<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

New Well

16. Multiple

Depth to Ground water

# **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 339928

| APPLICATION FOR PERMIT TO DRILL | RF-FNTFR DFFPF | N PLUGBACK OR | ADD A ZONE |
|---------------------------------|----------------|---------------|------------|

|                                  |                   | APPLICATIO   | N FOR PERMIT 1 | O DRILL, RE-  | ENTER, DEEPE      | IN, PLUGBAC   | N, OK ADD |           |               |        |     |
|----------------------------------|-------------------|--------------|----------------|---------------|-------------------|---------------|-----------|-----------|---------------|--------|-----|
|                                  | ame and Address   |              |                |               |                   |               |           | 2. OGRIE  | O Number      |        |     |
|                                  | IEREDEV OPERATI   | NG, LLC      |                |               |                   |               |           |           | 372224        |        |     |
| 29                               | 01 Via Fortuna    |              |                |               |                   |               |           | 3. API Nu | umber         |        |     |
| Au                               | stin, TX 78746    |              |                |               |                   |               |           |           | 30-025-51469  | )      |     |
| 1. Property Co                   | ode               | 5. Pro       | perty Name     |               |                   |               |           | 6. Well N | lo.           |        |     |
| 331807 AZALEA 26 36 28 STATE COM |                   |              |                |               |                   |               |           |           | 073H          |        |     |
|                                  |                   |              |                |               |                   |               |           |           |               |        |     |
|                                  |                   |              |                | 7. Surfa      | ace Location      |               |           |           |               |        |     |
| L - Lot                          | Section           | Township     | Range          | Lot Idn       | Feet From         | N/S Line      | Feet From |           | E/W Line      | County |     |
| В                                | 28                | 26S          | 36E            | В             | 180               | N             | 1         | 970       | E             |        | Lea |
|                                  |                   |              |                | 8. Proposed B | ottom Hole Locati | on            |           |           |               |        |     |
| JL - Lot                         | Section           | Township     | Range          | Lot Idn       | Feet From         | N/S Line      | Feet From |           | E/W Line      | County |     |
| G                                | 33                | 26S          | 36E            | 2             | 50                | S             | 16        | 650       | E             |        | Lea |
|                                  |                   |              |                | 9. Pool       | Information       |               |           |           |               |        |     |
| WC-025 G-0                       | 08 S263620C;LWR I | BONE SPRIN   |                |               |                   |               |           |           | 981           | 50     |     |
|                                  |                   |              |                | Additional    | Well Information  |               |           |           |               |        |     |
| I1 Work Type                     |                   | 12 Well Type | 12.0           | able/Potary   |                   | 14 Lease Type | 145.6     | ^         | vel Elevation |        |     |

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

OIL

17576

17. Proposed Depth

21. Proposed Casing and Cement Program

18. Formation

Bone Spring

Distance from nearest fresh water well

State

19. Contractor

2907

1/1/2024

Distance to nearest surface water

20. Spud Date

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5      | 13.375      | 68               | 1856          | 1146            | 0             |
| Int1 | 9.875     | 7.625       | 29.7             | 9700          | 1194            | 0             |
| Prod | 6.75      | 5.5         | 23               | 17576         | 1368            | 0             |

#### **Casing/Cement Program: Additional Comments**

|            | 22. Proposed Blowout Prevention Program |               |              |  |  |  |  |  |  |
|------------|---|---------------|--------------|--|--|--|--|--|--|
| Туре       | Working Pressure                        | Test Pressure | Manufacturer |  |  |  |  |  |  |
| Double Ram | 5000                                    | 5000          | TRD          |  |  |  |  |  |  |

| knowledge and b | pelief. have complied with 19.15.14.9 (A) | s true and complete to the best of my  NMAC ⊠ and/or 19.15.14.9 (B) NMAC |              | OIL CONSERVA               | FION DIVISION |  |
|-----------------|---|--|--------------|----------------------------|---------------|--|
| Printed Name:   | Electronically filed by Christie H        | anna   | Approved By: | Paul F Kautz               |               |  |
| Title:          | Regulatory                                |  | Title:       | Geologist                  |               |  |
| Email Address:  | channa@ameredev.com                       | Approved Date:   | 5/19/2023    | Expiration Date: 5/19/2025 |               |  |
| Date:           | 5/9/2023                                  | Conditions of Approval Attached  |              |                            |               |  |

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 Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 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 WC-025 G-08

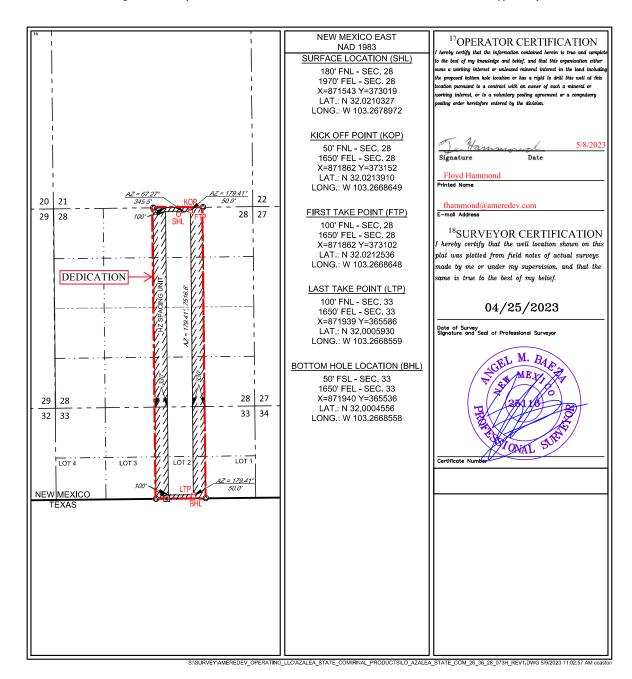
# WELL LOCATION AND ACREAGE DEDICATION PLAT S263620C; LOWER BONE

| <sup>1</sup> API Number<br>30-025- 51469 |  | <sup>2</sup> Pool Code<br><b>XXX</b> 7 [9815( | <sup>3</sup> Pool Name <b>SPRING</b> WC-025 G-06 S263622F; BONE SPRING |                          |  |  |  |
|--|--|---|--|--------------------------|--|--|--|
| <sup>4</sup> Property Code               |  | <sup>- 5</sup> Pr                             | operty Name  | <sup>6</sup> Well Number |  |  |  |
| 331807                                   |  | 36 28 STATE COM                               | 073H   |                          |  |  |  |
| <sup>7</sup> OGRID №.                    |  | <sup>8</sup> Ор                               | perator Name   | <sup>9</sup> Elevation   |  |  |  |
| 3722 <del>2</del> 4                      |  | AMEREDEV                                      | OPERATING, LLC.  | 2907'                    |  |  |  |

11Bottom 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 |
|-------------------|--------------------------|------------|----------------|----------------------|---------------|------------------|---------------|----------------|--------|
| 2                 | 33                       | 26-S       | 36-E           | _                    | 50'           | SOUTH            | 1650'         | EAST           | LEA    |
|                   | 1.0                      |            |                | 144                  |               |                  |               |                |        |
| 12Dedicated Acres | <sup>13</sup> Joint or I | nfill 14Co | nsolidation Co | de <sup>15</sup> Ord | er No.        |                  |               |                |        |
| 233.72            |                          |            | C              |                      |               |                  |               |                |        |
| .555.1.2          |                          |            | _              |                      |               |                  |               |                |        |

