<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 351555

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

Operator Name and Address		2. OGRID Number
AMEREDEV OPERATING, LLC	372224	
2901 Via Fortuna	3. API Number	
Austin, TX 78746		30-025-52094
4. Property Code	5. Property Name	6. Well No.
331807	AZALEA 26 36 28 STATE COM	282H

7 Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
С	28	26S	36E	С	230	N	1726	W	Lea

8. Proposed Bottom Hole Location

I	UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
	F	33	26S	36E	3	50	S	1650	W	Lea

9. Pool Information

W	VC-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	2913
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date
N	18359	2nd Bone Spring Carbonate		12/1/2024
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	1887	1477	0
I	Int1	12.25	10.75	45.5	5062	1250	0
	Prod	8.75	5.5	17	18359	5879	0

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Туре	Working Pressure	Test Pressure	Manufacturer	
Double Ram	5000	5000	TBD	

knowledge and be	elief.	true and complete to the best of my IMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATION	ON DIVISION
Printed Name:				Paul F Kautz	
Title:	Regulatory	Title:	Geologist		
Email Address:	ail Address: channa@ameredev.com			10/17/2023	Expiration Date: 10/17/2025
Date:	10/10/2023	Conditions of Approval 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 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

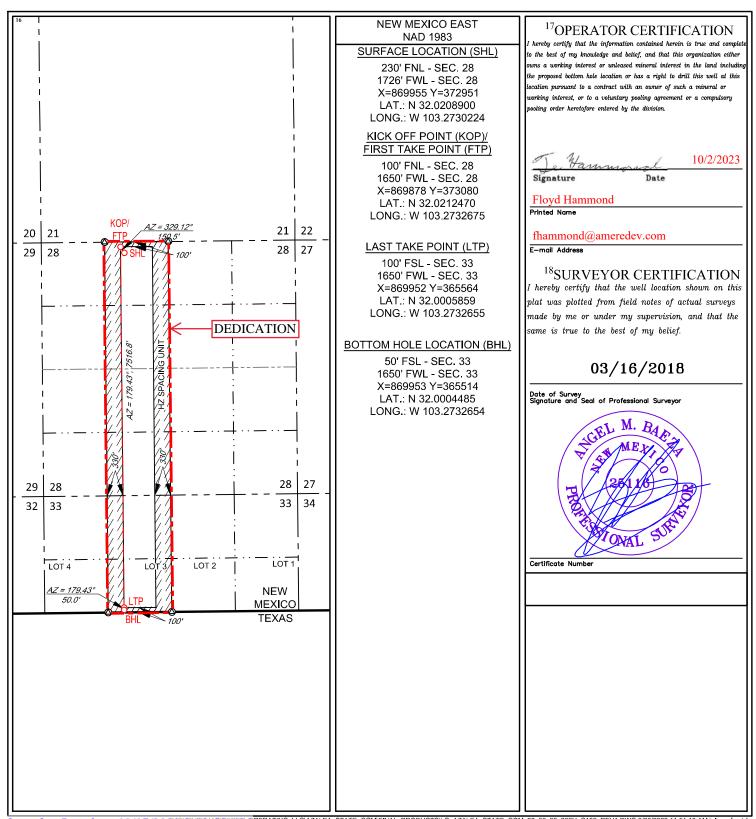
WELL LOCATION AND ACREAGE DEDICATION PLAT

	WEEE EGGRITOWING MCREAGE DEDICATION I EAT							
¹ API Numbe	er ² Pool Code	³ Pool Name						
30-025-	98150	WC-025 G-08 S263620C; LWR F	WR BONE SPRING					
⁴ Property Code	⁵ P1	⁵ Property Name						
331807	AZALEA 26	36 28 STATE COM	282H					
⁷ OGRID No.	⁸ O _I	perator Name	⁹ Elevation					
372224	AMEREDEV	AMEREDEV OPERATING, LLC. 2913'						

¹⁰Surface Location

C C	Section 28	Z6-S	36-E	Lot Idn —	Feet from the 230'	NORTH	1726'	WEST	LEA
	¹¹ 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
3	33	26-S	36-E	_	50'	SOUTH	1650'	WEST	LEA
12Dedicated Acres	¹³ Joint or 1	infill 14Cc	onsolidation Co	de ¹⁵ Ord	er No.				
233.72			C						

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.



