Sante Fe Main Office Phone: (505) 476-3441 General Information Phone: (505) 629-6116

Online Phone Directory

https://www.emnrd.nm.gov/ocd/contact-us

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

Form C-101 August 1, 2011

Permit 381057

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

					,			,	,	,,					
	me and Address /ON ENERGY PRO	DUCTION COM	IPANY. LP								2	2. OGRI	D Number 6137		
	West Sheridan Av		,								3	3. API N	umber		
Okl	ahoma City, OK 73	102											30-015-561	30	
4. Property Co		;	5. Property Nan								6	3. Well N			
337	034		MIM	OSA 17 16 S	TATE COM								222H		
					7. S	urfa	ce Location								
UL - Lot	Section	Township	Range		Lot Idn	Fe	et From	N	N/S Line	Feet Fro			E/W Line	County	,
F	18	20S	;	30E			1430		N		2196	i	W		Eddy
					8. Proposed	d Bo	ttom Hole Locati	ion							
UL - Lot							Fee	t From		E/W Line	County				
Н	16	20	S	30E	Н		2000		N		2	0	E		Eddy
					9. P	ool	Information								
PARKWAY;B	ONE SPRING											49	9622		
					Δdditio	nal V	Vell Information								
11. Work Type		12. Well Type		13. Ca	able/Rotary	iai v		14.	Lease Type		15. Grd	ound Le	vel Elevation		
	v Well	ÖII		101 02211111				State			327	76			
16. Multiple		17. Proposed	Depth	18. Formation			19. Contractor 20.			20. Spi	Spud Date				
N		19	782	Bone Spring							5/10/2025				
Depth to Groun	d water			Distar	ce from nearest	fresh	water well				Distanc	stance to nearest surface water			
⊠ We will be	using a closed-loo	p system in lie	u of lined pits												
	<b>g</b>	, -,			Proposed C	aein	g and Cement P	roa	ıram						
Туре	Hole Size	Casing	Size		g Weight/ft	asııı	Setting [			Sac	ks of Cer	ment		Estimate	d TOC
Surf	17.5	13.37			54.5		329	_			277			0	
Int1	12.25				45.5		170	5			192			0	
Int2	9.875	8.62	25		32		375	4		194				0	
Prod	7.875	5.5	5		20		1978	82			1550			695	3
			•	Casi	na/Cement Pr	rogra	am: Additional C	om	ments				•		
						25.0		J							

22. Proposed	<b>Blowout Prevention</b>	Program

Туре	Working Pressure	Test Pressure	Manufacturer									
Annular	5000	2500										
Blind	5000	5000										
Double Ram	5000	5000										
Annular	5000	5000										
Blind	5000	5000										
Double Ram	5000	5000										

knowledge and b	pelief.	true and complete to the best of my  NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSE	ERVATION DIVISION
Printed Name:	Electronically filed by Jeff Walla		Approved By:	Matthew Gomez	
Title:	Supervisor Land		Title:		
Email Address:	Jeff.Walla@dvn.com		Approved Date:	2/13/2025	Expiration Date: 2/13/2027
Date:	1/10/2025	Phone: 575-748-9925	Conditions of App	roval Attached	•

C-10	2			Ctata of	NIa	NA Maria	Revised July 9, 2024					
<u>C-10</u>	<u> </u>		_				ew Mexic	_				• •
Submit	Electronica	lly					al Resource			Submittal	X Initial Su	
Via OC	D Permittin	g		JIL (	CONSER	VA	TION DIV	'ISIOI	V	Type:	☐ Amended	
											☐ As Drille	d
					WELL LO	OCA.	TION INFORM	ATION			Γ	
		15-56180	Pool Code		622	PARKWAY; BONE SPRING						
Propert	y Code 3	37034	Property Na		MIMOSA 1	7-1	6 STATE CO	M			Well Numb 222H	er
OGRID	No. 6	137	Operator N	ame	DEVON EN	IERO	GY PRODUC	TION C	OMPANY,	L.P.	Ground Lev 3276.2'	vel Elevation
Surface	e Owner: X	State ☐ Fee	☐ Tribal ☐	Federal			Mineral (	Owner: 🛭	【 State □ Fee	e 🗌 Tribal 🛭	Federal	
						Sur	face Location					
UL	Section	Township	Range	Lot	Ft. from N		Ft. from E/W	Latitud	е	Longitude	)	County
F	18	20-S	30-E	N/A	1430/	N	2196/W	32.5	767060°	-104.0	127613°	EDDY
					В	otto	m Hole Location	on				
UL	Section	Township	Range	Lot	Ft. from N	N/S	Ft. from E/W	Latitud	е	Longitude	)	County
Н	16	20-S	30-E	N/A	2000/	N	20/E	32.5	5750701°	-103.9	686136°	EDDY
Dedicat	ted Acres	Infill or Defin	J	Defini	ing Well API			ng Spaci	ing Unit (Y/N)		ition Code	
320	lumboro	DEFININ	1G				NO Well eath	aalta ara	under Comme	C	in: [V]V □A	1-
Older	Order Numbers. Well setbacks are under Common Ownership: ⊠Yes □No											
	T	ı	ı			_	Off Point (KOP					
UL	Section	Township	Range	Lot	Ft. from I	N/S	Ft. from E/W	Latitud	е	Longitude	e	County
E	17	20-S	30-E	N/A	2001/	'n	50/w	32.5	7503017	-104.00278744		EDDY
					F	irst 1	Γake Point (FT	P)		_		
UL	Section	Township	Range	Lot	Ft. from I	N/S	Ft. from E/W	Latitud	е	Longitude	9	County
E	17	20-S	30-E	N/A	2000/	N	100/W	32.5	5751305°	-104.0	0025418°	EDDY
L		I					Take Point (LTI	_		1		
UL 	Section	Township	Range	Lot	Ft. from N/S Ft. from E/W Latitude					Longitude		County
H	16	20-S	30-E	N/A	2000/	N	100/E	32.5	5750706°	-103.9688732° EDDY		
Unitize	d Area: □	Area of Unif	orm Interest:	П	Spacing	l Init	Type: X Horiz	zontal [	Vertical	Ground I	Floor Elevation	on:
Official	Arca.	Alca of offi	orm interest.		Орионія	01111	Type. La Hell	- Contain	vortiour			
OPERA	TOR CERTII	FICATIONS:					-		SURVEYO	R CERTIFICA	TIONS:	
I hereby true and belief, a that this unlease propose	certify that a complete to nd, if the we organization dinneral intended bottom ho	the information the best of my Il is a vertical on the either owns a erest in the land le location or h	y knowledge a directional w working inter d including the as a right to di	nd ell, est or e:ill	SURVEYOR NOTES:  1. BEARINGS AND COORDINATES SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM 3001, WITH CONVERGENCE ANGLE OF							
owner of interest, compuls division.	of a working i , or to a volu sory pooling	ion pursuant to nterest or unle ntary pooling a order heretofor ontal well, I furti	ased mineral greement or a re entered by t	:he	POINT CP FI E:633268.60 DETERMINE UNE 5TH, 20 2. DISTANCES I	TZ BO 06. OR D BY A 020. DEPIC	BASED ON CONTR OSTER AT N:55691 THO:3349.52. AN OPUS SOLUTIO TED HEREON ARE OUND DISTANCES	17.441 N ON J	L	1 (M)	INIEX/CO	10
organiza lessee o mineral formatio interval pooling	ation has record rowner of a interest in ea on) in which	eived the conse working interes ach tract (in the any part of the ed or obtained he division.	ent of at least of st or unleased e target pool of well's complet	ne r	FACTOR OF 3. ELEVATIONS EXISTING GF 4. KARST AREA BUFFERS, LE IF SHOWN, N ENERGY ANI	REPORTED AS GROUND DISTANCES IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000237768  3. ELEVATIONS SHOWN OR LISTED ARE EXISTING GROUND ELEVATIONS. 4. KARST AREAS, 1/4 & 1/2 MILE POTASH BUFFERS, LEASE AREAS AND DRILL ISLANDS, IF SHOWN, WERE PROVIDED BY DEVON ENERGY AND NOT LOCATED ON THE						
Signatur SHAN	e IDEE THOMA	.s	Date				RT OF THIS SURVE APPROXIMATE.	',			of Professiona	•
Printed SHAN		AS@DVN.COM							20250 Certificate N	<u>John E.</u> o. Name	Allen	12/17/24 Date of Survey
E-mail A	ddress				Page: 1 of 2	Dra	awn By: JEB	Checked	By: JEA D	ate Drawn:	12/17/2024	Revision: R0