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

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

Form APD Conditions

Permit 339928

#### PERMIT CONDITIONS OF APPROVAL

| Operator Name and Address:       | API Number:                     |  |  |
|----------------------------------|---------------------------------|--|--|
| AMEREDEV OPERATING, LLC [372224] | 30-025-51469                    |  |  |
| 2901 Via Fortuna                 | Well:                           |  |  |
| Austin, TX 78746                 | AZALEA 26 36 28 STATE COM #073H |  |  |

| OCD      | Condition  |
|----------|--|
| Reviewer |  |
| 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   |



# **Wellbore Schematic**

Lea, NM

**Wellhead:** A - 13-5/8" 10M x 13-5/8" SOW **Field:** Delaware

B - 13-5/8" 10M x 13-5/8" 10M **Objective**: Second Bone Spring

GL:

2,907'

C - 13-5/8" 10M x 13-5/8" 10M **TVD**: 9,700' Tubing Spool - 7-1/16" 15M x 13-3/8" 10M **MD**: 17,576'

Tubing: 2-7/8" L-80 6.5# 8rd EUE E-Mail: Wellsite2@ameredev.com

| i ubing:          | 2-7/8" L-80 6.5# 8rd E | .oc                              | E-Maii:                 | <u>vveiisite2@ameredev.com</u> |                       |            |                                     |
|-------------------|------------------------|----------------------------------|-------------------------|--------------------------------|-----------------------|------------|-------------------------------------|
| Hole Size         |                        | Formation Tops                   |                         | Logs                           | Cemen                 | t          | Mud Weight                          |
| 17.5"             |                        | Rustler<br>13.375" 68# J-55 BTC  | 1,731'<br><b>1,856'</b> |                                | 1,146 Sacks<br>TOC 0' | 50% Excess | 8.4-8.6 ppg<br>WBM                  |
|                   |                        | Salado <b>DV Tool</b>            | 2,100'<br><b>3,239'</b> |                                | 444 Sacks<br>TOC 0'   | 25% Excess |                                     |
|                   | 71 1                   | Tansill                          | 3,239'                  |                                |                       |            | 1                                   |
|                   | 11 11                  | Capitan Reef                     | 3,726'                  |                                |                       |            |                                     |
| 9.875"            | 11 11                  | Lamar                            | 4,925'                  | 925'                           |                       |            | ulsion                              |
|                   | ш                      | Bell Canyon                      | 5,095'                  |                                |                       |            | e Emu                               |
|                   |                        | Brushy Canyon                    | 7,024'                  |                                |                       |            | el Brin                             |
|                   |                        | Bone Spring Lime                 | 8,010'                  |                                |                       |            | )ies(                               |
|                   | 11 11                  | First Bone Spring                | 9,554'                  |                                | sks                   | SS         | 7.5 - 9.4 ppg Diesel Brine Emulsion |
|                   |                        | Second Bone Spring               | 10,171'                 |                                | t Sad<br>0'           | Excess     | .6 - 9.                             |
| 12° Build<br>@    |                        | 7.625" 29.7# L-80HC BTC          | 9,700'                  |                                | 1,194 Sacks<br>TOC 0' | 25%        | 7.5                                 |
| 9,260' ME<br>thru | _                      | 5 / / 6 11 6 5 1 6 5 1 1 6 5 1 1 | 17,576'                 |                                |                       |            |                                     |
| 10,010' M         |                        | P-110 USS-Eagle SFH              |                         |                                |                       |            |                                     |
| 10,310 101        | Target Seco            | nd Bone Spring 9700 TVD //       | 11910 MID               |                                | cks                   | SSS        |                                     |
|                   | 71                     | 6.75"                            |                         |                                | 1,368 Sacks<br>TOC 0' | 25% Excess |                                     |



# **Ameredev Operating**

Lea County, NM (N83-NME)
Camelia\_Azalea
AZALEA STATE COM 26-36-28 073H

**OWB** 

Plan: PWP0

# **Standard Planning Report - Geographic**

02 May, 2023



AUS-COMPASS - EDM 15 - 32bit Database:

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

Site: Camelia Azalea

Well: AZALEA STATE COM 26-36-28 073H

Wellbore: **OWB** PWP0 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AZALEA STATE COM26-36-28 073H

KB=27' @ 2934.0usft KB=27' @ 2934.0usft

Grid

Minimum Curvature

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

Map System: Geo Datum:

Map Zone:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Site Camelia Azalea

Northing: 372,956.73 usft 32.0208919 Site Position: Latitude: Easting: 870,464.84 usft Longitude: -103.2713773 From: Lat/Long

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

Well **AZALEA STATE COM 26-36-28 073H** 

**Well Position** 0.0 usft Latitude: 32.0210327 +N/-S Northing: 373,018.57 usfl

0.0 usft Easting: 871,542.97 usfl -103.2678972 +E/-W Longitude:

**Position Uncertainty** 3.0 usft Wellhead Elevation: usf Ground Level: 2,907.0 usft

0.57° **Grid Convergence:** 

Wellbore **OWB** 

Declination Dip Angle Field Strength **Magnetics Model Name** Sample Date (°) (°) (nT) IGRF2020 5/1/2023 6.17 59.69 47,211.74359785

PWP0 Design

0.0

**Audit Notes:** 

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

**Vertical Section:** Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 0.0 0.0 0.0 179.41

MWD

**Plan Survey Tool Program** Date 5/2/2023

**Depth To Depth From** 

17,574.5 PWP0 (OWB)

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

OWSG MWD - Standard

| Plan Section                | ns                 |                |                             |                 |                 |                               |                              |                             |            |                |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------------|------------------------------|-----------------------------|------------|----------------|
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) | TFO<br>(°) | Target         |
| 0.0                         | 0.00               | 0.00           | 0.0                         | 0.0             | 0.0             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 2,000.0                     | 0.00               | 0.00           | 2,000.0                     | 0.0             | 0.0             | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 2,700.0                     | 7.00               | 29.25          | 2,698.3                     | 37.3            | 20.9            | 1.00                          | 1.00                         | 0.00                        | 29.25      |                |
| 7,263.8                     | 7.00               | 29.25          | 7,228.1                     | 522.5           | 292.6           | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 7,963.8                     | 0.00               | 0.00           | 7,926.3                     | 559.8           | 313.5           | 1.00                          | -1.00                        | 0.00                        | 180.00     |                |
| 9,260.0                     | 0.00               | 0.00           | 9,222.5                     | 559.8           | 313.5           | 0.00                          | 0.00                         | 0.00                        | 0.00       |                |
| 10,010.0                    | 90.00              | 179.41         | 9,700.0                     | 82.4            | 318.4           | 12.00                         | 12.00                        | 23.92                       | 179.41     |                |
| 17,575.5                    | 90.00              | 179.41         | 9,700.0                     | -7,482.7        | 396.6           | 0.00                          | 0.00                         | 0.00                        | 0.00 E     | 3HL (ASC 073H) |



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 073H

Wellbore: OWB Design: PWP0 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well AZALEA STATE COM26-36-28 073H

