

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 324469

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

| | | |
|--|--------------------------------------|-------------------------------|
| 1. Operator Name and Address Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206 | | 2. OGRID Number 373910 |
| | | 3. API Number 30-025-50541 |
| 4. Property Code 333246 | 5. Property Name NEW YELLER STATE | 6. Well No. 302H |

7. Surface Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|
| UL - Lot N | Section 32 | Township 24S | Range 36E | Lot Idn N | Feet From 280 | N/S Line S | Feet From 1870 | E/W Line W | County Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|

8. Proposed Bottom Hole Location

| | | | | | | | | | |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|
| UL - Lot C | Section 32 | Township 24S | Range 36E | Lot Idn C | Feet From 150 | N/S Line N | Feet From 2290 | E/W Line W | County Lea |
|---------------|---------------|-----------------|--------------|--------------|------------------|---------------|-------------------|---------------|---------------|

9. Pool Information

| | |
|----------------------------------|-------|
| WC-025 G-08 S2535340;BONE SPRING | 97088 |
|----------------------------------|-------|

Additional Well Information

| | | | | |
|---------------------------|-----------------------------|--|-------------------------|------------------------------------|
| 11. Work Type New Well | 12. Well Type OIL | 13. Cable/Rotary | 14. Lease Type State | 15. Ground Level Elevation 3242 |
| 16. Multiple N | 17. Proposed Depth 14239 | 18. Formation 1st Bone Spring Sand | 19. Contractor | 20. Spud Date 11/1/2022 |
| 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 | 54.5 | 1300 | 1130 | 0 |
| Int1 | 12.25 | 9.625 | 40 | 5200 | 2034 | 0 |
| Int2 | 8.75 | 7.625 | 29.7 | 9876 | 251 | 4200 |
| Prod | 6.75 | 5.5 | 23 | 14239 | 382 | 8876 |

Casing/Cement Program: Additional Comments

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

22. Proposed Blowout Prevention Program

| Type | Working Pressure | Test Pressure | Manufacturer |
|------------|------------------|---------------|--------------|
| Double Ram | 10000 | 5000 | Cactus |

| | | | |
|--|---|----------------------------------|--------------|
| 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 Rachael A Overbey | Approved By: | Paul F Kautz |
| Title: | Project Manager | Title: | Geologist |
| Email Address: | roverbey@fmellc.com | Approved Date: | 9/13/2022 |
| Date: | 9/7/2022 | Phone: | 303-570-4057 |
| | | Expiration Date: 9/13/2024 | |
| Conditions of Approval Attached | | | |

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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 30-025-50541 | ² Pool Code 97088 | ³ Pool Name WC-025 G-08 S253534O; BONE SPRING |
| ⁴ Property Code 333246 | ⁵ Property Name NEW YELLER STATE | ⁶ Well Number 302H |
| ⁷ OGRID No. 373910 | ⁸ Operator Name FRANKLIN MOUNTAIN ENERGY LLC | ⁹ Elevation 3242.3' |

¹⁰ Surface Location

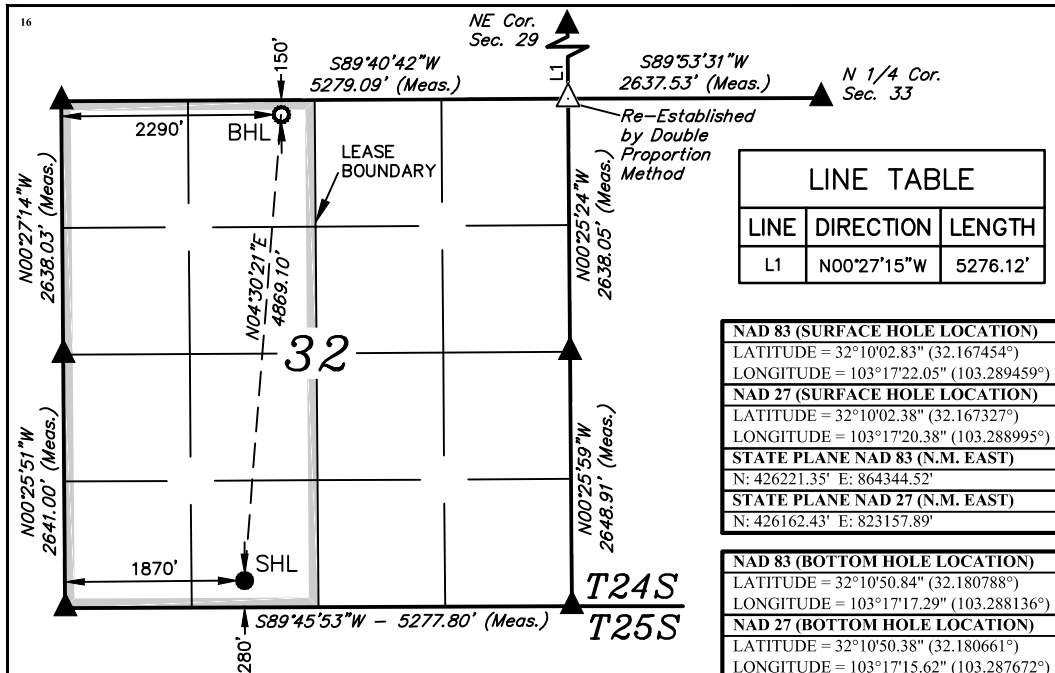
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| N | 32 | 24S | 36E | | 280 | SOUTH | 1870 | WEST | LEA |

¹¹ Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| C | 32 | 24S | 36E | | 150 | NORTH | 2290 | WEST | LEA |

| | | | |
|--------------------------------------|-------------------------------|----------------------------------|-------------------------|
| ¹² Dedicated Acres 320 | ¹³ Joint or Infill | ¹⁴ Consolidation Code | 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.



NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)

- = SURFACE HOLE LOCATION
- = BOTTOM HOLE LOCATION
- ▲ = SECTION CORNER LOCATED
- △ = SECTION CORNER RE-ESTABLISHED. (Not Set on Ground.)



SCALE

DRAWN BY: D.J.S. 08-10-22

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement, or a compulsory pooling order heretofore entered by the division.

Signature: *Rachael Overbey* Date: 8/22/2022

Printed Name: Rachael Overbey

roverbey@fmlc.com

E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

August 3, 2022

Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number:

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 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 324469

PERMIT CONDITIONS OF APPROVAL

| | |
|---|---------------------------------|
| Operator Name and Address: Franklin Mountain Energy LLC [373910] 44 Cook Street Denver, CO 80206 | API Number: 30-025-50541 |
| | Well: NEW YELLER STATE #302H |

| OCD Reviewer | Condition |
|-----------------|--|
| pkautz | Notify OCD 24 hours prior to casing & cement |
| pkautz | Will require a File As Drilled C-102 and a Directional Survey with the C-104 |
| pkautz | Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string |
| pkautz | Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system |
| pkautz | Cement is required to circulate on both surface and intermediate1 strings of casing |
| pkautz | The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud |



Franklin Mountain Energy

**Lea County, NM (NAD83)
NEW YELLER STATE PAD 2
NEW YELLER STATE 302H**

Wellbore #1

Plan: Design #1

Standard Planning Report - Geographic

01 September, 2022



Planning Report - Geographic

| | | | |
|------------------|----------------------------|-------------------------------------|---|
| Database: | EDM 5000.15 Single User Db | Local Co-ordinate Reference: | Well NEW YELLER STATE 302H |
| Company: | Franklin Mountain Energy | TVD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Project: | Lea County, NM (NAD83) | MD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Site: | NEW YELLER STATE PAD 2 | North Reference: | Grid |
| Well: | NEW YELLER STATE 302H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

| | | | |
|--------------------|---------------------------|----------------------|----------------|
| Project | Lea County, NM (NAD83) | | |
| Map System: | US State Plane 1983 | System Datum: | Mean Sea Level |
| Geo Datum: | North American Datum 1983 | | |
| Map Zone: | New Mexico Eastern Zone | | |

| Site | | NEW YELLER STATE PAD 2 | | | |
|-----------------------|-----------|------------------------|---------------|-------------------|-------------|
| Site Position: | | Northing: | 426,221.77 ft | Latitude: | 32.167454 |
| From: | Lat/Long | Easting: | 864,296.31 ft | Longitude: | -103.289620 |
| Position Uncertainty: | 0.00 usft | Slot Radius: | 13-3/16 " | Grid Convergence: | 0.56 ° |

| Well | NEW YELLER STATE 302H | | | | | |
|----------------------|-----------------------|-----------|---------------------|---------------|---------------|---------------|
| Well Position | +N/-S | 0.00 usft | Northing: | 426,222.25 ft | Latitude: | 32.167454 |
| | +E/-W | 0.00 usft | Easting: | 864,346.13 ft | Longitude: | -103.289459 |
| Position Uncertainty | | 0.00 usft | Wellhead Elevation: | | Ground Level: | 3,242.00 usft |

| | | | | | |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| Wellbore | Wellbore #1 | | | | |
| Magnetics | Model Name | Sample Date | Declination (°) | Dip Angle (°) | Field Strength (nT) |
| | IGRF2020 | 9/1/2022 | 6.27 | 59.85 | 47,362.80144620 |

| | | | | |
|--------------------------|--------------------------------|---------------------|----------------------|----------------------|
| Design | Design #1 | | | |
| Audit Notes: | | | | |
| Version: | Phase: | PLAN | Tie On Depth: | 0.00 |
| Vertical Section: | Depth From (TVD) (usft) | +N/-S (usft) | +E/-W (usft) | Direction (°) |
| | 0.00 | 0.00 | 0.00 | 4.27 |

| | | | | |
|---------------------------------|------------------------|-----------------------------------|---------------------|----------------|
| Plan Survey Tool Program | Date | 9/1/2022 | | |
| Depth From (usft) | Depth To (usft) | Survey (Wellbore) | Tool Name | Remarks |
| 1 | 0.00 | 14,239.13 Design #1 (Wellbore #1) | MWD | |
| | | | OWSG MWD - Standard | |

| | | | | | | | | | | |
|------------------------------|------------------------|--------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|------------------------------|----------------|-----------------------------|
| Plan Sections | | | | | | | | | | |
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,500.00 | 0.00 | 0.00 | 1,500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,824.18 | 4.86 | 100.78 | 1,823.79 | -2.57 | 13.51 | 1.50 | 1.50 | 0.00 | 100.78 | |
| 6,543.59 | 4.86 | 100.78 | 6,526.21 | -77.43 | 406.49 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 6,867.76 | 0.00 | 0.00 | 6,850.00 | -80.00 | 420.00 | 1.50 | -1.50 | 0.00 | 180.00 | |
| 8,976.81 | 0.00 | 0.00 | 8,959.04 | -80.00 | 420.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 9,876.81 | 90.00 | 359.33 | 9,532.00 | 492.92 | 413.30 | 10.00 | 10.00 | 0.00 | 359.33 | |
| 14,239.13 | 90.00 | 359.33 | 9,532.00 | 4,854.94 | 362.27 | 0.00 | 0.00 | 0.00 | 0.00 | BHL (NEW YELLER STATE 302H) |



Planning Report - Geographic

| | | | |
|------------------|----------------------------|-------------------------------------|---|
| Database: | EDM 5000.15 Single User Db | Local Co-ordinate Reference: | Well NEW YELLER STATE 302H |
| Company: | Franklin Mountain Energy | TVD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Project: | Lea County, NM (NAD83) | MD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Site: | NEW YELLER STATE PAD 2 | North Reference: | Grid |
| Well: | NEW YELLER STATE 302H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

| Planned Survey | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------|------------------------|-----------|-------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (ft) | Map Easting (ft) | Latitude | Longitude | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| SHL (NEW YELLER STATE 302H) | | | | | | | | | | |
| 30.00 | 0.00 | 0.00 | 30.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| Cenozoic Alluvium (surface) | | | | | | | | | | |
| 100.00 | 0.00 | 0.00 | 100.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 200.00 | 0.00 | 0.00 | 200.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 300.00 | 0.00 | 0.00 | 300.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 400.00 | 0.00 | 0.00 | 400.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 500.00 | 0.00 | 0.00 | 500.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 600.00 | 0.00 | 0.00 | 600.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 700.00 | 0.00 | 0.00 | 700.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 800.00 | 0.00 | 0.00 | 800.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 900.00 | 0.00 | 0.00 | 900.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 1,000.00 | 0.00 | 0.00 | 1,000.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 1,100.00 | 0.00 | 0.00 | 1,100.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 1,200.00 | 0.00 | 0.00 | 1,200.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 1,300.00 | 0.00 | 0.00 | 1,300.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 1,371.00 | 0.00 | 0.00 | 1,371.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| Rustler | | | | | | | | | | |
| 1,400.00 | 0.00 | 0.00 | 1,400.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| 1,500.00 | 0.00 | 0.00 | 1,500.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 | |
| Start Build 1.50 | | | | | | | | | | |
| 1,600.00 | 1.50 | 100.78 | 1,599.99 | -0.24 | 1.29 | 426,222.01 | 864,347.41 | 32.167453 | -103.289455 | |
| 1,700.00 | 3.00 | 100.78 | 1,699.91 | -0.98 | 5.14 | 426,221.28 | 864,351.27 | 32.167451 | -103.289443 | |
| 1,800.00 | 4.50 | 100.78 | 1,799.69 | -2.20 | 11.57 | 426,220.05 | 864,357.69 | 32.167448 | -103.289422 | |
| 1,824.18 | 4.86 | 100.78 | 1,823.79 | -2.57 | 13.51 | 426,219.68 | 864,359.63 | 32.167447 | -103.289416 | |
| Hold 4.86 Inc, 100.78 Az | | | | | | | | | | |
| 1,900.00 | 4.86 | 100.78 | 1,899.34 | -3.78 | 19.82 | 426,218.48 | 864,365.95 | 32.167443 | -103.289395 | |
| 1,922.74 | 4.86 | 100.78 | 1,922.00 | -4.14 | 21.71 | 426,218.12 | 864,367.84 | 32.167442 | -103.289389 | |
| Salado | | | | | | | | | | |
| 2,000.00 | 4.86 | 100.78 | 1,998.98 | -5.36 | 28.15 | 426,216.89 | 864,374.27 | 32.167439 | -103.289368 | |
| 2,100.00 | 4.86 | 100.78 | 2,098.62 | -6.95 | 36.47 | 426,215.31 | 864,382.60 | 32.167434 | -103.289342 | |
| 2,200.00 | 4.86 | 100.78 | 2,198.26 | -8.53 | 44.80 | 426,213.72 | 864,390.93 | 32.167429 | -103.289315 | |
| 2,300.00 | 4.86 | 100.78 | 2,297.90 | -10.12 | 53.13 | 426,212.14 | 864,399.25 | 32.167425 | -103.289288 | |
| 2,400.00 | 4.86 | 100.78 | 2,397.54 | -11.71 | 61.45 | 426,210.55 | 864,407.58 | 32.167420 | -103.289261 | |
| 2,500.00 | 4.86 | 100.78 | 2,497.18 | -13.29 | 69.78 | 426,208.96 | 864,415.91 | 32.167416 | -103.289234 | |
| 2,600.00 | 4.86 | 100.78 | 2,596.82 | -14.88 | 78.11 | 426,207.38 | 864,424.24 | 32.167411 | -103.289207 | |
| 2,700.00 | 4.86 | 100.78 | 2,696.46 | -16.46 | 86.44 | 426,205.79 | 864,432.56 | 32.167407 | -103.289180 | |
| 2,800.00 | 4.86 | 100.78 | 2,796.10 | -18.05 | 94.76 | 426,204.20 | 864,440.89 | 32.167402 | -103.289154 | |
| 2,900.00 | 4.86 | 100.78 | 2,895.74 | -19.64 | 103.09 | 426,202.62 | 864,449.22 | 32.167397 | -103.289127 | |
| 3,000.00 | 4.86 | 100.78 | 2,995.38 | -21.22 | 111.42 | 426,201.03 | 864,457.54 | 32.167393 | -103.289100 | |
| 3,100.00 | 4.86 | 100.78 | 3,095.02 | -22.81 | 119.74 | 426,199.45 | 864,465.87 | 32.167388 | -103.289073 | |
| 3,200.00 | 4.86 | 100.78 | 3,194.66 | -24.39 | 128.07 | 426,197.86 | 864,474.20 | 32.167384 | -103.289046 | |
| 3,300.00 | 4.86 | 100.78 | 3,294.30 | -25.98 | 136.40 | 426,196.27 | 864,482.53 | 32.167379 | -103.289019 | |
| 3,387.01 | 4.86 | 100.78 | 3,381.00 | -27.36 | 143.64 | 426,194.89 | 864,489.77 | 32.167375 | -103.288996 | |
| Base Salt | | | | | | | | | | |
| 3,400.00 | 4.86 | 100.78 | 3,393.94 | -27.57 | 144.73 | 426,194.69 | 864,490.85 | 32.167374 | -103.288992 | |
| 3,500.00 | 4.86 | 100.78 | 3,493.58 | -29.15 | 153.05 | 426,193.10 | 864,499.18 | 32.167370 | -103.288966 | |
| 3,600.00 | 4.86 | 100.78 | 3,593.22 | -30.74 | 161.38 | 426,191.52 | 864,507.51 | 32.167365 | -103.288939 | |
| 3,700.00 | 4.86 | 100.78 | 3,692.86 | -32.33 | 169.71 | 426,189.93 | 864,515.83 | 32.167361 | -103.288912 | |
| 3,800.00 | 4.86 | 100.78 | 3,792.50 | -33.91 | 178.03 | 426,188.34 | 864,524.16 | 32.167356 | -103.288885 | |
| 3,900.00 | 4.86 | 100.78 | 3,892.14 | -35.50 | 186.36 | 426,186.76 | 864,532.49 | 32.167352 | -103.288858 | |
| 4,000.00 | 4.86 | 100.78 | 3,991.78 | -37.08 | 194.69 | 426,185.17 | 864,540.82 | 32.167347 | -103.288831 | |
| 4,100.00 | 4.86 | 100.78 | 4,091.42 | -38.67 | 203.02 | 426,183.59 | 864,549.14 | 32.167342 | -103.288804 | |