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

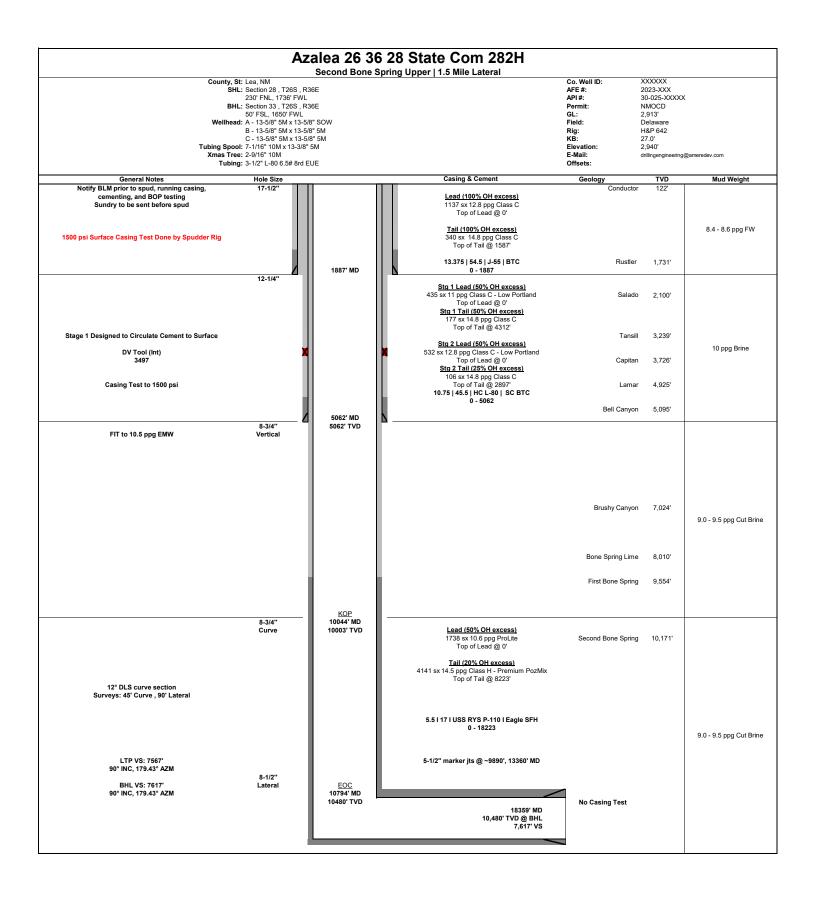
Form APD Conditions

Permit 351555

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:		
AMEREDEV OPERATING, LLC [372224]	30-025-52094		
2901 Via Fortuna	Well:		
Austin, TX 78746	AZALEA 26 36 28 STATE COM #282H		

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)
Camelia_Azalea
AZALEA 26 36 28 STATE COM 282H

OWB

Plan: PWP

Standard Planning Report - Geographic

23 June, 2023



Database: AUS-COMPASS - EDM_15 - 32bit

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

Site: Camelia_Azalea

Well: AZALEA STATE COM 26-36-28 282H

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

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well AZALEA STATE COM26-36-28 282H

KB=25' @ 2938.0usft KB=25' @ 2938.0usft

Grid

Minimum Curvature

Mean Sea Level

Project Lea County, NM (N83-NME)

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

State Plane 1983 System Datum: rth American Datum 1983

Map Zone: New Mexico Eastern Zone

Site Camelia Azalea

 Site Position:
 Northing:
 372,956.73 usft
 Latitude:
 32.0208919

 From:
 Lat/Long
 Easting:
 870,464.84 usft
 Longitude:
 -103.2713773

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

Well AZALEA STATE COM 26-36-28 282H

 Well Position
 +N/-S
 0.0 usft
 Northing:
 372,951.03 usft
 Latitude:
 32.0208900

 +E/-W
 0.0 usft
 Easting:
 869,954.97 usft
 Longitude:
 -103.2730224

 Position Uncertainty
 3.0 usft
 Wellhead Elevation:
 usft
 Ground Level:
 2,913.0 usft

Grid Convergence: 0.56 °

Wellbore OWB

Magnetics Model Name Sample Date Declination Dip Angle Field Strength
(°) (°) (nT)

IGRF2020 6/23/2023 6.15 59.69 47,195.94535137

Design PWP

Audit Notes:

Version:Phase:PROTOTYPETie On Depth:0.0

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

 0.0
 0.0
 0.0
 179.43

Plan Survey Tool Program Date 6/23/2023

Depth From Depth To

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

1 0.0 18,359.0 PWP (OWB) MWD

OWSG MWD - Standard

Plan Sections Measured Vertical Dogleg Build Turn Depth Inclination Depth +N/-S +E/-W Rate **Azimuth** Rate Rate **TFO** (usft) (usft) (°/100usft) (°/100usft) (°/100usft) (usft) (usft) (°) (°) **Target** (°) 0.0 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 0.00 1,000.0 0.00 0.00 0.0 0.00 0.00 0.00 0.00 1,000.0 0.0 1,400.0 8.00 352.28 1,398.7 27.6 -3.72.00 2.00 0.00 352.28 5,386.2 8.00 352.28 5,346.1 577.4 -78.3 0.00 0.00 0.00 0.00 0.00 5.744.8 605.0 -82.0 2.00 -2.00 0.00 180.00 5.786.2 0.00 10,043.9 0.00 0.00 10,002.5 605.0 -82.0 0.00 0.00 0.00 0.00 127.6 -77.3 12.00 12.00 23.92 10,793.9 90.00 179.43 10,480.0 179.43 10,480.0 -7,437.3 -2.4 0.00 0.00 0.00 0.00 BHL (ASC 282H) 18,359.1 90.00 179.43



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

Site: Camelia_Azalea

Well: AZALEA STATE COM 26-36-28 282H

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

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well AZALEA STATE COM26-36-28 282H