KB=27' @ 2934.0usft KB=27' @ 2934.0usft

iria

| Planned Surv                | rey .              |                |                             |                 |                 |                           |                          |                          |                              |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|---------------------------|--------------------------|--------------------------|------------------------------|
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(usft) | Latitude                 | Longitude                    |
| 0.0                         | 0.00               | 0.00           | 0.0                         | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 100.0                       | 0.00               | 0.00           | 100.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 200.0                       | 0.00               | 0.00           | 200.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 300.0                       | 0.00               | 0.00           | 300.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 400.0                       |                    | 0.00           | 400.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 500.0                       |                    | 0.00           | 500.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 600.0                       |                    | 0.00           | 600.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 700.0                       |                    | 0.00           | 700.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 800.0                       |                    | 0.00           | 800.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 900.0                       |                    | 0.00           | 900.0                       | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 1,000.0                     |                    | 0.00           | 1,000.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 1,100.0                     |                    | 0.00           | 1,100.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 1,200.0                     |                    | 0.00           | 1,200.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 1,300.0                     |                    | 0.00<br>0.00   | 1,300.0<br>1,400.0          | 0.0<br>0.0      | 0.0<br>0.0      | 373,018.57<br>373,018.57  | 871,542.97<br>871,542.97 | 32.0210327<br>32.0210327 | -103.2678972<br>-103.2678972 |
| 1,400.0<br>1,500.0          |                    | 0.00           | 1,500.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 1,600.0                     |                    | 0.00           | 1,600.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97<br>871,542.97 | 32.0210327               | -103.2678972                 |
| 1,700.0                     |                    | 0.00           | 1,700.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 1,800.0                     |                    | 0.00           | 1,800.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 1,900.0                     |                    | 0.00           | 1,900.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
| 2,000.0                     |                    | 0.00           | 2,000.0                     | 0.0             | 0.0             | 373,018.57                | 871,542.97               | 32.0210327               | -103.2678972                 |
|                             | uild 1.00          | 0.00           | 2,000.0                     | 0.0             | 0.0             | 0.0,0.0.0.                | 0,0 .2.0.                | 02.02.002.               | .00.20.00.2                  |
| 2,100.0                     |                    | 29.25          | 2,100.0                     | 0.8             | 0.4             | 373,019.33                | 871,543.39               | 32.0210348               | -103.2678958                 |
| 2,200.0                     |                    | 29.25          | 2,200.0                     | 3.0             | 1.7             | 373,021.61                | 871,544.67               | 32.0210410               | -103.2678916                 |
| 2,300.0                     |                    | 29.25          | 2,299.9                     | 6.9             | 3.8             | 373,025.42                | 871,546.80               | 32.0210515               | -103.2678846                 |
| 2,400.0                     | 4.00               | 29.25          | 2,399.7                     | 12.2            | 6.8             | 373,030.75                | 871,549.79               | 32.0210660               | -103.2678748                 |
| 2,500.0                     | 5.00               | 29.25          | 2,499.4                     | 19.0            | 10.7            | 373,037.59                | 871,553.62               | 32.0210847               | -103.2678622                 |
| 2,600.0                     |                    | 29.25          | 2,598.9                     | 27.4            | 15.3            | 373,045.95                | 871,558.30               | 32.0211076               | -103.2678468                 |
| 2,700.0                     |                    | 29.25          | 2,698.3                     | 37.3            | 20.9            | 373,055.83                | 871,563.83               | 32.0211346               | -103.2678287                 |
|                             | 563.8 hold a       |                |                             |                 |                 |                           |                          |                          |                              |
| 2,800.0                     |                    | 29.25          | 2,797.5                     | 47.9            | 26.8            | 373,066.46                | 871,569.79               | 32.0211636               | -103.2678091                 |
| 2,900.0                     |                    | 29.25          | 2,896.8                     | 58.5            | 32.8            | 373,077.10                | 871,575.74               | 32.0211927               | -103.2677896                 |
| 3,000.0                     |                    | 29.25          | 2,996.0                     | 69.2            | 38.7            | 373,087.73                | 871,581.70               | 32.0212218               | -103.2677700                 |
| 3,100.0                     |                    | 29.25          | 3,095.3                     | 79.8            | 44.7            | 373,098.36                | 871,587.65               | 32.0212508               | -103.2677505                 |
| 3,200.0                     |                    | 29.25<br>29.25 | 3,194.5                     | 90.4            | 50.6            | 373,109.00<br>373,119.63  | 871,593.61               | 32.0212799               | -103.2677309                 |
| 3,300.0<br>3,400.0          |                    | 29.25          | 3,293.8<br>3,393.0          | 101.1<br>111.7  | 56.6<br>62.6    | 373,119.03                | 871,599.56<br>871,605.52 | 32.0213090<br>32.0213380 | -103.2677114<br>-103.2676918 |
| 3,500.0                     |                    | 29.25          | 3,492.3                     | 122.3           | 68.5            | 373,140.89                | 871,611.47               | 32.0213671               | -103.2676723                 |
| 3,600.0                     |                    | 29.25          | 3,591.6                     | 133.0           | 74.5            | 373,151.53                | 871,617.43               | 32.0213961               | -103.2676723                 |
| 3,700.0                     |                    | 29.25          | 3,690.8                     | 143.6           | 80.4            | 373,162.16                | 871,623.38               | 32.0214252               | -103.2676332                 |
| 3,800.0                     |                    | 29.25          | 3,790.1                     | 154.2           | 86.4            | 373,172.79                | 871,629.34               | 32.0214543               | -103.2676136                 |
| 3,900.0                     |                    | 29.25          | 3,889.3                     | 164.9           | 92.3            | 373,183.43                | 871,635.29               | 32.0214833               | -103.2675941                 |
| 4,000.0                     |                    | 29.25          | 3,988.6                     | 175.5           | 98.3            | 373,194.06                | 871,641.25               | 32.0215124               | -103.2675745                 |
| 4,016.0                     | 7.00               | 29.25          | 4,004.4                     | 177.2           | 99.2            | 373,195.76                | 871,642.20               | 32.0215171               | -103.2675714                 |
| NMNM                        | 105464695 E        | intry at 401   | 6.0 MD                      |                 |                 |                           |                          |                          |                              |
| 4,100.0                     |                    | 29.25          | 4,087.8                     | 186.1           | 104.2           | 373,204.69                | 871,647.20               | 32.0215415               | -103.2675550                 |
| 4,200.0                     |                    | 29.25          | 4,187.1                     | 196.8           | 110.2           | 373,215.33                | 871,653.15               | 32.0215705               | -103.2675355                 |
| 4,300.0                     |                    | 29.25          | 4,286.3                     | 207.4           | 116.1           | 373,225.96                | 871,659.11               | 32.0215996               | -103.2675159                 |
| 4,400.0                     |                    | 29.25          | 4,385.6                     | 218.0           | 122.1           | 373,236.59                | 871,665.06               | 32.0216287               | -103.2674964                 |
| 4,500.0                     |                    | 29.25          | 4,484.8                     | 228.7           | 128.1           | 373,247.23                | 871,671.02               | 32.0216577               | -103.2674768                 |
| 4,600.0                     |                    | 29.25          | 4,584.1                     | 239.3           | 134.0           | 373,257.86                | 871,676.97               | 32.0216868               | -103.2674573                 |
| 4,700.0                     |                    | 29.25          | 4,683.4                     | 249.9           | 140.0           | 373,268.49                | 871,682.93               | 32.0217159               | -103.2674377                 |
| 4,800.0                     |                    | 29.25          | 4,782.6<br>4,881.0          | 260.6<br>271.2  | 145.9<br>151.0  | 373,279.12<br>373,280,76  | 871,688.88<br>871,694.84 | 32.0217449<br>32.0217740 | -103.2674182                 |
| 4,900.0                     | 7.00               | 29.25          | 4,881.9                     | 271.2           | 151.9           | 373,289.76                | 011,094.04               | 32.0211140               | -103.2673986                 |



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 073H

Wellbore: OWB Design: PWP0 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method: Mi

