

**District I**

1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

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

**District III**

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

**District IV**

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

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

Form C-101  
August 1, 2011

Permit 343924

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

1. Operator Name and Address AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746		2. OGRID Number 372224
		3. API Number 30-025-51683
4. Property Code 320645	5. Property Name MAGNOLIA 26 36 22 STATE COM	6. Well No. 181H

**7. Surface Location**

UL - Lot M	Section 22	Township 26S	Range 36E	Lot Idn M	Feet From 230	N/S Line S	Feet From 1060	E/W Line W	County Lea
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**8. Proposed Bottom Hole Location**

UL - Lot D	Section 15	Township 26S	Range 36E	Lot Idn D	Feet From 50	N/S Line N	Feet From 990	E/W Line W	County Lea
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**9. Pool Information**

WC-025 G-08 S263620C;LWR BONE SPRIN	98150
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**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 2910
16. Multiple N	17. Proposed Depth 20705	18. Formation 2nd Bone Spring Carbonate	19. Contractor	20. Spud Date 10/1/2024
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**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1782	1400	0
Int1	12.25	10.75	45.5	5116	1358	0
Prod	8.75	5.5	17	20705	6399	0

**Casing/Cement Program: Additional Comments**

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**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	TBD

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.  Signature:	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: Electronically filed by Christie Hanna	Approved By: Paul F Kautz	
Title: Regulatory	Title: Geologist	
Email Address: channa@ameredev.com	Approved Date: 7/3/2023	Expiration Date: 7/3/2025
Date: 6/28/2023	Phone: 737-300-4723	Conditions of Approval Attached

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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 <b>30-025- 51683</b>		<sup>2</sup> Pool Code <b>98150</b>		<sup>3</sup> Pool Name <b>WC-025 G-08 S263620C; LWR BONE SPRING</b>	
<sup>4</sup> Property Code <b>320645</b>		<sup>5</sup> Property Name <b>MAGNOLIA 26 36 22 STATE COM</b>			<sup>6</sup> Well Number <b>181H</b>
<sup>7</sup> OGRID No. <b>372224</b>		<sup>8</sup> Operator Name <b>AMEREDEV OPERATING, LLC.</b>			<sup>9</sup> Elevation <b>2910'</b>

<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
<b>M</b>	<b>22</b>	<b>26-S</b>	<b>36-E</b>	<b>-</b>	<b>230'</b>	<b>SOUTH</b>	<b>1060'</b>	<b>WEST</b>	<b>LEA</b>

<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
<b>D</b>	<b>15</b>	<b>26-S</b>	<b>36-E</b>	<b>-</b>	<b>50'</b>	<b>NORTH</b>	<b>990'</b>	<b>WEST</b>	<b>LEA</b>

<sup>12</sup> Dedicated Acres <b>320</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code <b>C</b>	<sup>15</sup> Order No.
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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.

	<p>NEW MEXICO EAST NAD 1983</p> <p><u>SURFACE LOCATION (SHL)</u> 230' FSL - SEC. 22 1060' FWL - SEC. 22 X=874569 Y=373460 LAT.: N 32.0221627 LONG.: W 103.2581223</p> <p><u>KICK OFF POINT (KOP)</u> <u>FIRST TAKE POINT (FTP)</u> 100' FSL - SEC. 22 990' FWL - SEC. 22 X=874500 Y=373329 LAT.: N 32.0218056 LONG.: W 103.2583476</p> <p><u>LAST TAKE POINT (LTP)</u> 100' FNL - SEC. 15 990' FWL - SEC. 15 X=874394 Y=383685 LAT.: N 32.0502728 LONG.: W 103.2583565</p> <p><u>BOTTOM HOLE LOCATION (BHL)</u> 50' FNL - SEC. 15 990' FWL - SEC. 15 X=874394 Y=383735 LAT.: N 32.0504102 LONG.: W 103.2583566</p>	<p><sup>17</sup>OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Floyd Hammond</i> <b>6/28/2023</b> Signature Date Floyd Hammond Printed Name fhammond@amerev.com E-mail Address</p> <p><sup>18</sup>SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true to the best of my belief.</p> <p><b>12/07/2017</b> Date of Survey Signature and Seal of Professional Surveyor</p> <p> Certificate Number</p>
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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form APD Conditions

Permit 343924

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: AMEREDEV OPERATING, LLC [372224] 2901 Via Fortuna Austin, TX 78746	API Number: 30-025-51683
	Well: MAGNOLIA 26 36 22 STATE COM #181H

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	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