KB=25' @ 2938.0usft KB=25' @ 2938.0usft

Grid

Planned Surv	/ev								
	,								
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	0.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
100.0		0.00	100.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
200.0		0.00	200.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
300.0		0.00	300.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
400.0 500.0		0.00 0.00	400.0 500.0	0.0 0.0	0.0 0.0	372,951.03 372,951.03	869,954.97 869,954.97	32.0208900 32.0208900	-103.2730224 -103.2730224
600.0		0.00	600.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
700.0		0.00	700.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
800.0		0.00	0.008	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
900.0		0.00	900.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
1,000.0		0.00	1,000.0	0.0	0.0	372,951.03	869,954.97	32.0208900	-103.2730224
1,100.0	Suild 2.00 2.00	352.28	1,100.0	1.7	-0.2	372,952.76	869,954.73	32.0208948	-103.2730231
1,200.0		352.28	1,199.8	6.9	-0.2	372,957.94	869,954.03	32.0209091	-103.2730257
1,300.0		352.28	1,299.5	15.6	-2.1	372,966.58	869,952.86	32.0209328	-103.2730287
1,400.0	8.00	352.28	1,398.7	27.6	-3.7	372,978.65	869,951.22	32.0209661	-103.2730336
	986.2 hold a								
1,500.0		352.28	1,497.7	41.4	-5.6 7.5	372,992.45	869,949.35	32.0210040	-103.2730392
1,600.0 1,700.0		352.28 352.28	1,596.8 1,695.8	55.2 69.0	-7.5 -9.4	373,006.24 373,020.03	869,947.48 869,945.61	32.0210420 32.0210799	-103.2730448 -103.2730504
1,800.0		352.28	1,794.8	82.8	-11.2	373,033.82	869.943.75	32.0210799	-103.2730560
1,867.9		352.28	1,862.0	92.1	-12.5	373,043.18	869,942.48	32.0211436	-103.2730598
Rustle									
1,900.0		352.28	1,893.8	96.6	-13.1	373,047.61	869,941.88	32.0211558	-103.2730616
2,000.0 2,100.0		352.28 352.28	1,992.9 2,091.9	110.4 124.2	-15.0 -16.8	373,061.40 373,075.19	869,940.01 869,938.14	32.0211938 32.0212318	-103.2730672 -103.2730728
2,200.0		352.28	2,190.9	138.0	-18.7	373,073.19	869,936.27	32.0212697	-103.2730728
2,216.2		352.28	2,207.0	140.2	-19.0	373,091.22	869,935.96	32.0212759	-103.2730793
Salado									
2,300.0		352.28	2,289.9	151.7	-20.6	373,102.78	869,934.40	32.0213077	-103.2730839
2,400.0		352.28	2,389.0	165.5	-22.4	373,116.57	869,932.53	32.0213456	-103.2730895
2,500.0 2,600.0		352.28 352.28	2,488.0 2,587.0	179.3 193.1	-24.3 -26.2	373,130.36 373,144.15	869,930.66 869,928.79	32.0213836 32.0214215	-103.2730951 -103.2731007
2,700.0		352.28	2,686.1	206.9	-28.0	373,157.94	869.926.92	32.0214595	-103.2731067
2,800.0		352.28	2,785.1	220.7	-29.9	373,171.73	869,925.05	32.0214974	-103.2731119
2,900.0		352.28	2,884.1	234.5	-31.8	373,185.52	869,923.18	32.0215354	-103.2731175
2,954.4		352.28	2,938.0	242.0	-32.8	373,193.03	869,922.17	32.0215561	-103.2731205
3,000.0		352.28	2,983.1	248.3	-33.7	373,199.31	869,921.31	32.0215734	-103.2731231
3,100.0		352.28	3,082.2	262.1	-35.7 -35.5	373,213.11	869,919.45	32.0216113	-103.2731237
3,200.0		352.28	3,181.2	275.9	-37.4	373,226.90	869,917.58	32.0216493	-103.2731343
3,215.0		352.28	3,196.0	277.9	-37.7	373,228.96	869,917.30	32.0216549	-103.2731351
Tansill									
									-103.2731399
							·		-103.2731517
3,619.9		352.28	3,597.0	333.8	-45.2	373,284.81	869,909.73	32.0218086	-103.2731578
Capita	n								
		352.28	3,676.3	344.8	-46.7	373,295.85	869,908.23	32.0218390	-103.2731623
									-103.2731678
							,		-103.2731734 -103.2731790
							·	32.0219909	-103.2731790
3,215.0 Tansill 3,300.0 3,400.0 3,500.0 3,600.0 3,619.9	8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00 8.00	352.28 352.28 352.28 352.28 352.28 352.28	3,196.0 3,280.2 3,379.2 3,478.3 3,577.3 3,597.0	277.9 289.7 303.5 317.2 331.0 333.8	-37.7 -39.3 -41.1 -43.0 -44.9 -45.2	373,228.96 373,240.69 373,254.48 373,268.27 373,282.06 373,284.81	869,917.30 869,915.71 869,913.84 869,911.97 869,910.10 869,909.73	32.0216549 32.0216872 32.0217252 32.0217631 32.0218011 32.0218086 32.0218390 32.0218770 32.0219150 32.0219529	-103.2731; -103.2731; -103.2731; -103.2731; -103.2731; -103.2731; -103.2731; -103.2731; -103.2731;



Database: AUS-COMPASS - EDM_15 - 32bit

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

Site: Camelia_Azalea

Well: AZALEA STATE COM 26-36-28 282H

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

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well AZALEA STATE COM26-36-28 282H