Well AZALEA STATE COM26-36-28 073H

KB=27' @ 2934.0usft KB=27' @ 2934.0usft

Grid

| Planned Surv                | ey                 |                  |                             |                    |                 |                           |                          |                          |                              |
|-----------------------------|--------------------|------------------|-----------------------------|--------------------|-----------------|---------------------------|--------------------------|--------------------------|------------------------------|
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°)   | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft)    | +E/-W<br>(usft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(usft) | Latitude                 | Longitude                    |
| 5,000.0                     | 7.00               | 29.25            | 4,981.1                     | 281.8              | 157.8           | 373,300.39                | 871,700.79               | 32.0218030               | -103.2673791                 |
| 5,100.0                     | 7.00               | 29.25            | 5,080.4                     | 292.5              | 163.8           | 373,311.02                | 871,706.75               | 32.0218321               | -103.2673595                 |
| 5,200.0                     | 7.00               | 29.25            | 5,179.6                     | 303.1              | 169.7           | 373,321.66                | 871,712.70               | 32.0218612               | -103.2673400                 |
| 5,300.0                     | 7.00               | 29.25            | 5,278.9                     | 313.7              | 175.7           | 373,332.29                | 871,718.66               | 32.0218902               | -103.2673204                 |
| 5,400.0                     |                    | 29.25            | 5,378.1                     | 324.4              | 181.6           | 373,342.92                | 871,724.61               | 32.0219193               | -103.2673009                 |
| 5,500.0                     |                    | 29.25            | 5,477.4                     | 335.0              | 187.6           | 373,353.56                | 871,730.57               | 32.0219484               | -103.2672813                 |
| 5,600.0                     |                    | 29.25            | 5,576.6                     | 345.6              | 193.6           | 373,364.19                | 871,736.52               | 32.0219774               | -103.2672618                 |
| 5,700.0                     |                    | 29.25            | 5,675.9                     | 356.3              | 199.5           | 373,374.82                | 871,742.48               | 32.0220065               | -103.2672422                 |
| 5,800.0                     |                    | 29.25            | 5,775.2                     | 366.9              | 205.5           | 373,385.46                | 871,748.43               | 32.0220356               | -103.2672227                 |
| 5,900.0                     |                    | 29.25            | 5,874.4                     | 377.5              | 211.4           | 373,396.09                | 871,754.39               | 32.0220646               | -103.2672031                 |
| 6,000.0                     |                    | 29.25            | 5,973.7                     | 388.2              | 217.4           | 373,406.72                | 871,760.34               | 32.0220937               | -103.2671836                 |
| 6,100.0                     |                    | 29.25            | 6,072.9                     | 398.8              | 223.3           | 373,417.35                | 871,766.29               | 32.0221227               | -103.2671640                 |
| 6,200.0                     |                    | 29.25            | 6,172.2                     | 409.4              | 229.3           | 373,427.99                | 871,772.25               | 32.0221518               | -103.2671445                 |
| 6,300.0                     |                    | 29.25            | 6,271.4                     | 420.1              | 235.2           | 373,438.62                | 871,778.20               | 32.0221809               | -103.2671249                 |
| 6,400.0<br>6,500.0          |                    | 29.25            | 6,370.7                     | 430.7<br>441.3     | 241.2           | 373,449.25<br>373,459.89  | 871,784.16               | 32.0222099               | -103.2671054                 |
| 6,600.0                     |                    | 29.25<br>29.25   | 6,469.9<br>6,569.2          | 441.3<br>452.0     | 247.1<br>253.1  | 373,459.69<br>373,470.52  | 871,790.11<br>871,796.07 | 32.0222390<br>32.0222681 | -103.2670858<br>-103.2670663 |
| 6,700.0                     |                    | 29.25            | 6,668.4                     | 462.6              | 259.1           | 373,481.15                | 871,802.02               | 32.0222971               | -103.2670467                 |
| 6,800.0                     |                    | 29.25            | 6,767.7                     | 473.2              | 265.0           | 373,491.79                | 871,802.02<br>871,807.98 | 32.0223262               | -103.2670272                 |
| 6,900.0                     |                    | 29.25            | 6,867.0                     | 483.9              | 271.0           | 373,502.42                | 871,813.93               | 32.0223553               | -103.2670076                 |
| 7,000.0                     |                    | 29.25            | 6,966.2                     | 494.5              | 276.9           | 373,513.05                | 871,819.89               | 32.0223843               | -103.2669881                 |
| 7,100.0                     |                    | 29.25            | 7,065.5                     | 505.1              | 282.9           | 373,523.69                | 871,825.84               | 32.0224134               | -103.2669685                 |
| 7,200.0                     |                    | 29.25            | 7,000.3                     | 515.8              | 288.8           | 373,534.32                | 871,831.80               | 32.0224424               | -103.2669490                 |
| 7,263.8                     |                    | 29.25            | 7,104.1                     | 522.5              | 292.6           | 373,541.11                | 871,835.60               | 32.0224610               | -103.2669365                 |
|                             | rop -1.00          | 20.20            | 7,220.1                     | 022.0              | 202.0           | 010,011.11                | 01 1,000.00              | 02.0221010               | 100.200000                   |
| 7,300.0                     |                    | 29.25            | 7,264.0                     | 526.3              | 294.7           | 373,544.85                | 871,837.70               | 32.0224712               | -103.2669296                 |
| 7,400.0                     |                    | 29.25            | 7,363.4                     | 535.6              | 300.0           | 373,554.18                | 871,842.92               | 32.0224967               | -103.2669124                 |
| 7,500.0                     |                    | 29.25            | 7,463.0                     | 543.4              | 304.3           | 373,562.00                | 871,847.30               | 32.0225181               | -103.2668981                 |
| 7,600.0                     |                    | 29.25            | 7,562.7                     | 549.7              | 307.9           | 373,568.29                | 871,850.82               | 32.0225353               | -103.2668865                 |
| 7,700.0                     |                    | 29.25            | 7,662.6                     | 554.5              | 310.5           | 373,573.07                | 871,853.50               | 32.0225484               | -103.2668777                 |
| 7,800.0                     |                    | 29.25            | 7,762.5                     | 557.8              | 312.4           | 373,576.32                | 871,855.32               | 32.0225573               | -103.2668717                 |
| 7,900.0                     | 0.64               | 29.25            | 7,862.5                     | 559.5              | 313.3           | 373,578.06                | 871,856.29               | 32.0225620               | -103.2668686                 |
| 7,963.8                     | 0.00               | 0.00             | 7,926.3                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| Start 12                    | 296.2 hold a       | t 7963.8 MD      |                             |                    |                 |                           |                          |                          |                              |
| 8,000.0                     | 0.00               | 0.00             | 7,962.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,100.0                     | 0.00               | 0.00             | 8,062.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,200.0                     | 0.00               | 0.00             | 8,162.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,300.0                     |                    | 0.00             | 8,262.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,400.0                     | 0.00               | 0.00             | 8,362.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,500.0                     |                    | 0.00             | 8,462.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,600.0                     |                    | 0.00             | 8,562.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,700.0                     |                    | 0.00             | 8,662.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,800.0                     |                    | 0.00             | 8,762.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 8,900.0                     |                    | 0.00             | 8,862.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 9,000.0                     |                    | 0.00             | 8,962.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 9,100.0                     |                    | 0.00             | 9,062.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 9,200.0                     |                    | 0.00             | 9,162.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
| 9,260.0                     |                    | 0.00             | 9,222.5                     | 559.8              | 313.5           | 373,578.37                | 871,856.47               | 32.0225628               | -103.2668680                 |
|                             | LS 12.00 TF        |                  | 0.007.5                     | FF0 0              | 240.5           | 070 570 40                | 074 050 47               | 20.0005000               | 400 000000                   |
| 9,275.0                     |                    | 179.41           | 9,237.5                     | 559.6              | 313.5           | 373,578.13                | 871,856.47               | 32.0225622               | -103.2668680                 |
| 9,300.0                     |                    | 179.41           | 9,262.5<br>9,287.3          | 558.1              | 313.5           | 373,576.69                | 871,856.48<br>871,856.51 | 32.0225582               | -103.2668680                 |
| 9,325.0<br>9,350.0          |                    | 179.41<br>179.41 | 9,287.3<br>9,312.0          | 555.4<br>551.3     | 313.5<br>313.6  | 373,573.95<br>373,569.91  | 871,856.51<br>871,856.55 | 32.0225507<br>32.0225396 | -103.2668680<br>-103.2668680 |
| 9,350.0                     |                    | 179.41           | 9,312.0                     | 546.0              | 313.6           | 373,564.59                | 871,856.61               | 32.0225250               | -103.2668680                 |
| 5,575.0                     | 13.00              | 17.5.41          | 5,550.4                     | J <del>-</del> U.U | 010.0           | 070,004.00                | 07 1,000.01              | 02.0220200               | 100.200000                   |



