

District I

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

District II

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

District III

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

District IV

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

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

Form C-101
August 1, 2011

Permit 312656

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

| | | |
|---|---|-------------------------------|
| 1. Operator Name and Address AMEREDEV OPERATING, LLC 2901 Via Fortuna Austin, TX 78746 | | 2. OGRID Number 372224 |
| | | 3. API Number 30-025-49933 |
| 4. Property Code 331807 | 5. Property Name AZALEA 26 36 28 STATE COM | 6. Well No. 127H |

7. Surface Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|
| UL - Lot A | Section 28 | Township 26S | Range 36E | Lot Idn A | Feet From 230 | N/S Line N | Feet From 1225 | E/W Line E | County Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|

8. Proposed Bottom Hole Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|------------------|---------------|---------------|
| UL - Lot H | Section 33 | Township 26S | Range 36E | Lot Idn 1 | Feet From 50 | N/S Line S | Feet From 785 | E/W Line E | County Lea |
|---------------|---------------|-----------------|--------------|--------------|-----------------|---------------|------------------|---------------|---------------|

9. Pool Information

| | |
|-------------------------------|-------|
| WC-025 G-09 S263619C;WOLFCAMP | 98234 |
|-------------------------------|-------|

Additional Well Information

| | | | | |
|---------------------------|-----------------------------|--|-------------------------|------------------------------------|
| 11. Work Type New Well | 12. Well Type OIL | 13. Cable/Rotary | 14. Lease Type State | 15. Ground Level Elevation 2912 |
| 16. Multiple N | 17. Proposed Depth 20169 | 18. Formation Wolfcamp | 19. Contractor | 20. Spud Date 4/22/2022 |
| Depth to Ground water | | Distance from nearest fresh water well | | Distance to nearest surface water |

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

21. Proposed Casing and Cement Program

| Type | Hole Size | Casing Size | Casing Weight/ft | Setting Depth | Sacks of Cement | Estimated TOC |
|------|-----------|-------------|------------------|---------------|-----------------|---------------|
| Surf | 17.5 | 13.375 | 68 | 1848 | 1505 | 0 |
| Int1 | 12.25 | 7.625 | 29.7 | 10899 | 2402 | 0 |
| Prod | 6.75 | 5.5 | 23 | 20169 | 1570 | 0 |

Casing/Cement Program: Additional Comments

| |
|--|
| |
|--|

22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Double Ram | 5000 | 2500 | TBD |

| | | |
|--|----------------------------------|---------------------------------|
| 23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable. | OIL CONSERVATION DIVISION | |
| Signature: | | |
| Printed Name: Electronically filed by Christie Hanna | Approved By: Paul F Kautz | |
| Title: | Title: Geologist | |
| Email Address: channa@ameredev.com | Approved Date: 3/28/2022 | Expiration Date: 3/28/2024 |
| Date: 3/23/2022 | Phone: 737-300-4723 | 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | |
|--|---|---|
| ¹ API Number 30-025-49933 | ² Pool Code 98234 | ³ Pool Name WC-025 G-09 S263619C; WOLFCAMP |
| ⁴ Property Code 331807 | ⁵ Property Name AZALEA STATE COM 26 36 28 STATE COM | ⁶ Well Number 127H |
| ⁷ OGRID No. 372224 | ⁸ Operator Name AMEREDEV OPERATING, LLC. | ⁹ Elevation 2912' |

¹⁰Surface Location

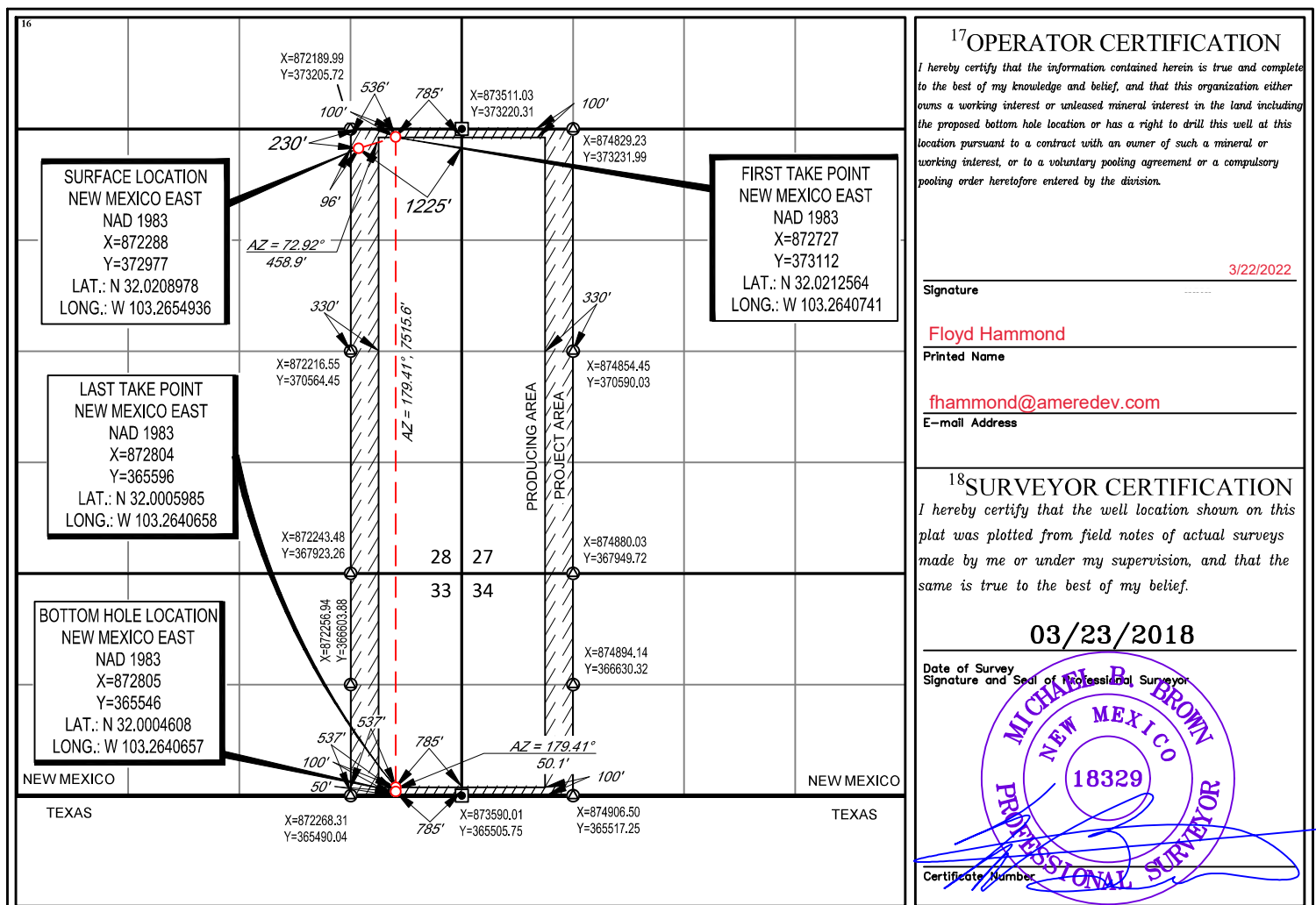
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|-----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| A | 28 | 26-S | 36-E | - | 230' | NORTH | 1225' | EAST | LEA |

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 |
|---------------|-----------|-------------|-------------|----------|---------------|------------------|---------------|----------------|------------|
| 1 | 33 | 26-S | 36-E | - | 50' | SOUTH | 785' | EAST | LEA |

| | | | |
|--|-------------------------------|--|-------------------------|
| ¹² Dedicated Acres 467.40 | ¹³ Joint or Infill | ¹⁴ Consolidation Code C | ¹⁵ Order No. |
|--|-------------------------------|--|-------------------------|

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.