KB=25' @ 2938.0usft KB=25' @ 2938.0usft

Grid

Design.	1 441								
Planned Surv	ey								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
4,200.0	8.00	352.28	4,171.5	413.8	-56.1	373,364.81	869,898.88	32.0220288	-103.2731902
4,300.0	8.00	352.28	4,270.5	427.6	-58.0	373,378.60	869,897.01	32.0220668	-103.2731958
4,400.0	8.00	352.28	4,369.5	441.4	-59.8	373,392.39	869,895.15	32.0221047	-103.2732014
4,500.0	8.00	352.28	4,468.5	455.2	-61.7	373,406.18	869,893.28	32.0221427	-103.2732070
4,600.0	8.00	352.28	4,567.6	468.9	-63.6	373,419.97	869,891.41	32.0221806	-103.2732126
4,700.0	8.00	352.28	4,666.6	482.7	-65.4	373,433.76	869,889.54	32.0222186	-103.2732182
4,800.0	8.00	352.28	4,765.6	496.5	-67.3	373,447.56	869,887.67	32.0222566	-103.2732238
4,900.0	8.00	352.28	4,864.6	510.3	-69.2	373,461.35	869,885.80	32.0222945	-103.2732294
4,973.1	8.00	352.28	4,937.0	520.4	-70.5	373,471.42	869,884.43	32.0223223	-103.2732335
Lamar			1,00110				,		
5,000.0	8.00	352.28	4,963.7	524.1	-71.0	373,475.14	869,883.93	32.0223325	-103.2732350
5,100.0	8.00	352.28	5,062.7	537.9	-71.0 -72.9	373,488.93	869,882.06	32.0223704	-103.2732406
5,190.2	8.00	352.28	5,152.0	550.3	-72.5 -74.6	373,501.37	869,880.38	32.0224047	-103.2732456
Bell Ca		332.20	3,132.0	330.3	-7-4.0	070,001.07	000,000.00	32.0224041	-100.2702400
5,200.0	8.00	352.28	5,161.7	551.7	-74.8	373,502.72	869,880.19	32.0224084	-103.2732462
5,300.0	8.00	352.28	5,161.7	565.5	-74.6 -76.6	373,516.51	869,878.32	32.0224463	-103.2732518
5,386.2	8.00	352.28	5,260.7	577.4	-76.6 -78.3	373,528.40	869,876.71	32.0224791	-103.2732566
,		332.20	5,340.1	377.4	-10.3	373,320.40	009,070.71	32.0224791	-103.2732300
	op -2.00	252.20	F 250 0	F70.0	70.5	272 520 27	000 070 40	20 0004040	400 0700570
5,400.0	7.72	352.28	5,359.8	579.2	-78.5	373,530.27	869,876.46	32.0224842	-103.2732573
5,500.0	5.72	352.28	5,459.1	590.8	-80.1	373,541.87	869,874.89	32.0225161	-103.2732620
5,600.0	3.72	352.28	5,558.7	599.0	-81.2	373,550.03	869,873.78	32.0225386	-103.2732654
5,700.0	1.72 0.00	352.28	5,658.6 5,744.8	603.7	-81.8	373,554.74	869,873.14	32.0225516	-103.2732673
5,786.2		0.00	,	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
		t 5786.2 MD		COE 0	00.0	272 550 02	000 070 07	20 0005554	400 0700070
5,800.0	0.00	0.00	5,758.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
5,900.0	0.00	0.00	5,858.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,000.0	0.00	0.00	5,958.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,100.0	0.00	0.00	6,058.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,200.0 6,300.0	0.00 0.00	0.00 0.00	6,158.6 6,258.6	605.0 605.0	-82.0 -82.0	373,556.03 373,556.03	869,872.97 869,872.97	32.0225551 32.0225551	-103.2732678 -103.2732678
6,400.0	0.00	0.00	6,358.6	605.0	-82.0 -82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,500.0	0.00	0.00	6,458.6	605.0	-82.0 -82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,600.0	0.00	0.00	6,558.6	605.0	-82.0 -82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,700.0	0.00	0.00	6,658.6	605.0	-82.0 -82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,800.0	0.00	0.00	6,758.6	605.0	-82.0 -82.0	373,556.03	869,872.97	32.0225551	-103.2732678
6,900.0	0.00	0.00	6,858.6	605.0	-82.0 -82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,000.0	0.00	0.00	6,958.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,100.0	0.00	0.00	7,058.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,170.4	0.00	0.00	7,030.0	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
,	Canyon	0.00	7,120.0	500.0	02.0	070,000.00	000,012.01	02.022000 I	100.2102010
7,200.0	0.00	0.00	7,158.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,200.0	0.00	0.00	7,138.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,400.0	0.00	0.00	7,258.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,500.0	0.00	0.00	7,458.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,600.0	0.00	0.00	7,558.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,700.0	0.00	0.00	7,658.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,800.0	0.00	0.00	7,758.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
7,900.0	0.00	0.00	7,858.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,000.0	0.00	0.00	7,958.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,100.0	0.00	0.00	8,058.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,200.0	0.00	0.00	8,158.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,228.4	0.00	0.00	8,187.0	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
	pring Lime					,	•		
8,300.0	0.00	0.00	8,258.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
5,555.0			-,			,	,		



Database: AUS-COMPASS - EDM_15 - 32bit

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

Site: Camelia_Azalea

Well: AZALEA STATE COM 26-36-28 282H

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

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well AZALEA STATE COM26-36-28 282H