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 073H

Wellbore: OWB Design: PWP0 Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well AZALEA STATE COM26-36-28 073H

KB=27' @ 2934.0usft KB=27' @ 2934.0usft

Grid

| Planned Surv                | ey                 |                  |                             |                      |                 |                           |                          |                          |                              |
|-----------------------------|--------------------|------------------|-----------------------------|----------------------|-----------------|---------------------------|--------------------------|--------------------------|------------------------------|
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°)   | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft)      | +E/-W<br>(usft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(usft) | Latitude                 | Longitude                    |
| 9,400.0                     | 16.80              | 179.41           | 9,360.5                     | 539.4                | 313.7           | 373,557.99                | 871,856.68               | 32.0225068               | -103.2668680                 |
| 9,425.0                     | 19.80              | 179.41           | 9,384.2                     | 531.6                | 313.8           | 373,550.14                | 871,856.76               | 32.0224853               | -103.2668679                 |
| 9,450.0                     | 22.80              | 179.41           | 9,407.5                     | 522.5                | 313.9           | 373,541.06                | 871,856.85               | 32.0224603               | -103.2668679                 |
| 9,475.0                     | 25.80              | 179.41           | 9,430.3                     | 512.2                | 314.0           | 373,530.78                | 871,856.96               | 32.0224320               | -103.2668679                 |
| 9,500.0                     | 28.80              | 179.41           | 9,452.5                     | 500.7                | 314.1           | 373,519.31                | 871,857.08               | 32.0224005               | -103.2668679                 |
| 9,525.0                     | 31.80              | 179.41           | 9,474.1                     | 488.1<br>474.4       | 314.2<br>314.4  | 373,506.70<br>373,492.98  | 871,857.21               | 32.0223658               | -103.2668679                 |
| 9,550.0<br>9,575.0          | 34.80<br>37.80     | 179.41<br>179.41 | 9,495.0<br>9,515.1          | 474.4<br>459.6       | 314.4<br>314.5  | 373,492.96<br>373,478.18  | 871,857.35<br>871,857.50 | 32.0223281<br>32.0222874 | -103.2668679<br>-103.2668678 |
| 9,600.0                     | 40.80              | 179.41           | 9,534.5                     | 443.8                | 314.3           | 373,462.35                | 871,857.67               | 32.0222439               | -103.2668678                 |
| 9,625.0                     | 43.80              | 179.41           | 9,553.0                     | 427.0                | 314.9           | 373,445.52                | 871,857.84               | 32.0221977               | -103.2668678                 |
| 9,650.0                     | 46.80              | 179.41           | 9,570.6                     | 409.2                | 315.1           | 373,427.76                | 871,858.02               | 32.0221488               | -103.2668678                 |
| 9,675.0                     | 49.80              | 179.41           | 9,587.2                     | 390.5                | 315.2           | 373,409.09                | 871,858.22               | 32.0220975               | -103.2668677                 |
| 9,700.0                     | 52.80              | 179.41           | 9,602.8                     | 371.0                | 315.5           | 373,389.59                | 871,858.42               | 32.0220439               | -103.2668677                 |
| 9,725.0                     | 55.80              | 179.41           | 9,617.4                     | 350.7                | 315.7           | 373,369.29                | 871,858.63               | 32.0219881               | -103.2668677                 |
| 9,750.0                     | 58.80              | 179.41           | 9,630.9                     | 329.7                | 315.9           | 373,348.25                | 871,858.84               | 32.0219303               | -103.2668676                 |
| 9,775.0                     | 61.80              | 179.41           | 9,643.3                     | 308.0                | 316.1           | 373,326.54                | 871,859.07               | 32.0218706               | -103.2668676                 |
| 9,800.0                     | 64.80              | 179.41           | 9,654.5                     | 285.6                | 316.3           | 373,304.21                | 871,859.30               | 32.0218092               | -103.2668676                 |
| 9,825.0                     | 67.80              | 179.41           | 9,664.6                     | 262.8                | 316.6           | 373,281.32<br>373,257.94  | 871,859.54               | 32.0217463               | -103.2668675                 |
| 9,850.0<br>9,875.0          | 70.80<br>73.80     | 179.41<br>179.41 | 9,673.4<br>9,681.0          | 239.4<br>215.6       | 316.8<br>317.1  | 373,257.94<br>373,234.13  | 871,859.78<br>871,860.02 | 32.0216821<br>32.0216166 | -103.2668675<br>-103.2668675 |
| 9,900.0                     | 76.80              | 179.41           | 9,687.3                     | 191.4                | 317.1           | 373,209.95                | 871,860.02               | 32.0215501               | -103.2668674                 |
| 9,913.0                     | 78.36              | 179.41           | 9,690.1                     | 178.7                | 317.4           | 373,197.28                | 871,860.41               | 32.0215153               | -103.2668674                 |
|                             | 105464695 E        |                  |                             |                      |                 | ,                         | ,                        |                          |                              |
| 9,925.0                     | 79.80              | 179.41           | 9,692.4                     | 166.9                | 317.6           | 373,185.47                | 871,860.53               | 32.0214829               | -103.2668674                 |
| 9,950.0                     | 82.80              | 179.41           | 9,696.2                     | 142.2                | 317.8           | 373,160.77                | 871,860.78               | 32.0214149               | -103.2668674                 |