Planning Report - Geographic

| | | | |
|------------------|----------------------------|-------------------------------------|---|
| Database: | EDM 5000.15 Single User Db | Local Co-ordinate Reference: | Well NEW YELLER STATE 302H |
| Company: | Franklin Mountain Energy | TVD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Project: | Lea County, NM (NAD83) | MD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Site: | NEW YELLER STATE PAD 2 | North Reference: | Grid |
| Well: | NEW YELLER STATE 302H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

| Planned Survey | | | | | | | | | | |
|-----------------------------|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------|------------------------|-----------|-------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (ft) | Map Easting (ft) | Latitude | Longitude | |
| 4,179.87 | 4.86 | 100.78 | 4,171.00 | -39.94 | 209.67 | 426,182.32 | 864,555.79 | 32.167339 | -103.288783 | |
| Capitan | | | | | | | | | | |
| 4,200.00 | 4.86 | 100.78 | 4,191.06 | -40.26 | 211.34 | 426,182.00 | 864,557.47 | 32.167338 | -103.288778 | |
| 4,300.00 | 4.86 | 100.78 | 4,290.70 | -41.84 | 219.67 | 426,180.41 | 864,565.80 | 32.167333 | -103.288751 | |
| 4,400.00 | 4.86 | 100.78 | 4,390.34 | -43.43 | 228.00 | 426,178.83 | 864,574.12 | 32.167329 | -103.288724 | |
| 4,500.00 | 4.86 | 100.78 | 4,489.98 | -45.01 | 236.32 | 426,177.24 | 864,582.45 | 32.167324 | -103.288697 | |
| 4,600.00 | 4.86 | 100.78 | 4,589.62 | -46.60 | 244.65 | 426,175.65 | 864,590.78 | 32.167319 | -103.288670 | |
| 4,700.00 | 4.86 | 100.78 | 4,689.26 | -48.19 | 252.98 | 426,174.07 | 864,599.10 | 32.167315 | -103.288643 | |
| 4,800.00 | 4.86 | 100.78 | 4,788.90 | -49.77 | 261.30 | 426,172.48 | 864,607.43 | 32.167310 | -103.288616 | |
| 4,900.00 | 4.86 | 100.78 | 4,888.54 | -51.36 | 269.63 | 426,170.90 | 864,615.76 | 32.167306 | -103.288590 | |
| 4,932.58 | 4.86 | 100.78 | 4,921.00 | -51.88 | 272.34 | 426,170.38 | 864,618.47 | 32.167304 | -103.288581 | |
| Lamar | | | | | | | | | | |
| 5,000.00 | 4.86 | 100.78 | 4,988.18 | -52.94 | 277.96 | 426,169.31 | 864,624.09 | 32.167301 | -103.288563 | |
| 5,100.00 | 4.86 | 100.78 | 5,087.82 | -54.53 | 286.29 | 426,167.72 | 864,632.41 | 32.167297 | -103.288536 | |
| 5,200.00 | 4.86 | 100.78 | 5,187.46 | -56.12 | 294.61 | 426,166.14 | 864,640.74 | 32.167292 | -103.288509 | |
| 5,300.00 | 4.86 | 100.78 | 5,287.10 | -57.70 | 302.94 | 426,164.55 | 864,649.07 | 32.167287 | -103.288482 | |
| 5,359.11 | 4.86 | 100.78 | 5,346.00 | -58.64 | 307.86 | 426,163.61 | 864,653.99 | 32.167285 | -103.288466 | |
| Bell Canyon | | | | | | | | | | |
| 5,400.00 | 4.86 | 100.78 | 5,386.74 | -59.29 | 311.27 | 426,162.97 | 864,657.39 | 32.167283 | -103.288455 | |
| 5,500.00 | 4.86 | 100.78 | 5,486.38 | -60.88 | 319.59 | 426,161.38 | 864,665.72 | 32.167278 | -103.288428 | |
| 5,600.00 | 4.86 | 100.78 | 5,586.02 | -62.46 | 327.92 | 426,159.79 | 864,674.05 | 32.167274 | -103.288402 | |
| 5,700.00 | 4.86 | 100.78 | 5,685.66 | -64.05 | 336.25 | 426,158.21 | 864,682.38 | 32.167269 | -103.288375 | |
| 5,756.54 | 4.86 | 100.78 | 5,742.00 | -64.94 | 340.96 | 426,157.31 | 864,687.08 | 32.167266 | -103.288360 | |
| Cherry Canyon | | | | | | | | | | |
| 5,800.00 | 4.86 | 100.78 | 5,785.30 | -65.63 | 344.58 | 426,156.62 | 864,690.70 | 32.167264 | -103.288348 | |
| 5,900.00 | 4.86 | 100.78 | 5,884.94 | -67.22 | 352.90 | 426,155.03 | 864,699.03 | 32.167260 | -103.288321 | |
| 6,000.00 | 4.86 | 100.78 | 5,984.58 | -68.81 | 361.23 | 426,153.45 | 864,707.36 | 32.167255 | -103.288294 | |
| 6,100.00 | 4.86 | 100.78 | 6,084.22 | -70.39 | 369.56 | 426,151.86 | 864,715.68 | 32.167251 | -103.288267 | |
| 6,200.00 | 4.86 | 100.78 | 6,183.86 | -71.98 | 377.88 | 426,150.28 | 864,724.01 | 32.167246 | -103.288240 | |
| 6,300.00 | 4.86 | 100.78 | 6,283.50 | -73.56 | 386.21 | 426,148.69 | 864,732.34 | 32.167242 | -103.288214 | |
| 6,400.00 | 4.86 | 100.78 | 6,383.14 | -75.15 | 394.54 | 426,147.10 | 864,740.67 | 32.167237 | -103.288187 | |
| 6,500.00 | 4.86 | 100.78 | 6,482.78 | -76.74 | 402.87 | 426,145.52 | 864,748.99 | 32.167232 | -103.288160 | |
| 6,543.59 | 4.86 | 100.78 | 6,526.21 | -77.43 | 406.49 | 426,144.83 | 864,752.62 | 32.167230 | -103.288148 | |
| Start Drop -1.50 | | | | | | | | | | |
| 6,600.00 | 4.02 | 100.78 | 6,582.45 | -78.24 | 410.78 | 426,144.01 | 864,756.91 | 32.167228 | -103.288134 | |
| 6,700.00 | 2.52 | 100.78 | 6,682.29 | -79.31 | 416.38 | 426,142.94 | 864,762.51 | 32.167225 | -103.288116 | |
| 6,800.00 | 1.02 | 100.78 | 6,782.24 | -79.89 | 419.41 | 426,142.37 | 864,765.54 | 32.167223 | -103.288107 | |
| 6,867.76 | 0.00 | 0.00 | 6,850.00 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| Vertical | | | | | | | | | | |
| 6,900.00 | 0.00 | 0.00 | 6,882.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 6,934.76 | 0.00 | 0.00 | 6,917.00 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| Brushy Canyon | | | | | | | | | | |
| 7,000.00 | 0.00 | 0.00 | 6,982.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,100.00 | 0.00 | 0.00 | 7,082.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,200.00 | 0.00 | 0.00 | 7,182.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,300.00 | 0.00 | 0.00 | 7,282.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,400.00 | 0.00 | 0.00 | 7,382.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,500.00 | 0.00 | 0.00 | 7,482.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,600.00 | 0.00 | 0.00 | 7,582.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,700.00 | 0.00 | 0.00 | 7,682.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,800.00 | 0.00 | 0.00 | 7,782.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 7,900.00 | 0.00 | 0.00 | 7,882.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,000.00 | 0.00 | 0.00 | 7,982.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,100.00 | 0.00 | 0.00 | 8,082.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |



Planning Report - Geographic

| | | | |
|------------------|----------------------------|-------------------------------------|---|
| Database: | EDM 5000.15 Single User Db | Local Co-ordinate Reference: | Well NEW YELLER STATE 302H |
| Company: | Franklin Mountain Energy | TVD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Project: | Lea County, NM (NAD83) | MD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Site: | NEW YELLER STATE PAD 2 | North Reference: | Grid |
| Well: | NEW YELLER STATE 302H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

| Planned Survey | | | | | | | | | | |
|--|--------------------|----------------|-----------------------------|-----------------|-----------------|-------------------------|------------------------|-----------|-------------|--|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (ft) | Map Easting (ft) | Latitude | Longitude | |
| 8,110.76 | 0.00 | 0.00 | 8,093.00 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| Bone Spring Lime | | | | | | | | | | |
| 8,194.76 | 0.00 | 0.00 | 8,177.00 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| Avalon | | | | | | | | | | |
| 8,200.00 | 0.00 | 0.00 | 8,182.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,300.00 | 0.00 | 0.00 | 8,282.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,400.00 | 0.00 | 0.00 | 8,382.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,445.76 | 0.00 | 0.00 | 8,428.00 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| Chert Zone | | | | | | | | | | |
| 8,500.00 | 0.00 | 0.00 | 8,482.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,600.00 | 0.00 | 0.00 | 8,582.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,700.00 | 0.00 | 0.00 | 8,682.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,800.00 | 0.00 | 0.00 | 8,782.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,900.00 | 0.00 | 0.00 | 8,882.24 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| 8,976.81 | 0.00 | 0.00 | 8,959.04 | -80.00 | 420.00 | 426,142.25 | 864,766.13 | 32.167223 | -103.288105 | |
| KOP 10°/100 | | | | | | | | | | |
| 9,000.00 | 2.32 | 359.33 | 8,982.23 | -79.53 | 419.99 | 426,142.72 | 864,766.12 | 32.167224 | -103.288105 | |
| 9,100.00 | 12.32 | 359.33 | 9,081.29 | -66.81 | 419.85 | 426,155.45 | 864,765.97 | 32.167259 | -103.288105 | |
| 9,200.00 | 22.32 | 359.33 | 9,176.63 | -37.08 | 419.50 | 426,185.18 | 864,765.63 | 32.167341 | -103.288105 | |
| 9,300.00 | 32.32 | 359.33 | 9,265.37 | 8.76 | 418.96 | 426,231.01 | 864,765.09 | 32.167467 | -103.288105 | |
| 9,400.00 | 42.32 | 359.33 | 9,344.79 | 69.30 | 418.25 | 426,291.56 | 864,764.38 | 32.167633 | -103.288106 | |
| 9,500.00 | 52.32 | 359.33 | 9,412.50 | 142.72 | 417.39 | 426,364.97 | 864,763.52 | 32.167835 | -103.288106 | |
| 9,588.54 | 61.17 | 359.33 | 9,461.00 | 216.68 | 416.53 | 426,438.93 | 864,762.66 | 32.168039 | -103.288107 | |
| First Bone Spring Sand | | | | | | | | | | |
| 9,600.00 | 62.32 | 359.33 | 9,466.43 | 226.77 | 416.41 | 426,449.03 | 864,762.54 | 32.168066 | -103.288107 | |
| 9,700.00 | 72.32 | 359.33 | 9,504.94 | 318.92 | 415.33 | 426,541.17 | 864,761.46 | 32.168320 | -103.288107 | |
| 9,800.00 | 82.32 | 359.33 | 9,526.86 | 416.35 | 414.19 | 426,638.60 | 864,760.32 | 32.168587 | -103.288108 | |
| 9,876.81 | 90.00 | 359.33 | 9,532.00 | 492.92 | 413.30 | 426,715.17 | 864,759.43 | 32.168798 | -103.288108 | |
| LP 90.00 Inc, 359.33 Az - HZ Target - LP (NEW YELLER STATE 302H) | | | | | | | | | | |
| 9,900.00 | 90.00 | 359.33 | 9,532.00 | 516.11 | 413.03 | 426,738.37 | 864,759.15 | 32.168862 | -103.288108 | |
| 10,000.00 | 90.00 | 359.33 | 9,532.00 | 616.10 | 411.86 | 426,838.36 | 864,757.98 | 32.169136 | -103.288109 | |
| 10,100.00 | 90.00 | 359.33 | 9,532.00 | 716.10 | 410.69 | 426,938.35 | 864,756.81 | 32.169411 | -103.288110 | |
| 10,200.00 | 90.00 | 359.33 | 9,532.00 | 816.09 | 409.52 | 427,038.35 | 864,755.64 | 32.169686 | -103.288110 | |
| 10,300.00 | 90.00 | 359.33 | 9,532.00 | 916.08 | 408.35 | 427,138.34 | 864,754.48 | 32.169961 | -103.288111 | |
| 10,400.00 | 90.00 | 359.33 | 9,532.00 | 1,016.08 | 407.18 | 427,238.33 | 864,753.31 | 32.170236 | -103.288112 | |
| 10,500.00 | 90.00 | 359.33 | 9,532.00 | 1,116.07 | 406.01 | 427,338.33 | 864,752.14 | 32.170511 | -103.288112 | |
| 10,600.00 | 90.00 | 359.33 | 9,532.00 | 1,216.06 | 404.84 | 427,438.32 | 864,750.97 | 32.170786 | -103.288113 | |
| 10,700.00 | 90.00 | 359.33 | 9,532.00 | 1,316.06 | 403.67 | 427,538.31 | 864,749.80 | 32.171060 | -103.288114 | |
| 10,800.00 | 90.00 | 359.33 | 9,532.00 | 1,416.05 | 402.50 | 427,638.31 | 864,748.63 | 32.171335 | -103.288114 | |
| 10,900.00 | 90.00 | 359.33 | 9,532.00 | 1,516.04 | 401.33 | 427,738.30 | 864,747.46 | 32.171610 | -103.288115 | |
| 11,000.00 | 90.00 | 359.33 | 9,532.00 | 1,616.04 | 400.16 | 427,838.29 | 864,746.29 | 32.171885 | -103.288116 | |
| 11,100.00 | 90.00 | 359.33 | 9,532.00 | 1,716.03 | 398.99 | 427,938.29 | 864,745.12 | 32.172160 | -103.288116 | |
| 11,200.00 | 90.00 | 359.33 | 9,532.00 | 1,816.02 | 397.82 | 428,038.28 | 864,743.95 | 32.172435 | -103.288117 | |
| 11,300.00 | 90.00 | 359.33 | 9,532.00 | 1,916.01 | 396.65 | 428,138.27 | 864,742.78 | 32.172710 | -103.288117 | |
| 11,400.00 | 90.00 | 359.33 | 9,532.00 | 2,016.01 | 395.48 | 428,238.27 | 864,741.61 | 32.172984 | -103.288118 | |
| 11,500.00 | 90.00 | 359.33 | 9,532.00 | 2,116.00 | 394.31 | 428,338.26 | 864,740.44 | 32.173259 | -103.288119 | |
| 11,600.00 | 90.00 | 359.33 | 9,532.00 | 2,215.99 | 393.14 | 428,438.25 | 864,739.27 | 32.173534 | -103.288119 | |
| 11,700.00 | 90.00 | 359.33 | 9,532.00 | 2,315.99 | 391.97 | 428,538.25 | 864,738.10 | 32.173809 | -103.288120 | |
| 11,800.00 | 90.00 | 359.33 | 9,532.00 | 2,415.98 | 390.80 | 428,638.24 | 864,736.93 | 32.174084 | -103.288121 | |
| 11,900.00 | 90.00 | 359.33 | 9,532.00 | 2,515.97 | 389.63 | 428,738.23 | 864,735.76 | 32.174359 | -103.288121 | |
| 12,000.00 | 90.00 | 359.33 | 9,532.00 | 2,615.97 | 388.46 | 428,838.23 | 864,734.59 | 32.174634 | -103.288122 | |
| 12,100.00 | 90.00 | 359.33 | 9,532.00 | 2,715.96 | 387.29 | 428,938.22 | 864,733.42 | 32.174908 | -103.288123 | |
| 12,200.00 | 90.00 | 359.33 | 9,532.00 | 2,815.95 | 386.12 | 429,038.21 | 864,732.25 | 32.175183 | -103.288123 | |
| 12,300.00 | 90.00 | 359.33 | 9,532.00 | 2,915.95 | 384.95 | 429,138.21 | 864,731.08 | 32.175458 | -103.288124 | |