Magnolia 26 36 22 State Com 181H					
Second Bone Spring   2 Mile Lateral					
<div>County, St: Lea, NM</div> <div>SHL: Section 22 , T26S , R36E</div> <div>230' FSL, 1060' FWL</div> <div>BHL: Section 15 , T26S , R36E</div> <div>50' FNL, 990' FWL</div> <div>Wellhead: A - 13-5/8" 5M x 13-5/8" SOW</div> <div>B - 13-5/8" 5M x 13-5/8" 5M</div> <div>C - 13-5/8" 5M x 13-5/8" 5M</div> <div>Tubing Spool: 7-1/16" 10M x 13-3/8" 5M</div> <div>Xmas Tree: 2-9/16" 10M</div> <div>Tubing: 3-1/2" L-80 6.5# 8rd EUE</div>			<div>Co. Well ID: XXXXXX</div> <div>AFE #: 2023-XXX</div> <div>API #: 30-025-XXXXX</div> <div>Permit: NMOC</div> <div>GL: 2,910'</div> <div>Field: Delaware</div> <div>Rig: H&amp;P 642</div> <div>KB: 27.0'</div> <div>Elevation: 2,937'</div> <div>E-Mail: drillingengineering@ameradev.com</div> <div>Offsets:</div>		
General Notes	Hole Size	Casing & Cement	Geology	TVD	Mud Weight
Notify BLM prior to spud, running casing, cementing, and BOP testing Sundry to be sent before spud	17-1/2"	<div>Lead (100% OH excess)</div> <div>1060 sx 12.8 ppg Class C</div> <div>Top of Lead @ 0'</div> <div>Tail (100% OH excess)</div> <div>340 sx 14.8 ppg Class C</div> <div>Top of Tail @ 1482'</div> <div>13.375   54.5   J-55   BTC</div> <div>0 - 1782</div>	Conductor	122'	8.4 - 8.6 ppg FW
1500 psi Surface Casing Test Done by Spudder Rig			Rustler	1,757'	
1782' MD	12-1/4"	<div>Stg 1 Lead (50% OH excess)</div> <div>446 sx 11 ppg Class C - Low Portland</div> <div>Top of Lead @ 0'</div> <div>Stg 1 Tail (50% OH excess)</div> <div>177 sx 14.8 ppg Class C</div> <div>Top of Tail @ 4366'</div> <div>Stg 2 Lead (50% OH excess)</div> <div>629 sx 12.8 ppg Class C - Low Portland</div> <div>Top of Lead @ 0'</div> <div>Stg 2 Tail (25% OH excess)</div> <div>106 sx 14.8 ppg Class C</div> <div>Top of Tail @ 3182'</div> <div>10.75   45.5   HC L-80   SC BTC</div> <div>0 - 5116</div>	Salado	2,226'	10 ppg Brine
Stage 1 Designed to Circulate Cement to Surface			Tansill	3,243'	
DV Tool (Int) 3782			Capitan	3,882'	
Casing Test to 1500 psi					
5116' MD	8-3/4" Vertical		Lamar	4,991'	
5116' TVD			Bell Canyon	5,183'	
			Brushy Canyon	6,854'	9.0 - 9.5 ppg Cut Brine
FIT to 10.5 ppg EMW			Bone Spring Lime	7,808'	
			First Bone Spring	9,476'	
	8-3/4" Curve	<div>Lead (50% OH excess)</div> <div>2258 sx 10.6 ppg ProLite</div> <div>Top of Lead @ 0'</div> <div>Tail (20% OH excess)</div> <div>4141 sx 14.5 ppg Class H - Premium PozMix</div> <div>Top of Tail @ 10705'</div> <div>5.5   17   USS RYS P-110   Eagle SFH</div> <div>0 - 20705</div> <div>5-1/2" marker jts @ ~9400', 15710' MD</div>	Second Bone Spring	9,989'	9.0 - 9.5 ppg Cut Brine
12° DLS curve section Surveys: 45° Curve , 90° Lateral					
LTP VS: 10306' 90° INC, 359.41° AZM					
BHL VS: 10356' 90° INC, 359.41° AZM	8-1/2" Lateral				
		20705' MD 10,000' TVD @ BHL 10,356' VS	No Casing Test		
		EOC 10299' MD 10000' TVD			



## **Ameredev Operating**

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

**MAGNOLIA ST COM PROJECT**

**MAGNOLIA 26 36 22 STATE COM #181H**

**OWB**

**Plan: PWP**

## **Standard Planning Report - Geographic**

**14 June, 2023**



## Planning Report - Geographic

<b>Database:</b>	AUS-COMPASS - EDM_15 - 32bit	<b>Local Co-ordinate Reference:</b>	Well MAGNOLIA ST COM 26 36 22 #181H
<b>Company:</b>	Ameredev Operating	<b>TVD Reference:</b>	KB=27' @ 2937.0usft
<b>Project:</b>	Lea County, NM (N83-NME)	<b>MD Reference:</b>	KB=27' @ 2937.0usft
<b>Site:</b>	MAGNOLIA ST COM PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	MAGNOLIA ST COM 26 36 22 #181H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP		

<b>Project</b>	Lea County, NM (N83-NME)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site		MAGNOLIA ST COM PROJECT			
Site Position:		Northing:	373,452.69 usft	Latitude:	32.0221651
From:	Lat/Long	Easting:	873,778.76 usft	Longitude:	-103.2606704
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	

Well		MAGNOLIA ST COM 26 36 22 #181H				
Well Position	+N/-S	0.0 usft	Northing:	373,459.67 usft	Latitude:	32.0221627
	+E/-W	0.0 usft	Easting:	874,568.52 usft	Longitude:	-103.2581223
Position Uncertainty		3.0 usft	Wellhead Elevation:	usft	Ground Level:	2,910.0 usft
Grid Convergence:		0.57 °				

<b>Wellbore</b>	OWB				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2020	6/13/2023	6.15	59.69	47,201.02032167

<b>Design</b>	PWP			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	359.41

<b>Plan Survey Tool Program</b>	<b>Date</b> 6/14/2023			
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	20,704.1 PWP (OWB)	MWD	
			OWSG MWD - Standard	

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
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	185.83	1,749.7	-10.8	-1.1	2.00	2.00	0.00	185.83	
8,500.6	5.00	185.83	8,474.6	-596.2	-60.9	0.00	0.00	0.00	0.00	
8,750.6	0.00	0.00	8,724.3	-607.0	-62.0	2.00	-2.00	0.00	180.00	
9,548.8	0.00	0.00	9,522.5	-607.0	-62.0	0.00	0.00	0.00	0.00	
10,298.8	90.00	359.41	10,000.0	-129.6	-67.0	12.00	12.00	-0.08	359.41	
20,704.6	90.00	359.41	10,000.0	10,275.7	-174.9	0.00	0.00	0.00	0.00	BHL (MSC 181H)



## Planning Report - Geographic

<b>Database:</b>	AUS-COMPASS - EDM_15 - 32bit	<b>Local Co-ordinate Reference:</b>	Well MAGNOLIA ST COM 26 36 22 #181H
<b>Company:</b>	Ameredev Operating	<b>TVD Reference:</b>	KB=27' @ 2937.0usft
<b>Project:</b>	Lea County, NM (N83-NME)	<b>MD Reference:</b>	KB=27' @ 2937.0usft
<b>Site:</b>	MAGNOLIA ST COM PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	MAGNOLIA ST COM 26 36 22 #181H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP		