| 9,975.0                     | 85.80              | 179.41           | 9,698.7                     | 117.3                | 318.1           | 373,135.89                | 871,861.04               | 32.0213466               | -103.2668673                 |
| 10,000.0                    | 88.80              | 179.41           | 9,699.9                     | 92.4                 | 318.3           | 373,110.93                | 871,861.30               | 32.0212779               | -103.2668673                 |
| 10,010.0                    | 90.00              | 179.41           | 9,700.0                     | 82.4                 | 318.4           | 373,100.93                | 871,861.40               | 32.0212505               | -103.2668673                 |
|                             | 565.5 hold a       |                  |                             | 7.0                  | 040.4           | 070 040 00                | 074 000 00               | 00.0040004               | 400 0000074                  |
| 10,100.0                    | 90.00<br>90.00     | 179.41<br>179.41 | 9,700.0                     | -7.6<br>-107.6       | 319.4           | 373,010.93                | 871,862.33               | 32.0210031<br>32.0207282 | -103.2668671                 |
| 10,200.0<br>10,300.0        | 90.00              | 179.41           | 9,700.0<br>9,700.0          | -207.6               | 320.4<br>321.4  | 372,910.94<br>372,810.94  | 871,863.37<br>871,864.40 | 32.0207262               | -103.2668670<br>-103.2668668 |
| 10,400.0                    | 90.00              | 179.41           | 9,700.0                     | -307.6               | 322.5           | 372,710.95                | 871,865.43               | 32.0204333               | -103.2668667                 |
| 10,500.0                    | 90.00              | 179.41           | 9,700.0                     | -407.6               | 323.5           | 372,610.95                | 871,866.47               | 32.0199036               | -103.2668665                 |
| 10,600.0                    | 90.00              | 179.41           | 9,700.0                     | -507.6               | 324.5           | 372,510.96                | 871,867.50               | 32.0196288               | -103.2668664                 |
| 10,700.0                    | 90.00              | 179.41           | 9,700.0                     | -607.6               | 325.6           | 372,410.96                | 871,868.53               | 32.0193539               | -103.2668662                 |
| 10,800.0                    | 90.00              | 179.41           | 9,700.0                     | -707.6               | 326.6           | 372,310.97                | 871,869.57               | 32.0190790               | -103.2668661                 |
| 10,900.0                    | 90.00              | 179.41           | 9,700.0                     | -807.6               | 327.6           | 372,210.97                | 871,870.60               | 32.0188042               | -103.2668659                 |
| 11,000.0                    | 90.00              | 179.41           | 9,700.0                     | -907.6               | 328.7           | 372,110.98                | 871,871.64               | 32.0185293               | -103.2668658                 |
| 11,100.0                    | 90.00              | 1/9.41           | 9,700.0                     | -1,007.6             | 329.7           | 372,010.99                | 871,872.67               | 32.0182544               | -103.2668656                 |
| 11,200.0<br>11,300.0        | 90.00<br>90.00     | 179.41<br>179.41 | 9,700.0<br>9,700.0          | -1,107.6             | 330.7           | 371,910.99<br>371,811.00  | 871,873.70<br>871,874.74 | 32.0179796<br>32.0177047 | -103.2668655                 |
| 11,400.0                    |                    | 179.41           | 9,700.0                     | -1,207.6<br>-1,307.6 | 331.8<br>332.8  | 371,711.00                | 871,875.77               | 32.0174298               | -103.2668653<br>-103.2668652 |
| 11,500.0                    | 90.00              | 179.41           | 9,700.0                     | -1,407.6             | 333.8           | 371,611.01                | 871,876.80               | 32.0171550               | -103.2668650                 |
| 11,600.0                    |                    | 179.41           | 9,700.0                     | -1,507.6             | 334.9           | 371,511.01                | 871,877.84               | 32.0168801               | -103.2668649                 |
| 11,700.0                    | 90.00              | 179.41           | 9,700.0                     | -1,607.6             | 335.9           | 371,411.02                | 871,878.87               | 32.0166052               | -103.2668647                 |
| 11,800.0                    | 90.00              | 179.41           | 9,700.0                     | -1,707.5             | 336.9           | 371,311.02                | 871,879.91               | 32.0163304               | -103.2668646                 |
| 11,900.0                    |                    | 179.41           | 9,700.0                     | -1,807.5             | 338.0           | 371,211.03                | 871,880.94               | 32.0160555               | -103.2668644                 |
| 12,000.0                    | 90.00              | 179.41           | 9,700.0                     | -1,907.5             | 339.0           | 371,111.03                | 871,881.97               | 32.0157806               | -103.2668643                 |
| 12,100.0                    |                    | 179.41           | 9,700.0                     | -2,007.5             | 340.0           | 371,011.04                | 871,883.01               | 32.0155058               | -103.2668641                 |
| 12,200.0                    |                    | 179.41           | 9,700.0                     | -2,107.5             | 341.1           | 370,911.04                | 871,884.04               | 32.0152309               | -103.2668640                 |
| 12,300.0<br>12,400.0        | 90.00<br>90.00     | 179.41<br>179.41 | 9,700.0<br>9,700.0          | -2,207.5<br>-2,307.5 | 342.1<br>343.1  | 370,811.05<br>370,711.05  | 871,885.07<br>871,886.11 | 32.0149560<br>32.0146812 | -103.2668638<br>-103.2668637 |
| 12,400.0                    | 90.00              | 179.41           | 9,700.0                     | -2,307.5<br>-2,407.5 | 344.2           | 370,711.05                | 871,887.14               | 32.0144063               | -103.2668635                 |
| 12,000.0                    | 55.00              | 170.71           | 3,7 30.0                    | _,⊣∪1.∪              | U-T.L           | 5.0,011.00                | J. 1,007.17              | 52.017T000               | 100.200000                   |



