

Office  
 District I – (575) 393-6161  
 1625 N. French Dr., Hobbs, NM 88240  
 District II – (575) 748-1283  
 811 S. First St., Artesia, NM 88210  
 District III – (505) 334-6178  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 District IV – (505) 476-3460  
 1220 S. St. Francis Dr., Santa Fe, NM  
 87505

State of New Mexico  
 Energy, Minerals and Natural Resources

Form C-103  
 Revised July 18, 2013

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

|                                                                                                     |
|-----------------------------------------------------------------------------------------------------|
| WELL API NO.<br>30-025-51200                                                                        |
| 5. Indicate Type of Lease<br>STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.                                                                        |
| 7. Lease Name or Unit Agreement Name<br>Eagle State Com                                             |
| 8. Well Number 702H                                                                                 |
| 9. OGRID Number 331595                                                                              |
| 10. Pool name or Wildcat<br>[55640] SCHARB; WOLFCAMP                                                |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.)<br>3848                                          |

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator  
Franklin Mountain Energy 3, LLC

3. Address of Operator  
44 Cook Street, Suite 1000, Denver, CO 80206

4. Well Location

Unit Letter C : 400 feet from the N line and 1920 feet from the W line  
 Section 3 Township 19S Range 35E NMPM County Lea

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
 TEMPORARILY ABANDON ☐ CHANGE PLANS ☒  
 PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
 DOWNHOLE COMMINGLE ☐  
 CLOSED-LOOP SYSTEM ☐  
 OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
 COMMENCE DRILLING OPNS. ☐ P AND A ☐  
 CASING/CEMENT JOB ☐  
 OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Franklin Mountain Energy 3, LLC (FME3), Operator, respectfully requests approval to make the following changes to the proposed drilling plan for the above referenced well.

BHL Change: FME3 requests approval to change the BHL for this well from 1428' FNL 1815' FWL to **1428 FSL 2200 FWL** Sec 10 19S 35E. SHL remains the same. Please see attached Plan #3, revised 14-point plan, geo prog and C-102.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Rachael Overbey TITLE Dir. Ops Planning & Regulatory DATE 4/28/2023

Type or print name Rachael Overbey E-mail address: roverbey@fmellc.com PHONE: 303-570-4057

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any):

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
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District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
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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

|                                  |  |                                                               |  |                                              |                                   |
|----------------------------------|--|---------------------------------------------------------------|--|----------------------------------------------|-----------------------------------|
| <sup>1</sup> API Number          |  | <sup>2</sup> Pool Code<br>55640                               |  | <sup>3</sup> Pool Name<br>SCHARB;BONE SPRING |                                   |
| <sup>4</sup> Property Code       |  | <sup>5</sup> Property Name<br>EAGLE STATE COM                 |  |                                              | <sup>6</sup> Well Number<br>702H  |
| <sup>7</sup> OGRID No.<br>331595 |  | <sup>8</sup> Operator Name<br>FRANKLIN MOUNTAIN ENERGY 3, LLC |  |                                              | <sup>9</sup> Elevation<br>3848.2' |

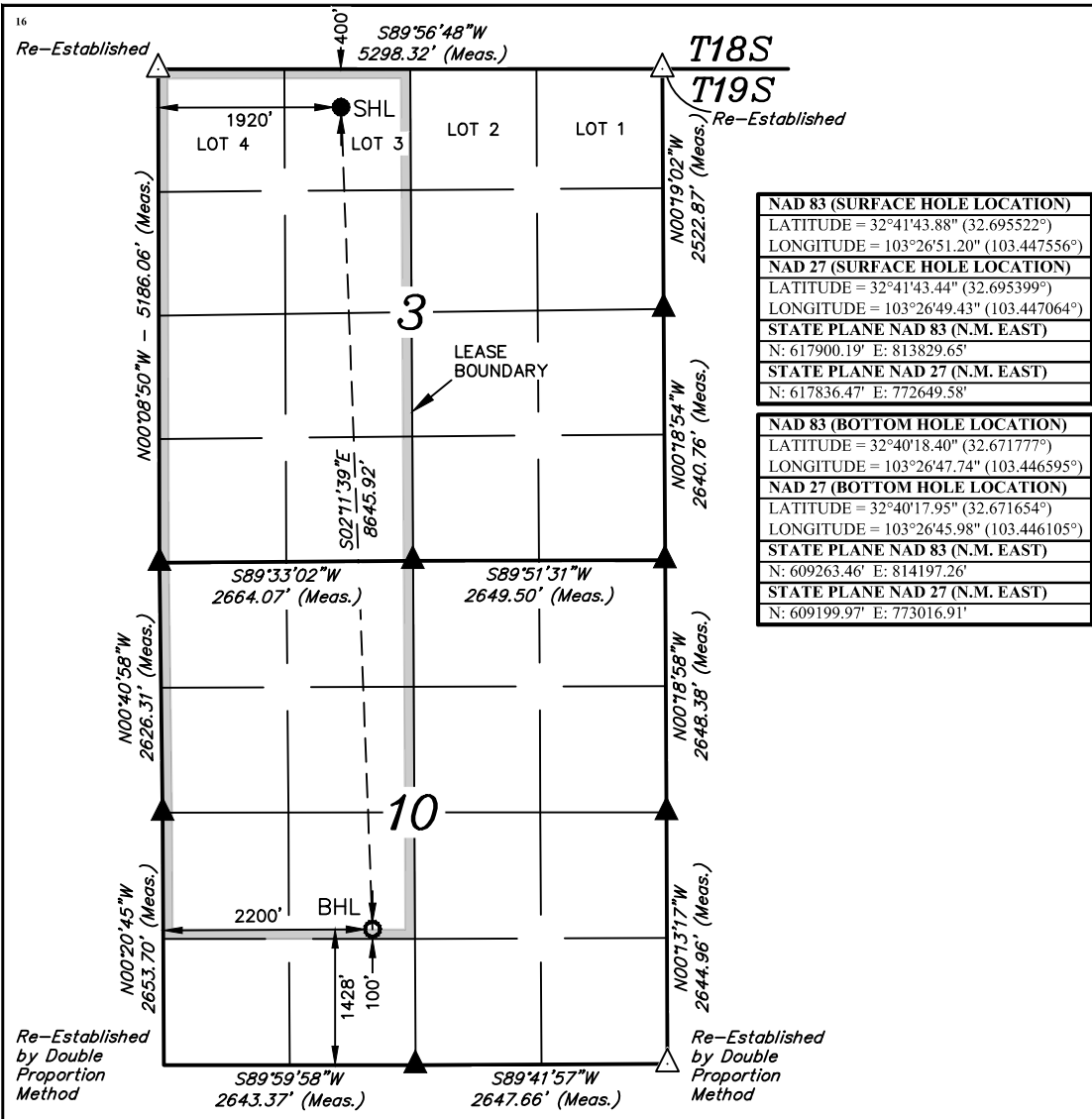
<sup>10</sup> Surface Location

|                    |              |                 |              |         |                      |                           |                       |                        |               |
|--------------------|--------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|---------------|
| UL or lot no.<br>3 | Section<br>3 | Township<br>19S | Range<br>35E | Lot Idn | Feet from the<br>400 | North/South line<br>NORTH | Feet from the<br>1920 | East/West line<br>WEST | County<br>LEA |
|--------------------|--------------|-----------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|---------------|