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	373,459.67	874,568.52	32.0221627	-103.2581223
100.0	0.00	0.00	100.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
200.0	0.00	0.00	200.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
300.0	0.00	0.00	300.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
400.0	0.00	0.00	400.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
500.0	0.00	0.00	500.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
600.0	0.00	0.00	600.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
700.0	0.00	0.00	700.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
800.0	0.00	0.00	800.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
900.0	0.00	0.00	900.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
1,000.0	0.00	0.00	1,000.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
1,100.0	0.00	0.00	1,100.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
1,200.0	0.00	0.00	1,200.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
1,300.0	0.00	0.00	1,300.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
1,400.0	0.00	0.00	1,400.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
1,500.0	0.00	0.00	1,500.0	0.0	0.0	373,459.67	874,568.52	32.0221627	-103.2581223
<b>Start Build 2.00</b>									
1,600.0	2.00	185.83	1,600.0	-1.7	-0.2	373,457.94	874,568.34	32.0221580	-103.2581229
1,700.0	4.00	185.83	1,699.8	-6.9	-0.7	373,452.73	874,567.81	32.0221437	-103.2581248
1,750.0	5.00	185.83	1,749.7	-10.8	-1.1	373,448.83	874,567.41	32.0221329	-103.2581262
<b>Start 6750.6 hold at 1750.0 MD</b>									
1,757.3	5.00	185.83	1,757.0	-11.5	-1.2	373,448.19	874,567.35	32.0221312	-103.2581264
<b>Rustler</b>									
1,800.0	5.00	185.83	1,799.5	-15.2	-1.6	373,444.49	874,566.97	32.0221210	-103.2581278
1,900.0	5.00	185.83	1,899.1	-23.9	-2.4	373,435.82	874,566.08	32.0220972	-103.2581309
2,000.0	5.00	185.83	1,998.7	-32.5	-3.3	373,427.15	874,565.20	32.0220734	-103.2581341
2,100.0	5.00	185.83	2,098.4	-41.2	-4.2	373,418.48	874,564.31	32.0220496	-103.2581372
2,200.0	5.00	185.83	2,198.0	-49.9	-5.1	373,409.81	874,563.43	32.0220258	-103.2581403
2,228.1	5.00	185.83	2,226.0	-52.3	-5.3	373,407.37	874,563.18	32.0220191	-103.2581412
<b>Salado</b>									
2,300.0	5.00	185.83	2,297.6	-58.5	-6.0	373,401.14	874,562.54	32.0220020	-103.2581435
2,400.0	5.00	185.83	2,397.2	-67.2	-6.9	373,392.47	874,561.65	32.0219782	-103.2581466
2,500.0	5.00	185.83	2,496.8	-75.9	-7.7	373,383.80	874,560.77	32.0219544	-103.2581497
2,600.0	5.00	185.83	2,596.4	-84.5	-8.6	373,375.13	874,559.88	32.0219306	-103.2581529
2,700.0	5.00	185.83	2,696.1	-93.2	-9.5	373,366.46	874,559.00	32.0219068	-103.2581560
2,800.0	5.00	185.83	2,795.7	-101.9	-10.4	373,357.79	874,558.11	32.0218830	-103.2581591
2,900.0	5.00	185.83	2,895.3	-110.6	-11.3	373,349.12	874,557.23	32.0218592	-103.2581623
2,941.9	5.00	185.83	2,937.0	-114.2	-11.7	373,345.49	874,556.86	32.0218492	-103.2581636
<b>Dewey Lake</b>									
3,000.0	5.00	185.83	2,994.9	-119.2	-12.2	373,340.45	874,556.34	32.0218354	-103.2581654
3,100.0	5.00	185.83	3,094.5	-127.9	-13.1	373,331.78	874,555.45	32.0218116	-103.2581685
3,200.0	5.00	185.83	3,194.2	-136.6	-13.9	373,323.10	874,554.57	32.0217878	-103.2581717
3,249.0	5.00	185.83	3,243.0	-140.8	-14.4	373,318.85	874,554.14	32.0217761	-103.2581732
<b>Tansill</b>									
3,300.0	5.00	185.83	3,293.8	-145.2	-14.8	373,314.43	874,553.68	32.0217639	-103.2581748
3,400.0	5.00	185.83	3,393.4	-153.9	-15.7	373,305.76	874,552.80	32.0217401	-103.2581780
3,500.0	5.00	185.83	3,493.0	-162.6	-16.6	373,297.09	874,551.91	32.0217163	-103.2581811
3,600.0	5.00	185.83	3,592.6	-171.2	-17.5	373,288.42	874,551.03	32.0216925	-103.2581842
3,700.0	5.00	185.83	3,692.3	-179.9	-18.4	373,279.75	874,550.14	32.0216687	-103.2581874
3,800.0	5.00	185.83	3,791.9	-188.6	-19.3	373,271.08	874,549.26	32.0216449	-103.2581905
3,890.5	5.00	185.83	3,882.0	-196.4	-20.1	373,263.24	874,548.45	32.0216234	-103.2581933
<b>Capitan</b>									
3,900.0	5.00	185.83	3,891.5	-197.3	-20.1	373,262.41	874,548.37	32.0216211	-103.2581936
4,000.0	5.00	185.83	3,991.1	-205.9	-21.0	373,253.74	874,547.48	32.0215973	-103.2581968