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 073H

Wellbore: OWB Design: PWP0 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AZALEA STATE COM26-36-28 073H

KB=27' @ 2934.0usft KB=27' @ 2934.0usft

Grid

| Diames d Occur              |                    |                  |                             |                      |                 |                           |                          |                          |                              |
|-----------------------------|--------------------|------------------|-----------------------------|----------------------|-----------------|---------------------------|--------------------------|--------------------------|------------------------------|
| Planned Surv                | ey                 |                  |                             |                      |                 |                           |                          |                          |                              |
| Measured<br>Depth<br>(usft) | Inclination<br>(°) | Azimuth<br>(°)   | Vertical<br>Depth<br>(usft) | +N/-S<br>(usft)      | +E/-W<br>(usft) | Map<br>Northing<br>(usft) | Map<br>Easting<br>(usft) | Latitude                 | Longitude                    |
| 12,600.0                    | 90.00              | 179.41           | 9,700.0                     | -2,507.5             | 345.2           | 370,511.07                | 871,888.17               | 32.0141314               | -103.2668634                 |
| 12,700.0                    | 90.00              | 179.41           | 9,700.0                     | -2,607.5             | 346.2           | 370,411.07                | 871,889.21               | 32.0138566               | -103.2668632                 |
| 12,800.0                    | 90.00              | 179.41           | 9,700.0                     | <b>-</b> 2,707.5     | 347.3           | 370,311.08                | 871,890.24               | 32.0135817               | -103.2668630                 |
| 12,900.0                    |                    | 179.41           | 9,700.0                     | -2,807.5             | 348.3           | 370,211.08                | 871,891.28               | 32.0133069               | -103.2668629                 |
| 13,000.0                    |                    | 179.41           | 9,700.0                     | -2,907.5             | 349.3           | 370,111.09                | 871,892.31               | 32.0130320               | -103.2668627                 |
| 13,100.0                    |                    | 179.41           | 9,700.0                     | -3,007.5             | 350.4           | 370,011.09                | 871,893.34               | 32.0127571               | -103.2668626                 |
| 13,200.0                    |                    | 179.41           | 9,700.0                     | -3,107.5             | 351.4           | 369,911.10                | 871,894.38               | 32.0124823               | -103.2668624                 |
| 13,300.0                    |                    | 179.41           | 9,700.0                     | -3,207.5             | 352.4           | 369,811.10                | 871,895.41               | 32.0122074               | -103.2668623                 |
| 13,400.0                    |                    | 179.41           | 9,700.0                     | -3,307.5             | 353.5           | 369,711.11                | 871,896.44               | 32.0119325               | -103.2668621                 |
| 13,500.0                    |                    | 179.41           | 9,700.0                     | -3,407.5             | 354.5           | 369,611.11                | 871,897.48               | 32.0116577               | -103.2668620                 |
| 13,600.0                    |                    | 179.41           | 9,700.0                     | -3,507.4             | 355.5           | 369,511.12                | 871,898.51               | 32.0113828               | -103.2668618                 |
| 13,700.0                    |                    | 179.41           | 9,700.0                     | -3,607.4             | 356.6           | 369,411.12                | 871,899.55               | 32.0111079               | -103.2668617                 |
| 13,800.0                    |                    | 179.41           | 9,700.0                     | -3,707.4             | 357.6           | 369,311.13                | 871,900.58               | 32.0108331               | -103.2668615                 |
| 13,900.0                    |                    | 179.41           | 9,700.0                     | -3,807.4             | 358.6           | 369,211.13                | 871,901.61               | 32.0105582               | -103.2668614                 |
| 14,000.0                    |                    | 179.41           | 9,700.0                     | -3,907.4             | 359.7           | 369,111.14                | 871,902.65               | 32.0102833               | -103.2668612                 |
| 14,100.0                    |                    | 179.41           | 9,700.0                     | -4,007.4             | 360.7           | 369,011.15                | 871,903.68               | 32.0100085               | -103.2668611                 |
| 14,200.0                    |                    | 179.41           | 9,700.0                     | -4,107.4<br>4,207.4  | 361.7           | 368,911.15                | 871,904.71               | 32.0097336               | -103.2668609                 |
| 14,300.0                    |                    | 179.41           | 9,700.0                     | -4,207.4<br>4,207.4  | 362.8           | 368,811.16                | 871,905.75<br>871,906.78 | 32.0094587               | -103.2668608                 |
| 14,400.0<br>14,500.0        |                    | 179.41<br>179.41 | 9,700.0<br>9,700.0          | -4,307.4<br>-4,407.4 | 363.8<br>364.8  | 368,711.16<br>368,611.17  | 871,906.76<br>871,907.82 | 32.0091839<br>32.0089090 | -103.2668606<br>-103.2668605 |
| 14,600.0                    |                    | 179.41           | 9,700.0                     | -4,407.4<br>-4,507.4 | 365.9           | 368,511.17                | 871,907.82<br>871,908.85 | 32.0089090               | -103.2668603                 |
| 14,700.0                    |                    | 179.41           | 9,700.0                     | -4,507.4<br>-4,607.4 | 366.9           | 368,411.18                | 871,909.88               | 32.0083593               | -103.2668602                 |
| 14,800.0                    |                    | 179.41           | 9,700.0                     | -4,007.4<br>-4,707.4 | 368.0           | 368,311.18                | 871,910.92               | 32.0083393               | -103.2668600                 |
| 14,900.0                    |                    | 179.41           | 9,700.0                     | -4,707.4<br>-4,807.4 | 369.0           | 368,211.19                | 871,911.95               | 32.0078095               | -103.2668599                 |
| 15,000.0                    |                    | 179.41           | 9,700.0                     | -4,007.4<br>-4,907.4 | 370.0           | 368,111.19                | 871,912.98               | 32.0075347               | -103.2668597                 |
| 15,100.0                    |                    | 179.41           | 9,700.0                     | -5,007.4             | 371.1           | 368,011.20                | 871,914.02               | 32.0073547               | -103.2668596                 |
| 15,200.0                    |                    | 179.41           | 9,700.0                     | -5,107.4             | 372.1           | 367,911.20                | 871,915.05               | 32.0069849               | -103.2668594                 |
| 15,300.0                    |                    | 179.41           | 9,700.0                     | -5,207.4             | 373.1           | 367,811.21                | 871,916.09               | 32.0067101               | -103.2668593                 |
| 15,400.0                    |                    | 179.41           | 9,700.0                     | -5,307.4             | 374.2           | 367,711.21                | 871,917.12               | 32.0064352               | -103.2668591                 |
| 15,500.0                    |                    | 179.41           | 9,700.0                     | -5,407.3             | 375.2           | 367,611.22                | 871,918.15               | 32.0061603               | -103.2668590                 |
| 15,600.0                    |                    | 179.41           | 9,700.0                     | -5,507.3             | 376.2           | 367,511.23                | 871,919.19               | 32.0058855               | -103.2668588                 |
| 15,700.0                    |                    | 179.41           | 9,700.0                     | -5,607.3             | 377.3           | 367,411.23                | 871,920.22               | 32.0056106               | -103.2668586                 |
| 15,800.0                    | 90.00              | 179.41           | 9,700.0                     | -5,707.3             | 378.3           | 367,311.24                | 871,921.25               | 32.0053357               | -103.2668585                 |
| 15,900.0                    | 90.00              | 179.41           | 9,700.0                     | -5,807.3             | 379.3           | 367,211.24                | 871,922.29               | 32.0050609               | -103.2668583                 |
| 16,000.0                    | 90.00              | 179.41           | 9,700.0                     | -5,907.3             | 380.4           | 367,111.25                | 871,923.32               | 32.0047860               | -103.2668582                 |
| 16,100.0                    | 90.00              | 179.41           | 9,700.0                     | -6,007.3             | 381.4           | 367,011.25                | 871,924.36               | 32.0045112               | -103.2668580                 |
| 16,200.0                    | 90.00              | 179.41           | 9,700.0                     | -6,107.3             | 382.4           | 366,911.26                | 871,925.39               | 32.0042363               | -103.2668579                 |
| 16,300.0                    |                    | 179.41           | 9,700.0                     | -6,207.3             | 383.5           | 366,811.26                | 871,926.42               | 32.0039614               | -103.2668577                 |
| 16,400.0                    |                    | 179.41           | 9,700.0                     | -6,307.3             | 384.5           | 366,711.27                | 871,927.46               | 32.0036866               | -103.2668576                 |
| 16,500.0                    |                    | 179.41           | 9,700.0                     | -6,407.3             | 385.5           | 366,611.27                | 871,928.49               | 32.0034117               | -103.2668574                 |
| 16,600.0                    |                    | 179.41           | 9,700.0                     | -6,507.3             | 386.6           | 366,511.28                | 871,929.52               | 32.0031368               | -103.2668573                 |
| 16,700.0                    |                    | 179.41           | 9,700.0                     | -6,607.3             | 387.6           | 366,411.28                | 871,930.56               | 32.0028620               | -103.2668571                 |
| 16,800.0                    |                    | 179.41           | 9,700.0                     | -6,707.3             | 388.6           | 366,311.29                | 871,931.59               | 32.0025871               | -103.2668570                 |
| 16,900.0                    |                    | 179.41           | 9,700.0                     | -6,807.3             | 389.7           | 366,211.29                | 871,932.62               | 32.0023122               | -103.2668568                 |
| 17,000.0                    |                    | 179.41           | 9,700.0                     | -6,907.3             | 390.7           | 366,111.30                | 871,933.66               | 32.0020374               | -103.2668567                 |
| 17,100.0                    |                    | 179.41           | 9,700.0                     | -7,007.3             | 391.7           | 366,011.31                | 871,934.69               | 32.0017625               | -103.2668565                 |
| 17,200.0                    |                    | 179.41           | 9,700.0                     | -7,107.3             | 392.8           | 365,911.31                | 871,935.73               | 32.0014876               | -103.2668564                 |
| 17,300.0                    |                    | 179.41           | 9,700.0                     | -7,207.3             | 393.8           | 365,811.32                | 871,936.76               | 32.0012128               | -103.2668562                 |
| 17,400.0                    |                    | 179.41           | 9,700.0                     | -7,307.2<br>7,407.2  | 394.8           | 365,711.32                | 871,937.79               | 32.0009379               | -103.2668561                 |
| 17,500.0                    |                    | 179.41           | 9,700.0                     | -7,407.2<br>7,402.7  | 395.9           | 365,611.33                | 871,938.83               | 32.0006630               | -103.2668559                 |
| 17,575.5                    |                    | 179.41           | 9,700.0                     | -7,482.7             | 396.6           | 365,535.88                | 871,939.61               | 32.0004556               | -103.2668558                 |
| TD at 1                     | 7575.5             |                  |                             |                      |                 |                           |                          |                          |                              |



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 073H

Wellbore: OWB Design: PWP0 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well AZALEA STATE COM26-36-28 073H