Planning Report - Geographic

| | | | |
|------------------|----------------------------|-------------------------------------|---|
| Database: | EDM 5000.15 Single User Db | Local Co-ordinate Reference: | Well NEW YELLER STATE 302H |
| Company: | Franklin Mountain Energy | TVD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Project: | Lea County, NM (NAD83) | MD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Site: | NEW YELLER STATE PAD 2 | North Reference: | Grid |
| Well: | NEW YELLER STATE 302H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

| Planned Survey | | | | | | | | | |
|--|-----------------|-------------|-----------------------|--------------|--------------|-------------------|------------------|-----------|-------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Map Northing (ft) | Map Easting (ft) | Latitude | Longitude |
| 12,400.00 | 90.00 | 359.33 | 9,532.00 | 3,015.94 | 383.78 | 429,238.20 | 864,729.91 | 32.175733 | -103.288124 |
| 12,500.00 | 90.00 | 359.33 | 9,532.00 | 3,115.93 | 382.61 | 429,338.19 | 864,728.74 | 32.176008 | -103.288125 |
| 12,600.00 | 90.00 | 359.33 | 9,532.00 | 3,215.93 | 381.44 | 429,438.19 | 864,727.57 | 32.176283 | -103.288126 |
| 12,700.00 | 90.00 | 359.33 | 9,532.00 | 3,315.92 | 380.27 | 429,538.18 | 864,726.40 | 32.176558 | -103.288126 |
| 12,800.00 | 90.00 | 359.33 | 9,532.00 | 3,415.91 | 379.10 | 429,638.17 | 864,725.23 | 32.176833 | -103.288127 |
| 12,900.00 | 90.00 | 359.33 | 9,532.00 | 3,515.91 | 377.93 | 429,738.17 | 864,724.06 | 32.177107 | -103.288128 |
| 13,000.00 | 90.00 | 359.33 | 9,532.00 | 3,615.90 | 376.76 | 429,838.16 | 864,722.89 | 32.177382 | -103.288128 |
| 13,100.00 | 90.00 | 359.33 | 9,532.00 | 3,715.89 | 375.59 | 429,938.15 | 864,721.72 | 32.177657 | -103.288129 |
| 13,200.00 | 90.00 | 359.33 | 9,532.00 | 3,815.88 | 374.43 | 430,038.15 | 864,720.55 | 32.177932 | -103.288130 |
| 13,300.00 | 90.00 | 359.33 | 9,532.00 | 3,915.88 | 373.26 | 430,138.14 | 864,719.38 | 32.178207 | -103.288130 |
| 13,400.00 | 90.00 | 359.33 | 9,532.00 | 4,015.87 | 372.09 | 430,238.13 | 864,718.21 | 32.178482 | -103.288131 |
| 13,500.00 | 90.00 | 359.33 | 9,532.00 | 4,115.86 | 370.92 | 430,338.13 | 864,717.04 | 32.178757 | -103.288132 |
| 13,600.00 | 90.00 | 359.33 | 9,532.00 | 4,215.86 | 369.75 | 430,438.12 | 864,715.87 | 32.179031 | -103.288132 |
| 13,700.00 | 90.00 | 359.33 | 9,532.00 | 4,315.85 | 368.58 | 430,538.11 | 864,714.70 | 32.179306 | -103.288133 |
| 13,800.00 | 90.00 | 359.33 | 9,532.00 | 4,415.84 | 367.41 | 430,638.11 | 864,713.53 | 32.179581 | -103.288133 |
| 13,900.00 | 90.00 | 359.33 | 9,532.00 | 4,515.84 | 366.24 | 430,738.10 | 864,712.36 | 32.179856 | -103.288134 |
| 14,000.00 | 90.00 | 359.33 | 9,532.00 | 4,615.83 | 365.07 | 430,838.09 | 864,711.19 | 32.180131 | -103.288135 |
| 14,100.00 | 90.00 | 359.33 | 9,532.00 | 4,715.82 | 363.90 | 430,938.09 | 864,710.02 | 32.180406 | -103.288135 |
| 14,200.00 | 90.00 | 359.33 | 9,532.00 | 4,815.82 | 362.73 | 431,038.08 | 864,708.86 | 32.180681 | -103.288136 |
| 14,239.13 | 90.00 | 359.33 | 9,532.00 | 4,854.94 | 362.27 | 431,077.21 | 864,708.40 | 32.180788 | -103.288136 |
| TD at 14239.13 - BHL (NEW YELLER STATE 302H) | | | | | | | | | |

| Design Targets | | | | | | | | | |
|---|---------------|--------------|------------|--------------|--------------|---------------|--------------|-----------|-------------|
| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (ft) | Easting (ft) | Latitude | Longitude |
| SHL (NEW YELLER ST/ - plan hits target center - Point | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 426,222.25 | 864,346.13 | 32.167454 | -103.289459 |
| BHL (NEW YELLER ST/ - plan hits target center - Point | 0.00 | 0.01 | 9,532.00 | 4,854.94 | 362.27 | 431,077.21 | 864,708.40 | 32.180788 | -103.288136 |
| LP (NEW YELLER STAT - plan hits target center - Point | 0.00 | 0.00 | 9,532.00 | 492.92 | 413.30 | 426,715.17 | 864,759.43 | 32.168798 | -103.288108 |