## Planning Report - Geographic

<b>Database:</b>	AUS-COMPASS - EDM_15 - 32bit	<b>Local Co-ordinate Reference:</b>	Well MAGNOLIA ST COM 26 36 22 #181H
<b>Company:</b>	Ameredev Operating	<b>TVD Reference:</b>	KB=27' @ 2937.0usft
<b>Project:</b>	Lea County, NM (N83-NME)	<b>MD Reference:</b>	KB=27' @ 2937.0usft
<b>Site:</b>	MAGNOLIA ST COM PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	MAGNOLIA ST COM 26 36 22 #181H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,100.0	5.00	185.83	4,090.7	-214.6	-21.9	373,245.07	874,546.60	32.0215735	-103.2581999	
4,200.0	5.00	185.83	4,190.4	-223.3	-22.8	373,236.40	874,545.71	32.0215497	-103.2582030	
4,300.0	5.00	185.83	4,290.0	-231.9	-23.7	373,227.73	874,544.83	32.0215259	-103.2582062	
4,400.0	5.00	185.83	4,389.6	-240.6	-24.6	373,219.06	874,543.94	32.0215021	-103.2582093	
4,500.0	5.00	185.83	4,489.2	-249.3	-25.5	373,210.39	874,543.06	32.0214783	-103.2582124	
4,600.0	5.00	185.83	4,588.8	-258.0	-26.3	373,201.72	874,542.17	32.0214545	-103.2582156	
4,700.0	5.00	185.83	4,688.5	-266.6	-27.2	373,193.05	874,541.29	32.0214307	-103.2582187	
4,800.0	5.00	185.83	4,788.1	-275.3	-28.1	373,184.38	874,540.40	32.0214068	-103.2582218	
4,900.0	5.00	185.83	4,887.7	-284.0	-29.0	373,175.71	874,539.51	32.0213830	-103.2582250	
5,000.0	5.00	185.83	4,987.3	-292.6	-29.9	373,167.04	874,538.63	32.0213592	-103.2582281	
5,003.7	5.00	185.83	4,991.0	-293.0	-29.9	373,166.72	874,538.60	32.0213584	-103.2582282	
Lamar										
5,100.0	5.00	185.83	5,086.9	-301.3	-30.8	373,158.37	874,537.74	32.0213354	-103.2582313	
5,196.4	5.00	185.83	5,183.0	-309.7	-31.6	373,150.00	874,536.89	32.0213125	-103.2582343	
Bell Canyon										
5,200.0	5.00	185.83	5,186.6	-310.0	-31.7	373,149.70	874,536.86	32.0213116	-103.2582344	
5,300.0	5.00	185.83	5,286.2	-318.6	-32.5	373,141.03	874,535.97	32.0212878	-103.2582375	
5,400.0	5.00	185.83	5,385.8	-327.3	-33.4	373,132.35	874,535.09	32.0212640	-103.2582407	
5,500.0	5.00	185.83	5,485.4	-336.0	-34.3	373,123.68	874,534.20	32.0212402	-103.2582438	
5,600.0	5.00	185.83	5,585.0	-344.7	-35.2	373,115.01	874,533.31	32.0212164	-103.2582469	
5,700.0	5.00	185.83	5,684.7	-353.3	-36.1	373,106.34	874,532.43	32.0211926	-103.2582501	
5,800.0	5.00	185.83	5,784.3	-362.0	-37.0	373,097.67	874,531.54	32.0211688	-103.2582532	
5,900.0	5.00	185.83	5,883.9	-370.7	-37.9	373,089.00	874,530.66	32.0211450	-103.2582563	
6,000.0	5.00	185.83	5,983.5	-379.3	-38.7	373,080.33	874,529.77	32.0211212	-103.2582595	
6,100.0	5.00	185.83	6,083.1	-388.0	-39.6	373,071.66	874,528.89	32.0210974	-103.2582626	
6,200.0	5.00	185.83	6,182.7	-396.7	-40.5	373,062.99	874,528.00	32.0210736	-103.2582657	
6,300.0	5.00	185.83	6,282.4	-405.4	-41.4	373,054.32	874,527.12	32.0210497	-103.2582689	
6,400.0	5.00	185.83	6,382.0	-414.0	-42.3	373,045.65	874,526.23	32.0210259	-103.2582720	
6,500.0	5.00	185.83	6,481.6	-422.7	-43.2	373,036.98	874,525.34	32.0210021	-103.2582751	
6,600.0	5.00	185.83	6,581.2	-431.4	-44.1	373,028.31	874,524.46	32.0209783	-103.2582783	
6,700.0	5.00	185.83	6,680.8	-440.0	-44.9	373,019.64	874,523.57	32.0209545	-103.2582814	
6,800.0	5.00	185.83	6,780.5	-448.7	-45.8	373,010.97	874,522.69	32.0209307	-103.2582846	
6,873.8	5.00	185.83	6,854.0	-455.1	-46.5	373,004.57	874,522.03	32.0209131	-103.2582869	
Brushy Canyon										
6,900.0	5.00	185.83	6,880.1	-457.4	-46.7	373,002.30	874,521.80	32.0209069	-103.2582877	
7,000.0	5.00	185.83	6,979.7	-466.0	-47.6	372,993.63	874,520.92	32.0208831	-103.2582908	
7,100.0	5.00	185.83	7,079.3	-474.7	-48.5	372,984.96	874,520.03	32.0208593	-103.2582940	
7,200.0	5.00	185.83	7,178.9	-483.4	-49.4	372,976.29	874,519.14	32.0208355	-103.2582971	
7,300.0	5.00	185.83	7,278.6	-492.1	-50.3	372,967.62	874,518.26	32.0208117	-103.2583002	
7,400.0	5.00	185.83	7,378.2	-500.7	-51.1	372,958.95	874,517.37	32.0207879	-103.2583034	
7,500.0	5.00	185.83	7,477.8	-509.4	-52.0	372,950.27	874,516.49	32.0207641	-103.2583065	
7,600.0	5.00	185.83	7,577.4	-518.1	-52.9	372,941.60	874,515.60	32.0207403	-103.2583096	
7,700.0	5.00	185.83	7,677.0	-526.7	-53.8	372,932.93	874,514.72	32.0207165	-103.2583128	
7,800.0	5.00	185.83	7,776.7	-535.4	-54.7	372,924.26	874,513.83	32.0206926	-103.2583159	
7,831.5	5.00	185.83	7,808.0	-538.1	-55.0	372,921.54	874,513.55	32.0206852	-103.2583169	
Bone Spring Lime										
7,900.0	5.00	185.83	7,876.3	-544.1	-55.6	372,915.59	874,512.95	32.0206688	-103.2583190	
8,000.0	5.00	185.83	7,975.9	-552.7	-56.5	372,906.92	874,512.06	32.0206450	-103.2583222	
8,100.0	5.00	185.83	8,075.5	-561.4	-57.3	372,898.25	874,511.17	32.0206212	-103.2583253	
8,200.0	5.00	185.83	8,175.1	-570.1	-58.2	372,889.58	874,510.29	32.0205974	-103.2583285	
8,300.0	5.00	185.83	8,274.8	-578.8	-59.1	372,880.91	874,509.40	32.0205736	-103.2583316	
8,400.0	5.00	185.83	8,374.4	-587.4	-60.0	372,872.24	874,508.52	32.0205498	-103.2583347	
8,500.6	5.00	185.83	8,474.6	-596.2	-60.9	372,863.52	874,507.63	32.0205259	-103.2583379	
Start Drop -2.00										