#### MIMOSA 17-16 STATE COM 222H SURFACE HOLE LOCATION N 00°13'47" W N 00°05'10" W (H)1430' FNL 2196' FWL SEC. 18, T20S, R30E **₽**(R) (G) **Q** EL: 3276.2 N: 573685.08 E: 640084.21 LAT: 32.5767060° LON: -104.0127613° '35" S 89°46'03' $\triangleleft$ 2636. S 89°35' 2648. KICK OFF POINT Θ 2001'\_\_F NL - \_\_50'\_ N: 573119 E: <u>643183</u> LAT: <u>32.5750</u> LON: -104.0028 $(F) \otimes$ **Q**) PPP 2 **FIRST TAKE POINT (PPP 1)** STATE OF NEW MEXICO 2000' FNL - 100' FWL 2027' FNL - 0' FEL 4-177-117-264-264 SEC. 17, T20S, R30E SEC. 16, T20S, R30E N: 573121.53 N: 573127.57 E: 643233.93 E: 648413.39 S 89°46'03" 09 76 LAT: 32.5751305° LAT: 32.5751017° 2655. 89°57 LON: -104.0025418° $\geq$ LON: -103.9857276° PPP 3 **LAST TAKE POINT** PPP 2013' FNL - 2643' FEL 2000' FNL - 100' FEL SEC. 16, T20S, R30E SEC. 16, T20S, R30E N: 573130.66 N 00°05'05" E N 00°04'44" E N: 573133.63 **(P)** 2642.43 E: 651062.32 E: 653605.27 2641.46 $(\mathbf{I})$ LAT: 32.5750861° LAT: 32.5750706° LON: -103.9771284° LON: -103.9688732° 89°25'32" **BOTTOM HOLE LOCATION** S 89°42': 0 2000' FNL - 20' FEL STATE OF NEW MEXICO 4-176-117-263-464 SEC. 16, T20S, R30E N: 573133.72 E: 653685.25 LAT: 32.5750701° (D) **4**0 LON: -103.9686136° PRIVATE 4-176-117-263-199 **LEGEND** SECTION CORNER CALLOUTS N: 575110.68 E: 637889.65 **SECTION LINE** .28 2628.14 1/4 SECTION LINE В N: 575115.93 E: 640502.22 50-1 S 89°31 E: 643140.48 N: 575120.79 Σ 1/16 SECTION LINE 。 68 D N: 575128.27 E: 645773.67 **WELL PATH** N: 575154.77 E: 648416.35 1/4 MILE BUFFER 575144.03 E: 651061.32 N: 1/2 MILE BUFFER G N: 575133.32 E: 653697.23 LEASE LINE E: 653707.82 572491.31 N 00°11'13" N 00°10'18" W (C) 572512.97 E: 648412.45 **(N)** VB24160003 LEASE ID NUMBER 2643.79 2641.24 572477.65 E: 643131.85 $(\mathbf{J})$ **FOUND USGLO** 0 K N: 572467.96 E: 637888.10 **BRASS CAP '1916'** 569826.75 E: 637889.72 N: 8 CALC'D CORNER 569830.66 E: 640488.83 M N: 569837.04 E: 643139.77 N: '43" S 89°53'40" .58 $\triangleleft$ $\square$ N: 569858.47 E: 645767.20 0 S 89°51 2651 569872.14 E: 648408.82 N: 569870.48 E: 651063.94 O N: N: 569851.67 E: 653711.79 SURVEYOR NOTES: BEARINGS AND COORDINATES SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM (B) **₫** M 1430' FNL 3001, WITH A CONVERGENCE ANGLE OF -0°09'37.47" AND BASED STATE OF NEW MEXICO ON CONTROL POINT CP FITZ BOOSTER AT N:556917.441 4-175-117-262-264 E:633268.606. ORTHO:3349.52. DETERMINED BY AN OPUS "54'50" S 89°53'06" W 2613.19' SOLUTION ON JUNE 5TH, 2020. 2. DISTANCES DEPICTED HEREON ARE REPORTED AS GROUND 돐 ⋛ S 89° DISTANCES IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000237768 \_ |≥ 3. ELEVATIONS SHOWN OR LISTED ARE EXISTING GROUND ELEVATIONS. 4. KARST AREAS, 1/4 & 1/2 MILE POTASH BUFFERS, LEASE AREAS AND LOT LOT LO DRILL ISLANDS, IF SHOWN, WERE PROVIDED BY DEVON ENERGY AND NOT LOCATED ON THE GROUND AS A PART OF THIS SURVEY, LOCATIONS ARE APPROXIMATE. (L)(A) ( GRID NORTH N 00°02'07 2641.84' N 00°02'01' 2643.35' **(K)** 450 450 900 SCALE: 1 INCH= 1800 FEET Page: 2 of 2 Drawn By: JEB Checked By: JEA Date Drawn: 12/17/2024 ON LETTER SIZE SHEET TRUE NORTH Revision: R0

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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