District I

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

District II

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

District III

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

District IV

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

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

Form APD Conditions

Permit 312656

PERMIT CONDITIONS OF APPROVAL

| | |
|--|--|
| Operator Name and Address: AMEREDEV OPERATING, LLC [372224] 2901 Via Fortuna Austin, TX 78746 | API Number: 30-025-49933 |
| | Well: AZALEA 26 36 28 STATE COM #127H |

| OCD Reviewer | Condition |
|-----------------|--|
| pkautz | Notify OCD 24 hours prior to casing & cement |
| pkautz | Will require a File As Drilled C-102 and a Directional Survey with the C-104 |
| pkautz | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string |
| pkautz | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system |
| pkautz | 1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing -- |
| pkautz | The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud |



American Resource Development LLC.

Ameredev Operating

Lea County, NM (N83-NME)

Camelia_Azalea

**Azalea State Com 26-36-28 127H
127H**

Plan: Baseline Plan #2 - 179.41

Permit Plan

15 March, 2022



American Resource Development LLC.

Permit Plan

| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Company: | Ameredev Operating | Local Co-ordinate Reference: | Well Azalea State Com 26-36-28 127H |
| Project: | Lea County, NM (N83-NME) | TVD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Site: | Camelia_Azalea | MD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Well: | Azalea State Com 26-36-28 127H | North Reference: | Grid |
| Wellbore: | 127H | Survey Calculation Method: | Minimum Curvature |
| Design: | Baseline Plan #2 - 179.41 | Database: | AUS-COMPASS - EDM_15 - 32bit |

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

| Site | Camelia_Azalea | | | | |
|-----------------------|----------------|--------------|-----------------|-------------------|---------------|
| Site Position: | | Northing: | 372,976.85 usft | Latitude: | 32.02089781 |
| From: | Map | Easting: | 872,288.43 usft | Longitude: | -103.26549359 |
| Position Uncertainty: | 0.0 usft | Slot Radius: | 13-3/16" | Grid Convergence: | 0.57 ° |

| Well | Azalea State Com 26-36-28 127H | | | | | |
|----------------------|--------------------------------|----------|---------------------|-----------------|---------------|---------------|
| Well Position | +N/-S | 0.0 usft | Northing: | 372,976.85 usft | Latitude: | 32.02089780 |
| | +E/-W | 0.0 usft | Easting: | 872,288.43 usft | Longitude: | -103.26549360 |
| Position Uncertainty | | 0.0 usft | Wellhead Elevation: | usft | Ground Level: | 2,912.0 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | 127H | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2020 | 2/14/2022 | 6.31 | 59.74 | 47,338.30296344 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | Baseline Plan #2 - 179.41 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.0 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.0 | 0.0 | 0.0 | 179.41 |

| | | | | |
|----------------------------|------------------|----------------------------------|------------------|---------------------|
| Survey Tool Program | Date | 3/15/2022 | | |
| From (usft) | To (usft) | Survey (Wellbore) | Tool Name | Description |
| 0.0 | 20,168.6 | Baseline Plan #2 - 179.41 (127H) | MWD | OWSG MWD - Standard |

| | | | | | | | |
|-------------------------|----------------|--------------------------|-------------------|-------------------------|-------------------------|---------------------|----------------------|
| Planned Survey | | | | | | | |
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | +FSL/-FNL (usft) | +FWL/-FEL (usft) | Latitude (°) | Longitude (°) |
| 0.0 | 0.00 | 0.00 | 0.0 | -230.0 | -1,225.0 | 32.02089780 | -103.26549360 |
| 100.0 | 0.00 | 0.00 | 100.0 | -230.0 | -1,225.0 | 32.02089780 | -103.26549360 |
| 200.0 | 0.00 | 0.00 | 200.0 | -230.0 | -1,225.0 | 32.02089780 | -103.26549360 |
| 300.0 | 0.00 | 0.00 | 300.0 | -230.0 | -1,225.0 | 32.02089780 | -103.26549360 |
| 400.0 | 0.00 | 0.00 | 400.0 | -230.0 | -1,225.0 | 32.02089780 | -103.26549360 |
| Start Build 1.00 | | | | | | | |
| 500.0 | 1.00 | 33.72 | 500.0 | -229.3 | -1,224.5 | 32.02089978 | -103.26549201 |
| 600.0 | 2.00 | 33.72 | 600.0 | -227.1 | -1,223.1 | 32.02090573 | -103.26548726 |
| 700.0 | 3.00 | 33.72 | 699.9 | -223.5 | -1,220.6 | 32.02091563 | -103.26547933 |
| 800.0 | 4.00 | 33.72 | 799.7 | -218.4 | -1,217.3 | 32.02092950 | -103.26546823 |
| 900.0 | 5.00 | 33.72 | 899.4 | -211.9 | -1,212.9 | 32.02094731 | -103.26545397 |



American Resource Development LLC.

Permit Plan

| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Company: | Ameredev Operating | Local Co-ordinate Reference: | Well Azalea State Com 26-36-28 127H |
| Project: | Lea County, NM (N83-NME) | TVD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Site: | Camelia_Azalea | MD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Well: | Azalea State Com 26-36-28 127H | North Reference: | Grid |
| Wellbore: | 127H | Survey Calculation Method: | Minimum Curvature |
| Design: | Baseline Plan #2 - 179.41 | Database: | AUS-COMPASS - EDM_15 - 32bit |

