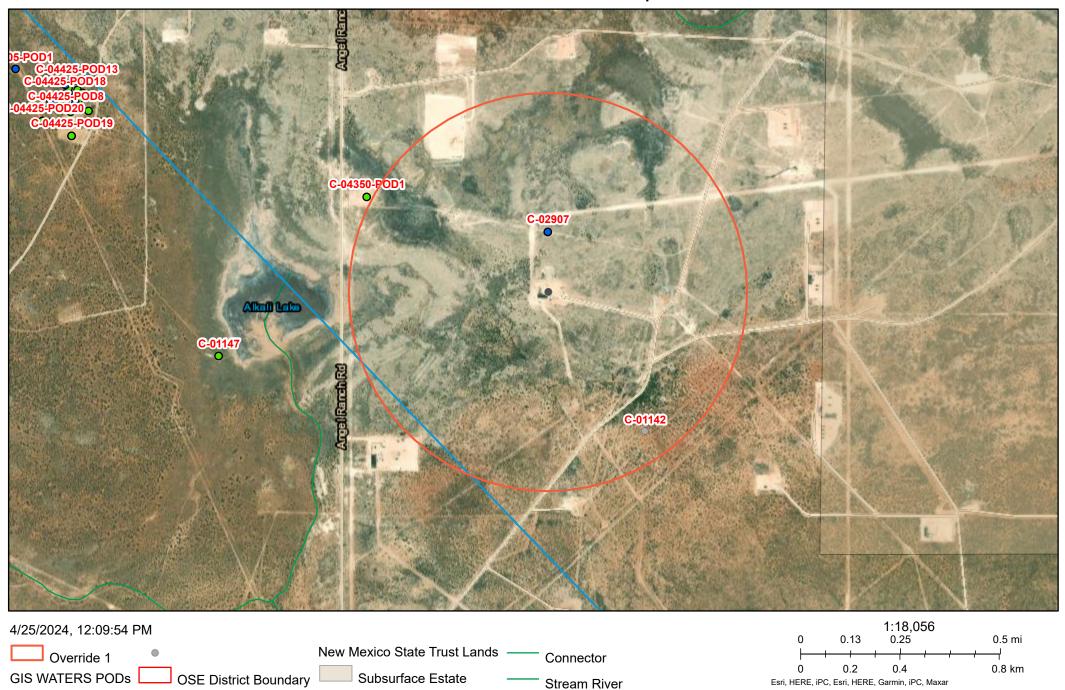
Pl

PLSS First Division



BLM, OCD, New Mexico Tech, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, OCD, Esri Community Maps Contributors, New Mexico State University, Texas

OSE POD Location Map



NHD Flowlines

Artificial Path

Water Right Regulations

Released to Indiguing: 6/14/2024 Artesian Planning Area

Active

Released to Imaging: 6/14/2024 2:50:52 PM



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)

Q64 Q16 Q4 Sec Tws Rng

X Y

C 02907

POD Number

03 21S 27E

576959 3597669*

Driller License: 1348

Well Tag

Driller Company:

TAYLOR WATER WELL SERVICE

Driller Name:

Drill Start Date:

01/29/2003

Drill Finish Date:

01/29/2003

Plug Date:

Log File Date:

02/10/2003

PCW Rcv Date:

Source:

Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

100 GPM

Casing Size:

5.00

Depth Well:

52 feet

Depth Water:

14 feet

Water Bearing Stratifications:

Top Bottom Description

35 52 Sandstone/Gravel/Conglomerate

Casing Perforations:

Top Bottom

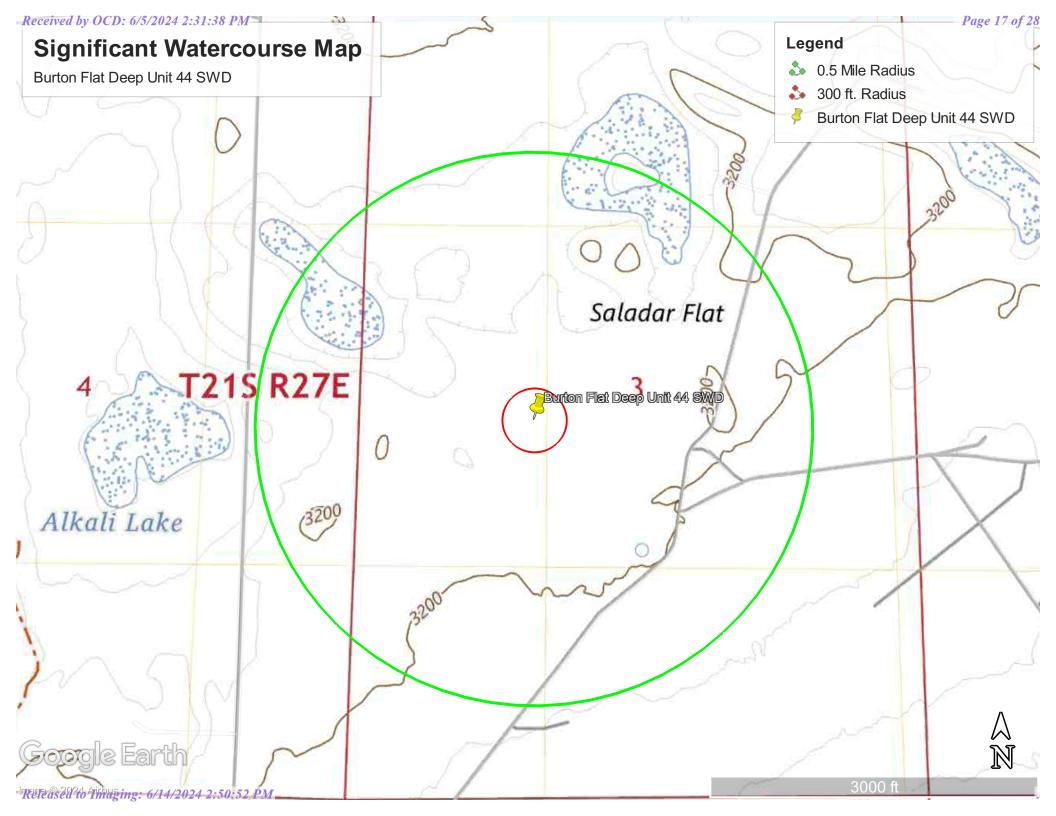
25 52

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.

11/8/23 10:04 AM

POINT OF DIVERSION SUMMARY

^{*}UTM location was derived from PLSS - see Help





Wetlands Map



April 25, 2024

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

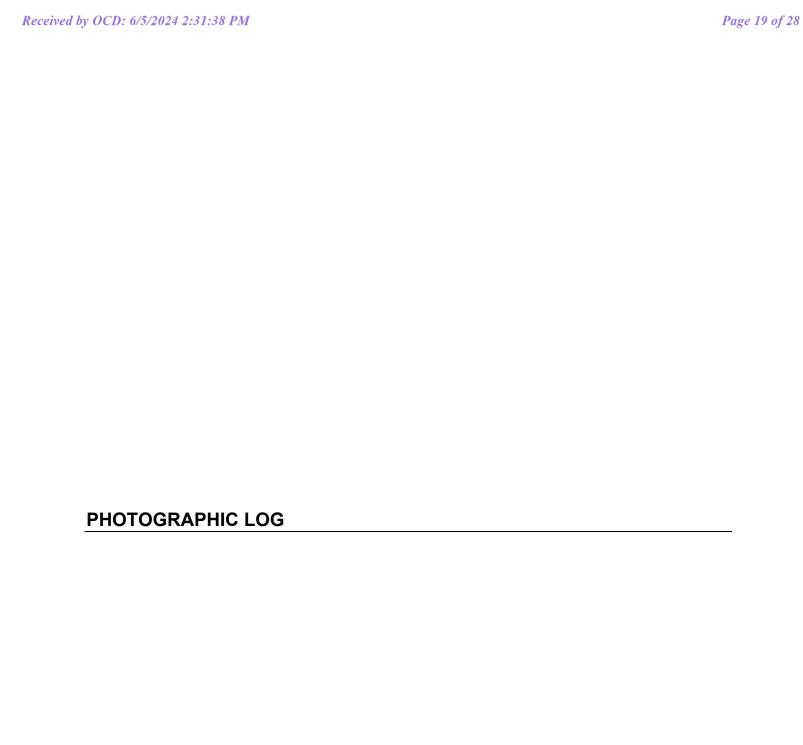
Lake

Other

Riverine

Other

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.



PHOTOGRAPHIC LOG

Devon Energy Production Company

Photograph No. 1

Facility: Burton Flat Deep Unit 44

County: Eddy County, New Mexico

Description: Area of Concern.



Photograph No. 2

Facility: Burton Flat Deep Unit 44

County: Eddy County, New Mexico

Description: Area of Concern.



Photograph No. 3

Facility: Burton Flat Deep Unit 44

County: Eddy County, New Mexico

Description: Area of Concern.



PHOTOGRAPHIC LOG

Devon Energy Production Company

Photograph No. 4

Facility: Burton Flat Deep Unit 44

County: Eddy County, New Mexico

Description: Area of Concern.



Photograph No. 5

Facility: Burton Flat Deep Unit 44

County: Eddy County, New Mexico

Description: Area of Concern.



Photograph No. 6

Facility: Burton Flat Deep Unit 44

County: Eddy County, New Mexico

Description: Area of Concern.



<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

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

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

QUESTIONS

Action 351135

QUESTIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	351135
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2410758305
Incident Name	NAPP2410758305 BURTON FLAT DEEP UNIT 44 SWD @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Facility	[fAPP2130153693] BURTON FLAT DEEP UNIT 44 SWD

Location of Release Source				
Please answer all the questions in this group.				
Site Name	BURTON FLAT DEEP UNIT 44 SWD			
Date Release Discovered	04/16/2024			
Surface Owner	Federal			

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

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for	or the volumes provided should be attached to the follow-up C-141 submission.
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pipeline (Any) Produced Water Released: 38 BBL Recovered: 30 BBL Lost: 8 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	A 4" poly line was leaking water. Valves were shut on the line to isolate the leak. 30 bbls were recovered. 38.4 bbls of produced water were spilled onto the ground, not in a lined containment.