<sup>11</sup> Bottom Hole Location If Different From Surface

|                                         |               |                               |              |                                  |                       |                           |                       |                        |               |
|-----------------------------------------|---------------|-------------------------------|--------------|----------------------------------|-----------------------|---------------------------|-----------------------|------------------------|---------------|
| UL or lot no.<br>K                      | Section<br>10 | Township<br>19S               | Range<br>35E | Lot Idn                          | Feet from the<br>1428 | North/South line<br>SOUTH | Feet from the<br>2200 | East/West line<br>WEST | County<br>LEA |
| <sup>12</sup> Dedicated Acres<br>559.31 |               | <sup>13</sup> Joint or Infill |              | <sup>14</sup> Consolidation Code |                       | <sup>15</sup> 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.



**<sup>17</sup> OPERATOR CERTIFICATION**

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

Signature: *Rachael Overbey* Date: 4/14/2023

Printed Name: Rachael Overbey

E-mail Address: roverbey@fmellc.com

**<sup>18</sup> SURVEYOR CERTIFICATION**

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

January 17, 2023

Date of Survey

Signature and Seal of Professional Surveyor:

*Paul Buchele*

**PAUL BUCHELE**  
NEW MEXICO  
23782  
04-07-23  
PROFESSIONAL SURVEYOR

Certificate Number:

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)
- Section breakdown information for this plat may be obtained from Uintah Engineering & Land Surveying.

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

2000' 1000' 0' 2000'

SCALE

DRAWN BY: Z.L. 01-19-23  
REV: 2 04-07-23 N.D.T.  
(BHL MOVE)



## Eagle State Com 702H

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)   | 3,855'         | 30'            | 30'        | 0     | Sand/Gravels/unconsolidated         |
| Rustler                       | 2,076'         | 1,809'         |            |       | Carbonates                          |
| Salado                        | 1,841'         | 2,044'         |            |       | Salt, Carbonate & Clastics          |
| Base Salt                     | 922'           | 2,963'         |            |       | Shaley Carbonate & Shale            |
| Yates                         | 522'           | 3,363'         |            |       | Carbonate & Clastics                |
| Seven Rivers                  | 74'            | 3,811'         |            |       | Sandstone - oil/gas/water           |
| Queen                         | -686'          | 4,571'         |            |       | Sandstone - oil/gas/water           |
| Cherry Canyon                 | -2,127'        | 6,013'         |            |       | Sand/carb/shales - oil/gas/water    |
| Bone Spring Lime              | -3,584'        | 7,470'         |            |       | Shale/Carbonates - oil/gas          |
| First Bone Spring Sand        | -5,154'        | 9,039'         |            |       | Shale/Carbonates - oil/gas          |
| Second Bone Spring Carbonates | -5,419'        | 9,305'         |            |       | Chert/Carbonate                     |
| Second Bone Spring Sand       | -5,584'        | 9,469'         |            |       | Sandstone - oil/gas/water           |
| Third Bone Spring Carbonates  | -6,013'        | 9,898'         |            |       | Shale/Carbonates - oil/gas          |
| Third Bone Spring Sand        | -6,091'        | 9,976'         |            |       | Sandstone - oil/gas/water           |
| Wolfcamp                      | -6,248'        | 10,133'        |            |       | Overpressure shale/sand- Oil/Gas    |
| <b>HZ Target</b>              | <b>-6,388'</b> | <b>10,274'</b> |            |       | <b>Overpressure Shale - Oil/Gas</b> |
| Wolfcamp B                    | -6,426'        | 10,312'        |            |       | Overpressure Shale - Oil/Gas        |

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

|                                  |         |             |
|----------------------------------|---------|-------------|
| Upper Permian Sands              | 0- 400' | Fresh Water |
| Delaware Sands                   | 6,013'  | Oil         |
| 1 <sup>st</sup> Bone Spring Sand | 9,039'  | Oil         |
| 2 <sup>nd</sup> Bone Spring Sand | 9,469'  | Oil         |
| 3 <sup>rd</sup> Bone Spring Sand | 9,976'  | Oil         |
| Wolfcamp                         | 10,133' | Oil         |
| Wolfcamp B                       | 10,312' | 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 1,900' and circulating cement back to surface.

4. Casing Program:

All casing strings will be run new.



| Casing string                       | Weight | Grade   | Burst | Collapse | Tension | Conn                  | Length        | API design factor |          |         |              |
|-------------------------------------|--------|---------|-------|----------|---------|-----------------------|---------------|-------------------|----------|---------|--------------|
|                                     |        |         |       |          |         |                       |               | Burst             | Collapse | Tension | Coupling     |
| Surface 13 3/8"<br>0-1,900'         | 54.5   | J-55    | 2730  | 1130     | 853     | BTC<br>909            | 1900          | 1.02              | 1.14     | 4.19    | 4.47         |
| Intermediate 9 5/8"<br>0-4,000'     | 40     | HCL-80  | 7430  | 4230     | 916     | BTC<br>1042           | 4000          | 2.08              | 2.26     | 3.52    | 4.01         |
| Production 7"<br>0-9,700'           | 32     | HCP-110 | 12460 | 10760    | 1025    | CDC-HTQ<br>1053       | 9700          | 2.06              | 2.37     | 2.50    | 2.57         |
| Production 5 1/2"<br>9,700'-18,990' | 20     | HCP-110 | 12640 | 12200    | 641     | CDC-HTQ<br>667<br>TVD | 9290<br>10274 | 1.15              | 2.81     | 2.24    | 2.33<br>2.18 |

Tapered production string will be ran with a X-over installed at the KOP of 9,700'.

#### Cementing Program:

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

To increase efficiency of drilling operations and minimize disturbance of the area the batch-drilling approach will be used.