Planned Survey

| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | +FSL/-FNL (usft) | +FWL/-FEL (usft) | Latitude (°) | Longitude (°) |
|--------------------------------------|------------|----------------------|---------------|---------------------|---------------------|-----------------|------------------|
| 964.6 | 5.65 | 33.72 | 963.6 | -206.9 | -1,209.6 | 32.02096091 | -103.26544309 |
| Start 5487.2 hold at 964.6 MD | | | | | | | |
| 1,000.0 | 5.65 | 33.72 | 998.9 | -204.0 | -1,207.6 | 32.02096883 | -103.26543675 |
| 1,100.0 | 5.65 | 33.72 | 1,098.4 | -195.8 | -1,202.2 | 32.02099117 | -103.26541887 |
| 1,200.0 | 5.65 | 33.72 | 1,197.9 | -187.6 | -1,196.7 | 32.02101351 | -103.26540099 |
| 1,300.0 | 5.65 | 33.72 | 1,297.5 | -179.4 | -1,191.3 | 32.02103585 | -103.26538311 |
| 1,400.0 | 5.65 | 33.72 | 1,397.0 | -171.3 | -1,185.8 | 32.02105819 | -103.26536523 |
| 1,500.0 | 5.65 | 33.72 | 1,496.5 | -163.1 | -1,180.3 | 32.02108053 | -103.26534735 |
| 1,600.0 | 5.65 | 33.72 | 1,596.0 | -154.9 | -1,174.9 | 32.02110287 | -103.26532947 |
| 1,700.0 | 5.65 | 33.72 | 1,695.5 | -146.7 | -1,169.4 | 32.02112522 | -103.26531159 |
| 1,727.6 | 5.65 | 33.72 | 1,723.0 | -144.5 | -1,167.9 | 32.02113138 | -103.26530665 |
| Rustler | | | | | | | |
| 1,800.0 | 5.65 | 33.72 | 1,795.0 | -138.5 | -1,163.9 | 32.02114756 | -103.26529371 |
| 1,900.0 | 5.65 | 33.72 | 1,894.5 | -130.3 | -1,158.5 | 32.02116990 | -103.26527583 |
| 2,000.0 | 5.65 | 33.72 | 1,994.1 | -122.2 | -1,153.0 | 32.02119224 | -103.26525795 |
| 2,100.0 | 5.65 | 33.72 | 2,093.6 | -114.0 | -1,147.6 | 32.02121458 | -103.26524007 |
| 2,187.8 | 5.65 | 33.72 | 2,181.0 | -106.8 | -1,142.8 | 32.02123420 | -103.26522436 |
| Salado | | | | | | | |
| 2,200.0 | 5.65 | 33.72 | 2,193.1 | -105.8 | -1,142.1 | 32.02123692 | -103.26522219 |
| 2,300.0 | 5.65 | 33.72 | 2,292.6 | -97.6 | -1,136.6 | 32.02125926 | -103.26520431 |
| 2,400.0 | 5.65 | 33.72 | 2,392.1 | -89.4 | -1,131.2 | 32.02128160 | -103.26518642 |
| 2,500.0 | 5.65 | 33.72 | 2,491.6 | -81.3 | -1,125.7 | 32.02130394 | -103.26516854 |
| 2,600.0 | 5.65 | 33.72 | 2,591.2 | -73.1 | -1,120.3 | 32.02132628 | -103.26515066 |
| 2,700.0 | 5.65 | 33.72 | 2,690.7 | -64.9 | -1,114.8 | 32.02134862 | -103.26513278 |
| 2,800.0 | 5.65 | 33.72 | 2,790.2 | -56.7 | -1,109.3 | 32.02137096 | -103.26511490 |
| 2,900.0 | 5.65 | 33.72 | 2,889.7 | -48.5 | -1,103.9 | 32.02139330 | -103.26509702 |
| 3,000.0 | 5.65 | 33.72 | 2,989.2 | -40.3 | -1,098.4 | 32.02141564 | -103.26507914 |
| 3,100.0 | 5.65 | 33.72 | 3,088.7 | -32.2 | -1,092.9 | 32.02143798 | -103.26506126 |
| 3,160.6 | 5.65 | 33.72 | 3,149.0 | -27.2 | -1,089.6 | 32.02145151 | -103.26505043 |
| Tansill | | | | | | | |
| 3,200.0 | 5.65 | 33.72 | 3,188.2 | -24.0 | -1,087.5 | 32.02146032 | -103.26504338 |
| 3,300.0 | 5.65 | 33.72 | 3,287.8 | -15.8 | -1,082.0 | 32.02148266 | -103.26502550 |
| 3,400.0 | 5.65 | 33.72 | 3,387.3 | -7.6 | -1,076.6 | 32.02150500 | -103.26500762 |
| 3,500.0 | 5.65 | 33.72 | 3,486.8 | 0.6 | -1,071.1 | 32.02152734 | -103.26498974 |
| 3,514.0 | 5.65 | 33.72 | 3,500.7 | 1.7 | -1,070.3 | 32.02153047 | -103.26498724 |
| Lease Line Exit at 3514.0 MD | | | | | | | |
| 3,600.0 | 5.65 | 33.72 | 3,586.3 | 8.8 | -1,065.6 | 32.02154968 | -103.26497186 |
| 3,700.0 | 5.65 | 33.72 | 3,685.8 | 16.9 | -1,060.2 | 32.02157203 | -103.26495398 |
| 3,772.5 | 5.65 | 33.72 | 3,758.0 | 22.9 | -1,056.2 | 32.02158823 | -103.26494101 |
| Capitan | | | | | | | |
| 3,800.0 | 5.65 | 33.72 | 3,785.3 | 25.1 | -1,054.7 | 32.02159437 | -103.26493610 |
| 3,900.0 | 5.65 | 33.72 | 3,884.8 | 33.3 | -1,049.3 | 32.02161671 | -103.26491822 |
| 4,000.0 | 5.65 | 33.72 | 3,984.4 | 41.5 | -1,043.8 | 32.02163905 | -103.26490034 |
| 4,100.0 | 5.65 | 33.72 | 4,083.9 | 49.7 | -1,038.3 | 32.02166139 | -103.26488246 |
| 4,200.0 | 5.65 | 33.72 | 4,183.4 | 57.8 | -1,032.9 | 32.02168373 | -103.26486458 |



American Resource Development LLC.

Permit Plan

| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Company: | Ameredev Operating | Local Co-ordinate Reference: | Well Azalea State Com 26-36-28 127H |
| Project: | Lea County, NM (N83-NME) | TVD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Site: | Camelia_Azalea | MD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Well: | Azalea State Com 26-36-28 127H | North Reference: | Grid |
| Wellbore: | 127H | Survey Calculation Method: | Minimum Curvature |
| Design: | Baseline Plan #2 - 179.41 | Database: | AUS-COMPASS - EDM_15 - 32bit |