Planning Report - Geographic

| | | | |
|------------------|----------------------------|-------------------------------------|---|
| Database: | EDM 5000.15 Single User Db | Local Co-ordinate Reference: | Well NEW YELLER STATE 302H |
| Company: | Franklin Mountain Energy | TVD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Project: | Lea County, NM (NAD83) | MD Reference: | WELL @ 3272.00usft (Original Well Elev) |
| Site: | NEW YELLER STATE PAD 2 | North Reference: | Grid |
| Well: | NEW YELLER STATE 302H | Survey Calculation Method: | Minimum Curvature |
| Wellbore: | Wellbore #1 | | |
| Design: | Design #1 | | |

| Formations | | | | | |
|-----------------------|-----------------------|-----------------------------|-----------|---------|-------------------|
| Measured Depth (usft) | Vertical Depth (usft) | Name | Lithology | Dip (°) | Dip Direction (°) |
| 30.00 | 30.00 | Cenozoic Alluvium (surface) | | | |
| 1,371.00 | 1,371.00 | Rustler | | | |
| 1,922.74 | 1,922.00 | Salado | | | |
| 3,387.01 | 3,381.00 | Base Salt | | | |
| 4,179.87 | 4,171.00 | Capitan | | | |
| 4,932.58 | 4,921.00 | Lamar | | | |
| 5,359.11 | 5,346.00 | Bell Canyon | | | |
| 5,756.54 | 5,742.00 | Cherry Canyon | | | |
| 6,934.76 | 6,917.00 | Brushy Canyon | | | |
| 8,110.76 | 8,093.00 | Bone Spring Lime | | | |
| 8,194.76 | 8,177.00 | Avalon | | | |
| 8,445.76 | 8,428.00 | Chert Zone | | | |
| 9,588.54 | 9,461.00 | First Bone Spring Sand | | | |
| 9,876.81 | 9,532.00 | HZ Target | | | |

| Plan Annotations | | | | | |
|-----------------------|-----------------------|-------------------|--------------|--------------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates | | | |
| | | +N/-S (usft) | +E/-W (usft) | Comment | |
| 1,500.00 | 1,500.00 | 0.00 | 0.00 | Start Build 1.50 | |
| 1,824.18 | 1,823.79 | -2.57 | 13.51 | Hold 4.86 Inc, 100.78 Az | |
| 6,543.59 | 6,526.21 | -77.43 | 406.49 | Start Drop -1.50 | |
| 6,867.76 | 6,850.00 | -80.00 | 420.00 | Vertical | |
| 8,976.81 | 8,959.04 | -80.00 | 420.00 | KOP 10°/100 | |
| 9,876.81 | 9,532.00 | 492.92 | 413.30 | LP 90.00 Inc, 359.33 Az | |
| 14,239.13 | 9,532.00 | 4,854.94 | 362.27 | TD at 14239.13 | |

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: Franklin Mountain Energy, LLC **OGRID:** 373910 **Date:** 08/31/2022

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 |
|------------------------|-----|-------|----------|-----------------------|-----------------------|----------------------------------|
| See Attached Well List | | | | | | |
| | | | | | | |

IV. Central Delivery Point Name: New Yeller CTB: facility ID TBD [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 |
|------------------------|-----|-----------|-----------------|------------------------------|------------------------|-----------------------|
| See Attached Well List | | | | | | |
| | | | | | | |

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

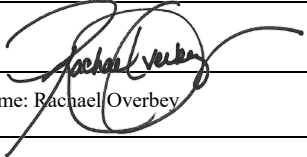
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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: Rachael Overbey |
| Title: Director Operations Planning & Regulatory |
| E-mail Address: roverbey@fmelle.com |
| Date: 08/31/2022 |
| Phone: 720-414-7868 |
| OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form) |
| Approved By: |
| Title: |
| Approval Date: |
| Conditions of Approval: |

NATURAL GAS MANAGEMENT PLAN

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 14 Digit | ULSTR | Surface Location FTG | Anticipated Oil BBL/D | Anticipated Gas MCF/D | Anticipated Produced Water BBL/D |
|-----------------------|--------------|--------------|----------------------|-----------------------|-----------------------|----------------------------------|
| New Yeller State 302H | TBD | N-32-24S-36E | 280 FSL 1870 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 602H | TBD | N-32-24S-36E | 280 FSL 1795 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 703H | TBD | N-32-24S-36E | 280 FSL 1845 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 802H | TBD | N-32-24S-36E | 280 FSL 1820 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 301H | TBD | M-32-24S-36E | 280 FSL 770 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 601H | TBD | M-32-24S-36E | 280 FSL 795 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 701H | TBD | M-32-24S-36E | 280 FSL 820 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 702H | TBD | M-32-24S-36E | 280 FSL 845 FWL | 800 +/- | 1100 +/- | 500 +/- |
| New Yeller State 801H | TBD | M-32-24S-36E | 280 FSL 870 FWL | 800 +/- | 1100 +/- | 500 +/- |

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 14 Digit | Spud Date (Batch Drilling) | TD Reached Date | Completion Commencement Date | Initial Flowback Date | First Production Date |
|-----------------------|--------------|----------------------------|-----------------|------------------------------|-----------------------|-----------------------|
| New Yeller State 302H | TBD | 11/24/2022 | 1/28/2023 | 2/12/2023 | 2/22/2023 | 2/24/2023 |
| New Yeller State 602H | TBD | 11/24/2022 | 1/28/2023 | 2/12/2023 | 2/22/2023 | 2/24/2023 |
| New Yeller State 703H | TBD | 11/24/2022 | 1/28/2023 | 2/12/2023 | 2/22/2023 | 2/24/2023 |
| New Yeller State 802H | TBD | 11/24/2022 | 1/28/2023 | 2/12/2023 | 2/22/2023 | 2/24/2023 |
| New Yeller State 301H | TBD | 12/1/2022 | 2/17/2023 | 3/4/2023 | 3/14/2023 | 3/16/2023 |
| New Yeller State 601H | TBD | 12/1/2022 | 2/17/2023 | 3/4/2023 | 3/14/2023 | 3/16/2023 |
| New Yeller State 701H | TBD | 12/1/2022 | 2/17/2023 | 3/4/2023 | 3/14/2023 | 3/16/2023 |
| New Yeller State 702H | TBD | 12/1/2022 | 2/17/2023 | 3/4/2023 | 3/14/2023 | 3/16/2023 |
| New Yeller State 801H | TBD | 12/1/2022 | 2/17/2023 | 3/4/2023 | 3/14/2023 | 3/16/2023 |



Natural Gas Management Plan

Items VI-VIII

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

- Data from surrounding wells is used to generate type curves which provides the basis for expected gas rates during initial production, peak production and then the natural decline.
- Separation equipment will be sized to provide adequate separation for peak production.
- Facility design includes multiple stages of separation to minimize gas waste. Wells flow through a high pressure 2-phase separator to remove bulk gas, liquid from the 2-phase separator is sent to a 3-phase separator where additional gas is separated. Gas from the 2 Phase and 3 Phase separators are then sent through a gas scrubber before being route to treatment and/or sales. As production declines the 2-phase separator may be removed.
- Industry standard sizing calculations are used for gas-liquid separation and liquid-liquid separation.

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.

- Drilling, completion and production setup is designed to minimize the waste of natural gas and to flare instead of vent.
- *Drilling Operations:*
 - Natural gas encountered will be flared instead of vented unless there is an equipment malfunction and/or to avoid risking safety or the environment.
 - Flares will be properly sized and placed at least 100' from the nearest surface hole on the pad.
- *Completions/Recompletions Operations:*
 - Flowback operations will not commence until connected to a properly sized gas gathering system.
 - During initial flowback wells are routed to the separation equipment as soon as technically feasible to minimize gas waste.
 - During separation flowback wells are routed to the separation equipment to minimize gas waste.
 - Gas sales is maximized. Gas will be flared instead of vented during an emergency or malfunction to avoid posing a risk to operations or personnel safety.
 - Flares are properly sized with a continuous pilot.
- *Production Operations:*
 - Gas sales will be maximized. Gas will be flared instead of vented during an emergency or malfunction to avoid posing a risk to operations or personnel safety.
 - After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- *Performance Standards:*
 - The facility will be designed to handle peak production rates and pressures.
 - All tanks will have automatic gauging equipment.
 - Flares will be designed to ensure proper combustion and will have continuous pilots. Flares will be located 100' from nearest surface hole on the pad and storage tanks.
 - Weekly AVOs will be performed, and any leaking thief hatches will be cleaned and properly re-sealed.