Off-line cementing may be utilized for Surface and Intermediate strings to further optimization of drilling process and reduction of disturbance.

| String Type | Hole Size | Casing Size | Setting Depth | Sacks | Type of cmt                                                                                       | Lead Yield ft3/sk | Water gal/sk | TOC ft | Sacks | Type of cmt                                           | Tail Yield ft3/sk | Water gal/sk | TOC  | Excess |
|-------------|-----------|-------------|---------------|-------|---------------------------------------------------------------------------------------------------|-------------------|--------------|--------|-------|-------------------------------------------------------|-------------------|--------------|------|--------|
| Surf        | 17.5      | 13.375      | 1900          | 1016  | 85:15 Compass Poz, 12.8 ppg Class C, 5%Gel, 3#/sk Kol Seal, 4.64#/sk Salt Lead, 11.3 ppg, HSLD 82 | 2.05              | 11.12        | 0      | 441   | Tail, 14.8 ppg, 100% Class C, 1%CaCl2, 0.1%           | 1.34              | 6.35         | 1500 | 100%   |
| Int         | 12.25     | 9.625       | 4000          | 640   | 10% Gel, 4% STE, 2#/sk, Gyp Seal HSLD 9420,                                                       | 2.74              | 16.31        | 0      | 201   | Econolite Tail, 14.8 ppg, 100% Class C, 0.08% C-51    | 1.33              | 6.33         | 3600 | 100%   |
| Prod        | 8.75      | 7           | 0-9700        | 469   | 10.5 ppg, Class C, 1#/sk Salt, 4% STE 1% C-45                                                     | 3.99              | 25.51        | 3000   |       |                                                       |                   |              |      | 100%   |
| Prod        | 8.75      | 5.5         | 9700-18990    |       |                                                                                                   |                   |              |        | 2319  | HSLD 80, 13.ppg , 32#/sk Salt, 4% STE, 1#/sk Gyp Seal | 1.52              | 7.59         | 9700 | 50%    |

**Contingency plan:**

If adverse drilling conditions are encountered the drilling will pivot to contingency plan to deepen Intermediate casing string and run 2-stage cement job on it.

**4.a Contingency Casing Program**

| 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     | 1900   | 1.02              | 1.14     | 4.19    | 4.47     |
| 0-1,900'            |        |         |       |          |         | 909     |        |                   |          |         |          |
| Intermediate 9 5/8" | 40     | HCL-80  | 7430  | 4230     | 916     | BTC     | 8000   | 1.31              | 1.13     | 2.18    | 2.48     |
| 0-8,000'            |        |         |       |          |         | 1042    |        |                   |          |         |          |
| Production 7"       | 32     | HCP-110 | 12460 | 10760    | 1025    | CDC-HTQ | 9700   | 2.06              | 2.37     | 2.50    | 2.57     |
| 0-9,700'            |        |         |       |          |         | 1053    |        |                   |          |         |          |
| Production 5 1/2"   | 20     | HCP-110 | 12640 | 12200    | 641     | CDC-HTQ | 9290   | 1.15              | 2.81     | 2.24    | 2.33     |
| 9,700'-18,990'      |        |         |       |          |         | 667     | 10274  |                   |          |         | 2.18     |
|                     |        |         |       |          |         | TVD     |        |                   |          |         |          |

**Contingency Cementing Program:**

| String Type | Hole Size | Casing Size | Setting Depth | Sacks | Type of cmt                                                               | Lead Yield ft <sup>3</sup> /sk | Water gal/sk | TOC ft | Sacks | Type of cmt                                              | Tail Yield ft <sup>3</sup> /sk | Water gal/sk | TOC  | Excess |
|-------------|-----------|-------------|---------------|-------|---------------------------------------------------------------------------|--------------------------------|--------------|--------|-------|----------------------------------------------------------|--------------------------------|--------------|------|--------|
| Surf        | 17.5      | 13.375      | 1900          | 1016  | 85:15 Compass Poz, 12.8 ppg Class C, 5%Gel, 3#/sk Kol Seal, 4.64#/sk Salt | 2.05                           | 11.12        | 0      | 441   | Tail, 14.8 ppg, 100% Class C, 1%CaCl <sub>2</sub> , 0.1% | 1.34                           | 6.35         | 1500 | 100%   |
| Int St 1    | 12.25     | 9.625       | 8000          | 823   | Lead, 11.3 ppg, HSLD 82 10% Gel, 4%STE, 2#/sk, Gyp Seal                   | 2.74                           | 16.31        | 4000   | 188   | Econolite Tail, 14.8 ppg, 100% Class C, 0.08% C-51       | 1.33                           | 6.33         | 7600 | 100%   |
| Int St 2    | 12.25     | 9.625       | 4000          | 732   | Lead, 11.3 ppg, HSLD 82 10% Gel, 4%STE, 2#/sk, Gyp Seal                   | 2.74                           | 16.31        | 0      |       |                                                          |                                |              |      | 100%   |
| Prod        | 8.75      | 7           | 0-9700        | 168   | HSLD 9420, 10.5 ppg, Class C, 1#/sk Salt, 4% STE 1% C-45                  | 3.99                           | 25.51        | 7000   |       |                                                          |                                |              |      | 100%   |
| Prod        | 8.75      | 5.5         | 9700-18982    |       |                                                                           |                                |              |        | 2319  | HSLD 80, 13.ppg, 32#/sk Salt, 4% STE, 1#/sk Gyp Seal     | 1.52                           | 7.59         | 9700 | 50%    |



## 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 to 1500 psi for 30 minutes.

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.

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 – 1,900'                  | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1,900' – 4,000'             | Brine       | 8.8-10.2     | 28-34     | N/c        |
| 4,000' – 18,990'<br>Lateral | Oil Base    | 9.0-11.0     | 58-68     | 3 - 6      |

### Contingency mud system:

| Depth                       | Type        | Weight (ppg) | Viscosity | Water Loss |
|-----------------------------|-------------|--------------|-----------|------------|
| 0 – 1,900'                  | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1,900' – 8,000'             | Brine       | 8.8-10.2     | 28-34     | N/c        |
| 8,000' – 18,990'<br>Lateral | Oil Base    | 9.0-11.0     | 58-68     | 3 - 6      |

The highest mud weight needed to balance formation is expected to be 10-11 ppg. In order to maintain hole stability, mud weights up to 12 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) H<sub>2</sub>S 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 10,277' TVD (deepest point of the well) is 165F with an estimated maximum bottom-hole pressure (BHP) at the same point of 6,411 psig (based on 12 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 150' 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/Escapes 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 H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S 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 H<sub>2</sub>S 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.

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 H<sub>2</sub>S contingency plan. This will be reevaluated during wellbore construction if H<sub>2</sub>S 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. A batch drilling sequence sundry will be submitted for State approval prior to spud. A 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 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 21 days.