Planned Survey

| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | +FSL/-FNL (usft) | +FWL/-FEL (usft) | Latitude (°) | Longitude (°) |
|---------------------------------------|------------|----------------------|---------------|---------------------|---------------------|-----------------|------------------|
| 4,300.0 | 5.65 | 33.72 | 4,282.9 | 66.0 | -1,027.4 | 32.02170607 | -103.26484669 |
| 4,400.0 | 5.65 | 33.72 | 4,382.4 | 74.2 | -1,021.9 | 32.02172841 | -103.26482881 |
| 4,500.0 | 5.65 | 33.72 | 4,481.9 | 82.4 | -1,016.5 | 32.02175075 | -103.26481093 |
| 4,600.0 | 5.65 | 33.72 | 4,581.5 | 90.6 | -1,011.0 | 32.02177309 | -103.26479305 |
| 4,700.0 | 5.65 | 33.72 | 4,681.0 | 98.8 | -1,005.6 | 32.02179543 | -103.26477517 |
| 4,800.0 | 5.65 | 33.72 | 4,780.5 | 106.9 | -1,000.1 | 32.02181777 | -103.26475729 |
| 4,900.0 | 5.65 | 33.72 | 4,880.0 | 115.1 | -994.6 | 32.02184011 | -103.26473941 |
| 4,999.5 | 5.65 | 33.72 | 4,979.0 | 123.3 | -989.2 | 32.02186234 | -103.26472162 |
| Lamar | | | | | | | |
| 5,000.0 | 5.65 | 33.72 | 4,979.5 | 123.3 | -989.2 | 32.02186245 | -103.26472153 |
| 5,100.0 | 5.65 | 33.72 | 5,079.0 | 131.5 | -983.7 | 32.02188479 | -103.26470365 |
| 5,174.3 | 5.65 | 33.72 | 5,153.0 | 137.6 | -979.7 | 32.02190140 | -103.26469036 |
| Bell Canyon | | | | | | | |
| 5,200.0 | 5.65 | 33.72 | 5,178.5 | 139.7 | -978.3 | 32.02190713 | -103.26468577 |
| 5,300.0 | 5.65 | 33.72 | 5,278.1 | 147.8 | -972.8 | 32.02192947 | -103.26466789 |
| 5,400.0 | 5.65 | 33.72 | 5,377.6 | 156.0 | -967.3 | 32.02195181 | -103.26465001 |
| 5,500.0 | 5.65 | 33.72 | 5,477.1 | 164.2 | -961.9 | 32.02197415 | -103.26463213 |
| 5,600.0 | 5.65 | 33.72 | 5,576.6 | 172.4 | -956.4 | 32.02199649 | -103.26461425 |
| 5,700.0 | 5.65 | 33.72 | 5,676.1 | 180.6 | -950.9 | 32.02201883 | -103.26459637 |
| 5,800.0 | 5.65 | 33.72 | 5,775.6 | 188.8 | -945.5 | 32.02204117 | -103.26457848 |
| 5,900.0 | 5.65 | 33.72 | 5,875.1 | 196.9 | -940.0 | 32.02206352 | -103.26456060 |
| 6,000.0 | 5.65 | 33.72 | 5,974.7 | 205.1 | -934.6 | 32.02208586 | -103.26454272 |
| 6,100.0 | 5.65 | 33.72 | 6,074.2 | 213.3 | -929.1 | 32.02210820 | -103.26452484 |
| 6,200.0 | 5.65 | 33.72 | 6,173.7 | 221.5 | -923.6 | 32.02213054 | -103.26450696 |
| 6,300.0 | 5.65 | 33.72 | 6,273.2 | 229.7 | -918.2 | 32.02215288 | -103.26448908 |
| 6,400.0 | 5.65 | 33.72 | 6,372.7 | 237.9 | -912.7 | 32.02217522 | -103.26447120 |
| 6,451.8 | 5.65 | 33.72 | 6,424.2 | 242.1 | -909.9 | 32.02218678 | -103.26446194 |
| Start Drop -1.50 | | | | | | | |
| 6,500.0 | 4.92 | 33.72 | 6,472.3 | 245.8 | -907.4 | 32.02219687 | -103.26445387 |
| 6,600.0 | 3.42 | 33.72 | 6,572.0 | 251.8 | -903.4 | 32.02221339 | -103.26444065 |
| 6,700.0 | 1.92 | 33.72 | 6,671.9 | 255.7 | -900.8 | 32.02222398 | -103.26443217 |
| 6,800.0 | 0.42 | 33.72 | 6,771.9 | 257.4 | -899.7 | 32.02222862 | -103.26442846 |
| 6,828.1 | 0.00 | 0.00 | 6,800.0 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| Start 2720.0 hold at 6828.1 MD | | | | | | | |
| 6,900.0 | 0.00 | 0.00 | 6,871.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,000.0 | 0.00 | 0.00 | 6,971.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,041.1 | 0.00 | 0.00 | 7,013.0 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| Brushy Canyon | | | | | | | |
| 7,100.0 | 0.00 | 0.00 | 7,071.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,200.0 | 0.00 | 0.00 | 7,171.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,300.0 | 0.00 | 0.00 | 7,271.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,400.0 | 0.00 | 0.00 | 7,371.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,500.0 | 0.00 | 0.00 | 7,471.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,600.0 | 0.00 | 0.00 | 7,571.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,700.0 | 0.00 | 0.00 | 7,671.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |



American Resource Development LLC.

Permit Plan

Company: Ameredev Operating
Project: Lea County, NM (N83-NME)
Site: Camelia_Azalea
Well: Azalea State Com 26-36-28 127H
Wellbore: 127H
Design: Baseline Plan #2 - 179.41

Local Co-ordinate Reference: Well Azalea State Com 26-36-28 127H
TVD Reference: GL 2912 + 27 KB @ 2939.0usft
MD Reference: GL 2912 + 27 KB @ 2939.0usft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: AUS-COMPASS - EDM_15 - 32bit

Planned Survey

| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | +FSL/-FNL (usft) | +FWL/-FEL (usft) | Latitude (°) | Longitude (°) |
|---------------------------------------|------------|----------------------|---------------|---------------------|---------------------|-----------------|------------------|
| 7,800.0 | 0.00 | 0.00 | 7,771.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,900.0 | 0.00 | 0.00 | 7,871.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 7,984.1 | 0.00 | 0.00 | 7,956.0 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| Bone Spring Lime | | | | | | | |
| 8,000.0 | 0.00 | 0.00 | 7,971.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,100.0 | 0.00 | 0.00 | 8,071.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,200.0 | 0.00 | 0.00 | 8,171.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,300.0 | 0.00 | 0.00 | 8,271.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,400.0 | 0.00 | 0.00 | 8,371.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,500.0 | 0.00 | 0.00 | 8,471.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,600.0 | 0.00 | 0.00 | 8,571.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,700.0 | 0.00 | 0.00 | 8,671.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,800.0 | 0.00 | 0.00 | 8,771.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 8,900.0 | 0.00 | 0.00 | 8,871.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 9,000.0 | 0.00 | 0.00 | 8,971.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 9,100.0 | 0.00 | 0.00 | 9,071.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 9,200.0 | 0.00 | 0.00 | 9,171.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 9,300.0 | 0.00 | 0.00 | 9,271.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 9,400.0 | 0.00 | 0.00 | 9,371.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 9,500.0 | 0.00 | 0.00 | 9,471.9 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| 9,536.1 | 0.00 | 0.00 | 9,508.0 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| First Bone Spring | | | | | | | |
| 9,548.1 | 0.00 | 0.00 | 9,520.0 | 257.5 | -899.6 | 32.02222886 | -103.26442827 |
| Start Build 1.50 | | | | | | | |
| 9,600.0 | 0.78 | 33.61 | 9,571.9 | 257.8 | -899.4 | 32.02222966 | -103.26442763 |
| 9,700.0 | 2.28 | 33.61 | 9,671.8 | 260.0 | -897.9 | 32.02223572 | -103.26442280 |
| 9,800.0 | 3.78 | 33.61 | 9,771.7 | 264.4 | -895.0 | 32.02224773 | -103.26441322 |
| 9,900.0 | 5.28 | 33.61 | 9,871.4 | 271.0 | -890.6 | 32.02226568 | -103.26439892 |
| 9,947.9 | 6.00 | 33.61 | 9,919.1 | 274.9 | -888.0 | 32.02227639 | -103.26439038 |
| Start 1467.4 hold at 9947.9 MD | | | | | | | |
| 10,000.0 | 6.00 | 33.61 | 9,970.8 | 279.4 | -885.0 | 32.02228876 | -103.26438053 |
| 10,100.0 | 6.00 | 33.61 | 10,070.3 | 288.1 | -879.2 | 32.02231252 | -103.26436159 |
| 10,111.8 | 6.00 | 33.61 | 10,082.0 | 289.2 | -878.6 | 32.02231532 | -103.26435936 |
| Second Bone Spring | | | | | | | |
| 10,200.0 | 6.00 | 33.61 | 10,169.8 | 296.8 | -873.5 | 32.02233628 | -103.26434266 |
| 10,300.0 | 6.00 | 33.61 | 10,269.2 | 305.5 | -867.7 | 32.02236004 | -103.26432372 |
| 10,400.0 | 6.00 | 33.61 | 10,368.7 | 314.2 | -861.9 | 32.02238379 | -103.26430479 |
| 10,500.0 | 6.00 | 33.61 | 10,468.1 | 322.9 | -856.1 | 32.02240755 | -103.26428585 |
| 10,600.0 | 6.00 | 33.61 | 10,567.6 | 331.6 | -850.3 | 32.02243131 | -103.26426692 |
| 10,700.0 | 6.00 | 33.61 | 10,667.0 | 340.3 | -844.5 | 32.02245507 | -103.26424798 |
| 10,800.0 | 6.00 | 33.61 | 10,766.5 | 349.0 | -838.8 | 32.02247883 | -103.26422905 |
| 10,807.6 | 6.00 | 33.61 | 10,774.0 | 349.7 | -838.3 | 32.02248063 | -103.26422762 |
| Third Bone Spring Upper | | | | | | | |
| 10,900.0 | 6.00 | 33.61 | 10,865.9 | 357.7 | -833.0 | 32.02250259 | -103.26421012 |
| 11,000.0 | 6.00 | 33.61 | 10,965.4 | 366.4 | -827.2 | 32.02252634 | -103.26419118 |



American Resource Development LLC.