KB=27' @ 2934.0usft KB=27' @ 2934.0usft

Grid

| Design Targets                             |                       |                 |                       |                          |                       |                               |                   |            |              |
|--|-----------------------|-----------------|-----------------------|--------------------------|-----------------------|-------------------------------|-------------------|------------|--------------|
| Target Name - hit/miss target - Shape      | Dip Angle<br>(°)      | Dip Dir.<br>(°) | TVD<br>(usft)         | +N/-S<br>(usft)          | +E/-W<br>(usft)       | Northing<br>(usft)            | Easting<br>(usft) | Latitude   | Longitude    |
| FTP (ASC 073H) - plan misses targ - Point  | 0.00<br>get center by |                 | 9,700.0<br>0008.8usft | 83.5<br>MD (9700.0       | 319.2<br>TVD, 83.5 N  | 373,102.09<br>I, 318.4 E)     | 871,862.16        | 32.0212536 | -103.2668648 |
| BHL (ASC 073H) - plan hits target of Point | 0.00<br>center        | 0.00            | 9,700.0               | -7,482.7                 | 396.6                 | 365,535.88                    | 871,939.61        | 32.0004556 | -103.2668558 |
| LTP (ASC 073H) - plan misses tarç - Point  | 0.00<br>get center by |                 | 9,700.0<br>17500.0usf | -7,432.7<br>t MD (9700.0 | 396.1<br>0 TVD, -7407 | 365,585.86<br>7.2 N, 395.9 E) | 871,939.08        | 32.0005930 | -103.2668559 |

| Plan Annotations            |                             |                               |                            |                                  |
|-----------------------------|-----------------------------|-------------------------------|----------------------------|----------------------------------|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coor<br>+N/-S<br>(usft) | dinates<br>+E/-W<br>(usft) | Comment                          |
| 2,000.0                     | 2,000.0                     | 0.0                           | 0.0                        | Start Build 1.00                 |
| 2,700.0                     | 2,698.3                     | 37.3                          | 20.9                       | Start 4563.8 hold at 2700.0 MD   |
| 4,016.0                     | 4,004.4                     | 177.2                         | 99.2                       | NMNM105464695 Entry at 4016.0 MD |
| 7,263.8                     | 7,228.1                     | 522.5                         | 292.6                      | Start Drop -1.00                 |
| 7,963.8                     | 7,926.3                     | 559.8                         | 313.5                      | Start 1296.2 hold at 7963.8 MD   |
| 9,260.0                     | 9,222.5                     | 559.8                         | 313.5                      | Start DLS 12.00 TFO 179.41       |
| 9,913.0                     | 9,690.1                     | 178.7                         | 317.4                      | NMNM105464695 Exit at 9913.0 MD  |
| 10,010.0                    | 9,700.0                     | 82.4                          | 318.4                      | Start 7565.5 hold at 10010.0 MD  |
| 17,575.5                    | 9,700.0                     | -7,482.7                      | 396.6                      | TD at 17575.5                    |

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

| perator:                                     | Ameredev II, L  | LC            | OGRID: _                | 372224                   | 4 Date                   | <u>0</u> 5/08/2023 _                   |
|--|-----------------|---------------|-------------------------|--------------------------|--------------------------|--|
| <b>Гуре:</b> ⊠ Original □                    | Amendment due t | o □ 19.15.27. | 9.D(6)(a) NMAC          | □ 19.15.27.9.1           | D(6)(b) NMAC □ C         | Other.                                 |
| other, please describe: _                    |                 |               |                         |                          |                          |  |
| Well(s): Provide the f ecompleted from a sin |                 |               |                         |                          | of wells proposed to     | be drilled or propose                  |
| Well Name                                    | API             | ULSTR         | Footages                | Anticipated<br>Oil BBL/D | Anticipated Gas<br>MCF/D | Anticipated<br>Produced Water<br>BBL/D |
| Azalea 26 36 28<br>State Com 063H            | 30-025-         |               | 330' FNL &<br>2020' FEL | 600                      | 11,977                   | 1,971                                  |
| Azalea 26 36 28<br>State Com 073H            | 30-025-         |               | 180' FNL &<br>1970' FEL | 600                      | 11,977                   | 1,971                                  |
| Azalea 26 36 28<br>State Com 183H            | 30-025-         |               | 180' FNL &<br>1990' FEL | 600                      | 11,977                   | 1,971                                  |
| Azalea 26 36 28<br>State Com 195H            | 30-025-         |               | 330' FNL &<br>1980' FEL | 600                      | 11,977                   | 1,971                                  |
| Azalea 26 36 28<br>State Com 263H            | 30-025-         |               | 180' FNL &<br>2010' FEL | 600                      | 11,977                   | 1,971                                  |
| Azalea 26 36 28                              | 30-025-         |               | 330' FNL &<br>2000' FEL | 600                      | 11,977                   | 1,971                                  |

**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<br>Date | Completion Commencement Date | Initial Flow<br>Back Date | First Production Date |
|-----------------------------------|---------|------------|--------------------|------------------------------|---------------------------|-----------------------|
| Azalea 26 36 28<br>State Com 063H | 30-025- | 01/12/2024 | 02/03/2024         | 04/27/2024                   | 05/11/2024                | 05/14/2024            |
| Azalea 26 36 28<br>State Com 073H | 30-025- | 01/27/2024 | 02/16/2023         | 05/06/2024                   | 05/23/2024                | 05/26/2024            |
| Azalea 26 36 28<br>State Com 183H | 30-025- | 02/09/2024 | 02/30/2024         | 05/22/2024                   | 06/05/2024                | 06/08/2024            |
| Azalea 26 36 28<br>State Com 195H | 30-025- | 02/28/2024 | 03/19/2024         | 06/18/2024                   | 07/02/2024                | 07/05/2024            |
| Azalea 26 36 28<br>State Com 263H | 30-025- | 03/22/2024 | 04/13/2024         | 07/04/2024                   | 07/31/2024                | 08/03/2024            |
| Azalea 26 36 28<br>State Com 283H | 30-025- | 04/15/2024 | 05/17/2024         | 08/01/2024                   | 08/25/2024                | 08/28/2024            |

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.

 $\boxtimes$  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.

| Well | API | Anticipated Average<br>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 |
|----------|--------|-----------------|----------------------------------|---|
|          |        |                 | Start Date                       | or system segment tie-in                                  |
|          |        |                 |                                  |   |
|          |        |                 |                                  |   |

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

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

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

| Attach O | perator's | plan to | manage | production | in resp | ponse to | the | increased | line | pressure |
|----------|-----------|---------|--------|------------|---------|----------|-----|-----------|------|----------|
|          |           |         |        |            |         |          |     |           |      |          |

| XIV. C    | Confidentiality: $\square$ | Operator asserts  | confidentiality   | pursuant to  | Section ' | 71-2-8 NMS       | A 1978 for the   | information    | provided in |
|-----------|----------------------------|-------------------|-------------------|--------------|-----------|------------------|------------------|----------------|-------------|
| Section   | 2 as provided in Pa        | ragraph (2) of Su | bsection D of 19  | 9.15.27.9 NM | IAC, and  | l attaches a ful | l description of | f the specific | information |
| for which | ch confidentiality is      | asserted and the  | basis for such as | ssertion.    |           |                  |                  |                |             |

(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:   |
|---|--|
| one hundred percent of                            | to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport<br>the anticipated volume of natural gas produced from the well(s) commencing on the date of first production,<br>current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering  |
| hundred percent of the a into account the current | able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one nticipated 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<br>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  |
|   | 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)<br>(h)  | reinjection for enhanced oil recovery; fuel cell production; and   |
| (11)  | ruci cen 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: 05/08/2023                                      |
| 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