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

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 string. After installation of the first intermediate string the pack-off and lower flanges will be pressure tested to 5000 psi.



Both the surface and intermediate casing strings will be tested as per NMOCD Rules to the one-third of manufacture's rated yield pressure, no less than 600 psi, but not greater than 1,500 psi.

**14. Additional variance requests**

A. Casing.

1. Variance is requested to wave/reduce the centralizer requirements for the 7" and 5 ½" production casing due to the tight clearance with 8 ¾" hole.

## Geologic Prognosis



|               |                                 |
|---------------|---------------------------------|
| Well Name     | Eagle State Com 702H            |
| Operator      | Franklin Mountain Energy 3, LLC |
| Project Area  | Eagle Unit                      |
| Well Type     | 10,000' Wolfcamp Lateral        |
| API           |                                 |
| Permit Number |                                 |
| Rig           |                                 |

|                       |          |            |         |    |        |     |        |     |  |
|-----------------------|----------|------------|---------|----|--------|-----|--------|-----|--|
| State                 | NM       | County     | Lea     |    |        |     |        |     |  |
| SHL                   | Township | 19S/35E    | Section | 3  | 1,920' | FWL | 400'   | FNL |  |
| BHL                   | Township | 19S/35E    | Section | 10 | 2,200' | FWL | 1,428' | FSL |  |
| Surface Latitude      | NAD 83   | 32.695522  |         |    |        |     |        |     |  |
| Surface Longitude     | NAD 83   | 103.447556 |         |    |        |     |        |     |  |
| Bottom Hole Latitude  | NAD 83   | 32.671777  |         |    |        |     |        |     |  |
| Bottom Hole Longitude | NAD 83   | 103.446595 |         |    |        |     |        |     |  |
| Ground Level          | 3,855'   | Rig KB     | 30'     | KB | 3,885' |     |        |     |  |

| Formations                    | PROG SS        | PROG TVD       | Picked TVD | delta | Potential/Issues                    |
|-------------------------------|----------------|----------------|------------|-------|-------------------------------------|
| Cenozoic Alluvium (surface)   | 3,855'         | 30'            | 30'        | 0     | Sand/Gravels/unconsolidated         |
| Rustler                       | 2,076'         | 1,809'         |            |       | Carbonates                          |
| Salado                        | 1,841'         | 2,044'         |            |       | Salt, Carbonate & Clastics          |
| Base Salt                     | 922'           | 2,963'         |            |       | Shaley Carbonate & Shale            |
| Yates                         | 522'           | 3,363'         |            |       | Carbonate & Clastics                |
| Seven Rivers                  | 74'            | 3,811'         |            |       | Sandstone - oil/gas/water           |
| Queen                         | -686'          | 4,571'         |            |       | Sandstone - oil/gas/water           |
| Cherry Canyon                 | -2,127'        | 6,013'         |            |       | Sand/carb/shales - oil/gas/water    |
| Bone Spring Lime              | -3,584'        | 7,470'         |            |       | Shale/Carbonates - oil/gas          |
| First Bone Spring Sand        | -5,154'        | 9,039'         |            |       | Shale/Carbonates - oil/gas          |
| Second Bone Spring Carbonates | -5,419'        | 9,305'         |            |       | Chert/Carbonate                     |
| Second Bone Spring Sand       | -5,584'        | 9,469'         |            |       | Sandstone - oil/gas/water           |
| Third Bone Spring Carbonates  | -6,013'        | 9,898'         |            |       | Shale/Carbonates - oil/gas          |
| Third Bone Spring Sand        | -6,091'        | 9,976'         |            |       | Sandstone - oil/gas/water           |
| Wolfcamp                      | -6,248'        | 10,133'        |            |       | Overpressure shale/sand- Oil/Gas    |
| <b>HZ Target</b>              | <b>-6,388'</b> | <b>10,274'</b> |            |       | <b>Overpressure Shale - Oil/Gas</b> |
| Wolfcamp B                    | -6,426'        | 10,312'        |            |       | Overpressure Shale - Oil/Gas        |

Target interval is expected to have an average apparent dip of ~0.0 degrees down along the lateral based on Wolfcamp structure

Target window tolerance is set at +/- 10'

Target Line: 10,274' KBTVD @ 0' VS w/ 90.0° inc.

Offset Log: Scharb (30025272270000)

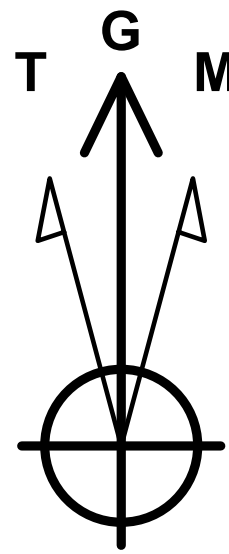
Updated 3/3/2023

|               |              |                                                    |
|---------------|--------------|----------------------------------------------------|
| FME Geologist | Ben Metz     | <a href="mailto:bmetz@fmlc.com">bmetz@fmlc.com</a> |
| Office        | 303.513.8590 | Cell 303.513.8590                                  |

| Electric Logs                                |                                                                      |  |  |  | From              | To |
|----------------------------------------------|----------------------------------------------------------------------|--|--|--|-------------------|----|
| Open-Hole                                    |                                                                      |  |  |  |                   |    |
|                                              | n/a                                                                  |  |  |  |                   |    |
|                                              |                                                                      |  |  |  |                   |    |
| MWD/LWD                                      |                                                                      |  |  |  |                   |    |
|                                              | MWD GR                                                               |  |  |  | Int. 1 Csg. Point | TD |
|                                              |                                                                      |  |  |  |                   |    |
| <b>Mud Log:</b>                              |                                                                      |  |  |  |                   |    |
| drill out of surface casing                  |                                                                      |  |  |  |                   |    |
| Sampling:                                    | 10' samples in vertical and through curve, 30' samples in lateral    |  |  |  |                   |    |
| Samples:                                     | 1 set dry samples at footage frequency noted above                   |  |  |  |                   |    |
| Mud Gas:                                     | Continuous                                                           |  |  |  |                   |    |
| Daily Contact:                               | Email distribution of mud log/daily report at 7:30am and 4:30 pm CST |  |  |  |                   |    |
| <b>Daily Mud Log Email Distribution List</b> |                                                                      |  |  |  |                   |    |
|                                              |                                                                      |  |  |  |                   |    |
| <b>Final Mud Log Distribution</b>            |                                                                      |  |  |  |                   |    |
|                                              | Ben Metz (bmetz@fmellc.com)                                          |  |  |  | email             |    |
|                                              |                                                                      |  |  |  |                   |    |
| <b>Cuttings/Samples Shipment Information</b> |                                                                      |  |  |  |                   |    |
|                                              |                                                                      |  |  |  |                   |    |
|                                              |                                                                      |  |  |  |                   |    |
|                                              |                                                                      |  |  |  |                   |    |