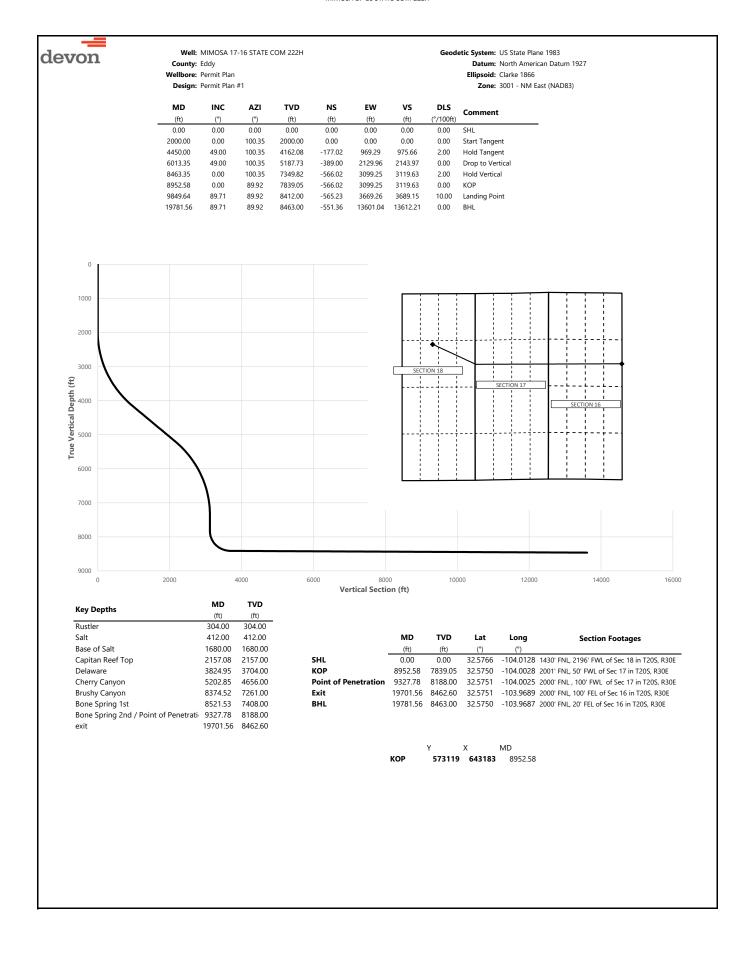
Form APD Conditions

Permit 381057

#### PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
DEVON ENERGY PRODUCTION COMPANY, LP [6137]	30-015-56180
333 West Sheridan Ave.	Well:
Oklahoma City, OK 73102	MIMOSA 17 16 STATE COM #222H

OCD Reviewer	Condition
matthew.gomez	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.
matthew.gomez	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
matthew.gomez	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
matthew.gomez	Cement is required to circulate on both surface and intermediate1 strings of casing.
matthew.gomez	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.
matthew.gomez	Brine water shall not be used in the Capitan Reef. Only fresh water shall be utilized until the Capitan Reef is cased and cemented.
matthew.gomez	This well is within the Capitan Reef. The first intermediate casing string shall be sat and cemented back to surface immediately above the Capitan Reef. The second intermediate string shall be set and cemented back to surface immediately below the base of the Capitan Reef.
matthew.gomez	Must comply with all R-111-Q requirements.





County: Eddy Wellbore: Permit Plan

Design: Permit Plan #1 Geodetic System: US State Plane 1983

Datum: North American Datum 1927

Ellipsoid: Clarke 1866

	<b>Design:</b> Permit Plan #1					<b>Zone:</b> 3001 - NM East (NAD83)						
MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment				
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)					
0.00 100.00	0.00	0.00 100.35	0.00 100.00	0.00	0.00	0.00	0.00	SHL				
200.00	0.00	100.35	200.00	0.00	0.00	0.00	0.00					
300.00	0.00	100.35	300.00	0.00	0.00	0.00	0.00					
304.00	0.00	100.35	304.00	0.00	0.00	0.00	0.00	Rustler				
400.00	0.00	100.35	400.00	0.00	0.00	0.00	0.00					
412.00	0.00	100.35	412.00	0.00	0.00	0.00	0.00	Salt				
500.00	0.00	100.35	500.00	0.00	0.00	0.00	0.00					
600.00 700.00	0.00	100.35	600.00	0.00	0.00	0.00	0.00					
800.00	0.00	100.35 100.35	700.00 800.00	0.00	0.00	0.00	0.00					
900.00	0.00	100.35	900.00	0.00	0.00	0.00	0.00					
1000.00	0.00	100.35	1000.00	0.00	0.00	0.00	0.00					
1100.00	0.00	100.35	1100.00	0.00	0.00	0.00	0.00					
1200.00	0.00	100.35	1200.00	0.00	0.00	0.00	0.00					
1300.00	0.00	100.35	1300.00	0.00	0.00	0.00	0.00					
1400.00	0.00	100.35	1400.00	0.00	0.00	0.00	0.00					
1500.00	0.00	100.35	1500.00	0.00	0.00	0.00	0.00					
1600.00	0.00	100.35	1600.00	0.00	0.00	0.00	0.00	Page of Calt				
1680.00 1700.00	0.00	100.35 100.35	1680.00 1700.00	0.00	0.00	0.00	0.00	Base of Salt				
1800.00	0.00	100.35	1800.00	0.00	0.00	0.00	0.00					
1900.00	0.00	100.35	1900.00	0.00	0.00	0.00	0.00					
2000.00	0.00	100.35	2000.00	0.00	0.00	0.00	0.00	Start Tangent				
2100.00	2.00	100.35	2099.98	-0.31	1.72	1.73	2.00					
2157.08	3.14	100.35	2157.00	-0.77	4.24	4.26	2.00	Capitan Reef Top				
2200.00	4.00	100.35	2199.84	-1.25	6.86	6.91	2.00					
2300.00	6.00	100.35	2299.45	-2.82	15.44	15.54	2.00					
2400.00 2500.00	8.00 10.00	100.35 100.35	2398.70 2497.47	-5.01	27.43 42.81	27.61 43.10	2.00 2.00					
2600.00	12.00	100.35	2595.62	-7.82 -11.25	61.58	61.99	2.00					
2700.00	14.00	100.35	2693.06	-15.29	83.71	84.26	2.00					
2800.00	16.00	100.35	2789.64	-19.94	109.17	109.89	2.00					
2900.00	18.00	100.35	2885.27	-25.19	137.93	138.84	2.00					
3000.00	20.00	100.35	2979.82	-31.04	169.96	171.07	2.00					
3100.00	22.00	100.35	3073.17	-37.48	205.21	206.56	2.00					
3200.00	24.00	100.35	3165.21	-44.50	243.64	245.25	2.00					
3300.00	26.00	100.35	3255.84	-52.09	285.22	287.09	2.00					
3400.00 3500.00	28.00 30.00	100.35 100.35	3344.94 3432.39	-60.25 -68.95	329.87 377.56	332.04 380.05	2.00 2.00					
3600.00	32.00	100.35	3518.11	-78.21	428.23	431.04	2.00					
3700.00	34.00	100.35	3601.97	-87.99	481.80	484.97	2.00					
3800.00	36.00	100.35	3683.88	-98.30	538.22	541.76	2.00					
3824.95	36.50	100.35	3704.00	-100.95	552.73	556.37	2.00	Delaware				
3900.00	38.00	100.35	3763.74	-109.11	597.42	601.35	2.00					
4000.00	40.00	100.35	3841.45	-120.41	659.33	663.66	2.00					
4100.00	42.00	100.35	3916.92	-132.20	723.86	728.62	2.00					
4200.00 4300.00	44.00 46.00	100.35 100.35	3990.05 4060.76	-144.45 -157.15	790.95 860.51	796.15 866.17	2.00					
4400.00	48.00	100.35	4128.95	-157.15 -170.29	860.51 932.45	866.17 938.58	2.00 2.00					
4450.00	49.00	100.35	4162.08	-177.02	969.29	975.66	2.00	Hold Tangent				
4500.00	49.00	100.35	4194.89	-183.80	1006.41	1013.03	0.00	•				
4600.00	49.00	100.35	4260.49	-197.36	1080.65	1087.76	0.00					
4700.00	49.00	100.35	4326.10	-210.92	1154.89	1162.49	0.00					
4800.00	49.00	100.35	4391.70	-224.48	1229.14	1237.22	0.00					
4900.00	49.00	100.35	4457.31	-238.04	1303.38	1311.95	0.00					
5000.00 5100.00	49.00 49.00	100.35 100.35	4522.92 4588.52	-251.60 -265.16	1377.62 1451.86	1386.68 1461.41	0.00					
5200.00	49.00	100.35	4566.52	-205.16 -278.72	1526.11	1536.14	0.00					
5202.85	49.00	100.35	4656.00	-279.10	1528.23	1538.28	0.00	Cherry Canyon				
5300.00	49.00	100.35	4719.73	-292.27	1600.35	1610.88	0.00	, ,				
5400.00	49.00	100.35	4785.34	-305.83	1674.59	1685.61	0.00					
5500.00	49.00	100.35	4850.95	-319.39	1748.84	1760.34	0.00					
5600.00	49.00	100.35	4916.55	-332.95	1823.08	1835.07	0.00					
5700.00	49.00	100.35	4982.16	-346.51	1897.32	1909.80	0.00					
5800.00	49.00	100.35	5047.76	-360.07	1971.57	1984.53	0.00					
5900.00 6000.00	49.00 49.00	100.35 100.35	5113.37 5178.98	-373.63 -387.19	2045.81 2120.05	2059.26 2133.99	0.00					
6013.35	49.00	100.35	5176.36	-389.00	2120.03	2143.97	0.00	Drop to Vertical				
6100.00	47.27	100.35	5245.56	-400.59	2193.44	2207.86	2.00	·				



