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

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

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

**District IV** 

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

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

Form C-101 August 1, 2011

Permit 352527

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

AFFLICATION FOR FEMILIF TO DISEL, RE-ENTEN, DELFEN, FEOGDACK, ON ADD A ZONE								
Operator Name and Address		2. OGRID Number						
AMEREDEV OPERATING, LL	372224							
2901 Via Fortuna	3. API Number							
Austin, TX 78746		30-025-52131						
4. Property Code	5. Property Name	6. Well No.						
320055	184H							

7. Surface Location

	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A 27 26S 36	E A	200	N	230	E	Lea

8. Proposed Bottom Hole Location

***************************************									
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
Н	34	26S	36E	1	50	S	330	E	Lea

9. Pool Information

WC-025 G-08 S263620C;LWR BONE SPRIN	98150	

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	2906
16. Multiple	17. Proposed Depth	18. Formation 19. Contractor		20. Spud Date
N	17635	2nd Bone Spring Carbonate	11/1/2024	
Depth to Ground water		Distance from nearest fresh water well	Distance to nearest surface water	
				·

☑ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

	21. Floposed casing and centent Flogram									
Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC				
Surf	17.5	13.375	54.5	2042	1590	0				
Int1	12.25	10.75	45.5	5128	1269	0				
Prod	8 75	5.5	17	17635	5756	0				

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	TBD

knowledge and b	have complied with 19.15.14.9 (A) N	true and complete to the best of my IMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATI	ION DIVISION
Printed Name:	Printed Name: Electronically filed by Christie Hanna		Approved By:	Paul F Kautz	
Title:	Regulatory		Title:	Geologist	
Email Address:	channa@ameredev.com		Approved Date:	10/19/2023	Expiration Date: 10/19/2025
Date:	Date: 10/16/2023 Phone: 737-300-4723		Conditions of Appr	oval Attached	

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 Phone: (505) 4170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

**FORM C-102** Revised August 1, 2011 Submit one copy to appropriate District Office

AMENDED REPORT

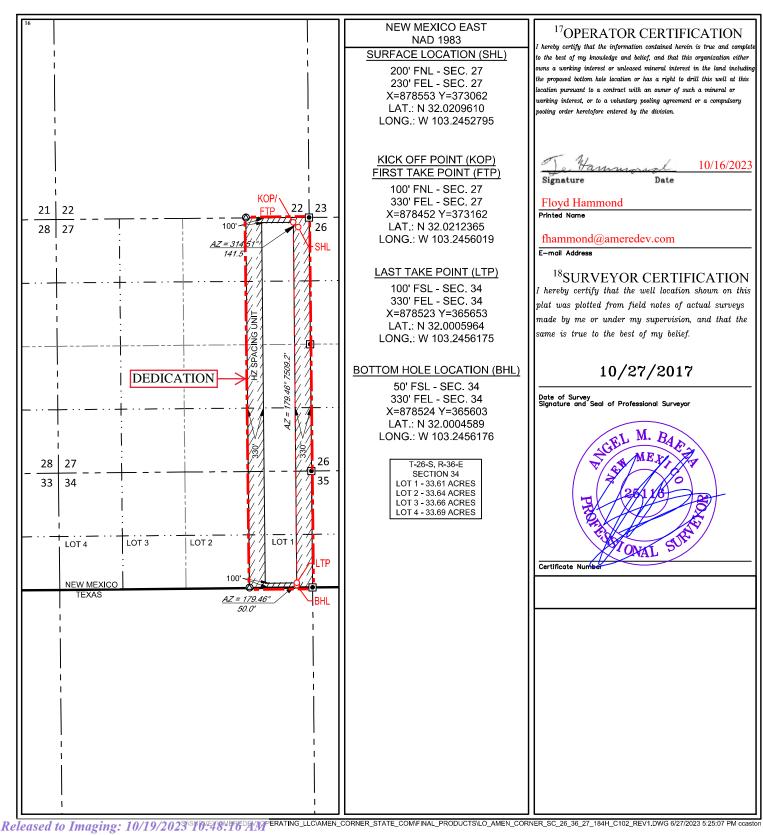
# WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number		<sup>2</sup> Pool Code	<sup>3</sup> Pool Name				
30-025- 98150 WC-025 G-08 S263620		WC-025 G-08 S263620C; LWR I	20C; LWR BONE SPRING				
<sup>4</sup> Property Code		<sup>5</sup> Pr	operty Name	<sup>6</sup> Well Number			
320055		AMEN CORNER	26 36 27 STATE COM	184H			
<sup>7</sup> OGRID N₀.		<sup>8</sup> О <sub>Г</sub>	<sup>8</sup> Operator Name				
372224		AMEREDEV OPERATING, LLC. 2906'					

<sup>10</sup>Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	27	26-S	36-E	-	200'	NORTH	230'	EAST	LEA
	<sup>11</sup> Bottom Hole Location If Different From Surface								
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	34	26-S	36-E	-	50'	SOUTH	330'	EAST	LEA
12Dedicated Acres	<sup>13</sup> Joint or l	Infill 14Co	nsolidation Cod	le <sup>15</sup> Orde	er No.				
233.61			C						
ı	1	I		I					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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

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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**

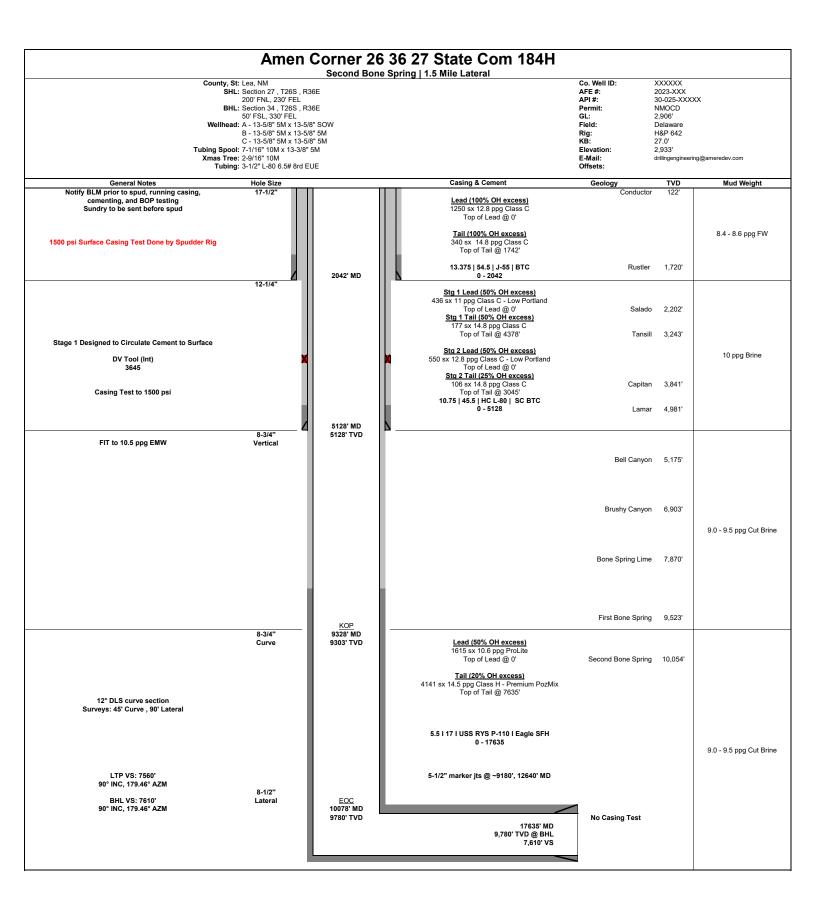
Form APD Conditions

Permit 352527

#### PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
AMEREDEV OPERATING, LLC [372224]	30-025-52131
2901 Via Fortuna	Well:
Austin, TX 78746	AMEN CORNER 26 36 27 STATE COM #184H