Franklin Mountain Energy

Project: Lea County, NM (NAD83)  
Site: Sec 03-T19S-R35E  
Well: Eagle State Com 702H  
Wellbore: OH  
Design: Plan #3  
Rig:



Azimuths to Grid North  
True North: -0.48°  
Magnetic North: 5.74°  
  
Magnetic Field  
Strength: 47648.3nT  
Dip Angle: 60.52°  
Date: 2/17/2023  
Model: HDGM2023

Total Magnetic Correction: 5.74°

PROJECT DETAILS: Lea County, NM (NAD83)

Geodetic System: US State Plane 1983  
Datum: North American Datum 1983  
Ellipsoid: GRS 1980  
Zone: New Mexico Eastern Zone

Reference Datum: 3855' GL + 30' KB @ 3885.00usft

FORMATION TOP DETAILS

| TVDPath  | MDPath   | Formation                     |
|----------|----------|-------------------------------|
| 30.00    | 30.00    | Cenozoic Alluvium (surface)   |
| 1809.00  | 1809.00  | Rustler                       |
| 2044.00  | 2044.00  | Salado                        |
| 2963.00  | 2966.78  | Base Salt                     |
| 3363.00  | 3368.98  | Yates                         |
| 3811.00  | 3819.44  | Seven Rivers                  |
| 4571.00  | 4583.62  | Queen                         |
| 6013.00  | 6030.65  | Cherry Canyon                 |
| 7470.00  | 7487.65  | Bone Spring Lime              |
| 9039.00  | 9056.65  | First Bone Spring Sand        |
| 9305.00  | 9322.65  | Second Bone Spring Carbonates |
| 9469.00  | 9486.65  | Second Bone Spring Sand       |
| 9898.00  | 9919.75  | Third Bone Spring Carbonates  |
| 9976.00  | 10005.48 | Third Bone Spring Sand        |
| 10133.00 | 10207.99 | Wolfcamp                      |
| 10274.00 | 10618.69 | HZ Target                     |

SHL

RKB Elevation: 3855' GL + 30' KB @ 3885.00usft

| +N/-S | +E/-W | Northing  | Easting   | Latitude   | Longitude    | Slot |
|-------|-------|-----------|-----------|------------|--------------|------|
| 0.00  | 0.00  | 617900.19 | 813829.65 | 32.6955225 | -103.4475555 |      |

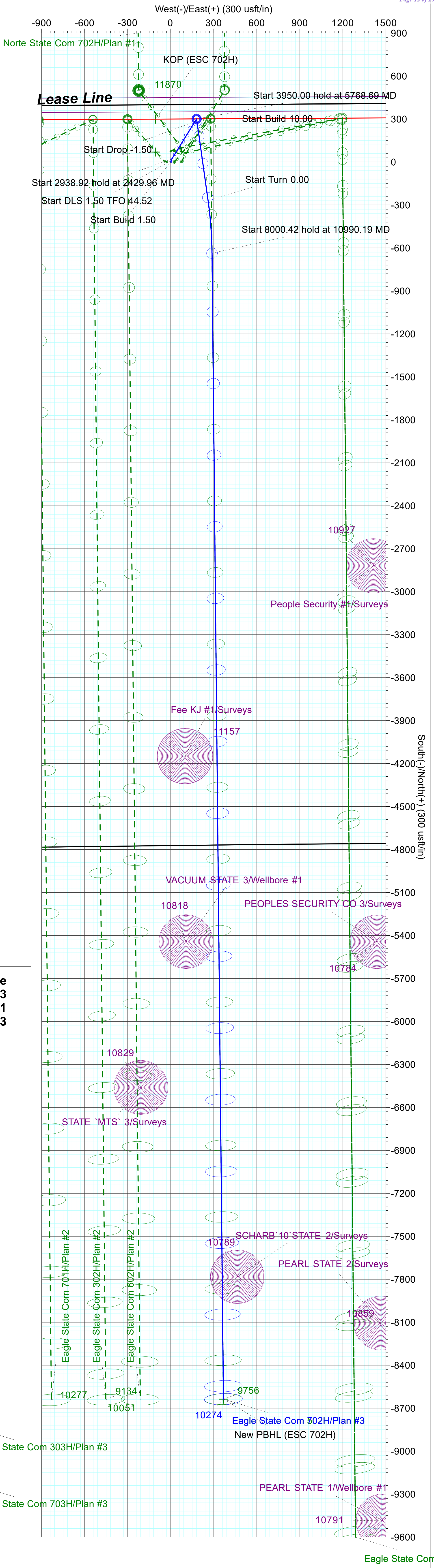
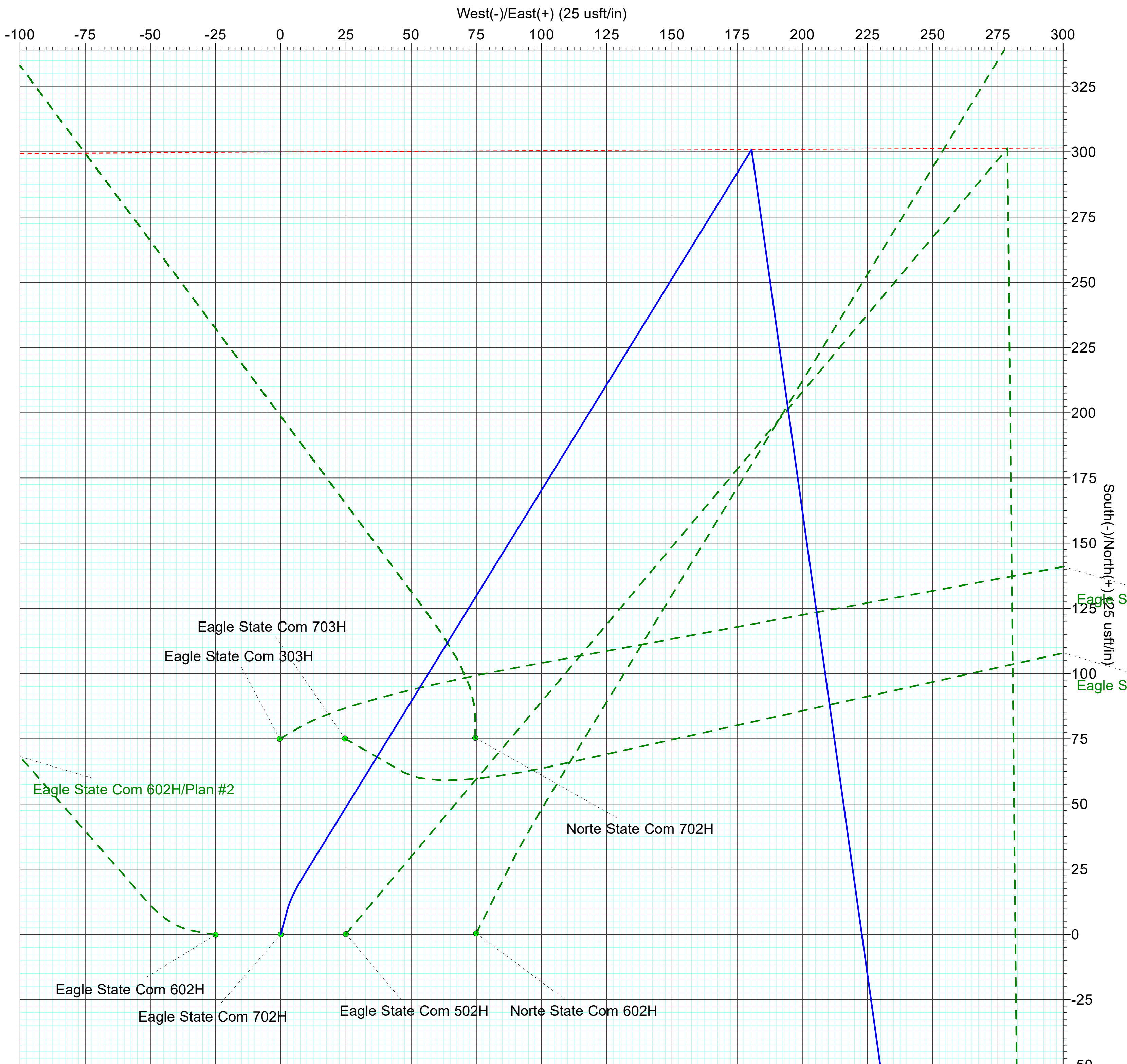
Target Line: 10,274' KBTVD @ 0' VS w/ 90.0° inc.