County: Eddy
Wellbore: Permit Plan
Design: Permit Plan #1

Geodetic System: US State Plane 1983

Datum: North American Datum 1927 Ellipsoid: Clarke 1866

Zone: 3001 - NM East (NAD83)

Design: Permit Plan #1						Zone: 3001 - NM East (NAD83)						
MD	INC	AZI	TVD	NS	EW	vs	DLS					
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment				
6200.00	45.27	100.35	5314.69	-413.57	2264.52	2279.41	2.00					
6300.00	43.27	100.35	5386.29	-426.11	2333.18	2348.52	2.00					
6400.00	41.27	100.35	5460.29	-438.20	2399.34	2415.12	2.00					
6500.00	39.27	100.35	5536.59	-449.81	2462.92	2479.12	2.00					
6600.00	37.27	100.35	5615.10	-460.93	2523.84	2540.44	2.00					
6700.00	35.27	100.35	5695.72	-471.56	2582.03	2599.01	2.00					
6800.00	33.27	100.35	5778.36	-481.68	2637.42	2654.76	2.00					
6900.00	31.27	100.35	5862.92	-491.27	2689.93	2707.62	2.00					
7000.00	29.27	100.35	5949.28	-500.32	2739.51	2757.53	2.00					
7100.00	27.27	100.35	6037.35	-508.83	2786.10	2804.42	2.00					
7200.00	25.27	100.35	6127.02	-516.78	2829.63	2848.24	2.00					
7300.00	23.27	100.35	6218.18	-524.16	2870.06	2888.93	2.00					
7400.00	21.27	100.35	6310.72	-530.97	2907.33	2926.45	2.00					
7500.00	19.27	100.35	6404.52	-537.19	2941.41	2960.75	2.00					
7600.00	17.27	100.35	6499.48	-542.83	2972.24	2991.79	2.00					
7700.00	15.27	100.35	6595.47	-547.86	2999.79	3019.52	2.00					
7800.00	13.27	100.35	6692.38	-552.29	3024.04	3043.92	2.00					
7900.00	11.27	100.35	6790.09	-556.10	3044.94	3064.96	2.00					
8000.00	9.27	100.35	6888.49	-559.30	3062.47	3082.61	2.00					
8100.00	7.27 5.27	100.35	6987.44	-561.89	3076.61	3096.85	2.00					
8200.00	5.27	100.35	7086.84	-563.85	3087.35	3107.65	2.00					
8300.00 8374.52	3.27 1.78	100.35 100.35	7186.56 7261.00	-565.19 -565.77	3094.67 3097.89	3115.02 3118.27	2.00	Brushy Canyon				
8374.52 8400.00	1.78	100.35	7261.00 7286.47	-565.77 -565.90	3097.89	3118.27	2.00 2.00	Brushy Canyon				
8463.35	0.00	100.35	7349.82	-565.90 -566.02	3098.56	3118.94	2.00	Hold Vertical				
8500.00	0.00	89.92	7386.47	-566.02	3099.25	3119.63	0.00	Tiold Vertical				
8521.53	0.00	89.92	7408.00	-566.02	3099.25	3119.63	0.00	Bone Spring 1st				
8600.00	0.00	89.92	7486.47	-566.02	3099.25	3119.63	0.00	some spring 130				
8700.00	0.00	89.92	7586.47	-566.02	3099.25	3119.63	0.00					
8800.00	0.00	89.92	7686.47	-566.02	3099.25	3119.63	0.00					
8900.00	0.00	89.92	7786.47	-566.02	3099.25	3119.63	0.00					
8952.58	0.00	89.92	7839.05	-566.02	3099.25	3119.63	0.00	KOP				
9000.00	4.74	89.92	7886.41	-566.02	3101.21	3121.59	10.00					
9100.00	14.74	89.92	7984.85	-566.00	3118.11	3138.48	10.00					
9200.00	24.74	89.92	8078.85	-565.95	3151.85	3172.18	10.00					
9300.00	34.74	89.92	8165.57	-565.88	3201.39	3221.68	10.00					
9327.78	37.52	89.92	8188.00	-565.86	3217.77	3238.05	10.00	Bone Spring 2nd / Point of Penetration				
9400.00	44.74	89.92	8242.36	-565.79	3265.24	3285.48	10.00					
9500.00	54.74	89.92	8306.90	-565.68	3341.46	3361.63	10.00					
9600.00	64.74	89.92	8357.23	-565.56	3427.73	3447.82	10.00					
9700.00	74.74	89.92	8391.81	-565.43	3521.42	3541.43	10.00					
9800.00	84.74	89.92	8409.60	-565.30	3619.70	3639.63	10.00					
9849.64	89.71	89.92	8412.00	-565.23	3669.26	3689.15	10.00	Landing Point				
9900.00	89.71	89.92	8412.26	-565.16	3719.62	3739.46	0.00					
10000.00	89.71	89.92	8412.77	-565.02	3819.62	3839.37	0.00					
10100.00	89.71	89.92	8413.29	-564.88	3919.62	3939.29	0.00					
10200.00	89.71	89.92	8413.80	-564.74	4019.62	4039.20	0.00					
10300.00	89.71	89.92	8414.31	-564.60	4119.62	4139.11	0.00					
10400.00	89.71	89.92	8414.83	-564.46	4219.62	4239.02	0.00					
10500.00 10600.00	89.71 89.71	89.92 89.92	8415.34	-564.32 -564.18	4319.62 4419.61	4338.93 4438.84	0.00					
10700.00	89.71 89.71	89.92 89.92	8415.85 8416.37	-564.18 -564.04	4419.61 4519.61	4438.84 4538.75	0.00					
10700.00	89.71	89.92 89.92	8416.88	-564.04 -563.90	4619.61	4638.66	0.00					
10900.00	89.71	89.92	8417.39	-563.76	4719.61	4738.57	0.00					
11000.00	89.71	89.92	8417.91	-563.62	4819.61	4838.48	0.00					
11100.00	89.71	89.92	8418.42	-563.48	4919.61	4938.39	0.00					
11200.00	89.71	89.92	8418.94	-563.34	5019.61	5038.30	0.00					
11300.00	89.71	89.92	8419.45	-563.20	5119.60	5138.22	0.00					
11400.00	89.71	89.92	8419.96	-563.06	5219.60	5238.13	0.00					
11500.00	89.71	89.92	8420.48	-562.92	5319.60	5338.04	0.00					
11600.00	89.71	89.92	8420.99	-562.78	5419.60	5437.95	0.00					
11700.00	89.71	89.92	8421.50	-562.64	5519.60	5537.86	0.00					
11800.00	89.71	89.92	8422.02	-562.50	5619.60	5637.77	0.00					
11900.00	89.71	89.92	8422.53	-562.36	5719.60	5737.68	0.00					
12000.00	89.71	89.92	8423.04	-562.22	5819.59	5837.59	0.00					
12100.00	89.71	89.92	8423.56	-562.08	5919.59	5937.50	0.00					
12200.00	89.71	89.92	8424.07	-561.94	6019.59	6037.41	0.00					
12300.00	89.71	89.92	8424.59	-561.80	6119.59	6137.32	0.00					
12400.00	89.71	89.92	8425.10	-561.66	6219.59	6237.23	0.00					
12500.00	89.71	89.92	8425.61	-561.52	6319.59	6337.15	0.00					