KB=25' @ 2938.0usft KB=25' @ 2938.0usft

Grid

Design:	PVVF								
Planned Surv	rev								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,400.0	0.00	0.00	8,358.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,500.0	0.00	0.00	8,458.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,600.0		0.00	8,558.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,700.0	0.00	0.00	8,658.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,800.0		0.00	8,758.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
8,900.0		0.00	8,858.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,000.0	0.00	0.00	8,958.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,100.0	0.00	0.00	9,058.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,200.0	0.00	0.00	9,158.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,300.0	0.00	0.00	9,258.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,400.0		0.00	9,358.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,500.0		0.00	9,458.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,600.0		0.00	9,558.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,700.0		0.00	9,658.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,716.4	0.00	0.00	9,675.0	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
First B	one Spring								
9,800.0		0.00	9,758.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
9,900.0		0.00	9,858.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
10,000.0		0.00	9,958.6	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
10,043.9	0.00	0.00	10,002.5	605.0	-82.0	373,556.03	869,872.97	32.0225551	-103.2732678
KOP-S	tart DLS 12.0	00 TFO 179	.43						
10,050.0	0.73	179.43	10,008.6	605.0	-82.0	373,555.99	869,872.97	32.0225550	-103.2732678
10,075.0		179.43	10,033.6	604.0	-82.0	373,555.01	869,872.98	32.0225523	-103.2732678
10,100.0		179.43	10,058.5	601.7	-82.0	373,552.73	869,873.00	32.0225460	-103.2732678
10,125.0		179.43	10,083.2	598.1	-81.9	373,549.16	869,873.03	32.0225362	-103.2732678
10,150.0		179.43	10,107.7	593.3	-81.9	373,544.29	869,873.08	32.0225228	-103.2732678
10,175.0		179.43	10,132.0	587.1	-81.8	373,538.14	869,873.14	32.0225059	-103.2732678
10,200.0		179.43	10,155.8	579.7	-81.7	373,530.73	869,873.22	32.0224856	-103.2732678
10,225.0		179.43	10,179.3	571.1	-81.7	373,522.09	869,873.30	32.0224618	-103.2732678
10,250.0		179.43	10,202.3	561.2	-81.6	373,512.23	869,873.40	32.0224347	-103.2732678
10,275.0		179.43	10,224.7	550.2	-81.5	373,501.18	869,873.51	32.0224043	-103.2732678
10,300.0		179.43	10,246.5	537.9	-81.3	373,488.97	869,873.63	32.0223708	-103.2732678
10,325.0		179.43	10,267.6	524.6	-81.2	373,475.64	869,873.76	32.0223341	-103.2732678
10,350.0		179.43	10,288.1	510.2	-81.1	373,461.22	869,873.91	32.0222945	-103.2732678
10,362.5		179.43	10,298.0	502.6	-81.0	373,453.60	869,873.98	32.0222736	-103.2732678
	d Bone Sprir		40 007 7	404.7	00.0	070 445 75	000 074 00	20 0000500	400 0700070
10,375.0		179.43	10,307.7	494.7	-80.9	373,445.75	869,874.06	32.0222520	-103.2732678
10,400.0		179.43	10,326.5	478.2	-80.7	373,429.28	869,874.22	32.0222067 32.0221588	-103.2732677
10,425.0		179.43 179.43	10,344.4	460.8 442.5	-80.6 -80.4	373,411.84	869,874.39 869,874.58	32.0221083	-103.2732677 -103.2732677
10,450.0 10,475.0		179.43	10,361.4 10,377.4	423.2	-80.4 -80.2	373,393.49 373,374.28	869,874.77	32.0221065	-103.2732677
10,475.0		179.43	10,377.4	403.2	-80.2 -80.0	373,354.25	869,874.77	32.0220005	-103.2732677
10,525.0		179.43	10,392.3	382.4	-79.8	373,333.47	869,875.17	32.0219433	-103.2732677
10,550.0		179.43	10,400.2	361.0	-79.6	373,312.00	869,875.38	32.0218843	-103.2732677
10,575.0		179.43	10,430.7	338.9	-79.4	373,289.88	869,875.60	32.0218235	-103.2732677
10,600.0		179.43	10,430.7	316.2	-79.4 -79.1	373,267.18	869,875.83	32.0217611	-103.2732677
10,625.0		179.43	10,450.4	292.9	-78.9	373,243.97	869,876.06	32.0216973	-103.2732677
10,650.0		179.43	10,458.4	269.3	-78.7	373,220.30	869,876.29	32.0216323	-103.2732677
10,675.0		179.43	10,465.2	245.2	-78.4	373,196.25	869,876.53	32.0215661	-103.2732677
10,700.0		179.43	10,470.8	220.8	-78.2	373,171.87	869,876.77	32.0214991	-103.2732677
10,725.0		179.43	10,475.0	196.2	-78.0	373,147.23	869,877.01	32.0214314	-103.2732677
10,750.0		179.43	10,477.9	171.4	-77.7	373,122.41	869,877.26	32.0213632	-103.2732677
10,775.0		179.43	10,479.6	146.4	-77.5	373,097.47	869,877.51	32.0212946	-103.2732677



Database: AUS-COMPASS - EDM_15 - 32bit

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

Site: Camelia_Azalea

Well: AZALEA STATE COM 26-36-28 282H

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

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well AZALEA STATE COM26-36-28 282H