SECTION DETAILS for: Plan #3

| MD       | Inc   | Azi    | TVD      | +N/-S    | +E/-W  | Dleg  | TFace  | VSect   | Target              |
|----------|-------|--------|----------|----------|--------|-------|--------|---------|---------------------|
| 0.00     | 0.00  | 0.00   | 0.00     | 0.00     | 0.00   | 0.00  | 0.00   | 0.00    |                     |
| 2000.00  | 0.00  | 0.00   | 2000.00  | 0.00     | 0.00   | 0.00  | 0.00   | 0.00    |                     |
| 2266.67  | 4.00  | 15.00  | 2266.45  | 8.99     | 2.41   | 1.50  | 15.00  | -8.99   |                     |
| 2429.96  | 6.00  | 31.67  | 2429.12  | 21.75    | 8.36   | 1.50  | 44.52  | -21.77  |                     |
| 5368.88  | 6.00  | 31.67  | 5351.96  | 283.09   | 169.57 | 0.00  | 0.00   | -283.41 |                     |
| 5768.69  | 0.00  | 172.00 | 5751.04  | 300.88   | 180.54 | 1.50  | 180.00 | -301.22 |                     |
| 9718.69  | 0.00  | 172.00 | 9701.04  | 300.88   | 180.54 | 0.00  | 0.00   | -301.22 |                     |
| 10618.69 | 90.00 | 172.00 | 10274.00 | -266.50  | 260.28 | 10.00 | 0.00   | 266.00  |                     |
| 10990.19 | 90.00 | 179.43 | 10274.00 | -636.71  | 288.02 | 2.00  | 90.00  | 636.15  |                     |
| 18990.61 | 90.00 | 179.43 | 10274.00 | -8636.73 | 367.61 | 0.00  | 0.00   | 8636.01 | New PBHL (ESC 702H) |

WELLBORE TARGET DETAILS

| Name                | TVD      | +N/-S    | +E/-W   | Northing  | Easting   | Latitude   | Longitude    |
|---------------------|----------|----------|---------|-----------|-----------|------------|--------------|
| KOP (ESC 702H)      | 9701.04  | 299.38   | -106.74 | 618199.57 | 813722.91 | 32.6963478 | -103.4478943 |
| FTP (ESC 702H)      | 10160.02 | 69.39    | -104.43 | 617969.58 | 813725.22 | 32.6957156 | -103.4478931 |
| New PBHL (ESC 702H) | 10274.00 | -8636.73 | 367.61  | 609263.46 | 814197.26 | 32.6717771 | -103.4465953 |



Sec 03-T19S-R35E Eagle State Com 702H Plan: Plan #3 (Eagle State Com 702H/OH)  
Created By: RDW Date: 14-50, April 21 2023  
Checked: Date:

# Franklin Mountain Energy

Lea County, NM (NAD83)

Sec 03-T19S-R35E

Eagle State Com 702H

1920 FWL, 400 FNL Sec 3

OH

Plan: Plan #3



## Standard Survey Report

21 April, 2023

Total Report Version 1.10

COMPASS 5000.16 Build 97



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

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

|                              |                  |                     |                 |                   |              |
|------------------------------|------------------|---------------------|-----------------|-------------------|--------------|
| <b>Site</b>                  | Sec 03-T19S-R35E |                     |                 |                   |              |
| <b>Site Position:</b>        |                  | <b>Northing:</b>    | 617,968.58 usft | <b>Latitude:</b>  | 32.6957397   |
| <b>From:</b>                 | Map              | <b>Easting:</b>     | 812,554.48 usft | <b>Longitude:</b> | -103.4516984 |
| <b>Position Uncertainty:</b> | 0.00 usft        | <b>Slot Radius:</b> | 13-3/16 "       |                   |              |

|                      |                      |           |                     |                 |               |               |
|----------------------|----------------------|-----------|---------------------|-----------------|---------------|---------------|
| Well                 | Eagle State Com 702H |           |                     |                 |               |               |
| Well Position        | +N/-S                | 0.00 usft | Northing:           | 617,900.19 usft | Latitude:     | 32.6955225    |
|                      | +E/-W                | 0.00 usft | Easting:            | 813,829.65 usft | Longitude:    | -103.4475555  |
| Position Uncertainty |                      | 0.50 usft | Wellhead Elevation: | usft            | Ground Level: | 3,855.00 usft |
| Grid Convergence:    |                      | 0.48 °    |                     |                 |               |               |