County: Eddy Wellbore: Permit Plan Design: Permit Plan #1 Geodetic System: US State Plane 1983

**Datum:** North American Datum 1927

Ellipsoid: Clarke 1866

**Zone:** 3001 - NM East (NAD83)

	Design: Permit Plan #1						<b>Zone:</b> 3001 - NM East (NAD83)					
MD	INC	AZI	TVD	NS	EW	vs	DLS					
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment				
12600.00	89.71	89.92	8426.13	-561.38	6419.59	6437.06	0.00					
12700.00	89.71	89.92	8426.64	-561.24	6519.58	6536.97	0.00					
12800.00	89.71	89.92	8427.15	-561.10	6619.58	6636.88	0.00					
12900.00	89.71	89.92	8427.67	-560.96	6719.58	6736.79	0.00					
13000.00	89.71	89.92	8428.18	-560.82	6819.58	6836.70	0.00					
13100.00	89.71	89.92	8428.69	-560.68	6919.58	6936.61	0.00					
13200.00	89.71	89.92	8429.21	-560.55	7019.58	7036.52	0.00					
3300.00	89.71	89.92	8429.72	-560.41	7119.58	7136.43	0.00					
3400.00	89.71	89.92	8430.24	-560.27	7219.57	7236.34	0.00					
13500.00	89.71	89.92	8430.75	-560.13	7319.57	7336.25	0.00					
13600.00	89.71	89.92	8431.26	-559.99	7419.57	7436.17	0.00					
13700.00	89.71	89.92	8431.78	-559.85	7519.57	7536.08	0.00					
13800.00	89.71	89.92	8432.29	-559.71	7619.57	7635.99	0.00					
13900.00	89.71	89.92	8432.80	-559.57	7719.57	7735.90	0.00					
14000.00	89.71	89.92	8433.32	-559.43	7819.57	7835.81	0.00					
4100.00	89.71	89.92	8433.83	-559.29	7919.56	7935.72	0.00					
4200.00	89.71	89.92	8434.34	-559.15	8019.56	8035.63	0.00					
4300.00	89.71	89.92	8434.86	-559.01	8119.56	8135.54	0.00					
4400.00	89.71	89.92	8435.37	-558.87	8219.56	8235.45	0.00					
14500.00	89.71 89.71	89.92	8435.89	-558.73	8319.56	8335.36	0.00					
14600.00	89.71 89.71	89.92 89.92	8436.40 8436.91	-558.59 -558.45	8419.56 8519.56	8435.27 8535.18	0.00					
14700.00 14800.00	89.71 89.71	89.92 89.92		-558.45 -558.31	8519.56 8619.55	8535.18 8635.10	0.00					
4900.00	89.71	89.92 89.92	8437.43 8437.94	-558.31 -558.17	8619.55 8719.55	8635.10 8735.01	0.00 0.00					
15000.00	89.71	89.92	8438.45	-558.03	8819.55	8834.92	0.00					
15100.00	89.71	89.92	8438.97	-557.89	8919.55	8934.83	0.00					
15200.00	89.71	89.92	8439.48	-557.75	9019.55	9034.74	0.00					
15300.00	89.71	89.92	8439.99	-557.61	9119.55	9134.65	0.00					
15400.00	89.71	89.92	8440.51	-557.47	9219.55	9234.56	0.00					
15500.00	89.71	89.92	8441.02	-557.33	9319.54	9334.47	0.00					
15600.00	89.71	89.92	8441.54	-557.19	9419.54	9434.38	0.00					
15700.00	89.71	89.92	8442.05	-557.05	9519.54	9534.29	0.00					
15800.00	89.71	89.92	8442.56	-556.91	9619.54	9634.20	0.00					
15900.00	89.71	89.92	8443.08	-556.77	9719.54	9734.11	0.00					
16000.00	89.71	89.92	8443.59	-556.63	9819.54	9834.03	0.00					
16100.00	89.71	89.92	8444.10	-556.49	9919.54	9933.94	0.00					
16200.00	89.71	89.92	8444.62	-556.35	10019.54	10033.85	0.00					
16300.00	89.71	89.92	8445.13	-556.21	10119.53	10133.76	0.00					
16400.00	89.71	89.92	8445.64	-556.07	10219.53	10233.67	0.00					
16500.00	89.71	89.92	8446.16	-555.93	10319.53	10333.58	0.00					
16600.00	89.71	89.92	8446.67	-555.79	10419.53	10433.49	0.00					
16700.00	89.71	89.92	8447.18	-555.65	10519.53	10533.40	0.00					
16800.00	89.71	89.92	8447.70	-555.51	10619.53	10633.31	0.00					
16900.00	89.71	89.92	8448.21	-555.37		10733.22	0.00					
17000.00	89.71	89.92	8448.73	-555.23	10819.52		0.00					
17100.00	89.71	89.92	8449.24	-555.09		10933.05	0.00					
17200.00	89.71	89.92	8449.75	-554.95	11019.52		0.00					
17300.00	89.71	89.92	8450.27	-554.82	11119.52		0.00					
17400.00	89.71	89.92	8450.78	-554.68		11232.78	0.00					
17500.00	89.71	89.92	8451.29	-554.54	11319.52		0.00					
17600.00	89.71	89.92	8451.81	-554.40	11419.52		0.00					
7700.00	89.71 89.71	89.92 89.92	8452.32 8452.83	-554.26 -554.12	11519.51		0.00					
17800.00 17900.00	89.71 89.71	89.92 89.92	8452.83 8453.35	-554.12 -553.98	11619.51 11719.51		0.00 0.00					
18000.00	89.71	89.92 89.92	8453.86	-553.96 -553.84	11719.51		0.00					
18100.00	89.71	89.92	8454.38	-553.70	11919.51		0.00					
18200.00	89.71	89.92	8454.89	-553.56	12019.51		0.00					
18300.00	89.71	89.92	8455.40	-553.42	12119.51	12131.98	0.00					
18400.00	89.71	89.92	8455.92	-553.28	12219.50		0.00					
18500.00	89.71	89.92	8456.43	-553.14	12319.50		0.00					
18600.00	89.71	89.92	8456.94	-553.00	12419.50		0.00					
18700.00	89.71	89.92	8457.46	-552.86		12531.62	0.00					
18800.00	89.71	89.92	8457.97	-552.72	12619.50		0.00					
18900.00	89.71	89.92	8458.48	-552.58		12731.44	0.00					
19000.00	89.71	89.92	8459.00	-552.44	12819.50		0.00					
19100.00	89.71	89.92	8459.51	-552.30		12931.26	0.00					
19200.00	89.71	89.92	8460.03	-552.16	13019.49	13031.17	0.00					
19300.00	89.71	89.92	8460.54	-552.02	13119.49		0.00					
19400.00	89.71	89.92	8461.05	-551.88	13219.49		0.00					
	89.71	89.92	8461.57	-551.74	13319.49		0.00					
19500.00	05.11	05.52										