## Planning Report - Geographic

<b>Database:</b>	AUS-COMPASS - EDM_15 - 32bit	<b>Local Co-ordinate Reference:</b>	Well MAGNOLIA ST COM 26 36 22 #181H
<b>Company:</b>	Ameredev Operating	<b>TVD Reference:</b>	KB=27' @ 2937.0usft
<b>Project:</b>	Lea County, NM (N83-NME)	<b>MD Reference:</b>	KB=27' @ 2937.0usft
<b>Site:</b>	MAGNOLIA ST COM PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	MAGNOLIA ST COM 26 36 22 #181H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
8,600.0	3.01	185.83	8,573.7	-603.1	-61.6	372,856.61	874,506.92	32.0205069	-103.2583404	
8,700.0	1.01	185.83	8,673.7	-606.6	-62.0	372,853.12	874,506.56	32.0204973	-103.2583416	
8,750.6	0.00	0.00	8,724.3	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
Start 798.2 hold at 8750.6 MD										
8,800.0	0.00	0.00	8,773.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
8,900.0	0.00	0.00	8,873.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,000.0	0.00	0.00	8,973.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,100.0	0.00	0.00	9,073.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,200.0	0.00	0.00	9,173.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,300.0	0.00	0.00	9,273.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,400.0	0.00	0.00	9,373.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,500.0	0.00	0.00	9,473.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,502.3	0.00	0.00	9,476.0	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
First Bone Spring										
9,548.8	0.00	0.00	9,522.5	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
KOP-Start DLS 12.00 TFO 359.41										
9,550.0	0.14	359.41	9,523.7	-607.0	-62.0	372,852.67	874,506.52	32.0204961	-103.2583418	
9,575.0	3.14	359.41	9,548.7	-606.3	-62.0	372,853.39	874,506.51	32.0204980	-103.2583418	
9,600.0	6.14	359.41	9,573.6	-604.3	-62.0	372,855.41	874,506.49	32.0205036	-103.2583418	
9,625.0	9.14	359.41	9,598.4	-600.9	-62.1	372,858.74	874,506.46	32.0205127	-103.2583418	
9,650.0	12.14	359.41	9,622.9	-596.3	-62.1	372,863.35	874,506.41	32.0205254	-103.2583418	
9,675.0	15.14	359.41	9,647.2	-590.4	-62.2	372,869.25	874,506.35	32.0205416	-103.2583418	
9,700.0	18.14	359.41	9,671.2	-583.3	-62.2	372,876.40	874,506.27	32.0205613	-103.2583418	
9,725.0	21.14	359.41	9,694.7	-574.9	-62.3	372,884.81	874,506.19	32.0205844	-103.2583418	
9,750.0	24.14	359.41	9,717.8	-565.2	-62.4	372,894.43	874,506.09	32.0206109	-103.2583419	
9,775.0	27.14	359.41	9,740.3	-554.4	-62.5	372,905.25	874,505.97	32.0206406	-103.2583419	
9,800.0	30.14	359.41	9,762.3	-542.4	-62.7	372,917.23	874,505.85	32.0206735	-103.2583419	
9,825.0	33.14	359.41	9,783.5	-529.3	-62.8	372,930.34	874,505.71	32.0207096	-103.2583419	
9,850.0	36.14	359.41	9,804.1	-515.1	-63.0	372,944.55	874,505.57	32.0207486	-103.2583419	
9,875.0	39.14	359.41	9,823.9	-499.9	-63.1	372,959.81	874,505.41	32.0207906	-103.2583419	
9,900.0	42.14	359.41	9,842.9	-483.6	-63.3	372,976.09	874,505.24	32.0208353	-103.2583420	
9,925.0	45.14	359.41	9,861.0	-466.3	-63.5	372,993.34	874,505.06	32.0208828	-103.2583420	
9,950.0	48.14	359.41	9,878.1	-448.2	-63.6	373,011.52	874,504.87	32.0209327	-103.2583420	
9,975.0	51.14	359.41	9,894.3	-429.1	-63.8	373,030.56	874,504.67	32.0209851	-103.2583420	
10,000.0	54.14	359.41	9,909.5	-409.2	-64.1	373,050.43	874,504.47	32.0210397	-103.2583421	
10,025.0	57.14	359.41	9,923.6	-388.6	-64.3	373,071.07	874,504.25	32.0210964	-103.2583421	
10,050.0	60.14	359.41	9,936.6	-367.3	-64.5	373,092.41	874,504.03	32.0211551	-103.2583421	
10,075.0	63.14	359.41	9,948.5	-345.3	-64.7	373,114.41	874,503.80	32.0212155	-103.2583422	
10,100.0	66.14	359.41	9,959.2	-322.7	-64.9	373,136.99	874,503.57	32.0212776	-103.2583422	
10,125.0	69.14	359.41	9,968.7	-299.6	-65.2	373,160.11	874,503.33	32.0213412	-103.2583422	
10,150.0	72.14	359.41	9,977.0	-276.0	-65.4	373,183.69	874,503.08	32.0214060	-103.2583423	
10,175.0	75.14	359.41	9,984.0	-252.0	-65.7	373,207.68	874,502.84	32.0214719	-103.2583423	
10,196.3	77.70	359.41	9,989.0	-231.3	-65.9	373,228.38	874,502.62	32.0215288	-103.2583423	
Second Bone Spring										
10,200.0	78.14	359.41	9,989.8	-227.7	-65.9	373,232.00	874,502.58	32.0215388	-103.2583423	
10,225.0	81.14	359.41	9,994.3	-203.1	-66.2	373,256.59	874,502.33	32.0216064	-103.2583424	
10,250.0	84.14	359.41	9,997.5	-178.3	-66.4	373,281.38	874,502.07	32.0216745	-103.2583424	
10,275.0	87.14	359.41	9,999.4	-153.4	-66.7	373,306.30	874,501.81	32.0217430	-103.2583424	
10,298.8	90.00	359.41	10,000.0	-129.6	-67.0	373,330.11	874,501.57	32.0218085	-103.2583425	
LP-Start 10405.8 hold at 10298.8 MD										
10,300.0	90.00	359.41	10,000.0	-128.4	-67.0	373,331.29	874,501.55	32.0218117	-103.2583425	
10,400.0	90.00	359.41	10,000.0	-28.4	-68.0	373,431.28	874,500.52	32.0220866	-103.2583426	
10,500.0	90.00	359.41	10,000.0	71.6	-69.0	373,531.28	874,499.48	32.0223614	-103.2583427	
10,600.0	90.00	359.41	10,000.0	171.6	-70.1	373,631.27	874,498.44	32.0226363	-103.2583429	