KB=25' @ 2938.0usft KB=25' @ 2938.0usft

Grid

Planned Surv	vey .								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
10,793.9	90.00	179.43	10,480.0	127.6	-77.3	373,078.59	869,877.69	32.0212427	-103.2732676
	rt 7565.2 hol	ld at 10793.							
10,800.0		179.43	10,480.0	121.4	-77.2	373,072.48	869,877.75	32.0212259	-103.2732676
10,900.0		179.43	10,480.0	21.5	-76.2	372,972.48	869,878.74	32.0209510	-103.2732676
11,000.0		179.43	10,480.0	-78.5	-75.2	372,872.49	869,879.73	32.0206762	-103.2732676
11,100.0		179.43	10,480.0	-178.5	-74.2	372,772.49	869,880.72	32.0204013	-103.2732676
11,200.0 11,300.0		179.43 179.43	10,480.0 10,480.0	-278.5 -378.5	-73.3 -72.3	372,672.50 372,572.50	869,881.71 869,882.70	32.0201265 32.0198516	-103.2732675 -103.2732675
11,400.0		179.43	10,480.0	-376.5 -478.5	-72.3 -71.3	372,472.51	869,883.69	32.0195767	-103.2732675
11,500.0		179.43	10,480.0	-578.5	-71.3 -70.3	372,372.51	869,884.68	32.0193019	-103.2732674
11,600.0		179.43	10,480.0	-678.5	-69.3	372,272.52	869,885.67	32.0190270	-103.2732674
11,700.0		179.43	10,480.0	-778.5	-68.3	372,172.52	869,886.66	32.0187521	-103.2732674
11,800.0	90.00	179.43	10,480.0	-878.5	-67.3	372,072.53	869,887.65	32.0184773	-103.2732674
11,900.0	90.00	179.43	10,480.0	-978.5	-66.3	371,972.53	869,888.64	32.0182024	-103.2732673
12,000.0	90.00	179.43	10,480.0	-1,078.5	-65.3	371,872.54	869,889.63	32.0179275	-103.2732673
12,100.0		179.43	10,480.0	-1,178.5	-64.3	371,772.54	869,890.62	32.0176527	-103.2732673
12,200.0		179.43	10,480.0	-1,278.5	-63.4	371,672.55	869,891.61	32.0173778	-103.2732672
12,300.0		179.43	10,480.0	-1,378.5	-62.4	371,572.55	869,892.60	32.0171029	-103.2732672
12,400.0 12.500.0		179.43 179.43	10,480.0	-1,478.5	-61.4 -60.4	371,472.56	869,893.59	32.0168281	-103.2732672 -103.2732672
12,500.0		179.43	10,480.0 10,480.0	-1,578.5 -1,678.5	-60.4 -59.4	371,372.56 371,272.56	869,894.58 869,895.57	32.0165532 32.0162783	-103.2732671
12,700.0		179.43	10,480.0	-1,778.5	-58.4	371.172.57	869.896.56	32.0160035	-103.2732671
12,800.0		179.43	10,480.0	-1,878.5	-57.4	371,072.57	869,897.55	32.0157286	-103.2732671
12,900.0		179.43	10,480.0	-1,978.4	-56.4	370,972.58	869,898.54	32.0154537	-103.2732670
13,000.0		179.43	10,480.0	-2,078.4	-55.4	370,872.58	869,899.53	32.0151789	-103.2732670
13,100.0	90.00	179.43	10,480.0	-2,178.4	-54.4	370,772.59	869,900.52	32.0149040	-103.2732670
13,200.0	90.00	179.43	10,480.0	-2,278.4	-53.5	370,672.59	869,901.51	32.0146291	-103.2732669
13,300.0		179.43	10,480.0	-2,378.4	-52.5	370,572.60	869,902.50	32.0143543	-103.2732669
13,400.0		179.43	10,480.0	-2,478.4	-51.5	370,472.60	869,903.49	32.0140794	-103.2732669
13,500.0		179.43	10,480.0	-2,578.4	-50.5	370,372.61	869,904.48	32.0138045	-103.2732669
13,600.0		179.43	10,480.0	-2,678.4	-49.5	370,272.61	869,905.48	32.0135297	-103.2732668
13,700.0 13,800.0		179.43 179.43	10,480.0 10,480.0	-2,778.4 -2,878.4	-48.5 -47.5	370,172.62 370,072.62	869,906.47 869,907.46	32.0132548 32.0129799	-103.2732668 -103.2732668
13,900.0		179.43	10,480.0	-2,076.4 -2,978.4	-47.5 -46.5	369,972.63	869,908.45	32.0129799	-103.2732667
14,000.0		179.43	10,480.0	-3,078.4	-40.5 -45.5	369,872.63	869,909.44	32.0124302	-103.2732667
14,100.0		179.43	10,480.0	-3,178.4	-44.5	369,772.64	869,910.43	32.0121553	-103.2732667
14,200.0		179.43	10,480.0	-3,278.4	-43.6	369,672.64	869,911.42	32.0118805	-103.2732666
14,300.0		179.43	10,480.0	-3,378.4	-42.6	369,572.65	869,912.41	32.0116056	-103.2732666
14,400.0		179.43	10,480.0	-3,478.4	-41.6	369,472.65	869,913.40	32.0113307	-103.2732666
14,500.0		179.43	10,480.0	-3,578.4	-40.6	369,372.66	869,914.39	32.0110559	-103.2732666
14,600.0		179.43	10,480.0	-3,678.4	-39.6	369,272.66	869,915.38	32.0107810	-103.2732665
14,700.0		179.43	10,480.0	-3,778.4	-38.6	369,172.67	869,916.37	32.0105061	-103.2732665
14,800.0		179.43	10,480.0	-3,878.4	-37.6	369,072.67	869,917.36	32.0102313	-103.2732665
14,900.0		179.43	10,480.0	-3,978.3	-36.6	368,972.68	869,918.35	32.0099564	-103.2732664
15,000.0		179.43	10,480.0	-4,078.3	-35.6	368,872.68	869,919.34	32.0096816	-103.2732664
15,100.0 15,200.0		179.43 179.43	10,480.0 10,480.0	-4,178.3 -4,278.3	-34.6 -33.7	368,772.69 368,672.69	869,920.33 869,921.32	32.0094067 32.0091318	-103.2732664 -103.2732664
15,300.0		179.43	10,480.0	-4,276.3 -4,378.3	-33.7 -32.7	368,572.70	869,922.31	32.0091318	-103.2732663
15,400.0		179.43	10,480.0	-4,478.3	-31.7	368,472.70	869,923.30	32.0085821	-103.2732663
15,500.0		179.43	10,480.0	-4,578.3	-30.7	368,372.71	869,924.29	32.0083072	-103.2732663
15,600.0		179.43	10,480.0	-4,678.3	-29.7	368,272.71	869,925.28	32.0080324	-103.2732662
15,700.0		179.43	10,480.0	-4,778.3	-28.7	368,172.72	869,926.27	32.0077575	-103.2732662
15,800.0		179.43	10,480.0	-4,878.3	-27.7	368,072.72	869,927.26	32.0074826	-103.2732662
15,900.0	90.00	179.43	10,480.0	-4,978.3	-26.7	367,972.73	869,928.25	32.0072078	-103.2732661