- *Measurement and Calibration:*
 - All volume that is flared and vented that is not measured will be estimated.
 - When metering is not practical due to low pressure/rate, all vented or flared volumes will be estimated.
 - Measurement will conform to industry standards. Measurement will not be bypassed except for purposes of inspection or calibration.

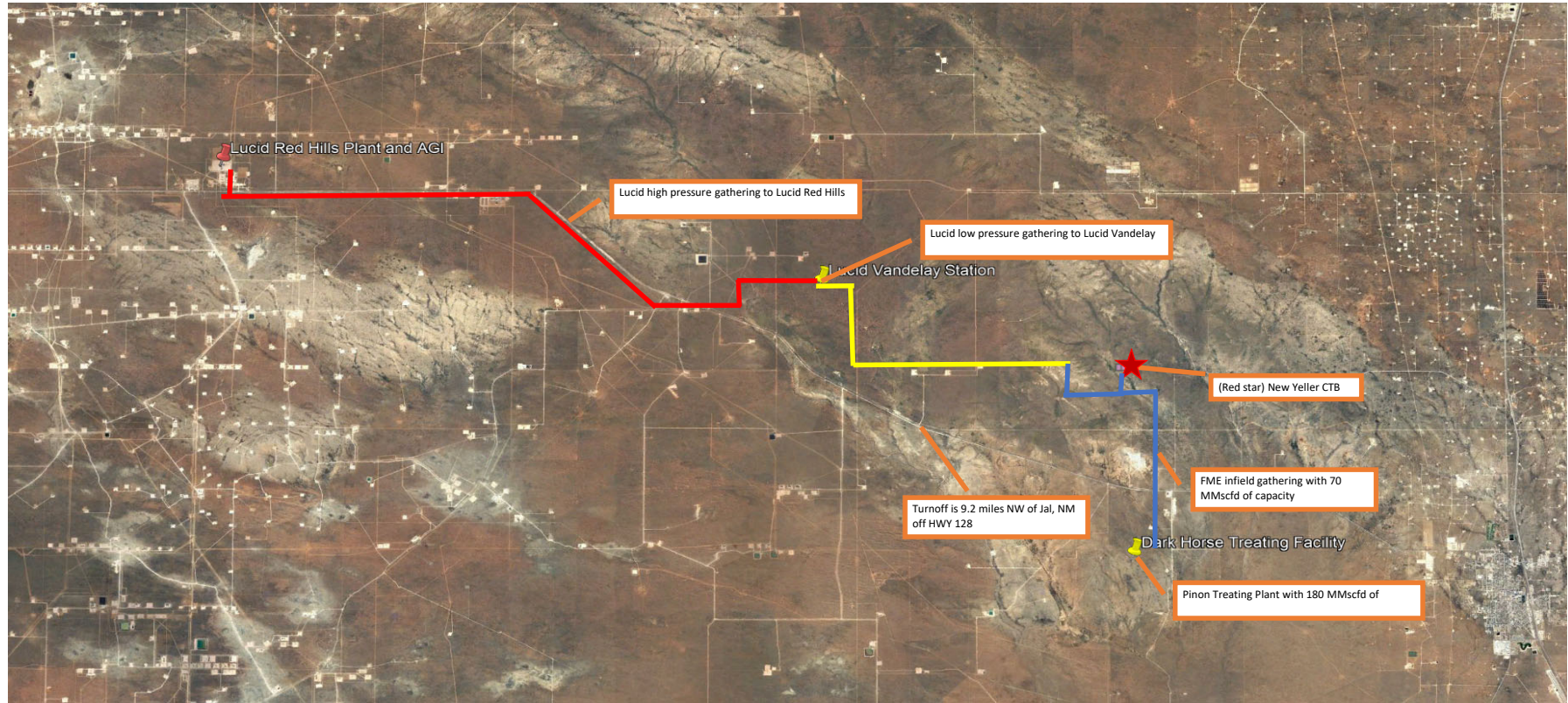
VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- Venting will be minimized during active and planned maintenance.
- Systems and equipment requiring maintenance will be isolated and blown down to sales and then flare before any remaining gas is vented in an effort to minimize waste and venting.
- Downhole maintenance will use best management practices to minimize vent.

New Yeller NGMP Map

Aug 2022

- Capacities reflected are FME's understanding of 3rd party midstream system capacities





New Yeller State 302H

1. Geologic name of surface location: Permian
2. Estimated tops of important geological markers:

| Formations | PROG SS | PROG TVD | Picked TVD | delta | Potential/Issues |
|-------------------------------|---------|----------|------------|-------|----------------------------------|
| Cenozoic Alluvium (surface) | 3,242' | 30' | 30' | 0 | Sand/Gravels/unconsolidated |
| Rustler | 1,901' | 1,371' | | | Carbonates |
| Salado | 1,350' | 1,922' | | | Salt, Carbonate & Clastics |
| Base Salt | -109' | 3,381' | | | Shaley Carbonate & Shale |
| Capitan | -899' | 4,171' | | | Carbonates |
| Lamar | -1,649' | 4,921' | | | Carbonate & Clastics |
| Bell Canyon | -2,074' | 5,346' | | | Sandstone - oil/gas/water |
| Cherry Canyon | -2,470' | 5,742' | | | Sandstone - oil/gas/water |
| Brushy Canyon | -3,645' | 6,917' | | | Sand/carb/shales - oil/gas/water |
| Bone Spring Lime | -4,821' | 8,093' | | | Shale/Carbonates - oil/gas |
| Avalon | -4,905' | 8,177' | | | Shale/Carbonates - oil/gas |
| Chert Zone | -5,156' | 8,428' | | | Carbonates/Shale/Chert |
| First Bone Spring Sand | -6,189' | 9,461' | | | Sandstone - oil/gas/water |
| HZ Target | -6,260' | 9,532' | | | Sandstone - oil/gas/water |
| Second Bone Spring Carbonates | -6,298' | 9,570' | | | Shale/Carbonates - oil/gas |
| Second Bone Spring Sand | -6,631' | 9,903' | | | Sandstone - oil/gas/water |

3. Estimated depth of anticipated fresh water, oil or gas:

| | | |
|---------------------|--------|-------------|
| Upper Permian Sands | 0-400' | Fresh Water |
| Delaware Sands | 5,346' | Oil |
| Avalon | 8,177' | Oil |
| Bone Spring | 9,461' | Oil |

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Surface freshwater sands will be protected by setting 13-3/8" casing at 1,300' and circulating cement back to surface.

4. Casing Program:

All casing strings will be run new. Safety factors calculated assuming the well is vertical.

| Casing string | Weight | Grade | Burst | Collapse | Tension | Conn | Length | API design factor | | | |
|---------------------|--------|---------|-------|----------|---------|----------------|-----------------|-------------------|----------|---------|--------------|
| | | | | | | | | Burst | Collapse | Tension | Coupling |
| Surface 13 3/8" | 54.5 | J-55 | 2730 | 1130 | 853 | BTC 909 | 1,300 | 1.18 | 1.67 | 4.99 | 5.32 |
| Intermediate 9 5/8" | 40 | HCL-80 | 7430 | 4230 | 916 | BTC 1042 | 5,200 | 1.77 | 1.74 | 2.97 | 3.38 |
| Intermediate 7 5/8" | 29.7 | HCP-110 | 8280 | 7150 | 827 | Liberty 558 | 9,876 | 1.34 | 1.55 | 2.10 | 1.42 |
| Long string 5 1/2" | 23 | P-110 | 14520 | 14520 | 729 | Eagle 606 | 14,239 9,532 | 1.32 | 2.18 | 1.71 | 1.42 1.90 |

7-5/8" casing will be set at 9,876' MD / 9,532' TVD at 90° inclination. Stress calculations on 5-1/2" casing performed assuming 14,239' depth. Actual max vertical depth is 9,532'.