OCD Reviewer	Condition
pkautz	Notify OCD 24 hours prior to casing & cement
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104
pkautz	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
pkautz	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
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing
pkautz	If cement does not circulate on any string , a CBL is required for that string of casing.
pkautz	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud





# **Ameredev Operating**

Lea County, NM (N83-NME)
AMEN CORNER ST COM PROJECT
AMEN CORNER 26 36 27 ST COM 184H

**OWB** 

Plan: PWP

# **Standard Planning Report - Geographic**

14 June, 2023



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: **Ameredev Operating** Project: Lea County, NM (N83-NME)

AMEN CORNER ST COM PROJECT Site:

Well: AMEN CORNER ST COM 26 36 27 #184H

**OWB** Wellbore: PWP Design:

Local Co-ordinate Reference:

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Minimum Curvature

**Project** Lea County, NM (N83-NME)

Map System: US State Plane 1983 North American Datum 1983 Geo Datum: Map Zone:

New Mexico Eastern Zone

System Datum:

Mean Sea Level

AMEN CORNER ST COM PROJECT Site

373,452.33 usft Site Position: Northing: Latitude: 32.0221652 From: Lat/Long Easting: 873,738.68 usft Longitude: -103.2607997

**Position Uncertainty:** 0.0 usft Slot Radius: 13-3/16 "

AMEN CORNER ST COM 26 36 27 #184H Well

**Well Position** +N/-S 0.0 usft 373,062.34 usfl Latitude: 32.0209610 Northing: +E/-W 0.0 usft Easting: 878,553.39 usfl Longitude: -103.2452795

**Position Uncertainty** 3.0 usft Wellhead Elevation: usf **Ground Level:** 2,906.0 usft

**Grid Convergence:** 0.58°

OWB Wellbore

Magnetics **Model Name** Sample Date Declination **Dip Angle** Field Strength (°) (°) (nT) IGRF2020 6.14 59.69 6/14/2023 47,201.31158197

Design **PWP** 

**Audit Notes:** 

Version: **PROTOTYPE** 0.0 Phase: Tie On Depth:

Vertical Section: Direction Depth From (TVD) +N/-S +E/-W (usft) (usft) (usft) (°) 179.46 0.0 0.0 0.0

Date 6/14/2023 **Plan Survey Tool Program** 

**Depth From** 

(usft) **Tool Name** (usft) Survey (Wellbore) Remarks

0.0 17,634.8 PWP (OWB) MWD 1

OWSG MWD - Standard



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: Ameredev Operating
Project: Lea County, NM (N83-NME)

Site: AMEN CORNER ST COM PROJECT
Well: AMEN CORNER ST COM 26 36 27 #184H

Wellbore: OWB Design: PWP **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Plan Section	s									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,750.0	5.00	349.65	1,749.7	10.7	-2.0	2.00	2.00	0.00	349.65	
8,206.3	5.00	349.65	8,181.4	564.3	-103.0	0.00	0.00	0.00	0.00	
8,456.3	0.00	0.00	8,431.1	575.0	-105.0	2.00	-2.00	0.00	180.00	
9,327.7	0.00	0.00	9,302.5	575.0	-105.0	0.00	0.00	0.00	0.00	
10,077.7	90.00	179.46	9,780.0	97.6	-100.5	12.00	12.00	23.93	179.46	
17,635.3	90.00	179.46	9,780.0	-7,459.7	-29.7	0.00	0.00	0.00	0.00	BHL (ACSC #184H



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: Ameredev Operating
Project: Lea County, NM (N83-NME)