Database: AUS-COMPASS - EDM_15 - 32bit

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

Site: Camelia_Azalea

Well: AZALEA STATE COM 26-36-28 282H

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

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well AZALEA STATE COM26-36-28 282H

KB=25' @ 2938.0usft KB=25' @ 2938.0usft

Grid

Namad Cum	- 1.								
Planned Surv	ey								
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	179.43	10,480.0	-5,078.3	-25.7	367,872.73	869,929.24	32.0069329	-103.273266°
16,100.0	90.00	179.43	10,480.0	-5,178.3	-24.7	367,772.74	869,930.23	32.0066580	-103.273266
16,200.0	90.00	179.43	10,480.0	-5,278.3	-23.8	367,672.74	869,931.22	32.0063832	-103.273266
16,300.0	90.00	179.43	10,480.0	-5,378.3	-22.8	367,572.75	869,932.21	32.0061083	-103.273266
16,400.0	90.00	179.43	10,480.0	-5,478.3	-21.8	367,472.75	869,933.20	32.0058334	-103.273266
16,500.0	90.00	179.43	10,480.0	-5,578.3	-20.8	367,372.76	869,934.19	32.0055586	-103.273266
16,600.0		179.43	10,480.0	-5,678.3	-19.8	367,272.76	869,935.18	32.0052837	-103.2732659
16,700.0		179.43	10,480.0	-5,778.3	-18.8	367,172.77	869,936.17	32.0050088	-103.2732659
16,800.0		179.43	10,480.0	-5,878.3	-17.8	367,072.77	869,937.16	32.0047340	-103.2732659
16,900.0		179.43	10,480.0	-5,978.3	-16.8	366,972.78	869,938.15	32.0044591	-103.273265
17,000.0		179.43	10,480.0	-6,078.2	-15.8	366,872.78	869,939.14	32.0041842	-103.273265
17,100.0		179.43	10,480.0	-6,178.2	-14.8	366,772.79	869,940.13	32.0039094	-103.273265
17,200.0		179.43	10,480.0	-6,278.2	-13.9	366,672.79	869,941.12	32.0036345	-103.273265
17,300.0		179.43	10,480.0	-6,378.2	-12.9	366,572.80	869,942.11	32.0033596	-103.273265
17,400.0		179.43	10,480.0	-6,478.2	-11.9	366,472.80	869,943.10	32.0030848	-103.273265
17,500.0		179.43	10,480.0	-6,578.2	-10.9	366,372.80	869,944.09	32.0028099	-103.273265
17,600.0		179.43	10,480.0	-6,678.2	-9.9	366,272.81	869,945.08	32.0025350	-103.273265
17,700.0		179.43	10,480.0	-6,778.2	-8.9	366,172.81	869,946.07	32.0022602	-103.273265
17,800.0		179.43	10,480.0	-6,878.2	-7.9	366,072.82	869,947.06	32.0019853	-103.273265
17,900.0		179.43	10,480.0	-6,978.2	-6.9	365,972.82	869,948.05	32.0017104	-103.273265
18,000.0		179.43	10,480.0	-7,078.2	-5.9	365,872.83	869,949.04	32.0014356	-103.273265
18,100.0		179.43	10,480.0	-7,178.2	-4.9	365,772.83	869,950.03	32.0011607	-103.273265
18,200.0		179.43	10,480.0	-7,278.2	-3.9	365,672.84	869,951.02	32.0008858	-103.273265
18,300.0		179.43	10,480.0	-7,378.2	-3.0	365,572.84	869,952.01	32.0006110	-103.273265
18,359.1	90.00	179.43	10,480.0	-7,437.3	-2.4	365,513.75	869,952.59	32.0004485	-103.273265
TD at 1	8359.1								