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1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170 **District IV**

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

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

QUESTIONS, Page 2

Action 351135

(,				
QUESTI	ONS (continued)			
Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137 Action Number: 351135 Action Type:			
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)			
QUESTIONS				
Nature and Volume of Release (continued)				
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.			
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes			
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.			
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	e. gas only) are to be submitted on the C-129 form.			
Initial Response The responsible party must undertake the following actions immediately unless they could create a s	afety hazard that would result in injury.			
The source of the release has been stopped	True			
The impacted area has been secured to protect human health and the environment	True			

Initial Response				
he responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.				
The source of the release has been stopped	True			
The impacted area has been secured to protect human health and the environment	True			
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True			
All free liquids and recoverable materials have been removed and managed appropriately	True			
If all the actions described above have not been undertaken, explain why	Not answered.			

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

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

Name: Dale Woodall
Title: EHS Professional
Email: Dale.Woodall@dvn.com
Date: 06/05/2024

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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**

QUESTIONS, Page 3

Action 351135

QUESTIONS (continued)

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	351135
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization		
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)	
What method was used to determine the depth to ground water	NM OSE iWaters Database Search	
Did this release impact groundwater or surface water	No	
What is the minimum distance, between the closest lateral extents of the release ar	nd the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)	
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)	
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)	
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)	
Any other fresh water well or spring	Between 1 and 5 (mi.)	
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1 and 5 (mi.)	
A wetland	Between 1 and 5 (mi.)	
A subsurface mine	Between 1 and 5 (mi.)	
An (non-karst) unstable area	Between 1 and 5 (mi.)	
Categorize the risk of this well / site being in a karst geology	High	
A 100-year floodplain	Between 1 and 5 (mi.)	
Did the release impact areas not on an exploration, development, production, or storage site	No	

Remediation Plan		
Please answer all the questions to	hat apply or are indicated. This information must be provided t	o the appropriate district office no later than 90 days after the release discovery date.
Requesting a remediation	plan approval with this submission	Yes
Attach a comprehensive report de	emonstrating the lateral and vertical extents of soil contamination	on associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.
Have the lateral and vertical	al extents of contamination been fully delineated	Yes
Was this release entirely o	contained within a lined containment area	No
Soil Contamination Sampling	g: (Provide the highest observable value for each, in n	nilligrams per kilograms.)
Chloride	(EPA 300.0 or SM4500 CI B)	33600
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	0
GRO+DRO	(EPA SW-846 Method 8015M)	0
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
	NMAC unless the site characterization report includes complete nelines for beginning and completing the remediation.	ed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC,
On what estimated date w	ill the remediation commence	07/15/2024
On what date will (or did) t	he final sampling or liner inspection occur	08/15/2024
On what date will (or was)	the remediation complete(d)	09/01/2024
What is the estimated surfa	ace area (in square feet) that will be reclaimed	0
What is the estimated volu	me (in cubic yards) that will be reclaimed	0
What is the estimated surfa	ace area (in square feet) that will be remediated	24361
What is the estimated volu	me (in cubic yards) that will be remediated	3576
These estimated dates and measu	urements are recognized to be the best guess or calculation at t	he time of submission and may (be) change(d) over time as more remediation efforts are completed.

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to

District I

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<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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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

QUESTIONS, Page 4

Action 351135

QUESTIONS (continued)

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	351135
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)			
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.			
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:			
(Select all answers below that apply.)			
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes		
Which OCD approved facility will be used for off-site disposal	LEA LAND LANDFILL [fEEM0112342028]		
OR which OCD approved well (API) will be used for off-site disposal	Not answered.		
OR is the off-site disposal site, to be used, out-of-state	Not answered.		
OR is the off-site disposal site, to be used, an NMED facility	Not answered.		
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.		
(In Situ) Soil Vapor Extraction	Not answered.		
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.		
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.		
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.		
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.		
OTHER (Non-listed remedial process)	Not answered.		

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement

Name: Dale Woodall Title: EHS Professional Email: Dale.Woodall@dvn.com Date: 06/05/2024

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 351135

QUESTIONS (continued)

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	351135
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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Requesting a remediation closure approval with this submission

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

QUESTIONS, Page 6

Action 351135

QUESTIONS (continued)

Operator:	OGRID:	
DEVON ENERGY PRODUCTION COMPANY, LP	6137	
333 West Sheridan Ave.	Action Number:	
Oklahoma City, OK 73102	351135	
	Action Type:	
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	
QUESTIONS		
Sampling Event Information		
Last sampling notification (C-141N) recorded	{Unavailable.}	
Remediation Closure Request		
Only answer the questions in this group if seeking remediation closure for this release because all	remediation steps have been completed.	

No

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CONDITIONS

Action 351135

CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	351135
	Action Type:
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By		Condition Date
scwells	Remediation plan approved with conditions. There are no horizontal delineation points collected north of V-15, V-1, V-2 and V-3. Ensure this area is horizontally delineated during remedial efforts. Submit remediation closure report to the OCD by 9/12/2024.	