## Planning Report - Geographic

<b>Database:</b>	AUS-COMPASS - EDM_15 - 32bit	<b>Local Co-ordinate Reference:</b>	Well MAGNOLIA ST COM 26 36 22 #181H
<b>Company:</b>	Ameredev Operating	<b>TVD Reference:</b>	KB=27' @ 2937.0usft
<b>Project:</b>	Lea County, NM (N83-NME)	<b>MD Reference:</b>	KB=27' @ 2937.0usft
<b>Site:</b>	MAGNOLIA ST COM PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	MAGNOLIA ST COM 26 36 22 #181H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,700.0	90.00	359.41	10,000.0	271.6	-71.1	373,731.27	874,497.40	32.0229112	-103.2583430
10,800.0	90.00	359.41	10,000.0	371.6	-72.2	373,831.26	874,496.37	32.0231860	-103.2583431
10,900.0	90.00	359.41	10,000.0	471.6	-73.2	373,931.26	874,495.33	32.0234609	-103.2583433
11,000.0	90.00	359.41	10,000.0	571.6	-74.2	374,031.25	874,494.29	32.0237357	-103.2583434
11,100.0	90.00	359.41	10,000.0	671.6	-75.3	374,131.24	874,493.25	32.0240106	-103.2583436
11,200.0	90.00	359.41	10,000.0	771.6	-76.3	374,231.24	874,492.22	32.0242855	-103.2583437
11,300.0	90.00	359.41	10,000.0	871.6	-77.3	374,331.23	874,491.18	32.0245603	-103.2583438
11,400.0	90.00	359.41	10,000.0	971.6	-78.4	374,431.23	874,490.14	32.0248352	-103.2583440
11,500.0	90.00	359.41	10,000.0	1,071.6	-79.4	374,531.22	874,489.10	32.0251101	-103.2583441
11,600.0	90.00	359.41	10,000.0	1,171.5	-80.5	374,631.22	874,488.07	32.0253849	-103.2583442
11,700.0	90.00	359.41	10,000.0	1,271.5	-81.5	374,731.21	874,487.03	32.0256598	-103.2583444
11,800.0	90.00	359.41	10,000.0	1,371.5	-82.5	374,831.21	874,485.99	32.0259347	-103.2583445
11,900.0	90.00	359.41	10,000.0	1,471.5	-83.6	374,931.20	874,484.95	32.0262095	-103.2583446
12,000.0	90.00	359.41	10,000.0	1,571.5	-84.6	375,031.20	874,483.92	32.0264844	-103.2583448
12,100.0	90.00	359.41	10,000.0	1,671.5	-85.6	375,131.19	874,482.88	32.0267593	-103.2583449
12,200.0	90.00	359.41	10,000.0	1,771.5	-86.7	375,231.19	874,481.84	32.0270341	-103.2583451
12,300.0	90.00	359.41	10,000.0	1,871.5	-87.7	375,331.18	874,480.80	32.0273090	-103.2583452
12,400.0	90.00	359.41	10,000.0	1,971.5	-88.8	375,431.18	874,479.77	32.0275838	-103.2583453
12,500.0	90.00	359.41	10,000.0	2,071.5	-89.8	375,531.17	874,478.73	32.0278587	-103.2583455
12,600.0	90.00	359.41	10,000.0	2,171.5	-90.8	375,631.16	874,477.69	32.0281336	-103.2583456
12,700.0	90.00	359.41	10,000.0	2,271.5	-91.9	375,731.16	874,476.65	32.0284084	-103.2583457
12,800.0	90.00	359.41	10,000.0	2,371.5	-92.9	375,831.15	874,475.62	32.0286833	-103.2583459
12,900.0	90.00	359.41	10,000.0	2,471.5	-93.9	375,931.15	874,474.58	32.0289582	-103.2583460
13,000.0	90.00	359.41	10,000.0	2,571.5	-95.0	376,031.14	874,473.54	32.0292330	-103.2583461
13,100.0	90.00	359.41	10,000.0	2,671.5	-96.0	376,131.14	874,472.51	32.0295079	-103.2583463
13,200.0	90.00	359.41	10,000.0	2,771.5	-97.1	376,231.13	874,471.47	32.0297828	-103.2583464
13,300.0	90.00	359.41	10,000.0	2,871.5	-98.1	376,331.13	874,470.43	32.0300576	-103.2583466
13,400.0	90.00	359.41	10,000.0	2,971.4	-99.1	376,431.12	874,469.39	32.0303325	-103.2583467
13,500.0	90.00	359.41	10,000.0	3,071.4	-100.2	376,531.12	874,468.36	32.0306074	-103.2583468
13,600.0	90.00	359.41	10,000.0	3,171.4	-101.2	376,631.11	874,467.32	32.0308822	-103.2583470
13,700.0	90.00	359.41	10,000.0	3,271.4	-102.2	376,731.11	874,466.28	32.0311571	-103.2583471
13,800.0	90.00	359.41	10,000.0	3,371.4	-103.3	376,831.10	874,465.24	32.0314319	-103.2583472
13,900.0	90.00	359.41	10,000.0	3,471.4	-104.3	376,931.09	874,464.21	32.0317068	-103.2583474
14,000.0	90.00	359.41	10,000.0	3,571.4	-105.3	377,031.09	874,463.17	32.0319817	-103.2583475
14,100.0	90.00	359.41	10,000.0	3,671.4	-106.4	377,131.08	874,462.13	32.0322565	-103.2583476
14,200.0	90.00	359.41	10,000.0	3,771.4	-107.4	377,231.08	874,461.09	32.0325314	-103.2583478
14,300.0	90.00	359.41	10,000.0	3,871.4	-108.5	377,331.07	874,460.06	32.0328063	-103.2583479
14,400.0	90.00	359.41	10,000.0	3,971.4	-109.5	377,431.07	874,459.02	32.0330811	-103.2583481
14,500.0	90.00	359.41	10,000.0	4,071.4	-110.5	377,531.06	874,457.98	32.0333560	-103.2583482
14,600.0	90.00	359.41	10,000.0	4,171.4	-111.6	377,631.06	874,456.94	32.0336309	-103.2583483
14,700.0	90.00	359.41	10,000.0	4,271.4	-112.6	377,731.05	874,455.91	32.0339057	-103.2583485
14,800.0	90.00	359.41	10,000.0	4,371.4	-113.6	377,831.05	874,454.87	32.0341806	-103.2583486
14,900.0	90.00	359.41	10,000.0	4,471.4	-114.7	377,931.04	874,453.83	32.0344554	-103.2583487
15,000.0	90.00	359.41	10,000.0	4,571.4	-115.7	378,031.04	874,452.79	32.0347303	-103.2583489
15,100.0	90.00	359.41	10,000.0	4,671.4	-116.8	378,131.03	874,451.76	32.0350052	-103.2583490
15,200.0	90.00	359.41	10,000.0	4,771.4	-117.8	378,231.02	874,450.72	32.0352800	-103.2583491
15,300.0	90.00	359.41	10,000.0	4,871.3	-118.8	378,331.02	874,449.68	32.0355549	-103.2583493
15,400.0	90.00	359.41	10,000.0	4,971.3	-119.9	378,431.01	874,448.64	32.0358298	-103.2583494
15,500.0	90.00	359.41	10,000.0	5,071.3	-120.9	378,531.01	874,447.61	32.0361046	-103.2583496
15,600.0	90.00	359.41	10,000.0	5,171.3	-121.9	378,631.00	874,446.57	32.0363795	-103.2583497
15,700.0	90.00	359.41	10,000.0	5,271.3	-123.0	378,731.00	874,445.53	32.0366544	-103.2583498
15,800.0	90.00	359.41	10,000.0	5,371.3	-124.0	378,830.99	874,444.49	32.0369292	-103.2583500
15,900.0	90.00	359.41	10,000.0	5,471.3	-125.1	378,930.99	874,443.46	32.0372041	-103.2583501
16,000.0	90.00	359.41	10,000.0	5,571.3	-126.1	379,030.98	874,442.42	32.0374790	-103.2583502
16,100.0	90.00	359.41	10,000.0	5,671.3	-127.1	379,130.98	874,441.38	32.0377538	-103.2583504