County: Eddy
Wellbore: Permit Plan
Design: Permit Plan #1

Geodetic System: US State Plane 1983

Datum: North American Datum 1927

Ellipsoid: Clarke 1866 Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
19600.00	89.71	89.92	8462.08	-551.60	13419.49	13430.82	0.00	
19700.00	89.71	89.92	8462.59	-551.46	13519.49	13530.73	0.00	
19701.56	89.71	89.92	8462.60	-551.46	13521.04	13532.28	0.00	exit
19781.56	89.71	89.92	8463.00	-551.36	13601.04	13612.21	0.00	BHL



Devon Energy Center 333 West Sheridan Avenue Oklahoma City, Oklahoma 73102-5015

# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

For

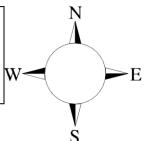
Mimosa 17-16 State Com 222H

Sec-18 T-20S R-30E 1430' FNL & 2196' FWL LAT. = 32.5767060° N (NAD83) LONG = 104.0127613° W

**Eddy County NM** 

# Mimosa 17-16 State Com 222H

This is an open drilling site.  $H_2S$  monitoring equipment and emergency response equipment will be used within 500' of zones known to contain  $H_2S$ , including warning signs, wind indicators and  $H_2S$  monitor.





Assumed 100 ppm ROE = 3000' (Radius of Exposure)
100 ppm H2S concentration shall trigger activation of this plan.

#### **Escape**

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crews should then block the entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

### **Assumed 100 ppm ROE = 3000'**

100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

#### **Emergency Procedures**

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - Detection of H₂S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

#### **Ignition of Gas Source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

#### Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

Common	Chemical	Specific Threshold		Harardona Limit	Lethal	
Name	Formula	Gravity	Limit	Hazardous Limit	Concentration	
Hydrogen Sulfide	H <sub>2</sub> S	1.189 10 ppm Air = 1		100 ppm/hr	600 ppm	
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm	

#### **Contacting Authorities**

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

#### **Hydrogen Sulfide Drilling Operation Plan**

#### I. HYDROGEN SULFIDE (H2S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- 1. The hazards and characteristics of hydrogen sulfide (H<sub>2</sub>S)
- 2. The proper use and maintenance of personal protective equipment and life support systems.
- 3. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
- 4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H<sub>2</sub>S metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
- 3. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan.

There will be weekly H<sub>2</sub>S and well control drills for all personnel in each crew.

#### II. HYDROGEN SULFIDE TRAINING

Note: All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H<sub>2</sub>S.

#### 1. Well Control Equipment

- A. Flare line
- B. Choke manifold Remotely Operated
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer and rotating head.
- E. Mud/Gas Separator

#### 2. Protective equipment for essential personnel:

30-minute SCBA units located at briefing areas, as indicated on well site diagram, with escape units available in the top doghouse. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

#### 3. H₂S detection and monitoring equipment:

Portable H<sub>2</sub>S monitors positioned on location for best coverage and response. These units have warning lights which activate when H<sub>2</sub>S levels reach 10 ppm and audible sirens which activate at 10 ppm. Sensor locations:

- Bell nipple
- Possum Belly/Shale shaker
- Rig floor
- Choke manifold
- Cellar

#### Visual warning systems:

- A. Wind direction indicators as shown on well site diagram
- B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

#### 4. Mud program:

The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. Proper mud weight, safe drilling practices and the use of H<sub>2</sub>S scavengers will minimize hazards when penetrating H<sub>2</sub>S bearing zones.

#### 5. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H<sub>2</sub>S trim.
- B. All elastomers used for packing and seals shall be H<sub>2</sub>S trim.

#### 6. Communication:

- A. Company personnel have/use cellular telephones in the field.
- B. Land line (telephone) communications at Office

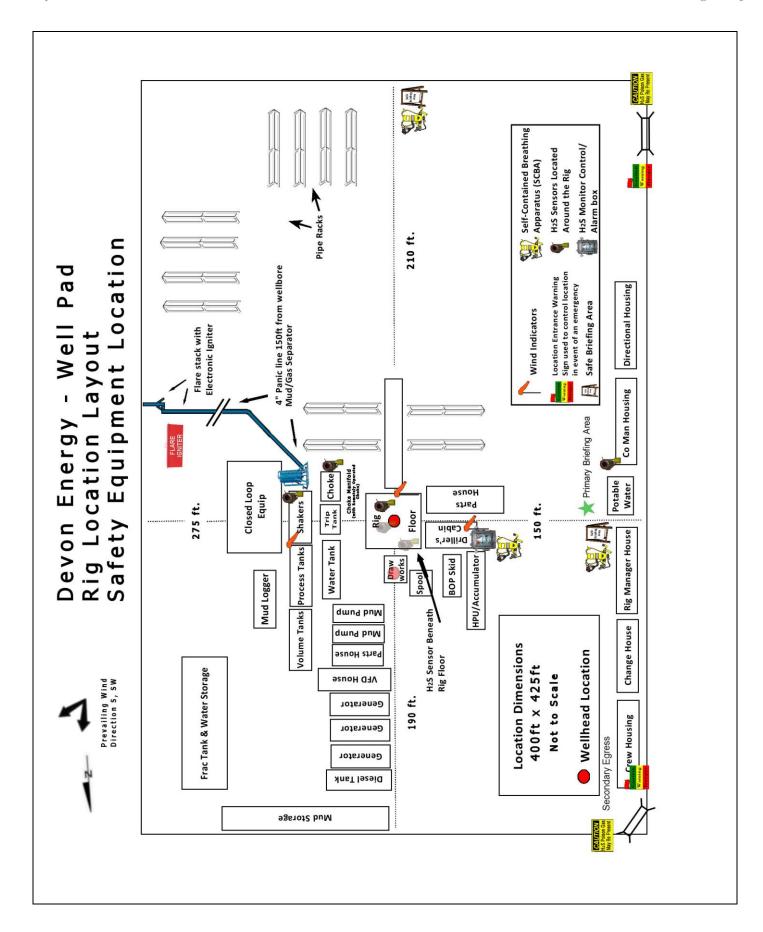
#### 7. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H<sub>2</sub>S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