Site: AMEN CORNER ST COM PROJECT
Well: AMEN CORNER ST COM 26 36 27 #184H

Wellbore: OWB Design: PWP **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Planned Surve	Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude		
0.0	0.00	0.00	0.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
100.0	0.00	0.00	100.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
200.0	0.00	0.00	200.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
300.0	0.00	0.00	300.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
400.0	0.00	0.00	400.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
500.0	0.00	0.00	500.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
600.0	0.00	0.00	600.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
700.0 800.0	0.00	0.00 0.00	700.0 800.0	0.0	0.0 0.0	373,062.34 373,062.34	878,553.39 878,553.39	32.0209610	-103.2452795		
900.0	0.00 0.00	0.00	900.0	0.0 0.0	0.0	373,062.34	878,553.39	32.0209610 32.0209610	-103.2452795 -103.2452795		
1,000.0	0.00	0.00	1,000.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
1,100.0	0.00	0.00	1,100.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
1,200.0	0.00	0.00	1,200.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
1,300.0	0.00	0.00	1,300.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
1,400.0	0.00	0.00	1,400.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
1,500.0	0.00	0.00	1,500.0	0.0	0.0	373,062.34	878,553.39	32.0209610	-103.2452795		
Start Bu	uild 2.00										
1,600.0	2.00	349.65	1,600.0	1.7	-0.3	373,064.06	878,553.08	32.0209658	-103.2452804		
1,700.0	4.00	349.65	1,699.8	6.9	-1.3	373,069.21	878,552.14	32.0209799	-103.2452833		
1,750.0	5.00	349.65	1,749.7	10.7	-2.0	373,073.07	878,551.43	32.0209906	-103.2452855		
	156.3 hold at										
1,800.0	5.00	349.65	1,799.5	15.0	-2.7	373,077.36	878,550.65	32.0210024	-103.2452878		
1,900.0	5.00	349.65	1,899.1	23.6	-4.3	373,085.93	878,549.08	32.0210260	-103.2452926		
2,000.0	5.00	349.65	1,998.7 2,017.0	32.2	-5.9	373,094.50	878,547.52	32.0210496	-103.2452974		
2,018.3	5.00	349.65	2,017.0	33.7	-6.2	373,096.08	878,547.23	32.0210539	-103.2452983		
2,100.0	5.00	349.65	2,098.4	40.7	-7.4	373,103.08	878,545.95	32.0210732	-103.2453022		
2,200.0	5.00	349.65	2,198.0	49.3	-9.0	373,111.65	878,544.39	32.0210968	-103.2453069		
2,300.0	5.00	349.65	2,297.6	57.9	-10.6	373,120.22	878,542.82	32.0211204	-103.2453117		
2,353.6	5.00	349.65	2,351.0	62.5	-11.4	373,124.82	878,541.98	32.0211331	-103.2453143		
Salado											
2,400.0	5.00	349.65	2,397.2	66.5	-12.1	373,128.80	878,541.26	32.0211440	-103.2453165		
2,500.0	5.00	349.65	2,496.8	75.0	-13.7	373,137.37	878,539.69	32.0211676	-103.2453213		
2,600.0	5.00	349.65	2,596.4	83.6	-15.3	373,145.95	878,538.12	32.0211912	-103.2453260		
2,700.0	5.00	349.65	2,696.1	92.2	-16.8	373,154.52	878,536.56	32.0212148	-103.2453308		
2,800.0	5.00	349.65	2,795.7	100.7	-18.4	373,163.09	878,534.99	32.0212384	-103.2453356		
2,900.0	5.00	349.65	2,895.3	109.3	-20.0	373,171.67	878,533.43	32.0212621	-103.2453403		
2,935.8	5.00	349.65	2,931.0	112.4	-20.5	373,174.74	878,532.87	32.0212705	-103.2453421		
Dewey		240.05	2.004.0	447.0	04.5	070 400 04	070 504 00	22 0242057	400 0450454		
3,000.0		349.65 349.65	2,994.9 3,094.5	117.9	-21.5	373,180.24 373,188.81	878,531.86 878,530.30	32.0212857 32.0213093	-103.2453451 -103.2453499		
3,100.0 3,177.8	5.00 5.00	349.65	3,172.0	126.5 133.1	-23.1 -24.3	373,195.48	878,529.08	32.0213093	-103.2453536		
Tansill	3.00	343.03	3,172.0	133.1	-24.5	373,133.40	070,329.00	32.0213270	-103.2433330		
3,200.0	5.00	349.65	3,194.2	135.0	-24.7	373,197.39	878,528.73	32.0213329	-103.2453547		
3,300.0	5.00	349.65	3,293.8	143.6	<b>-</b> 26.2	373,205.96	878,527.16	32.0213565	-103.2453594		
3,400.0	5.00	349.65	3,393.4	152.2	-27.8	373,214.54	878,525.60	32.0213801	-103.2453642		
3,500.0	5.00	349.65	3,493.0	160.8	-29.4	373,223.11	878,524.03	32.0214037	-103.2453690		
3,600.0		349.65	3,592.6	169.3	-30.9	373,231.68	878,522.47	32.0214273	-103.2453738		
3,700.0	5.00	349.65	3,692.3	177.9	-32.5	373,240.26	878,520.90	32.0214509	-103.2453785		
3,752.9	5.00	349.65	3,745.0	182.5	-33.3	373,244.80	878,520.07	32.0214634	-103.2453811		
Capitan											
3,800.0		349.65	3,791.9	186.5	-34.1	373,248.83	878,519.34	32.0214745	-103.2453833		
3,900.0	5.00	349.65	3,891.5	195.1	-35.6	373,257.41	878,517.77	32.0214981	-103.2453881		



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: Ameredev Operating
Project: Lea County, NM (N83-NME)