## Planning Report - Geographic

<b>Database:</b>	AUS-COMPASS - EDM_15 - 32bit	<b>Local Co-ordinate Reference:</b>	Well MAGNOLIA ST COM 26 36 22 #181H
<b>Company:</b>	Ameredev Operating	<b>TVD Reference:</b>	KB=27' @ 2937.0usft
<b>Project:</b>	Lea County, NM (N83-NME)	<b>MD Reference:</b>	KB=27' @ 2937.0usft
<b>Site:</b>	MAGNOLIA ST COM PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	MAGNOLIA ST COM 26 36 22 #181H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
16,200.0	90.00	359.41	10,000.0	5,771.3	-128.2	379,230.97	874,440.35	32.0380287	-103.2583505	
16,300.0	90.00	359.41	10,000.0	5,871.3	-129.2	379,330.97	874,439.31	32.0383035	-103.2583506	
16,400.0	90.00	359.41	10,000.0	5,971.3	-130.2	379,430.96	874,438.27	32.0385784	-103.2583508	
16,500.0	90.00	359.41	10,000.0	6,071.3	-131.3	379,530.95	874,437.23	32.0388533	-103.2583509	
16,600.0	90.00	359.41	10,000.0	6,171.3	-132.3	379,630.95	874,436.20	32.0391281	-103.2583510	
16,700.0	90.00	359.41	10,000.0	6,271.3	-133.4	379,730.94	874,435.16	32.0394030	-103.2583512	
16,800.0	90.00	359.41	10,000.0	6,371.3	-134.4	379,830.94	874,434.12	32.0396779	-103.2583513	
16,900.0	90.00	359.41	10,000.0	6,471.3	-135.4	379,930.93	874,433.08	32.0399527	-103.2583515	
17,000.0	90.00	359.41	10,000.0	6,571.3	-136.5	380,030.93	874,432.05	32.0402276	-103.2583516	
17,100.0	90.00	359.41	10,000.0	6,671.3	-137.5	380,130.92	874,431.01	32.0405025	-103.2583517	
17,200.0	90.00	359.41	10,000.0	6,771.2	-138.5	380,230.92	874,429.97	32.0407773	-103.2583519	
17,300.0	90.00	359.41	10,000.0	6,871.2	-139.6	380,330.91	874,428.93	32.0410522	-103.2583520	
17,400.0	90.00	359.41	10,000.0	6,971.2	-140.6	380,430.91	874,427.90	32.0413270	-103.2583521	
17,500.0	90.00	359.41	10,000.0	7,071.2	-141.7	380,530.90	874,426.86	32.0416019	-103.2583523	
17,600.0	90.00	359.41	10,000.0	7,171.2	-142.7	380,630.90	874,425.82	32.0418768	-103.2583524	
17,700.0	90.00	359.41	10,000.0	7,271.2	-143.7	380,730.89	874,424.78	32.0421516	-103.2583525	
17,800.0	90.00	359.41	10,000.0	7,371.2	-144.8	380,830.88	874,423.75	32.0424265	-103.2583527	
17,900.0	90.00	359.41	10,000.0	7,471.2	-145.8	380,930.88	874,422.71	32.0427014	-103.2583528	
18,000.0	90.00	359.41	10,000.0	7,571.2	-146.8	381,030.87	874,421.67	32.0429762	-103.2583529	
18,100.0	90.00	359.41	10,000.0	7,671.2	-147.9	381,130.87	874,420.63	32.0432511	-103.2583531	
18,200.0	90.00	359.41	10,000.0	7,771.2	-148.9	381,230.86	874,419.60	32.0435260	-103.2583532	
18,300.0	90.00	359.41	10,000.0	7,871.2	-150.0	381,330.86	874,418.56	32.0438008	-103.2583533	
18,400.0	90.00	359.41	10,000.0	7,971.2	-151.0	381,430.85	874,417.52	32.0440757	-103.2583535	
18,500.0	90.00	359.41	10,000.0	8,071.2	-152.0	381,530.85	874,416.48	32.0443505	-103.2583536	
18,600.0	90.00	359.41	10,000.0	8,171.2	-153.1	381,630.84	874,415.45	32.0446254	-103.2583538	
18,700.0	90.00	359.41	10,000.0	8,271.2	-154.1	381,730.84	874,414.41	32.0449003	-103.2583539	
18,800.0	90.00	359.41	10,000.0	8,371.2	-155.1	381,830.83	874,413.37	32.0451751	-103.2583540	
18,900.0	90.00	359.41	10,000.0	8,471.2	-156.2	381,930.83	874,412.33	32.0454500	-103.2583542	
19,000.0	90.00	359.41	10,000.0	8,571.1	-157.2	382,030.82	874,411.30	32.0457249	-103.2583543	
19,100.0	90.00	359.41	10,000.0	8,671.1	-158.3	382,130.81	874,410.26	32.0459997	-103.2583544	
19,200.0	90.00	359.41	10,000.0	8,771.1	-159.3	382,230.81	874,409.22	32.0462746	-103.2583546	
19,300.0	90.00	359.41	10,000.0	8,871.1	-160.3	382,330.80	874,408.19	32.0465495	-103.2583547	
19,400.0	90.00	359.41	10,000.0	8,971.1	-161.4	382,430.80	874,407.15	32.0468243	-103.2583548	
19,500.0	90.00	359.41	10,000.0	9,071.1	-162.4	382,530.79	874,406.11	32.0470992	-103.2583550	
19,600.0	90.00	359.41	10,000.0	9,171.1	-163.4	382,630.79	874,405.07	32.0473740	-103.2583551	
19,700.0	90.00	359.41	10,000.0	9,271.1	-164.5	382,730.78	874,404.04	32.0476489	-103.2583552	
19,800.0	90.00	359.41	10,000.0	9,371.1	-165.5	382,830.78	874,403.00	32.0479238	-103.2583554	
19,900.0	90.00	359.41	10,000.0	9,471.1	-166.6	382,930.77	874,401.96	32.0481986	-103.2583555	
20,000.0	90.00	359.41	10,000.0	9,571.1	-167.6	383,030.77	874,400.92	32.0484735	-103.2583556	
20,100.0	90.00	359.41	10,000.0	9,671.1	-168.6	383,130.76	874,399.89	32.0487484	-103.2583558	
20,200.0	90.00	359.41	10,000.0	9,771.1	-169.7	383,230.76	874,398.85	32.0490232	-103.2583559	
20,300.0	90.00	359.41	10,000.0	9,871.1	-170.7	383,330.75	874,397.81	32.0492981	-103.2583560	
20,400.0	90.00	359.41	10,000.0	9,971.1	-171.7	383,430.74	874,396.77	32.0495730	-103.2583562	
20,500.0	90.00	359.41	10,000.0	10,071.1	-172.8	383,530.74	874,395.74	32.0498478	-103.2583563	
20,600.0	90.00	359.41	10,000.0	10,171.1	-173.8	383,630.73	874,394.70	32.0501227	-103.2583565	
20,704.6	90.00	359.41	10,000.0	10,275.7	-174.9	383,735.34	874,393.61	32.0504102	-103.2583566	
TD at 20704.6										