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
FTP (ASC 282H) - plan misses targ - Point	0.00 let center by		10,480.0 0792.3usft	129.1 MD (10480.0	-77.2 0 TVD, 129.1	373,080.16 N, -77.3 E)	869,877.73	32.0212470	-103.2732675
BHL (ASC 282H) - plan hits target of Point	0.00 center	0.00	10,480.0	-7,437.3	-2.4	365,513.75	869,952.59	32.0004485	-103.2732654
LTP (ASC 282H) - plan misses targ - Point	0.00 jet center by	0.00 9.1usft at 1	10,480.0 8300.0usft	-7,387.3 MD (10480.0	-2.9 0 TVD, -7378	365,563.73 3.2 N, -3.0 E)	869,952.07	32.0005859	-103.2732655



Database: AUS-COMPASS - EDM_15 - 32bit

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

Site: Camelia_Azalea

Well: AZALEA STATE COM 26-36-28 282H

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

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well AZALEA STATE COM26-36-28 282H

KB=25' @ 2938.0usft KB=25' @ 2938.0usft

Grid

Formations							
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,867.9	1,862.0	Rustler				
	2,216.2	2,207.0	Salado				
	2,954.4	2,938.0	Dewey Lake				
	3,215.0	3,196.0	Tansill				
	3,619.9	3,597.0	Capitan				
	4,973.1	4,937.0	Lamar				
	5,190.2	5,152.0	Bell Canyon				
	7,170.4	7,129.0	Brushy Canyon				
	8,228.4	8,187.0	Bone Spring Lime				
	9,716.4	9,675.0	First Bone Spring				
	10,362.5	10,298.0	Second Bone Spring				

Plan Annotations									
Measured Depth (usft)	Vertical Depth (usft)	Local Coor +N/-S (usft)	dinates +E/-W (usft)	Comment					
1,000.0	1,000.0	0.0	0.0	Start Build 2.00					
1,400.0	1,398.7	27.6	-3.7	Start 3986.2 hold at 1400.0 MD					
5,386.2	5,346.1	577.4	-78.3	Start Drop -2.00					
5,786.2	5,744.8	605.0	-82.0	Start 4257.7 hold at 5786.2 MD					
10,043.9	10,002.5	605.0	-82.0	KOP-Start DLS 12.00 TFO 179.43					
10,793.9	10,480.0	127.6	- 77.3	LP-Start 7565.2 hold at 10793.9 MD					
18,359.1	10,480.0	-7,437.3	-2.4	TD at 18359.1					



H₂S Drilling Operation Plan

1. All Company and Contract personnel admitted on location must be trained by a qualified H₂S safety instructor to the following:

- a. Characteristics of H₂S
- b. Physical effects and hazards
- c. Principal and operation of H₂s 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. H₂S 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.



H₂S 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 H₂S has on tubular goods and other mechanical equipment provided through contractor.



H₂S Contingency Plan

Emergency Procedures

In the event of a release of H₂S, the first responder(s) must:

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response.
- Take precautions to avoid personal injury during this operation.
- Contact Operator and/or local officials 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 (SO₂). 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 H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air=1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	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)



H₂S Contingency Plan

Ameredev Operating LLC – Emergency Phone 737-300-4799									
Key Personnel:									
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 Construction Manager 737-300-4733 281-928-4692									

Artesia	
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
Medical	
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

I. Operator: _____ Ameredev II, LLC_____ **OGRID:** _____ 372224 ____ **Date:** _____ 06/21/2023 ___

Well(s): Provide the following					of wells proposed to	be drilled or propo
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Azalea 26 36 28 State Com 281H	30025-		250' FNL & 385' FWL	680	3,412	2,610
Azalea 26 36 28 State Com 282H	30025-		230' FNL & 1726' FWL	8	39	14
Azalea 26 36 28 State Com 381H	30025-		230' FNL & 1426' FEL	680	3,412	2,610
Azalea 26 36 28 State Com 382H	30025-		210' FNL & 2111' FWL	74	373	132
Azalea 26 36 28 State Com 384H	30025-		230' FNL & 775' FEL	680	3,412	2,610

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
Azalea 26 36 28 State Com 281H	30025-	12/01/2024	01/15/2025	02/15/2025	03/01/2025	03/04/2025
Azalea 26 36 28 State Com 282H	30025-	12/01/2024	01/15/2025	02/15/2025	03/01/2025	03/04/2025
Azalea 26 36 28 State Com 381H	30025-	12/01/2024	01/15/2025	02/15/2025	03/01/2025	03/04/2025
Azalea 26 36 28 State Com 382H	30025-	12/01/2024	01/15/2025	02/15/2025	03/01/2025	03/04/2025
Azalea 26 36 28 State Com 384H	30025-	12/01/2024	01/15/2025	02/15/2025	03/01/2025	03/04/2025

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.

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.

XII. Line Capacity. The natural	gas gathering system	will □ will r	not have capacity	o gather 1	100% of the	anticipated n	ıatural ga
production volume from the well j	prior to the date of first	production.					

XIII.	Line Pressure. Operator \square does \square does not anticipate that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment, or positive that its existing well(s) connected to the same segment.	rtion, of the
natura	al gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the ne	ew well(s).

Attach O	perator's	plan to	manage	production	in rest	onse to	the	increased	line	pressure

XIV. Confidentiality: Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provides	ed 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 inform	ation
for which confidentiality is asserted and the basis for such assertion.	

(i)

Section 3 - Certifications Effective May 25, 2021

Operator certifies that, a	fter 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							
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 ; or						
Venting and Flaring P	lan. □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential						
alternative beneficial us	es 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						

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