Site: AMEN CORNER ST COM PROJECT

Well: AMEN CORNER ST COM 26 36 27 #184H

Wellbore: OWB Design: PWP **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,000.0	5.00	349.65	3,991.1	203.6	-37.2	373,265.98	878,516.21	32.0215217	-103.2453928
4,100.0	5.00	349.65	4,090.7	212.2	-38.8	373,274.55	878,514.64	32.0215454	-103.2453976
4,200.0	5.00	349.65	4,190.4	220.8	-40.3	373,283.13	878,513.07	32.0215690	-103.2454024
4,300.0	5.00	349.65	4,290.0	229.4	-41.9	373,291.70	878,511.51	32.0215926	-103.2454072
4,400.0	5.00	349.65	4,389.6	237.9	-43.4	373,300.27	878,509.94	32.0216162	-103.2454119
4,500.0	5.00	349.65	4,489.2	246.5	-45.0	373,308.85	878,508.38	32.0216398	-103.2454167
4,600.0	5.00	349.65	4,588.8	255.1	-46.6	373,317.42	878,506.81	32.0216634	-103.2454215
4,700.0	5.00	349.65	4,688.5	263.7	-48.1	373,326.00	878,505.25	32.0216870	-103.2454262
4,800.0	5.00	349.65	4,788.1	272.2	-49.7	373,334.57	878,503.68	32.0217106	-103.2454310
4,900.0	5.00	349.65 349.65	4,887.7 4,987.3	280.8 289.4	-51.3 -52.8	373,343.14	878,502.11	32.0217342	-103.2454358
5,000.0	5.00 5.00	349.65	4,967.3 5,003.0	209.4 290.7	-52.6 -53.1	373,351.72 373,353.07	878,500.55 878,500.30	32.0217578 32.0217615	-103.2454406 -103.2454413
5,015.7	5.00	349.03	5,005.0	290.7	-55.1	373,333.07	070,300.30	32.0217013	-103.2434413
<b>Lamar</b> 5,100.0	5.00	349.65	5,086.9	297.9	-54.4	373,360.29	878,498.98	32.0217814	-103.2454453
5,200.0	5.00	349.65	5,186.6	306.5	-56.0	373,368.86	878.497.42	32.0218050	-103.2454501
5,288.8	5.00	349.65	5,275.0	314.1	-57.4	373,376.48	878,496.03	32.0218260	-103.2454543
Bell Ca		040.00	0,210.0	014.1	07.4	070,070.40	070,400.00	02.0210200	100.2404040
5,300.0	5.00	349.65	5.286.2	315.1	<b>-</b> 57.5	373,377.44	878,495.85	32.0218287	-103.2454549
5,400.0	5.00	349.65	5,385.8	323.7	-59.1	373,386.01	878,494.29	32.0218523	-103.2454597
5,500.0	5.00	349.65	5,485.4	332.2	-60.7	373,394.59	878,492.72	32.0218759	-103.2454644
5,600.0	5.00	349.65	5,585.0	340.8	-62.2	373,403.16	878,491.15	32.0218995	-103.2454692
5,700.0	5.00	349.65	5,684.7	349.4	-63.8	373,411.73	878,489.59	32.0219231	-103.2454740
5,800.0	5.00	349.65	5,784.3	358.0	-65.4	373,420.31	878,488.02	32.0219467	-103.2454787
5,900.0	5.00	349.65	5,883.9	366.5	-66.9	373,428.88	878,486.46	32.0219703	-103.2454835
6,000.0	5.00	349.65	5,983.5	375.1	-68.5	373,437.45	878,484.89	32.0219939	-103.2454883
6,100.0	5.00	349.65	6,083.1	383.7	-70.1	373,446.03	878,483.33	32.0220175	-103.2454931
6,200.0	5.00	349.65	6,182.7	392.3	-71.6	373,454.60	878,481.76	32.0220411	-103.2454978
6,300.0	5.00	349.65	6,282.4	400.8	-73.2	373,463.18	878,480.20	32.0220647	-103.2455026
6,400.0	5.00	349.65	6,382.0	409.4	-74.8	373,471.75	878,478.63	32.0220883	-103.2455074
6,500.0	5.00	349.65	6,481.6	418.0	-76.3	373,480.32	878,477.06	32.0221120	-103.2455122
6,600.0	5.00	349.65	6,581.2	426.6	-77.9	373,488.90	878,475.50	32.0221356	-103.2455169
6,694.1	5.00	349.65	6,675.0	434.6	-79.4	373,496.97	878,474.02	32.0221578	-103.2455214
6,700.0	Canyon 5.00	349.65	6,680.8	435.1	-79.5	373,497.47	878,473.93	32.0221592	-103.2455217
6,800.0	5.00	349.65	6,780.5	443.7	-79.5 -81.0	373,506.05	878,472.37	32.0221828	-103.2455265
6,900.0	5.00	349.65	6,880.1	452.3	-82.6	373,500.03	878,470.80	32.0221626	-103.2455312
7,000.0	5.00	349.65	6,979.7	460.8	-84.2	373,523.19	878,469.24	32.0222300	-103.2455360
7,100.0	5.00	349.65	7,079.3	469.4	-85.7	373,531.77	878,467.67	32.0222536	-103.2455408
7,200.0	5.00	349.65	7,178.9	478.0	-87.3	373,540.34	878,466.10	32.0222772	-103.2455456
7,300.0	5.00	349.65	7,278.6	486.6	-88.9	373,548.91	878,464.54	32.0223008	-103.2455503
7,400.0	5.00	349.65	7,378.2	495.1	-90.4	373,557.49	878,462.97	32.0223244	-103.2455551
7,473.1	5.00	349.65	7,451.0	501.4	-91.6	373,563.76	878,461.83	32.0223417	-103.2455586
Bone S	pring Lime								
7,500.0	5.00	349.65	7,477.8	503.7	-92.0	373,566.06	878,461.41	32.0223480	-103.2455599
7,600.0	5.00	349.65	7,577.4	512.3	-93.5	373,574.64	878,459.84	32.0223716	-103.2455647
7,700.0		349.65	7,677.0	520.9	-95.1	373,583.21	878,458.28	32.0223953	-103.2455694
7,800.0	5.00	349.65	7,776.7	529.4	-96.7	373,591.78	878,456.71	32.0224189	-103.2455742
7,900.0	5.00	349.65	7,876.3	538.0	-98.2	373,600.36	878,455.14	32.0224425	-103.2455790
8,000.0	5.00	349.65	7,975.9	546.6	-99.8	373,608.93	878,453.58	32.0224661	-103.2455837
8,100.0	5.00	349.65	8,075.5 9 191 <i>1</i>	555.2 564.3	-101.4	373,617.50	878,452.01	32.0224897	-103.2455885
8,206.3	5.00	349.65	8,181.4	564.3	-103.0	373,626.62	878,450.35	32.0225148	-103.2455936
8,300.0	rop -2.00 3.13	349.65	8,274.9	570.8	-104.2	373,633.15	878,449.16	32.0225328	-103.2455972
0,300.0	0.10	0-0.00	0,214.3	570.0	-104.2	070,000.10	070,740.10	02.0220020	-100.2400872