Devon Energy Corp. Company Call List						
Employee/Company Contact Representative	Position	Phone Number	After Hours Number			
Jonathan Fisher (North)	Drilling Manager	832-967-7912				
Jason Hildebrand (South)	Drilling Manager	405-552-6514				
Rich Downey	Drilling VP	405-228-2415				
Josh Harvey	EHS Manager	405-228-2440	918-500-5536			
Laura Wright	EHS Supervisor	405-552-5334	832-969-8145			
Robert Glover	EHS Professional	575-703-5712	575-703-5712			
Lane Frank	Lead EHS	580-579-7052	580-579-7052			
Rickey Porter	Lead EHS	903-720-8315	903-720-8315			
Ronnie Handy	Lead EHS	918-839-2046	918-839-2046			
Brock Vise	Lead EHS	918-413-3291	918-413-3291			

Agency	Call List	
Lea	Hobbs	
County	Lea County Communication Authority	397-9265
<u>(575)</u>	State Police	885-3138
	City Police	397-9265
	Sheriff's Office	396-3611
	Ambulance	911
	Fire Department	397-9308
	LEPC (Local Emergency Planning Committee)	393-2870
	NMOCD	393-6161
	US Bureau of Land Management (Closed)	393-0002
Eddy	Carlsbad	
County	State Police	885-3137
<u>(575)</u>	City Police	885-2111
	Sheriff's Office	887-7551
	Ambulance	911
	Fire Department	885-3125
	LEPC (Local Emergency Planning Committee)	887-3798
	US Bureau of Land Management	234-5972
	NM Emergency Response Commission (Santa Fe)	(505) 476-9600
	24 HR	(505) 827-9126
	National Emergency Response Center	(800) 424-8802
	National Pollution Control Center: Direct	(703) 872-6000
	For Oil Spills	(800) 280-7118
	Emergency Services	,
	Wild Well Control	(281) 784-4700
	Cudd Pressure Control (915) 699-0139	(915) 563-3356
	Halliburton	(575) 746-2757
	B. J. Services	(575) 746-3569
Give	Native Air – Emergency Helicopter – Hobbs	(575) 347-9836
GPS	For Air Ambulance - Eddy County Dispatch	(575)-616-7155
position:	For Air Ambulance - Lea County (LCCA)	(575)-397-9265
	Poison Control (24/7)	(800) 222-1222
	Oil & Gas Pipeline 24 Hour Service	(800) 364-4366
	NOAA – Website - www.nhc.noaa.gov	
	National Pollution Control Center	202-795-6958
	NPCC – Oil Spills	800-280-7118





#### 1. Geologic Formations

TVD of target	8463	Pilot hole depth	N/A
MD at TD:	19782	Deepest expected fresh water	

#### Basin

Formation	Depth (TVD)	Water/Mineral Bearing/Target	Hazards*
	from KB	Zone?	
Rustler	304		
Salt	412		
Base of Salt	1680		
Capitan Reef Top	2157		
Delaware	3704		
Cherry Canyon	4656		
Brushy Canyon	7261		
Bone Spring 1st	7408		
Bone Spring 2nd	8188		
*1100			

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
17 1/2	13 3/8	54.5	J-55	BTC	0.0	329 MD	0	329 TVD
12 1/4	10 3/4	45.5	J-55	BTC SCC	0.0	1705 MD	0	1705 TVD
9 7/8	8 5/8	32.0	P110EC	MOFXL	0	3754 MD	0	3754 TVD
7 7/8	5 1/2	20.0	P110	DWC/C IS+	0	19782 MD	0	8463 TVD

- All casing strings will be tested in accordance with 43 CFR 3172. Must have table for contingency casing.
- The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of  $25^{\circ}$  above the top of the salt.

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	277	0	13.2	1.44	Lead: Class C Cement + additives
Int	91	0	9	3.27	Lead: Class C Cement + additives
IIIt	101	1205	13.2	1.44	Tail: Class H / C + additives
Int 1	127	0	9	3.27	Lead: Class C Cement + additives
IIIt I	67	3254	13.2	1.44	Tail: Class H / C + additives
Production	117	6953	9	3.27	Lead: Class H /C + additives
Floduction	1433	8953	13.2	1.44	Tail: Class H / C + additives

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Capitan and the second stage performed as a bradenhead squeeze with planned cement from the Capitan to surface. Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures The final cement top will be verified by Echo-meter. Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

Casing String	% Excess
Surface	50%
Intermediate and Intermediate 1	30%
Intermediate 1 (Two Stage)	25%
Prod	10%

4. Pressure Control Equipment (Fou	r String Des	ign)													
BOP installed and tested before drilling which hole?	Size?	Min. Require d WP	Ту	<b>pe</b>	~	Tested to:									
			Anı	nular	X	50% of rated working pressure									
Int	13-5/8"	5M	Bline	l Ram	X										
IIIt	13-3/6	SIVI	Pipe	Ram		5M									
			Doub	le Ram	X	3101									
			Other*			]									
			Annul	ar (5M)	X	100% of rated working pressure									
Int 1	13-5/8"	5M	Blind Ram		X										
IIIt I		13-3/8	13-3/6	13-3/8 31/1	13-3/6 3101	13-3/6 3101	15-5/6 5101	13-3/6 3141	13-3/6 3WI	13-3/6	13-3/6	Pipe	Ram		5M
			Doub	le Ram	X	J1V1									
			Other*												
			Annula	ar (5M)	X	100% of rated working pressure									
Production	13-5/8"	5M	Bline	l Ram	X										
Floduction	13-3/6	JIVI	Pipe Ram Double Ram			5M									
					X	3101									
			Other*												
	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.														
N A variance is requested to	A variance is requested to run a 5 M annular on a 10M system														

5. Mud Program (Four String Design)

Section	Туре	Weight (ppg)
Surface	WBM	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Intermediate 1	WBM	8.5-9
Production	OBM	10-10.5

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring
---	-----------------------------

6. Logging and Testing Procedures

Logging, C	foring and Testing
	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the
X	Completion Report and sbumitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Additional	logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

William Conditions						
Condition	Specfiy what type and where?					
BH pressure at deepest TVD	4621					
Abnormal temperature	No					

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR 3176.. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.

N H2S is present

N	H2S is present				
Y	H2S plan attached.				

#### 8. Other facets of operation

Is this a walking operation? Potentially

- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well
- 3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
  - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).
- $^3$  The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
  - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments	}
X	Directional Plan
	Other, describe

#### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

#### NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

#### Section 1 – Plan Description Effective May 25, 2021

I. Operator: DEVON E	NERGY PRODUC	CTION COMPANY, LP	OGRID:	6137	Date:	12 / 18 / 2024
II. Type: ☒ Original [	☐ Amendment	due to □ 19.15.27.	9.D(6)(a) NMA	C □ 19.15.27.9.D(	6)(b) NMAC 🗆 (	Other.
If Other, please describe	::					
III. Well(s): Provide the be recompleted from a s					wells proposed to	be drilled or proposed to
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
See attachment						
V. Anticipated Schedu proposed to be recomple Well Name	le: Provide the	following informat			vell or set of wells  Initial F	
See attachment						
VII. Operational Prac Subsection A through F	tices: Attac of 19.15.27.8	h a complete descr NMAC.	ription of the ac	tions Operator will	l take to comply	at to optimize gas capture.  with the requirements of tices to minimize venting

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# NATURAL GAS MANAGEMENT PLAN Section 1 - Plan Description