## Planning Report - Geographic

<b>Database:</b>	AUS-COMPASS - EDM_15 - 32bit	<b>Local Co-ordinate Reference:</b>	Well MAGNOLIA ST COM 26 36 22 #181H
<b>Company:</b>	Ameredev Operating	<b>TVD Reference:</b>	KB=27' @ 2937.0usft
<b>Project:</b>	Lea County, NM (N83-NME)	<b>MD Reference:</b>	KB=27' @ 2937.0usft
<b>Site:</b>	MAGNOLIA ST COM PROJECT	<b>North Reference:</b>	Grid
<b>Well:</b>	MAGNOLIA ST COM 26 36 22 #181H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OWB		
<b>Design:</b>	PWP		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
FTP (MSC 181H)	0.00	0.00	10,000.0	-130.6	-68.5	373,329.06	874,499.98	32.0218056	-103.2583476
- plan misses target center by 1.6usft at 10297.8usft MD (10000.0 TVD, -130.6 N, -66.9 E)									
- Point									
LTP (MSC 181H)	0.00	0.00	10,000.0	10,225.7	-174.4	383,685.36	874,394.14	32.0502728	-103.2583565
- plan hits target center									
- Point									
BHL (MSC 181H)	0.00	0.00	10,000.0	10,275.7	-174.9	383,735.34	874,393.61	32.0504102	-103.2583566
- plan hits target center									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
1,757.3	1,757.0	Rustler				
2,228.1	2,226.0	Salado				
2,941.9	2,937.0	Dewey Lake				
3,249.0	3,243.0	Tansill				
3,890.5	3,882.0	Capitan				
5,003.7	4,991.0	Lamar				
5,196.4	5,183.0	Bell Canyon				
6,873.8	6,854.0	Brushy Canyon				
7,831.5	7,808.0	Bone Spring Lime				
9,502.3	9,476.0	First Bone Spring				
10,196.3	9,989.0	Second Bone Spring				

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
1,500.0	1,500.0	0.0	0.0	Start Build 2.00
1,750.0	1,749.7	-10.8	-1.1	Start 6750.6 hold at 1750.0 MD
8,500.6	8,474.6	-596.2	-60.9	Start Drop -2.00
8,750.6	8,724.3	-607.0	-62.0	Start 798.2 hold at 8750.6 MD
9,548.8	9,522.5	-607.0	-62.0	KOP-Start DLS 12.00 TFO 359.41
10,298.8	10,000.0	-129.6	-67.0	LP-Start 10405.8 hold at 10298.8 MD
20,704.6	10,000.0	10,275.7	-174.9	TD at 20704.6

State of New Mexico  
Energy, Minerals and Natural Resources DepartmentSubmit Electronically  
Via E-permittingOil 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:** Ameredev II, LLC **OGRID:** 372224 **Date:** 06/21/2023**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**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	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Magnolia 26 36 22 State Com 073H	30025-		230' FSL & 1015' FEL	115	576	203
Magnolia 26 36 22 State Com 074H	30025-		200' FNL & 310' FEL	115	576	203
Magnolia 26 36 22 State Com 181H	30025-		230' FSL & 1060' FWL	115	576	203
Magnolia 26 36 22 State Com 182H	30025-		650' FSL & 1808' FWL	115	576	203
Magnolia 26 36 22 State Com 183H	30025-		230' FSL & 1035' FEL	115	576	203
Magnolia 26 36 22 State Com 184H	30025-		200' FNL & 290' FEL	115	576	203

**IV. Central Delivery Point Name:** \_\_\_\_\_ [See 19.15.27.9(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
Magnolia 26 36 22 State Com 073H	30025-	10/01/2024	11/15/2024	12/15/2024	01/01/2025	01/04/2025
Magnolia 26 36 22 State Com 074H	30025-	10/01/2024	11/15/2024	12/15/2024	01/01/2025	01/04/2025
Magnolia 26 36 22 State Com 181H	30025-	10/01/2024	11/15/2024	12/15/2024	01/01/2025	01/04/2025
Magnolia 26 36 22 State Com 182H	30025-	10/01/2024	11/15/2024	12/15/2024	01/01/2025	01/04/2025
Magnolia 26 36 22 State Com 183H	30025-	10/01/2024	11/15/2024	12/15/2024	01/01/2025	01/04/2025
Magnolia 26 36 22 State Com 184H	30025-	10/01/2024	11/15/2024	12/15/2024	01/01/2025	01/04/2025

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

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided 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 information 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

☐ 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;
- (f) 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: <i>Cesca Yu</i>
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. Operational Practices: Attach a complete description of the actions Operator will 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/H<sub>2</sub>S 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. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.**

- 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