Cementing Program:

Cementing Stage tool can be placed in the 1st Intermediate string as a contingency to ensure required TOC to surface.

| String Type | Hole Size | Casing | | Sacks | Type of cmt | Lead | | | TOC ft | Tail | | | | | |
|-------------|-----------|--------|---------------|-------|---|---------------------------|--------------|--|--------|-------|--|---------------------------|--------------|-------|--------|
| | | Size | Setting Depth | | | Yield ft ³ /sk | Water gal/sk | | | Sacks | Type of cmt | Yield ft ³ /sk | Water gal/sk | TOC | Excess |
| Surf | 17.5 | 13.375 | 1,300 | 795 | Extenda Cem, 13.5 ppg Class C, 3lb/sk Kol-Seal 0.125pps Poly-E-Flake | 1.747 | 9.06 | | 0 | 335 | Tail, 14.8 ppg, Class C, 1% CaCl ₂ , 0.125pps Celo-Flake | 1.349 | 6.51 | 1,000 | 100% |
| Int1 | 12.25 | 9.625 | 5,200 | 1880 | Lead, 12.8 ppg, Class C, 5% Salt 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal | 1.45 | 6.9 | | 0 | 154 | Tail, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake | 1.33 | 6.3 | 4,900 | 100% |
| Int2 | 8.75 | 7.625 | 9,876 | 130 | Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgmaker Gel, 5% Salt, 5pps LCM, 0.25pps IntegraSeal | 5.1 | 27.2 | | 4,200 | 121 | IntegraCem 14.8 ppg, Class P 0.25 pps Cello-Flake, 2% CaCl ₂ | 1.33 | 6.31 | 8,876 | 50% |
| Prod | 6.75 | 5.5 | 14,239 | 382 | Tail, 14.5 ppg, Gas Migration Control | 1.4 | 6.8 | | 8,876 | | | | | | 20% |

5. Minimum Specifications for Pressure Control:

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated, and the ram-type will be equipped with blind rams on bottom and 4 ½" x 7" variable pipe rams on top.

All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5,000/250 psig and the annular preventer to 5,000/250 psig. The surface casing will be tested for 30 minutes to 0.22 psi/ft or 1500 psi, whichever is greater, but not to exceed 70% of Internal yield.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig. The intermediate casing will be for 30 minutes to 0.22 psi/ft or 1500 psi, whichever is greater, but not to exceed 70% of Internal yield prior to drill-out.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.



6. Types and characteristics of the proposed mud system:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal. The applicable depths and properties of the drilling fluid systems are as follows.

| Depth | Type | Weight (ppg) | Viscosity | Water Loss |
|-----------------|-------------|--------------|-----------|------------|
| 0 – 1,300' | Fresh - Gel | 8.6-8.8 | 28-34 | N/c |
| 1,300' –9,876' | Brine | 8.8-10.2 | 28-34 | N/c |
| 9,876' –14,239' | Oil Base | 9.0-11.0 | 58-68 | 3 – 6 |
| Lateral | | | | |

The highest mud weight needed to balance formation is expected to be 9-11 ppg. In order to maintain hole stability, mud weights up to 11 ppg may be utilized.

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary well control and monitoring equipment:

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H2S monitoring and detection equipment will be utilized from surface casing point to TD.
- (D) A wear bushing will be installed in the wellhead prior to drilling out of the surface casing.

8. Logging, testing and coring program:

GR–CCL–CNL will be run in cased hole during completions phase of operations.

Open-hole logs are not planned for this well.

9. Abnormal conditions, pressures, temperatures and potential hazards:

The estimated bottom-hole temperature at 9,532' TVD (deepest point of the well) is 160°F with an estimated maximum bottom-hole pressure (BHP) at the same point of 5,452 psig (based on 11 ppg MW).

Hydrogen sulfide may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

- A. All personnel shall receive proper awareness H2S training.
- B. Briefing Area: Two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment
 - a. Well Control Equipment
 - i. Flare line 100' from wellhead to be ignited by auto ignition sparking system.
 - ii. Choke manifold with a remotely operated hydraulic choke.
 - iii. Mud/gas separator.
 - b. Protective equipment for essential personnel
 - i. Breathing Apparatus
 - 1. Rescue packs (SCBA) – 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.
 - 2. Work / Escape packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.



3. Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.
- ii. Auxiliary Rescue Equipment
 1. Stretcher
 2. Two OSHA full body harnesses
 3. 100 feet of 5/8 inches OSHA approved rope
 4. 1-20# class ABC fire extinguisher
- c. H2S Detection and Monitoring Equipment
 - i. A stationary detector with three sensors will be placed in the doghouse if equipped, set to visually alarm at 10 ppm and audible at 14 ppm. The detector will be calibrated a minimum of every 30 days or as needed. The sensors will be placed in the following places:
 1. Rig Floor
 2. Below Rig Floor / Near BOPs
 3. End of flow line or where well bore fluid is being discharged (near shakers)
 - ii. If H2S is encountered, measured values and formations will be provided to the BLM.
- d. Visual Warning Systems
 - i. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - ii. A colored condition flag will be on display, reflecting the current condition at the site at the time.
 - iii. Two windsocks will be placed in strategic locations, visible from all angles.
- e. Mud Program
 - i. The Mud program will be designed to minimize the volume of H2S circulated to surface.
 - ii. The operator will have the necessary mud products to minimize hazards while drilling in H2S bearing zones.
- f. Metallurgy
 - i. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service at the anticipated operating pressures to prevent sour sulfide stress cracking.
- g. Communication
 - i. Communication will be via cell phones and walkie talkies on location.

Franklin Mountain Energy has conducted a review of offset operated wells to determine if an H2S contingency plan is required for the proposed well. Based on concentrations of offset wells, proximity to main roads, and distance to populated areas, the radius of exposure created by a potential release was determined to be minimal and low enough to not necessitate an H2S contingency plan. This will be reevaluated during wellbore construction if H2S is observed and after the well is on production.

11. Anticipated starting date and duration of operations:

The drilling operations on the well should be finished in approximately one month. However, in order to minimize disturbance in the area and to improve efficiency Franklin Mountain is planning to drill all the wells on the pad prior to commence completion operations. To even further reduce the time heavy machinery is used the “batch drilling” method may be used. The drilling rig with walking/skidding capabilities will be used.

**12. Disposal/environmental concerns:**

- (A) Drilled cuttings will be hauled to and disposed of in a state-certified disposal site.
- (B) Non-hazardous waste mud/cement from the drilling process will be also be hauled to and disposed of in a state-certified disposal site.
- (C) Garbage will be hauled to the Pecos City Landfill.
- (D) Sewage (grey water) will be hauled to the Carlsbad City Landfill.

13. Wellhead:

A multi-bowl wellhead system will be utilized.

After running the 13-3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 5,000 psi.

After running the 2nd intermediate casing, and before drilling out, the wellhead, BOP, and related equipment will be tested to 10,000/250 psig.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Cactus Multi-Bowl WH system has been sent to the BLM office in Carlsbad.

The wellhead will be installed by a third-party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing strings. After installation of the first intermediate string the pack-off and lower flanges will be pressure tested to 5,000 psi. After installation of the second intermediate string, the pack-off and upper flange will be pressure tested to 10,000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1,500 psi, whichever is greater.

14. Additional variance requests**A. Casing.**

In order to minimize potential environmental and technical hazards, this well is planned with two intermediate strings of casing.

1. Variance is requested to waive the centralizer requirements for the 7-5/8" casing due to the tight clearance with 9-5/8" string.
2. Variance is requested to waive/reduce the centralizer requirements for the 5-1/2" casing due to the tight clearance with 6-3/4" hole and 5-1/2" casing due to tight clearances.