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: Ameredev Operating
Project: Lea County, NM (N83-NME)

Site: AMEN CORNER ST COM PROJECT
Well: AMEN CORNER ST COM 26 36 27 #184H

Wellbore: OWB Design: PWP **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Planned Surv	<i>r</i> ey								
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Map Northing	Map Easting		
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude
8,400.0	1.13	349.65	8,374.8	574.5	-104.9	373,636.80	878,448.49	32.0225428	-103.2455993
8,456.3		0.00	8,431.1	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
	71.4 hold at								
8,500.0		0.00	8,474.8	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
8,600.0 8,700.0		0.00 0.00	8,574.8 8,674.8	575.0 575.0	-105.0 -105.0	373,637.34 373,637.34	878,448.39 878,448.39	32.0225443 32.0225443	-103.2455996 -103.2455996
8,800.0		0.00	8,774.8	575.0 575.0	-105.0 -105.0	373,637.34	878,448.39	32.0225443	-103.2455996
8,900.0		0.00	8,874.8	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
9,000.0		0.00	8,974.8	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
9,100.0		0.00	9,074.8	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
9,200.0		0.00	9,174.8	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
9,300.0	0.00	0.00	9,274.8	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
9,322.2	0.00	0.00	9,297.0	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
First B	one Spring								
9,327.7		0.00	9,302.5	575.0	-105.0	373,637.34	878,448.39	32.0225443	-103.2455996
	tart DLS 12.0								
9,350.0		179.46	9,324.8	574.5	-105.0	373,636.82	878,448.40	32.0225429	-103.2455996
9,375.0		179.46	9,349.7	572.7	-105.0	373,635.00	878,448.41	32.0225379	-103.2455996
9,400.0		179.46	9,374.5	569.5 565.1	-104.9 -104.9	373,631.88	878,448.44	32.0225293 32.0225172	-103.2455996
9,425.0 9,450.0		179.46 179.46	9,399.1 9,423.5	559.4	-104.9 -104.9	373,627.47 373,621.77	878,448.48 878,448.54	32.0225172	-103.2455996 -103.2455996
9,475.0		179.46	9,423.5	552.5	-104.9	373,614.80	878,448.60	32.0224824	-103.2455996
9,500.0		179.46	9,471.1	544.2	-104.7	373,606.59	878,448.68	32.0224598	-103.2455996
9,525.0		179.46	9,494.2	534.8	-104.6	373,597.16	878,448.77	32.0224339	-103.2455996
9,550.0		179.46	9,516.9	524.2	-104.5	373,586.53	878,448.87	32.0224046	-103.2455997
9,575.0		179.46	9,538.9	512.4	-104.4	373,574.72	878,448.98	32.0223722	-103.2455997
9,600.0	32.68	179.46	9,560.3	499.4	-104.3	373,561.78	878,449.10	32.0223366	-103.2455997
9,625.0		179.46	9,581.0	485.4	-104.2	373,547.74	878,449.23	32.0222980	-103.2455998
9,650.0		179.46	9,600.9	470.3	-104.0	373,532.64	878,449.37	32.0222565	-103.2455998
9,675.0		179.46	9,620.0	454.2	-103.9	373,516.51	878,449.52	32.0222122	-103.2455998
9,700.0		179.46	9,638.2	437.1	-103.7	373,499.41	878,449.68	32.0221652	-103.2455999
9,725.0		179.46	9,655.5	419.0 400.1	-103.5	373,481.38	878,449.85	32.0221156	-103.2455999
9,750.0 9,775.0		179.46 179.46	9,671.9 9,687.2	380.4	-103.4 -103.2	373,462.46 373,442.72	878,450.03 878,450.21	32.0220636 32.0220093	-103.2456000 -103.2456000
9,800.0		179.46	9,701.5	359.9	-103.2	373,422.20	878,450.41	32.0219529	-103.2456000
9,825.0		179.46	9,714.6	338.6	-102.8	373,400.96	878,450.61	32.0218946	-103.2456001
9,850.0		179.46	9,726.7	316.7	-102.6	373,379.06	878,450.81	32.0218344	-103.2456001
9,875.0		179.46	9,737.6	294.2	-102.4	373,356.56	878,451.02	32.0217725	-103.2456002
9,900.0	68.68	179.46	9,747.3	271.2	-102.2	373,333.52	878,451.24	32.0217092	-103.2456002
9,925.0	71.68	179.46	9,755.8	247.7	-101.9	373,310.01	878,451.46	32.0216445	-103.2456003
9,950.0		179.46	9,763.0	223.7	-101.7	373,286.08	878,451.68	32.0215788	-103.2456003
9,975.0		179.46	9,769.0	199.5	-101.5	373,261.81	878,451.91	32.0215121	-103.2456004
10,000.0		179.46	9,773.7	174.9	-101.3	373,237.26	878,452.14	32.0214446	-103.2456005
10,025.0		179.46	9,777.1	150.1	-101.0	373,212.49	878,452.37	32.0213765	-103.2456005
10,050.0		179.46	9,779.2	125.2	-100.8	373,187.59	878,452.60	32.0213080	-103.2456006
10,075.0 10,077.7		179.46 179.46	9,780.0 9,780.0	100.3 97.6	-100.6 -100.5	373,162.60 373,159.90	878,452.84 878,452.86	32.0212394 32.0212319	-103.2456006 -103.2456006
	90.00 rt 7557.6 ho		-	91.0	-100.5	373,138.80	070,432.00	32.02 123 13	-103.2430000
10,100.0		179.46	9,780.0	75.3	-100.3	373,137.60	878,453.07	32.0211707	-103.2456007
10,200.0		179.46	9,780.0	-24.7	-99.4	373,037.61	878,454.01	32.0208958	-103.2456009
10,300.0		179.46	9,780.0	-124.7	-98.4	372,937.61	878,454.95	32.0206209	-103.2456011
10,400.0		179.46	9,780.0	-224.7	-97.5	372,837.62	878,455.88	32.0203461	-103.2456014
10,500.0	90.00	179.46	9,780.0	-324.7	-96.6	372,737.62	878,456.82	32.0200712	-103.2456016