Permit Plan

| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Company: | Ameredev Operating | Local Co-ordinate Reference: | Well Azalea State Com 26-36-28 127H |
| Project: | Lea County, NM (N83-NME) | TVD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Site: | Camelia_Azalea | MD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Well: | Azalea State Com 26-36-28 127H | North Reference: | Grid |
| Wellbore: | 127H | Survey Calculation Method: | Minimum Curvature |
| Design: | Baseline Plan #2 - 179.41 | Database: | AUS-COMPASS - EDM_15 - 32bit |

Planned Survey

| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | +FSL/-FNL (usft) | +FWL/-FEL (usft) | Latitude (°) | Longitude (°) |
|--|------------|----------------------|---------------|---------------------|---------------------|-----------------|------------------|
| 11,100.0 | 6.00 | 33.61 | 11,064.8 | 375.2 | -821.4 | 32.02255010 | -103.26417225 |
| 11,200.0 | 6.00 | 33.61 | 11,164.3 | 383.9 | -815.6 | 32.02257386 | -103.26415331 |
| 11,300.0 | 6.00 | 33.61 | 11,263.7 | 392.6 | -809.8 | 32.02259762 | -103.26413438 |
| 11,400.0 | 6.00 | 33.61 | 11,363.2 | 401.3 | -804.1 | 32.02262138 | -103.26411544 |
| 11,406.9 | 6.00 | 33.61 | 11,370.0 | 401.9 | -803.7 | 32.02262300 | -103.26411415 |
| Third Bone Spring | | | | | | | |
| 11,415.3 | 6.00 | 33.61 | 11,378.4 | 402.6 | -803.2 | 32.02262502 | -103.26411254 |
| Start Drop -1.50 | | | | | | | |
| 11,500.0 | 4.73 | 33.61 | 11,462.7 | 409.2 | -798.8 | 32.02264301 | -103.26409820 |
| 11,598.5 | 3.25 | 33.61 | 11,561.0 | 414.9 | -795.0 | 32.02265859 | -103.26408578 |
| Wolfcamp | | | | | | | |
| 11,600.0 | 3.23 | 33.61 | 11,562.5 | 415.0 | -795.0 | 32.02265878 | -103.26408563 |
| 11,700.0 | 1.73 | 33.61 | 11,662.4 | 418.6 | -792.6 | 32.02266861 | -103.26407780 |
| 11,800.0 | 0.23 | 33.61 | 11,762.4 | 420.0 | -791.6 | 32.02267249 | -103.26407471 |
| 11,815.1 | 0.00 | 0.00 | 11,777.5 | 420.0 | -791.6 | 32.02267255 | -103.26407466 |
| Start DLS 12.00 TFO 179.41 | | | | | | | |
| 11,900.0 | 10.18 | 179.41 | 11,861.9 | 412.5 | -791.5 | 32.02265187 | -103.26407465 |
| 12,000.0 | 22.18 | 179.41 | 11,957.8 | 384.7 | -791.2 | 32.02257540 | -103.26407462 |
| 12,066.0 | 30.11 | 179.41 | 12,017.0 | 355.6 | -790.9 | 32.02249551 | -103.26407459 |
| Wolfcamp B | | | | | | | |
| 12,100.0 | 34.18 | 179.41 | 12,045.8 | 337.5 | -790.8 | 32.02244581 | -103.26407457 |
| 12,200.0 | 46.18 | 179.41 | 12,122.0 | 273.1 | -790.1 | 32.02226878 | -103.26407450 |
| 12,300.0 | 58.18 | 179.41 | 12,183.2 | 194.3 | -789.3 | 32.02205204 | -103.26407441 |
| 12,400.0 | 70.18 | 179.41 | 12,226.7 | 104.4 | -788.4 | 32.02180506 | -103.26407432 |
| 12,500.0 | 82.18 | 179.41 | 12,250.5 | 7.5 | -787.4 | 32.02153863 | -103.26407421 |
| 12,503.0 | 82.54 | 179.41 | 12,250.9 | 4.5 | -787.4 | 32.02153053 | -103.26407421 |
| Lease Line Entry at 12503.0 MD | | | | | | | |
| 12,564.7 | 89.95 | 179.41 | 12,255.0 | -57.0 | -786.7 | 32.02136139 | -103.26407414 |
| Start 38.2 hold at 12564.7 MD | | | | | | | |
| 12,600.0 | 89.95 | 179.41 | 12,255.0 | -92.3 | -786.4 | 32.02126432 | -103.26407410 |
| 12,602.9 | 89.95 | 179.41 | 12,255.0 | -95.2 | -786.3 | 32.02125640 | -103.26407410 |
| Start 7515.6 hold at 12602.9 MD - 01-FTP (AZ127H) | | | | | | | |
| 12,700.0 | 89.95 | 179.41 | 12,255.1 | -192.3 | -785.3 | 32.02098945 | -103.26407400 |
| 12,800.0 | 89.95 | 179.41 | 12,255.2 | -292.3 | -784.3 | 32.02071459 | -103.26407389 |
| 12,900.0 | 89.95 | 179.41 | 12,255.3 | -392.3 | -783.3 | 32.02043973 | -103.26407378 |
| 13,000.0 | 89.95 | 179.41 | 12,255.4 | -492.3 | -782.3 | 32.02016486 | -103.26407367 |
| 13,100.0 | 89.95 | 179.41 | 12,255.5 | -592.3 | -781.2 | 32.01989000 | -103.26407356 |
| 13,200.0 | 89.95 | 179.41 | 12,255.6 | -692.3 | -780.2 | 32.01961513 | -103.26407346 |
| 13,300.0 | 89.95 | 179.41 | 12,255.6 | -792.3 | -779.2 | 32.01934027 | -103.26407335 |
| 13,400.0 | 89.95 | 179.41 | 12,255.7 | -892.3 | -778.2 | 32.01906540 | -103.26407324 |
| 13,500.0 | 89.95 | 179.41 | 12,255.8 | -992.3 | -777.2 | 32.01879054 | -103.26407313 |
| 13,600.0 | 89.95 | 179.41 | 12,255.9 | -1,092.3 | -776.1 | 32.01851567 | -103.26407302 |
| 13,700.0 | 89.95 | 179.41 | 12,256.0 | -1,192.3 | -775.1 | 32.01824081 | -103.26407291 |
| 13,800.0 | 89.95 | 179.41 | 12,256.1 | -1,292.2 | -774.1 | 32.01796594 | -103.26407281 |
| 13,900.0 | 89.95 | 179.41 | 12,256.2 | -1,392.2 | -773.1 | 32.01769108 | -103.26407270 |



American Resource Development LLC.