|                  |                   |                    |                        |                      |                            |  |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|--|
| <b>Wellbore</b>  | OH                |                    |                        |                      |                            |  |
| <b>Magnetics</b> | <b>Model Name</b> | <b>Sample Date</b> | <b>Declination (°)</b> | <b>Dip Angle (°)</b> | <b>Field Strength (nT)</b> |  |
|                  | HDGM2023          | 2/17/2023          | 6.22                   | 60.52                | 47,648.30000000            |  |

|                          |         |                                |                     |                      |                      |      |
|--------------------------|---------|--------------------------------|---------------------|----------------------|----------------------|------|
| <b>Design</b>            | Plan #3 |                                |                     |                      |                      |      |
| <b>Audit Notes:</b>      |         |                                |                     |                      |                      |      |
| <b>Version:</b>          |         | <b>Phase:</b>                  | PLAN                | <b>Tie On Depth:</b> |                      | 0.00 |
| <b>Vertical Section:</b> |         | <b>Depth From (TVD) (usft)</b> | <b>+N/-S (usft)</b> | <b>+E/-W (usft)</b>  | <b>Direction (°)</b> |      |
|                          |         | 0.00                           | 0.00                | 0.00                 | 180.11               |      |

|                            |                  |                          |                  |                    |  |
|----------------------------|------------------|--------------------------|------------------|--------------------|--|
| <b>Survey Tool Program</b> | <b>Date</b>      | 4/21/2023                |                  |                    |  |
| <b>From (usft)</b>         | <b>To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Description</b> |  |
| 0.00                       | 18,990.35        | Plan #3 (OH)             | MWD+HDGM         | OWSG MWD + HDGM    |  |

| Planned Survey              |         |         |              |                   |              |                 |                |                 |               |                |                  |                  |                  |
|-----------------------------|---------|---------|--------------|-------------------|--------------|-----------------|----------------|-----------------|---------------|----------------|------------------|------------------|------------------|
| Measured                    |         |         | Vertical     | Local Coordinates |              | Map Coordinates |                | Geo Coordinates |               | Vertical       | Dogleg           | Build            | Turn             |
| Depth (usft)                | INC (°) | AZI (°) | Depth (usft) | +N/-S (usft)      | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude (°)    | Longitude (°) | Section (usft) | Rate (°/100usft) | Rate (°/100usft) | Rate (°/100usft) |
| 0.00                        | 0.00    | 0.00    | 0.00         | 0.00              | 0.00         | 617,900.19      | 813,829.65     | 32.6955225      | -103.4475555  | 0.00           | 0.00             | 0.00             | 0.00             |
| 30.00                       | 0.00    | 0.00    | 30.00        | 0.00              | 0.00         | 617,900.19      | 813,829.65     | 32.6955225      | -103.4475555  | 0.00           | 0.00             | 0.00             | 0.00             |
| Cenozoic Alluvium (surface) |         |         |              |                   |              |                 |                |                 |               |                |                  |                  |                  |
| 100.00                      | 0.00    | 0.00    | 100.00       | 0.00              | 0.00         | 617,900.19      | 813,829.65     | 32.6955225      | -103.4475555  | 0.00           | 0.00             | 0.00             | 0.00             |
| 200.00                      | 0.00    | 0.00    | 200.00       | 0.00              | 0.00         | 617,900.19      | 813,829.65     | 32.6955225      | -103.4475555  | 0.00           | 0.00             | 0.00             | 0.00             |
| 300.00                      | 0.00    | 0.00    | 300.00       | 0.00              | 0.00         | 617,900.19      | 813,829.65     | 32.6955225      | -103.4475555  | 0.00           | 0.00             | 0.00             | 0.00             |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Planned Survey

| Measured Depth (usft)                   | INC (°) | AZI (°) | Vertical Depth (usft) | Local Coordinates +N/-S (usft) | +E/-W (usft) | Map Coordinates Northing (usft) | Easting (usft) | Geo Coordinates Latitude (°) | Longitude (°) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------------------------|---------|---------|-----------------------|--------------------------------|--------------|---------------------------------|----------------|------------------------------|---------------|-------------------------|-------------------------|------------------------|-----------------------|
| 400.00                                  | 0.00    | 0.00    | 400.00                | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 500.00                                  | 0.00    | 0.00    | 500.00                | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 600.00                                  | 0.00    | 0.00    | 600.00                | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 700.00                                  | 0.00    | 0.00    | 700.00                | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 800.00                                  | 0.00    | 0.00    | 800.00                | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 900.00                                  | 0.00    | 0.00    | 900.00                | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00                                | 0.00    | 0.00    | 1,000.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                                | 0.00    | 0.00    | 1,100.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                                | 0.00    | 0.00    | 1,200.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                                | 0.00    | 0.00    | 1,300.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                                | 0.00    | 0.00    | 1,400.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,500.00                                | 0.00    | 0.00    | 1,500.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,600.00                                | 0.00    | 0.00    | 1,600.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,700.00                                | 0.00    | 0.00    | 1,700.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,800.00                                | 0.00    | 0.00    | 1,800.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,809.00                                | 0.00    | 0.00    | 1,809.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Rustler</b>                          |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 1,900.00                                | 0.00    | 0.00    | 1,900.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                                | 0.00    | 0.00    | 2,000.00              | 0.00                           | 0.00         | 617,900.19                      | 813,829.65     | 32.6955225                   | -103.4475555  | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Build 1.50</b>                 |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 2,044.00                                | 0.66    | 15.00   | 2,044.00              | 0.24                           | 0.07         | 617,900.43                      | 813,829.72     | 32.6955232                   | -103.4475553  | -0.24                   | 1.50                    | 1.50                   | 0.00                  |
| <b>Salado</b>                           |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 2,100.00                                | 1.50    | 15.00   | 2,099.99              | 1.26                           | 0.34         | 617,901.45                      | 813,829.99     | 32.6955260                   | -103.4475544  | -1.26                   | 1.50                    | 1.50                   | 0.00                  |
| 2,200.00                                | 3.00    | 15.00   | 2,199.91              | 5.06                           | 1.35         | 617,905.25                      | 813,831.00     | 32.6955364                   | -103.4475510  | -5.06                   | 1.50                    | 1.50                   | 0.00                  |
| 2,266.67                                | 4.00    | 15.00   | 2,266.45              | 8.99                           | 2.41         | 617,909.18                      | 813,832.06     | 32.6955472                   | -103.4475475  | -8.99                   | 1.50                    | 1.50                   | 0.00                  |
| <b>Start DLS 1.50 TFO 44.52</b>         |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 2,300.00                                | 4.37    | 19.61   | 2,299.69              | 11.31                          | 3.14         | 617,911.50                      | 813,832.79     | 32.6955535                   | -103.4475450  | -11.31                  | 1.50                    | 1.11                   | 13.82                 |
| 2,400.00                                | 5.60    | 29.51   | 2,399.32              | 19.15                          | 6.82         | 617,919.34                      | 813,836.47     | 32.6955750                   | -103.4475328  | -19.16                  | 1.50                    | 1.23                   | 9.91                  |
| 2,429.96                                | 6.00    | 31.67   | 2,429.12              | 21.75                          | 8.36         | 617,921.94                      | 813,838.01     | 32.6955821                   | -103.4475278  | -21.77                  | 1.50                    | 1.31                   | 7.19                  |
| <b>Start 2938.92 hold at 2429.96 MD</b> |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 2,500.00                                | 6.00    | 31.67   | 2,498.78              | 27.98                          | 12.20        | 617,928.17                      | 813,841.85     | 32.6955991                   | -103.4475151  | -28.00                  | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                                | 6.00    | 31.67   | 2,598.23              | 36.87                          | 17.69        | 617,937.06                      | 813,847.34     | 32.6956235                   | -103.4474970  | -36.91                  | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                                | 6.00    | 31.67   | 2,697.68              | 45.76                          | 23.17        | 617,945.95                      | 813,852.82     | 32.6956478                   | -103.4474790  | -45.81                  | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                                | 6.00    | 31.67   | 2,797.14              | 54.66                          | 28.66        | 617,954.85                      | 813,858.31     | 32.6956721                   | -103.4474609  | -54.71                  | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                                | 6.00    | 31.67   | 2,896.59              | 63.55                          | 34.14        | 617,963.74                      | 813,863.79     | 32.6956964                   | -103.4474428  | -63.61                  | 0.00                    | 0.00                   | 0.00                  |
| 2,966.78                                | 6.00    | 31.67   | 2,963.00              | 69.49                          | 37.81        | 617,969.68                      | 813,867.46     | 32.6957126                   | -103.4474308  | -69.56                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Base Salt</b>                        |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 3,000.00                                | 6.00    | 31.67   | 2,996.04              | 72.44                          | 39.63        | 617,972.63                      | 813,869.28     | 32.6957207                   | -103.4474248  | -72.52                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                                | 6.00    | 31.67   | 3,095.50              | 81.33                          | 45.11        | 617,981.52                      | 813,874.76     | 32.6957450                   | -103.4474067  | -81.42                  | 0.00                    | 0.00                   | 0.00                  |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Planned Survey