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: Ameredev Operating
Project: Lea County, NM (N83-NME)

Site: AMEN CORNER ST COM PROJECT

Well: AMEN CORNER ST COM 26 36 27 #184H

Wellbore: OWB Design: PWP **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Planned Surv	Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude		
10,600.0	90.00	179.46	9,780.0	-424.7	-95.6	372,637.63	878,457.76	32.0197963	-103.2456018		
10,700.0	90.00	179.46	9,780.0	-524.7	-94.7	372,537.63	878,458.69	32.0195215	-103.2456020		
10,800.0	90.00	179.46	9,780.0	-624.7	-93.8	372,437.63	878,459.63	32.0192466	-103.2456023		
10,900.0	90.00	179.46	9,780.0	-724.7	-92.8	372,337.64	878,460.57	32.0189717	-103.2456025		
11,000.0	90.00	179.46	9,780.0	-824.7	-91.9	372,237.64	878,461.50	32.0186969	-103.2456027		
11,100.0	90.00	179.46	9,780.0	-924.7	-90.9	372,137.65	878,462.44	32.0184220	-103.2456029		
11,200.0	90.00	179.46	9,780.0	-1,024.7	-90.0	372,037.65	878,463.38	32.0181472	-103.2456032		
11,300.0	90.00	179.46	9,780.0	-1,124.7	-89.1	371,937.66	878,464.31	32.0178723	-103.2456034		
11,400.0	90.00	179.46	9,780.0	-1,224.7	-88.1	371,837.66	878,465.25	32.0175974	-103.2456036		
11,500.0	90.00	179.46	9,780.0	-1,324.7	-87.2	371,737.67	878,466.19	32.0173226	-103.2456038		
11,600.0	90.00	179.46	9,780.0	-1,424.7	-86.3	371,637.67	878,467.13	32.0170477	-103.2456041		
11,700.0	90.00	179.46	9,780.0	-1,524.7	-85.3	371,537.67	878,468.06	32.0167728	-103.2456043		
11,800.0	90.00	179.46	9,780.0	-1,624.7	-84.4	371,437.68	878,469.00	32.0164980	-103.2456045		
11,900.0	90.00	179.46	9,780.0	-1,724.7	-83.5	371,337.68	878,469.94	32.0162231	-103.2456047		
12,000.0	90.00	179.46	9,780.0	-1,824.7	-82.5	371,237.69	878,470.87	32.0159482	-103.2456050		
12,100.0	90.00	179.46	9,780.0	-1,924.7	-81.6	371,137.69	878,471.81	32.0156734	-103.2456052		
12,200.0	90.00	179.46	9,780.0	-2,024.6	-80.6	371,037.70	878,472.75	32.0153985	-103.2456054		
12,300.0	90.00	179.46	9,780.0	-2,124.6	-79.7	370,937.70	878,473.68	32.0151236	-103.2456056		
12,400.0	90.00	179.46	9,780.0	-2,224.6	-78.8	370,837.71	878,474.62	32.0148488	-103.2456059		
12,500.0	90.00	179.46	9,780.0	-2,324.6	-77.8	370,737.71	878,475.56	32.0145739	-103.2456061		
12,600.0	90.00	179.46	9,780.0	-2,424.6	-76.9	370,637.71	878,476.49	32.0142991	-103.2456063		
12,700.0	90.00	179.46	9,780.0	-2,524.6	-76.0	370,537.72	878,477.43	32.0140242	-103.2456065		
12,800.0	90.00	179.46	9,780.0	-2,624.6	-75.0	370,437.72	878,478.37	32.0137493	-103.2456068		
12,900.0	90.00	179.46	9,780.0	-2,724.6	-74.1	370,337.73	878,479.30	32.0134745	-103.2456070		
13,000.0	90.00	179.46	9,780.0	-2,824.6	-73.1	370,237.73	878,480.24	32.0131996	-103.2456072		
13,100.0	90.00	179.46	9,780.0	-2,924.6	-72.2	370,137.74	878,481.18	32.0129247	-103.2456074		
13,200.0	90.00	179.46	9,780.0	-3,024.6	-71.3	370,037.74	878,482.11	32.0126499	-103.2456077		
13,300.0	90.00	179.46	9,780.0	-3,124.6	-70.3	369,937.74	878,483.05	32.0123750	-103.2456079		
13,400.0	90.00	179.46	9,780.0	-3,224.6	-69.4	369,837.75	878,483.99	32.0121001	-103.2456081		
13,500.0	90.00	179.46	9,780.0	-3,324.6	-68.5	369,737.75	878,484.92	32.0118253	-103.2456083		
13,600.0	90.00	179.46	9,780.0	-3,424.6	-67.5	369,637.76	878,485.86	32.0115504	-103.2456086		
13,700.0	90.00	179.46	9,780.0	-3,524.6	-66.6	369,537.76	878,486.80	32.0112756	-103.2456088		
13,800.0	90.00	179.46	9,780.0	-3,624.6	-65.7	369,437.77	878,487.74	32.0110007	-103.2456090		
13,900.0	90.00	179.46	9,780.0	-3,724.6	-64.7	369,337.77	878,488.67	32.0107258	-103.2456092		
14,000.0	90.00	179.46	9,780.0	-3,824.6	-63.8	369,237.78	878,489.61	32.0104510	-103.2456095		
14,100.0	90.00	179.46	9,780.0	-3,924.6	-62.8	369,137.78	878,490.55	32.0101761	-103.2456097		
14,200.0	90.00	179.46	9,780.0	-4,024.6	-61.9	369,037.78	878,491.48	32.0099012	-103.2456099		
14,300.0	90.00	179.46	9,780.0	-4,124.6	-61.0	368,937.79	878,492.42 878,493.36	32.0096264	-103.2456101 -103.2456104		
14,400.0	90.00	179.46	9,780.0	-4,224.6	-60.0	368,837.79	878,494.29	32.0093515			
14,500.0	90.00	179.46	9,780.0	-4,324.5	-59.1	368,737.80	,	32.0090766	-103.2456106		
14,600.0 14,700.0	90.00 90.00	179.46 179.46	9,780.0 9,780.0	-4,424.5 4,524.5	-58.2 -57.2	368,637.80 368,537,81	878,495.23	32.0088018	-103.2456108		
				-4,524.5		368,537.81 368,437.81	878,496.17	32.0085269	-103.2456110		
14,800.0 14,900.0	90.00	179.46	9,780.0	-4,624.5	-56.3	368,337.81	878,497.10	32.0082520	-103.2456112		
	90.00	179.46	9,780.0	-4,724.5	-55.4	,	878,498.04	32.0079772	-103.2456115		
15,000.0	90.00 90.00	179.46 179.46	9,780.0 9,780.0	-4,824.5 4,024.5	-54.4 -53.5	368,237.82 368,137.82	878,498.98 878,499.91	32.0077023 32.0074275	-103.2456117 -103.2456119		
15,100.0	90.00	179.46	9,780.0	-4,924.5 -5.024.5		368,137.82	878,499.91 878,500.85	32.0074275 32.0071526			
15,200.0 15,300.0	90.00	179.46	9,780.0	-5,024.5 -5,124.5	-52.5 -51.6	368,037.83	878,500.85 878,501.79	32.0071526	-103.2456121 -103.2456124		
15,300.0	90.00	179.46	9,780.0	-5,124.5 -5,224.5	-51.6 -50.7	367,837.84	878,502.72	32.0066029			
,	90.00	179.46			-50.7 -49.7	367,737.84 367,737.84	878,502.72 878,503.66		-103.2456126		
15,500.0			9,780.0	-5,324.5 5,424.5		•		32.0063280	-103.2456128		
15,600.0 15,700.0	90.00 90.00	179.46 179.46	9,780.0 9,780.0	-5,424.5 -5,524.5	-48.8 -47.9	367,637.85 367,537.85	878,504.60 878,505.54	32.0060531 32.0057783	-103.2456130 -103.2456133		
15,700.0	90.00	179.46	9,780.0		-47.9 -46.9	367,537.85 367,437.85	878,505.54 878,506.47	32.0057783 32.0055034			
15,800.0	90.00	179.46	9,780.0 9,780.0	-5,624.5 -5,724.5	-46.9 -46.0	367,437.85 367,337.86	878,506.47 878,507.41	32.0055034 32.0052285	-103.2456135 -103.2456137		
13,300.0	90.00	173.40	3,100.0	-5,124.5	-40.0	301,331.00	070,307.41	JZ.00JZZ0J	-100.2430137		



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: Ameredev Operating
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Site: AMEN CORNER ST COM PROJECT
Well: AMEN CORNER ST COM 26 36 27 #184H

Wellbore: OWB Design: PWP **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Planned Surv	еу								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
16,000.0	90.00	179.46	9,780.0	-5,824.5	-45.0	367,237.86	878,508.35	32.0049537	-103.2456139
16,100.0	90.00	179.46	9,780.0	-5,924.5	-44.1	367,137.87	878,509.28	32.0046788	-103.2456142
16,200.0	90.00	179.46	9,780.0	-6,024.5	-43.2	367,037.87	878,510.22	32.0044039	-103.2456144
16,300.0	90.00	179.46	9,780.0	-6,124.5	-42.2	366,937.88	878,511.16	32.0041291	-103.2456146
16,400.0	90.00	179.46	9,780.0	-6,224.5	-41.3	366,837.88	878,512.09	32.0038542	-103.2456148
16,500.0	90.00	179.46	9,780.0	-6,324.5	-40.4	366,737.88	878,513.03	32.0035794	-103.2456151
16,600.0	90.00	179.46	9,780.0	-6,424.5	-39.4	366,637.89	878,513.97	32.0033045	-103.2456153
16,700.0	90.00	179.46	9,780.0	-6,524.5	-38.5	366,537.89	878,514.90	32.0030296	-103.2456155
16,800.0	90.00	179.46	9,780.0	-6,624.4	-37.6	366,437.90	878,515.84	32.0027548	-103.2456157
16,900.0	90.00	179.46	9,780.0	-6,724.4	-36.6	366,337.90	878,516.78	32.0024799	-103.2456160
17,000.0	90.00	179.46	9,780.0	-6,824.4	-35.7	366,237.91	878,517.71	32.0022050	-103.2456162
17,100.0	90.00	179.46	9,780.0	-6,924.4	-34.7	366,137.91	878,518.65	32.0019302	-103.2456164
17,200.0	90.00	179.46	9,780.0	-7,024.4	-33.8	366,037.92	878,519.59	32.0016553	-103.2456166
17,300.0	90.00	179.46	9,780.0	-7,124.4	-32.9	365,937.92	878,520.52	32.0013804	-103.2456168
17,400.0	90.00	179.46	9,780.0	-7,224.4	-31.9	365,837.92	878,521.46	32.0011056	-103.2456171
17,500.0	90.00	179.46	9,780.0	-7,324.4	-31.0	365,737.93	878,522.40	32.0008307	-103.2456173
17,600.0	90.00	179.46	9,780.0	-7,424.4	-30.1	365,637.93	878,523.33	32.0005558	-103.2456175
17,635.3	90.00	179.46	9,780.0	-7,459.7	-29.7	365,602.67	878,523.67	32.0004589	-103.2456176
TD at 1	7635.3								