Permit Plan

| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Company: | Ameredev Operating | Local Co-ordinate Reference: | Well Azalea State Com 26-36-28 127H |
| Project: | Lea County, NM (N83-NME) | TVD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Site: | Camelia_Azalea | MD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Well: | Azalea State Com 26-36-28 127H | North Reference: | Grid |
| Wellbore: | 127H | Survey Calculation Method: | Minimum Curvature |
| Design: | Baseline Plan #2 - 179.41 | Database: | AUS-COMPASS - EDM_15 - 32bit |

| Planned Survey | | | | | | | |
|----------------|------------|----------------------|---------------|---------------------|---------------------|-----------------|------------------|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | +FSL/-FNL (usft) | +FWL/-FEL (usft) | Latitude (°) | Longitude (°) |
| 14,000.0 | 89.95 | 179.41 | 12,256.3 | -1,492.2 | -772.0 | 32.01741621 | -103.26407259 |
| 14,100.0 | 89.95 | 179.41 | 12,256.4 | -1,592.2 | -771.0 | 32.01714135 | -103.26407248 |
| 14,200.0 | 89.95 | 179.41 | 12,256.5 | -1,692.2 | -770.0 | 32.01686648 | -103.26407237 |
| 14,300.0 | 89.95 | 179.41 | 12,256.6 | -1,792.2 | -769.0 | 32.01659162 | -103.26407226 |
| 14,400.0 | 89.95 | 179.41 | 12,256.7 | -1,892.2 | -767.9 | 32.01631675 | -103.26407216 |
| 14,500.0 | 89.95 | 179.41 | 12,256.8 | -1,992.2 | -766.9 | 32.01604189 | -103.26407205 |
| 14,600.0 | 89.95 | 179.41 | 12,256.8 | -2,092.2 | -765.9 | 32.01576702 | -103.26407194 |
| 14,700.0 | 89.95 | 179.41 | 12,256.9 | -2,192.2 | -764.9 | 32.01549216 | -103.26407183 |
| 14,800.0 | 89.95 | 179.41 | 12,257.0 | -2,292.2 | -763.9 | 32.01521729 | -103.26407172 |
| 14,900.0 | 89.95 | 179.41 | 12,257.1 | -2,392.2 | -762.8 | 32.01494243 | -103.26407161 |
| 15,000.0 | 89.95 | 179.41 | 12,257.2 | -2,492.2 | -761.8 | 32.01466756 | -103.26407151 |
| 15,100.0 | 89.95 | 179.41 | 12,257.3 | -2,592.2 | -760.8 | 32.01439270 | -103.26407140 |
| 15,200.0 | 89.95 | 179.41 | 12,257.4 | -2,692.2 | -759.8 | 32.01411783 | -103.26407129 |
| 15,300.0 | 89.95 | 179.41 | 12,257.5 | -2,792.2 | -758.7 | 32.01384297 | -103.26407118 |
| 15,400.0 | 89.95 | 179.41 | 12,257.6 | -2,892.2 | -757.7 | 32.01356810 | -103.26407107 |
| 15,500.0 | 89.95 | 179.41 | 12,257.7 | -2,992.2 | -756.7 | 32.01329324 | -103.26407096 |
| 15,600.0 | 89.95 | 179.41 | 12,257.8 | -3,092.2 | -755.7 | 32.01301837 | -103.26407085 |
| 15,700.0 | 89.95 | 179.41 | 12,257.9 | -3,192.1 | -754.6 | 32.01274351 | -103.26407075 |
| 15,800.0 | 89.95 | 179.41 | 12,258.0 | -3,292.1 | -753.6 | 32.01246864 | -103.26407064 |
| 15,900.0 | 89.95 | 179.41 | 12,258.1 | -3,392.1 | -752.6 | 32.01219377 | -103.26407053 |
| 16,000.0 | 89.95 | 179.41 | 12,258.1 | -3,492.1 | -751.6 | 32.01191891 | -103.26407042 |
| 16,100.0 | 89.95 | 179.41 | 12,258.2 | -3,592.1 | -750.6 | 32.01164404 | -103.26407031 |
| 16,200.0 | 89.95 | 179.41 | 12,258.3 | -3,692.1 | -749.5 | 32.01136918 | -103.26407020 |
| 16,300.0 | 89.95 | 179.41 | 12,258.4 | -3,792.1 | -748.5 | 32.01109431 | -103.26407009 |
| 16,400.0 | 89.95 | 179.41 | 12,258.5 | -3,892.1 | -747.5 | 32.01081945 | -103.26406998 |
| 16,500.0 | 89.95 | 179.41 | 12,258.6 | -3,992.1 | -746.5 | 32.01054458 | -103.26406988 |
| 16,600.0 | 89.95 | 179.41 | 12,258.7 | -4,092.1 | -745.4 | 32.01026972 | -103.26406977 |
| 16,700.0 | 89.95 | 179.41 | 12,258.8 | -4,192.1 | -744.4 | 32.00999485 | -103.26406966 |
| 16,800.0 | 89.95 | 179.41 | 12,258.9 | -4,292.1 | -743.4 | 32.00971999 | -103.26406955 |
| 16,900.0 | 89.95 | 179.41 | 12,259.0 | -4,392.1 | -742.4 | 32.00944512 | -103.26406944 |
| 17,000.0 | 89.95 | 179.41 | 12,259.1 | -4,492.1 | -741.3 | 32.00917026 | -103.26406933 |
| 17,100.0 | 89.95 | 179.41 | 12,259.2 | -4,592.1 | -740.3 | 32.00889539 | -103.26406922 |
| 17,200.0 | 89.95 | 179.41 | 12,259.3 | -4,692.1 | -739.3 | 32.00862053 | -103.26406911 |
| 17,300.0 | 89.95 | 179.41 | 12,259.4 | -4,792.1 | -738.3 | 32.00834566 | -103.26406900 |
| 17,400.0 | 89.95 | 179.41 | 12,259.4 | -4,892.1 | -737.3 | 32.00807080 | -103.26406890 |
| 17,500.0 | 89.95 | 179.41 | 12,259.5 | -4,992.1 | -736.2 | 32.00779593 | -103.26406879 |
| 17,600.0 | 89.95 | 179.41 | 12,259.6 | -5,092.0 | -735.2 | 32.00752106 | -103.26406868 |
| 17,700.0 | 89.95 | 179.41 | 12,259.7 | -5,192.0 | -734.2 | 32.00724620 | -103.26406857 |
| 17,800.0 | 89.95 | 179.41 | 12,259.8 | -5,292.0 | -733.2 | 32.00697133 | -103.26406846 |
| 17,900.0 | 89.95 | 179.41 | 12,259.9 | -5,392.0 | -732.1 | 32.00669647 | -103.26406835 |
| 18,000.0 | 89.95 | 179.41 | 12,260.0 | -5,492.0 | -731.1 | 32.00642160 | -103.26406824 |
| 18,100.0 | 89.95 | 179.41 | 12,260.1 | -5,592.0 | -730.1 | 32.00614674 | -103.26406813 |
| 18,200.0 | 89.95 | 179.41 | 12,260.2 | -5,692.0 | -729.1 | 32.00587187 | -103.26406802 |
| 18,300.0 | 89.95 | 179.41 | 12,260.3 | -5,792.0 | -728.0 | 32.00559701 | -103.26406791 |
| 18,400.0 | 89.95 | 179.41 | 12,260.4 | -5,892.0 | -727.0 | 32.00532214 | -103.26406780 |



American Resource Development LLC.