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR & FOOTAGE	Anticipated Gas/Oil/Water	Central Delivery Point Name:
MIMOSA 17-16 STATE COM 221H	n/a	18-20S-30E, 720 FNL & 2490 FWL	(+/-)1625mcfd/(+/-)694bopd/(+/-)2172bwpd	MIMOSA 18 CTB 1
MIMOSA 17-16 STATE COM 222H	n/a	18-20S-30E, 2000 FNL & 2490 FWL	(+/-)1625mcfd/(+/-)694bopd/(+/-)2172bwpd	MIMOSA 18 CTB 1
MIMOSA 18-16 STATE COM 223H	n/a	18-20S-30E, 1642 FSL & 805 FWL	(+/-)1625mcfd/(+/-)694bopd/(+/-)2172bwpd	MIMOSA 18 CTB 1
MIMOSA 18-16 STATE COM 224H	n/a	18-20S-30E, 1612 FSL & 805 FWL	(+/-)1625mcfd/(+/-)694bopd/(+/-)2172bwpd	MIMOSA 18 CTB 1

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

				Completion		
				Commencement		
Well Name	API	Spud Date	TD Reached Date	Date	Initial Flow back Date	First Production Date
MIMOSA 17-16 STATE COM 221H	n/a	4/30/2025	5/30/2025	9/27/2025	9/27/2025	9/27/2025
MIMOSA 17-16 STATE COM 222H	n/a	5/20/2025	6/19/2025	10/17/2025	10/17/2025	10/17/2025
MIMOSA 18-16 STATE COM 223H	n/a	5/2/2025	6/1/2025	9/29/2025	9/29/2025	9/29/2025
MIMOSA 18-16 STATE COM 224H	n/a	4/14/2025	5/14/2025	9/11/2025	9/11/2025	9/11/2025

<sup>\*</sup> Dates subject to change

#### Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

🗵 Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

#### IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

#### X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in
			2.00.1 2.00.0	or a from a square the m

XI. Map. $\square$ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the
production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of
the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natur	al gas gathering system	$\square$ will $\square$ will n	ot have capacity to	gather 100%	of the anticipated	natural gas
production volume from the we	ell prior to the date of fir	st production.				

XIII. Line Pressure. Operator $\square$ does $\square$ does not anticipate that its existing well(s) connected to the same segment, or portion, of th
natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

l Attach (	Onerator's nla	an to manao	e production i	n response to	o the increase	d line pressure

XIV. Confidentiality: $\square$ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provides	ided in
Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific info	rmation
for which confidentiality is asserted and the basis for such assertion.	

# Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

- 🗆 Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or
- D Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- **(b)** power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (t) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

# Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:
Printed Name: Jeffrey Walla  Title: Surface Land & Regulatory Manager  Esmail Address: : Consults O days a sur
Title: Surface Land & Regulatory Manager
E-mail Address: jeff.walla@dvn.com
Date:
Phone: (405) 552-8154
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:



#### VI. Separation Equipment

Devon Energy Production Company, L.P. utilizes a "stage separation" process in which oil and gas separation is carried out through a series of separators operating at successively reduced pressures. Hydrocarbon liquids are produced into a high-pressure inlet separator, then carried through one or more lower pressure separation vessels before entering the storage tanks. The purpose of this separation process is to attain maximum recovery of liquid hydrocarbons from the fluids and allow maximum capture of produced gas into the sales pipeline. Devon utilizes a series of Low-Pressure Compression units to capture gas off the staged separation and send it to the sales pipeline. This process minimizes the amount of flash gas that enters the end-stage storage tanks that is subsequently vented or flared.



#### VII. Operational Practices

Devon Energy Production Company, L. P. will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

- During drilling operations, Devon will utilize flares and/or combustors to capture and control
  natural gas, where technically feasible. If flaring is deemed technically in-feasible, Devon will
  employ best management practices to minimize or reduce venting to the extent possible.
- During completions operations, Devon will utilize Green Completion methods to capture gas
  produced during well completions that is otherwise vented or flared. If capture is technically
  in-feasible, flares and/or combustors will be used to capture and control flow back fluids
  entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon
  volumes, Devon will turn operations to onsite separation vessels and flow to the gathering
  pipeline.
- During production operations, Devon will take every practical effort to minimize waste of natural gas through venting and flaring by:
  - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
  - Utilizing a closed-loop capture system to collect and route produced gas to sales line via low pressure compression, or to a flare/combustor
  - Flaring in lieu of venting, where technically feasible
  - Utilizing auto-ignitors or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
  - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
  - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
  - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications
  - Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible



VIII. Best Management Practices during Maintenance

Devon Energy Production Company, L.P. will utilize best management practices to minimize venting during active and planned maintenance activities. Devon is operating under guidance that production facilities permitted under NOI permits have no provisions to allow high pressure flaring and high pressure flaring is only allowed in disruption scenarios so long as the duration is less than eight hours. When technically feasible, flaring during maintenance activities will be utilized in lieu of venting to the atmosphere. Devon will work with third-party operators during scheduled maintenance of downstream pipeline or processing plants to address those events ahead of time to minimize venting. Actions considered include identifying alternative capture approaches or planning to temporarily reduce production or shut in the well to address these circumstances.



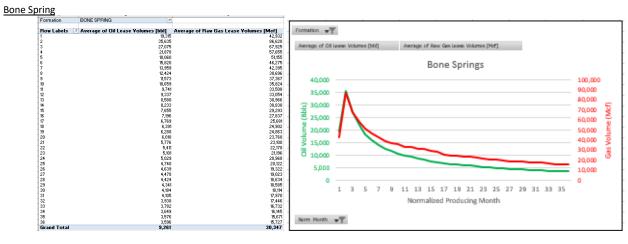
Devon Energy Production Company, L.P. 333 W. Sheridan Avenue Oklahoma City, Oklahoma 73102 Phone: (405) 228-4800

#### WASTE MINIMIZATION PLAN

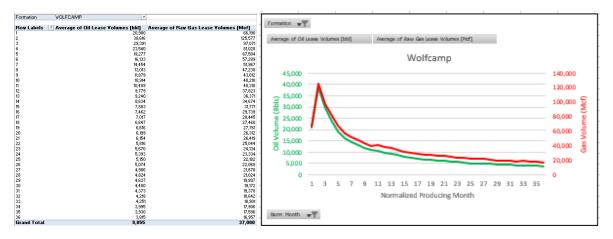
Per 89 FR 25378 - Waste Prevention, Production Subject to Royalties, and Resource Conservation, requirements:

- (1) initial oil production estimates and decline,
- (2) initial gas production estimates and decline,
- (3) certification that the operator has an executed gas sales contract to sell 100 percent of the produced oil-well gas, and
- (4) any other information demonstrating the operator's plans to avoid the waste of gas.

(1), (2) 3 year Oil and Gas decline curves: Bone Spring and Wolfcamp formation decline curves below supply Year 1, 2, 3 cumulative values for oil and gas, in range format; based on peak IP rates for oil and gas based on Devon Energy Production Company, L.P. operated wells ID post 1/2019, 10K LL norm, P90-10 ranges, annualized rates. Please refer to NGMP for table of initial oil and gas volumes.



#### Wolfcamp



- (3) Certification (NGMP Section 3 Certification): Operator (Devon Energy Production Company, L.P.) will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system;
- (4) Addl waste avoidance information: Refer to NGMP Sec. VII. Operational Practices & VIII. Best Management Practices during Maintenance