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
LTP (ACSC #184H) - plan hits target of Point	0.00 center	0.00	9,780.0	-7,409.6	-30.2	365,652.70	878,523.19	32.0005964	-103.2456175
BHL (ACSC #184H) - plan hits target c - Point	0.00 center	0.00	9,780.0	-7,459.7	-29.7	365,602.67	878,523.67	32.0004589	-103.2456176
FTP (ACSC #184H) - plan misses targ - Point	0.00 jet center by		9,780.0 0076.0usft	99.2 MD (9780.0	-100.9 TVD, 99.2 N	373,161.56 , -100.5 E)	878,452.46	32.0212365	-103.2456019



Database: AUS-COMPASS - EDM\_15 - 32bit

Company: Ameredev Operating
Project: Lea County, NM (N83-NME)

Site: AMEN CORNER ST COM PROJECT
Well: AMEN CORNER ST COM 26 36 27 #184H

Wellbore: OWB Design: PWP **Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AMEN CORNER ST COM 26 36 27

#184H

KB=25' @ 2931.0usft KB=25' @ 2931.0usft

Grid

Formations							
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	2,018.3	2,017.0	Rustler				
	2,353.6	2,351.0	Salado				
	2,935.8	2,931.0	Dewey Lake				
	3,177.8	3,172.0	Tansill				
	3,752.9	3,745.0	Capitan				
	5,015.7	5,003.0	Lamar				
	5,288.8	5,275.0	Bell Canyon				
	6,694.1	6,675.0	Brushy Canyon				
	7,473.1	7,451.0	Bone Spring Lime				
	9,322.2	9,297.0	First Bone Spring				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coor +N/-S (usft)	rdinates +E/-W (usft)	Comment	
1,500.0	1,500.0	0.0	0.0	Start Build 2.00	
1,750.0	1,749.7	10.7	-2.0	Start 6456.3 hold at 1750.0 MD	
8,206.3	8,181.4	564.3	-103.0	Start Drop -2.00	
8,456.3	8,431.1	575.0	-105.0	Start 871.4 hold at 8456.3 MD	
9,327.7	9,302.5	575.0	-105.0	KOP-Start DLS 12.00 TFO 179.46	
10,077.7	9,780.0	97.6	-100.5	LP-Start 7557.6 hold at 10077.7 MD	
17,635.3	9,780.0	-7,459.7	-29.7	TD at 17635.3	



# H<sub>2</sub>S Drilling Operation Plan

# 1. All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:

- a. Characteristics of H<sub>2</sub>S
- b. Physical effects and hazards
- c. Principal and operation of H<sub>2</sub>s detectors, warning system and briefing areas
- d. Evacuation procedure, routes and first aid
- e. Proper use of safety equipment and life support systems
- **f.** Essential personnel meeting Medical Evaluation criteria will receive additional training on the proper use of 30 minute pressure demand air packs.

#### 2. Briefing Area:

- a. Two perpendicular areas will be designated by signs and readily accessible.
- **b.** Upon location entry there will be a designated area to establish all safety compliance criteria (1.) has been met.

#### 3. H<sub>2</sub>S Detection and Alarm Systems:

- a.  $H_2S$  sensors/detectors shall be located on the drilling rig floor, in the base of the sub structure/cellar area, and on the mud pits in the shale shaker area. Additional  $H_2S$  detectors may be placed as deemed necessary. All detectors will be set to initiate visual alarm at 10 ppm and visual with audible at 14 ppm and all equipment will be calibrated every 30 days or as needed.
- **b.** An audio alarm will be installed on the derrick floor and in the top doghouse.

#### 4. Protective Equipment for Essential Personnel:

#### a. Breathing Apparatus:

- i. Rescue Packs (SCBA) 1 Unit shall be placed at each briefing area.
- ii. Two (SCBA) Units will be stored in safety trailer on location.
- iii. Work/Escape packs 1 Unit will be available on rig floor in doghouse for emergency evacuation for driller.

# b. Auxiliary Rescue Equipment:

- i. Stretcher
- ii. 2 OSHA full body harnesses
- iii. 100 ft. 5/8" OSHA approved rope
- iv. 1 20# class ABC fire extinguisher

#### 5. Windsock and/or Wind Streamers:

- a. Windsock at mud pit area should be high enough to be visible.
- **b.** Windsock on the rig floor should be high enough to be visible.

#### 6. Communication:

- a. While working under mask scripting boards will be used for communication where applicable.
- **b.** Hand signals will be used when script boards are not applicable.



# H<sub>2</sub>S Drilling Operation Plan

- c. Two way radios will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at Drilling Foreman's Office.
- 7. <u>Drill Stem Testing:</u> No Planned DST at this time.

# 8. Mud program:

a. If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

# 9. Metallurgy:

- a. All drill strings, casing, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.
- **b.** Drilling Contractor supervisor will be required to be familiar with the effect H<sub>2</sub>S has on tubular goods and other mechanical equipment provided through contractor.



# H<sub>2</sub>S Contingency Plan

#### **Emergency Procedures**

In the event of a release of 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 H<sub>2</sub>S 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 the aid in operation. See list of phone numbers attached.
- Have received training in the:
  - o Detection of H₂S and
  - o Measures for protection against the gas,
  - o 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 Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air=1	2 ppm	N/A	1000 ppm

#### **Contacting Authorities**

Ameredev Operating LLC personnel must liaise 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 including direction to site. The following call list of essential and potential responders has been prepared for use during a release. Ameredev Operating LLC's response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER)



# H<sub>2</sub>S Contingency Plan

Ameredev Operating	Ameredev Operating LLC – Emergency Phone 737-300-4799									
Key Personnel:	Key Personnel:									
Name	Name Title Office Mobile									
Floyd Hammond	Chief Operating officer	737-300-4724	512-783-6810							
Shane McNeely	Shane McNeely Operations Engineer 737-300-4729 432-413-8593									
Dayeed Khan	·									

<u>Artesia</u>	
Ambulance	911
State Police	575-748-9718
City Police	575-746-5000
Sheriff's Office	575-887-7551
Fire Department	575-746-5051
Artesia General Hospital	575-748-3333
New Mexico Oil Conservation Division	575-626-0830
<u>Carlsbad</u>	
Ambulance	911
State Police	575-885-3138
City Police	575-885-2111
Sheriff's Office	575-887-7551
Fire Department	575-885-3125
Carlsbad Medical Center	575-887-4100
Hobbs Hospital	575-492-5000
BLM Hobbs Field Office	575-689-5981
BLM Carlsbad Field Office	575-361-2822
New Mexico Oil Conservation Division	575-626-0830
Santa Fe	
Department of Homeland Security and Emergency Management (Santa Fe)	505-476-9600
New Mexico State Emergency Operations Center	505-476-9635
<u>National</u>	
National Emergency Response Center (Washington, D.C.)	800-424-8802
<u>Medical</u>	
Aerocare - R3, Box 49F; Lubbock, TX	800-627-2376
Med Flight Air Amb - 2301 Yale Blvd S.E., #D3; Albuquerque, NM	505-842-4433
Lifeguard Air Emergency Services- 2505 Clark Carr Loop S.E.; Albuquerque, NM	505-243-2343