Permit Plan

| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Company: | Ameredev Operating | Local Co-ordinate Reference: | Well Azalea State Com 26-36-28 127H |
| Project: | Lea County, NM (N83-NME) | TVD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Site: | Camelia_Azalea | MD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Well: | Azalea State Com 26-36-28 127H | North Reference: | Grid |
| Wellbore: | 127H | Survey Calculation Method: | Minimum Curvature |
| Design: | Baseline Plan #2 - 179.41 | Database: | AUS-COMPASS - EDM_15 - 32bit |

| Planned Survey | | | | | | | |
|--|------------|----------------------|---------------|---------------------|---------------------|-----------------|------------------|
| MD (usft) | Inc (°) | Azi (azimuth) (°) | TVD (usft) | +FSL/-FNL (usft) | +FWL/-FEL (usft) | Latitude (°) | Longitude (°) |
| 18,500.0 | 89.95 | 179.41 | 12,260.5 | -5,992.0 | -726.0 | 32.00504728 | -103.26406769 |
| 18,600.0 | 89.95 | 179.41 | 12,260.6 | -6,092.0 | -725.0 | 32.00477241 | -103.26406758 |
| 18,700.0 | 89.95 | 179.41 | 12,260.6 | -6,192.0 | -724.0 | 32.00449754 | -103.26406748 |
| 18,800.0 | 89.95 | 179.41 | 12,260.7 | -6,292.0 | -722.9 | 32.00422268 | -103.26406737 |
| 18,900.0 | 89.95 | 179.41 | 12,260.8 | -6,392.0 | -721.9 | 32.00394781 | -103.26406726 |
| 19,000.0 | 89.95 | 179.41 | 12,260.9 | -6,492.0 | -720.9 | 32.00367295 | -103.26406715 |
| 19,100.0 | 89.95 | 179.41 | 12,261.0 | -6,592.0 | -719.9 | 32.00339808 | -103.26406704 |
| 19,200.0 | 89.95 | 179.41 | 12,261.1 | -6,692.0 | -718.8 | 32.00312322 | -103.26406693 |
| 19,300.0 | 89.95 | 179.41 | 12,261.2 | -6,792.0 | -717.8 | 32.00284835 | -103.26406682 |
| 19,400.0 | 89.95 | 179.41 | 12,261.3 | -6,892.0 | -716.8 | 32.00257349 | -103.26406671 |
| 19,500.0 | 89.95 | 179.41 | 12,261.4 | -6,991.9 | -715.8 | 32.00229862 | -103.26406660 |
| 19,600.0 | 89.95 | 179.41 | 12,261.5 | -7,091.9 | -714.7 | 32.00202375 | -103.26406649 |
| 19,700.0 | 89.95 | 179.41 | 12,261.6 | -7,191.9 | -713.7 | 32.00174889 | -103.26406638 |
| 19,800.0 | 89.95 | 179.41 | 12,261.7 | -7,291.9 | -712.7 | 32.00147402 | -103.26406627 |
| 19,900.0 | 89.95 | 179.41 | 12,261.8 | -7,391.9 | -711.7 | 32.00119916 | -103.26406616 |
| 20,000.0 | 89.95 | 179.41 | 12,261.9 | -7,491.9 | -710.7 | 32.00092429 | -103.26406605 |
| 20,100.0 | 89.95 | 179.41 | 12,261.9 | -7,591.9 | -709.6 | 32.00064943 | -103.26406594 |
| 20,118.5 | 89.95 | 179.41 | 12,262.0 | -7,610.4 | -709.4 | 32.00059852 | -103.26406592 |
| Start 50.1 hold at 20118.5 MD - 02-LTP (AZ127H) | | | | | | | |
| 20,168.6 | 89.95 | 179.41 | 12,262.0 | -7,660.5 | -708.9 | 32.00046082 | -103.26406587 |
| TD at 20168.6 - 03-BHL (AZ127H) | | | | | | | |



American Resource Development LLC.

Permit Plan

| | | | |
|------------------|--------------------------------|-------------------------------------|-------------------------------------|
| Company: | Ameredev Operating | Local Co-ordinate Reference: | Well Azalea State Com 26-36-28 127H |
| Project: | Lea County, NM (N83-NME) | TVD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Site: | Camelia_Azalea | MD Reference: | GL 2912 + 27 KB @ 2939.0usft |
| Well: | Azalea State Com 26-36-28 127H | North Reference: | Grid |
| Wellbore: | 127H | Survey Calculation Method: | Minimum Curvature |
| Design: | Baseline Plan #2 - 179.41 | Database: | AUS-COMPASS - EDM_15 - 32bit |

Formations

| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|-------------------------|-----------|---------|-------------------|
| 3,160.6 | 3,149.0 | Tansill | | | |
| 3,772.5 | 3,758.0 | Capitan | | | |
| 4,999.5 | 4,979.0 | Lamar | | | |
| 10,807.6 | 10,774.0 | Third Bone Spring Upper | | | |
| 2,187.8 | 2,181.0 | Salado | | | |
| 7,041.1 | 7,013.0 | Brushy Canyon | | | |
| 11,406.9 | 11,370.0 | Third Bone Spring | | | |
| 11,598.5 | 11,561.0 | Wolfcamp | | | |
| 1,727.6 | 1,723.0 | Rustler | | | |
| 10,111.8 | 10,082.0 | Second Bone Spring | | | |
| 9,536.1 | 9,508.0 | First Bone Spring | | | |
| 5,174.3 | 5,153.0 | Bell Canyon | | | |
| 7,984.1 | 7,956.0 | Bone Spring Lime | | | |
| 12,066.0 | 12,017.0 | Wolfcamp B | | | |

Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | Comment |
|-----------------------|-----------------------|-------------------|--------------|---------------------------------|
| | | +N/-S (usft) | +E/-W (usft) | |
| 400.0 | 400.0 | 0.0 | 0.0 | Start Build 1.00 |
| 964.6 | 963.6 | 23.1 | 15.4 | Start 5487.2 hold at 964.6 MD |
| 3,514.0 | 3,500.7 | 231.7 | 154.7 | Lease Line Exit at 3514.0 MD |
| 6,451.8 | 6,424.2 | 472.1 | 315.1 | Start Drop -1.50 |
| 6,828.1 | 6,800.0 | 487.5 | 325.4 | Start 2720.0 hold at 6828.1 MD |
| 9,548.1 | 9,520.0 | 487.5 | 325.4 | Start Build 1.50 |
| 9,947.9 | 9,919.1 | 504.9 | 337.0 | Start 1467.4 hold at 9947.9 MD |
| 11,415.3 | 11,378.4 | 632.6 | 421.8 | Start Drop -1.50 |
| 11,815.1 | 11,777.5 | 650.0 | 433.4 | Start DLS 12.00 TFO 179.41 |
| 12,503.0 | 12,250.9 | 234.5 | 437.7 | Lease Line Entry at 12503.0 MD |
| 12,564.7 | 12,255.0 | 173.0 | 438.3 | Start 38.2 hold at 12564.7 MD |
| 12,602.9 | 12,255.0 | 134.8 | 438.7 | Start 7515.6 hold at 12602.9 MD |
| 20,118.5 | 12,262.0 | -7,380.4 | 515.6 | Start 50.1 hold at 20118.5 MD |
| 20,168.6 | 12,262.0 | -7,430.5 | 516.1 | TD at 20168.6 |

Checked By: _____ Approved By: _____ Date: _____



Ameredev II, LLC

Wellbore Schematic

Well: Azalea 26 36 28 State Com 127H
SHL: Sec. 28 26S-36E 230' FNL & 1225' FEL
BHL: Sec. 33 26S-36E 50' FSL & 785' FEL
 Lea, NM
Wellhead: A - 13-5/8" 10M x 13-5/8" SOW
 B - 13-5/8" 10M x 13-5/8" 10M
 C - 13-5/8" 10M x 13-5/8" 10M
 Tubing Spool - 7-1/16" 15M x 13-3/8" 10M
Xmas Tree: 2-9/16" 10M
Tubing: 2-7/8" L-80 6.5# 8rd EUE

Co. Well ID: xxxxxx
AFE No.: xxxx-xxx
API No.: xxxxxxxxxxxx
GL: 2,912'
Field: Delaware
Objective: Wolfcamp B
TVD: 12,262'
MD: 20,169'
Rig: TBD **KB 27'**
E-Mail: Wellsite2@ameredev.com

| Hole Size | Formation Tops | Logs | Cement | Mud Weight |
|---|--|-----------------------|-------------|-------------------------------|
| 17.5" | Rustler 1,723' | 1,505 Sacks TOC 0' | 100% Excess | 8.4-8.6 ppg WBM |
| | 13.375" 68# J-55 BTC 1,848' | | | |
| 12.25" | Salado 2,181' | 800 Sacks TOC 0' | 50% Excess | 7.5-9.4 Diesel Brine Emulsion |
| | DV Tool with ACP 3,149' | | | |
| | Tansill 3,149' | | | |
| | Capitan Reef 3,758' | | | |
| | Lamar 4,979' | | | |
| | Bell Canyon 5,153' | | | |
| | No Casing 5,104' | | | |
| 9.875" | Brushy Canyon 7,013' | 2,402 Sacks TOC 0' | 50% Excess | |
| | Bone Spring Lime 7,956' | | | |
| | First Bone Spring 9,508' | | | |
| | Second Bone Spring 10,082' | | | |
| | Third Bone Spring Upper 10,774' | | | |
| | 7.625" 29.7# L-80HC FJM 10,899' | | | |
| 6.75" | Third Bone Spring 11,370' | 1,570 Sacks TOC 0' | 25% Excess | 10.5-12.5 ppg OBM |
| 12° Build @ 6,900' MD thru 12,565' MD | Wolfcamp A 11,561' | | | |
| | Wolfcamp B 12,017' | | | |
| | 5.5" 23# P-110 USS-Eagle SFH 20,169' | | | |
| | Target Wolfcamp B 12262 TVD // 20169 MD | | | |

Casing Design and Safety Factor Check

| Casing Specifications | | | | | | |
|------------------------------|----------------|--------------|-----------|---------------|--------------|-----------------|
| Segment | Hole ID | Depth | OD | Weight | Grade | Coupling |
| Surface | 17.5 | 1,848' | 13.375 | 68 | J-55 | BTC |
| Intermediate | 9.875 | 10,899' | 7.625 | 29.7 | HCL-80 | FJM |
| Prod Segment A | 6.75 | 6,900' | 5.5 | 23 | P-110 | SFH |
| Prod Segment B | 6.75 | 20,169' | 5.5 | 23 | P-110 | SFH |

| Check Surface Casing | | | | |
|-------------------------------------|-----------------|-----------------|------------|------------|
| OD Cplg | Body | Joint | Collapse | Burst |
| <i>inches</i> | <i>1000 lbs</i> | <i>1000 lbs</i> | <i>psi</i> | <i>psi</i> |
| 14.375 | 1,069 | 915 | 4,100 | 3,450 |
| Safety Factors | | | | |
| 1.56 | 8.51 | 7.28 | 4.97 | 0.65 |
| Check Intermediate Casing | | | | |
| OD Cplg | Body | Joint | Collapse | Burst |
| <i>inches</i> | <i>1000 lbs</i> | <i>1000 lbs</i> | <i>psi</i> | <i>psi</i> |
| 7.625 | 940 | 558 | 6700 | 9460 |
| Safety Factors | | | | |
| 1.13 | 2.90 | 1.97 | 1.26 | 1.19 |
| Check Prod Casing, Segment A | | | | |
| OD Cplg | Body | Joint | Collapse | Burst |
| <i>inches</i> | <i>1000 lbs</i> | <i>1000 lbs</i> | <i>psi</i> | <i>psi</i> |
| 5.777 | 728 | 655 | 12780 | 14360 |
| Safety Factors | | | | |
| 0.49 | 2.58 | 2.32 | 2.85 | 1.80 |
| Check Prod Casing, Segment B | | | | |
| OD Cplg | Body | Joint | Collapse | Burst |
| <i>inches</i> | <i>1000 lbs</i> | <i>1000 lbs</i> | <i>psi</i> | <i>psi</i> |
| 5.777 | 728 | 655 | 12780 | 14360 |
| Safety Factors | | | | |
| 0.49 | 5.90 | 5.31 | 1.61 | 1.80 |

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit Electronically
Via E-permitting

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description Effective May 25, 2021

I. Operator: AMEREDEV OPERATING, LLC **OGRID:** 372224 **Date:** 3/22/2022

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

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

| Well Name | API | ULSTR | Footages | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|-----------------------------------|-----|----------------|-----------------------|-----------------------|-----------------------|----------------------------------|
| AZALEA STATE COM 26 36 28 127H | | A-28-26-S-36-E | 230'FNL & 1225'FEL | +/- 1500 | +/- 7000 | +/- 2500 |

IV. Central Delivery Point Name: AMEN CORNER CTB [See 19.15.27.9(D)(1) NMAC]

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

| Well Name | API | Spud Date | TD Reached Date | Completion Commencement Date | Initial Flow Back Date | First Production Date |
|-----------------------------------|-----|-----------|-----------------|------------------------------|------------------------|-----------------------|
| AZALEA STATE COM 26 36 28 127H | | 6/9/2022 | 7/10/2022 | 1/6/2023 | 2/20/2023 | 2/22/2023 |

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

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

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

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

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

| Operator | System | ULSTR of Tie-in | Anticipated Gathering Start Date | Available Maximum Daily Capacity of System Segment Tie-in |
|----------|--------|-----------------|----------------------------------|---|
| | | | | |
| | | | | |

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

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

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

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

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

Section 3 - Certifications**Effective May 25, 2021**

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

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

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

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

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

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

Section 4 - Notices


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

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

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

| | |
|--|---|
| Signature: |  |
| Printed Name: | Dayeed Khan |
| Title: | Engineer |
| E-mail Address: | dkhan@ameredev.com |
| Date: | 3/22/2022 |
| Phone: | 737-300-4735 |
| OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form) | |
| Approved By: | |
| Title: | |
| Approval Date: | |
| Conditions of Approval: | |

Natural Gas Management Plan

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

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

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

19.15.27.8 (A)

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

19.15.27.8 (B) Venting and Flaring during drilling operations

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

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

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

19.15.27.8 (D) Venting and Flaring during production operations.

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

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

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

19.15.27.8 (E) Performance Standards

- Production equipment will be designed to handle maximum anticipated rates and pressure.
- Automatic gauging equipment is installed on all tanks to minimize venting
- All flared gas will be combusted in a flare stack that is properly sized and designed to ensure proper combustion.
- Flares are equipped with continuous pilots and auto-ignitors along with remote monitoring of the pilot status
- Weekly AVOs and monthly LDAR inspections will be performed on all wells and facilities that produce more than 60 Mcfd.
- Gas/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. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

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