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

Operator:	_Ameredev II,	LLC	OGRID: _	372224	4Date	: <u>0</u> 6/21/2023 _
<b>Type:</b> ⊠ Original □ A					D(6)(b) NMAC □ C	Other.
Well(s): Provide the frecompleted from a single	ollowing inform	ation for each	new or recomple	eted well or set o	of wells proposed to	be drilled or propos
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Amen Corner 26 36 27 State Com 181H	30025-		230' FSL & 1120' FWL	680	3,412	2,610
Amen Corner 26 36 27 State Com 184H	30025-		200' FNL & 230' FEL	680	3,412	2,610
Amen Corner 26 36 27 State Com 261H	30025-		230' FSL & 290' FWL	680	3,412	2,610
Amen Corner 26 36 27 State Com 264H	30025-		230' FSL & 955' FEL	680	3,412	2,610
. Central Delivery Poir	nt Name:				See 19.15.27.90	(D)(1) NMAC]

**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.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Amen Corner 26 36 27 State Com 181H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 184H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 261H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025
Amen Corner 26 36 27 State Com 264H	30025-	11/01/2024	12/15/2024	01/15/2025	02/01/2025	02/04/2025

VI. Separation Equipment: 
☐ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ⊠ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: 

Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

# 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

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.

<b>XII.</b> Line Capacity. The natural gas gathering system $\square$ will $\square$ will not have capacity to gather 100%	of the anticipated natural gas
production volume from the well prior to the date of first production.	

XIII.	<b>Line Pressure.</b> Operator $\square$ does $\square$ does not anticipate that its existing well(s) confidence of the confidence of th	nected to the same segment, or portion,	of the
natura	al gas gathering system(s) described above will continue to meet anticipated increase	s in line pressure caused by the new wo	ell(s).

Attach Operator's plan to manage production in response to the increased line press
---

XIV.	Confidentiality: $\square$	Operator asserts	confidentiality	pursuant to	Section 7	71-2-8 NMSA	1978 for the	information	provided in
Section	n 2 as provided in Pa	ragraph (2) of Su	bsection D of 19	0.15.27.9 NM	IAC, and	l attaches a full	description of	f the specific	information
for wh	ich confidentiality is	asserted and the	basis for such as	sertion.					

(i)

# Section 3 - Certifications Effective May 25, 2021

Operator certifies that, a	ifter reasonable inquiry and based on the available information at the time of submittal:
one hundred percent of	e to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering
hundred percent of the a into account the current	able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. **box, Operator will select one of the following:
Well Shut-In. □ Opera D of 19.15.27.9 NMAC	tor will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection C; or
	Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential
	ses for the natural gas until a natural gas gathering system is available, including:
(a)	power generation on lease;
( <b>b</b> )	power generation for grid;
(c)	compression on lease;
(d)	liquids removal on lease;
(e)	reinjection for underground storage;
(f)	reinjection for temporary storage;
(g)	reinjection for enhanced oil recovery;
(h)	fuel cell production; and

# Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

other alternative beneficial uses approved by the division.

- (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: Casca Gu
Printed Name: Cesca Yu
Title: Engineer
E-mail Address: cyu@ameredev.com
Date: 06/21/2023
Phone: 512-775-1417
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

# Natural Gas Management Plan

# VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

- Separation equipment is sized to allow for retention time and velocity to adequately separate oil, gas, and water at anticipated peak rates.
- All central tank battery equipment is designed to efficiently capture the remaining gas from the liquid phase.
- Valves and meters are designed to service without flow interruption or venting of gas.

# VII. <u>Operational Practices: Attach a complete description of the actions Operator will</u> take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

# 19.15.27.8 (A)

Ameredev's field operations are designed with the goal of minimizing flaring and preventing venting of natural gas. If capturing the gas is not possible then the gas is combusted/flared using properly sized flares or combustors in accordance with state air permit rules.

# 19.15.27.8 (B) Venting and Flaring during drilling operations

- A properly-sized flare stack will be located at a minimum 100' from the nearest surface hole location on the pad.
- All natural gas produced during drilling operations will be flared. Venting will only occur if there is an equipment malfunction and/or to avoid risk of an immediate and substantial adverse impact on safety, public health, or the environment.

# 19.15.27.8 (C) Venting and Flaring during completions or recompletions operations.

- During all phases of flowback, wells will flow through a sand separator, or other appropriate flowback separation equipment, and the well stream will be directed to a central tank battery (CTB) through properly sized flowlines
- The CTB will have properly sized separation equipment for maximum anticipated flowrates
- Multiple stages of separation will be used to separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks equipped with a closed loop system that will recover any residual gas from the tanks and route such gas to a sales outlet.

# 19.15.27.8 (D) Venting and Flaring during production operations.

• During production, the well stream will be routed to the CTB where multiple stages of separation will separate gas from liquids. All gas will be routed to a sales outlet. Fluids will be routed to tanks with a closed

loop system that will recover any residual gas from the tanks and route such gas to a sales outlet, minimizing tank emissions.

- Flares are equipped with auto-ignition systems and continuous pilot operations.
- Automatic gauging equipment is installed on all tanks.

# 19.15.27.8 (E) Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- Automatic gauging equipment is installed on all tanks to minimize venting
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- •Flares are equipped with continuous pilots and auto-ignitors along with remote monitoring of the pilot status
- Weekly AVOs and monthly LDAR inspections will be performed on all wells and facilities that produce more than 60 Mcfd.
- Gas/H2S detectors will be installed throughout the facilities and wellheads to detect leaks and enable timely repairs.

# 19.15.27.8 (F) Measurement or estimation of vented and flared natural gas

- All high pressure flared gas is measured by equipment conforming to API 14.10.
- No meter bypasses are installed.
- When metering is not practical due to low pressure/low rate, the vented or flared volume will be estimated through flare flow curves with the assistance of air emissions consultants, as necessary.

# VIII. <u>Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.</u>

- Ameredev will use best management practices to vent as minimally as possible during well intervention operations and downhole well maintenance
- All natural gas is routed into the gas gathering system and directed to one of Ameredev's multiple gas sales outlets.
- All venting events will be recorded and all start-up, shutdown, maintenance logs will be kept for control equipment
- All control equipment will be maintained to provide highest run-time possible
- All procedures are drafted to keep venting and flaring to the absolute minimum