| Measured Depth (usft)            | INC (°) | AZI (°) | Vertical Depth (usft) | Local Coordinates +N/-S (usft) | +E/-W (usft) | Map Coordinates Northing (usft) | Easting (usft) | Geo Coordinates Latitude (°) | Longitude (°) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|----------------------------------|---------|---------|-----------------------|--------------------------------|--------------|---------------------------------|----------------|------------------------------|---------------|-------------------------|-------------------------|------------------------|-----------------------|
| 3,200.00                         | 6.00    | 31.67   | 3,194.95              | 90.22                          | 50.60        | 617,990.41                      | 813,880.25     | 32.6957693                   | -103.4473886  | -90.32                  | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                         | 6.00    | 31.67   | 3,294.40              | 99.12                          | 56.08        | 617,999.31                      | 813,885.73     | 32.6957936                   | -103.4473705  | -99.22                  | 0.00                    | 0.00                   | 0.00                  |
| 3,368.98                         | 6.00    | 31.67   | 3,363.00              | 105.25                         | 59.87        | 618,005.44                      | 813,889.52     | 32.6958104                   | -103.4473581  | -105.36                 | 0.00                    | 0.00                   | 0.00                  |
| Yates                            |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 3,400.00                         | 6.00    | 31.67   | 3,393.85              | 108.01                         | 61.57        | 618,008.20                      | 813,891.22     | 32.6958180                   | -103.4473525  | -108.13                 | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                         | 6.00    | 31.67   | 3,493.31              | 116.90                         | 67.06        | 618,017.09                      | 813,896.71     | 32.6958423                   | -103.4473344  | -117.03                 | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                         | 6.00    | 31.67   | 3,592.76              | 125.79                         | 72.54        | 618,025.98                      | 813,902.19     | 32.6958666                   | -103.4473163  | -125.93                 | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                         | 6.00    | 31.67   | 3,692.21              | 134.69                         | 78.03        | 618,034.88                      | 813,907.68     | 32.6958909                   | -103.4472983  | -134.83                 | 0.00                    | 0.00                   | 0.00                  |
| 3,800.00                         | 6.00    | 31.67   | 3,791.66              | 143.58                         | 83.51        | 618,043.77                      | 813,913.16     | 32.6959152                   | -103.4472802  | -143.74                 | 0.00                    | 0.00                   | 0.00                  |
| 3,819.44                         | 6.00    | 31.67   | 3,811.00              | 145.31                         | 84.58        | 618,045.50                      | 813,914.23     | 32.6959199                   | -103.4472767  | -145.47                 | 0.00                    | 0.00                   | 0.00                  |
| Seven Rivers                     |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 3,900.00                         | 6.00    | 31.67   | 3,891.12              | 152.47                         | 89.00        | 618,052.66                      | 813,918.65     | 32.6959395                   | -103.4472621  | -152.64                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                         | 6.00    | 31.67   | 3,990.57              | 161.36                         | 94.48        | 618,061.55                      | 813,924.13     | 32.6959638                   | -103.4472441  | -161.54                 | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                         | 6.00    | 31.67   | 4,090.02              | 170.25                         | 99.97        | 618,070.44                      | 813,929.62     | 32.6959881                   | -103.4472260  | -170.45                 | 0.00                    | 0.00                   | 0.00                  |
| 4,200.00                         | 6.00    | 31.67   | 4,189.48              | 179.15                         | 105.45       | 618,079.34                      | 813,935.10     | 32.6960125                   | -103.4472079  | -179.35                 | 0.00                    | 0.00                   | 0.00                  |
| 4,300.00                         | 6.00    | 31.67   | 4,288.93              | 188.04                         | 110.94       | 618,088.23                      | 813,940.59     | 32.6960368                   | -103.4471898  | -188.25                 | 0.00                    | 0.00                   | 0.00                  |
| 4,400.00                         | 6.00    | 31.67   | 4,388.38              | 196.93                         | 116.42       | 618,097.12                      | 813,946.07     | 32.6960611                   | -103.4471718  | -197.15                 | 0.00                    | 0.00                   | 0.00                  |
| 4,500.00                         | 6.00    | 31.67   | 4,487.83              | 205.82                         | 121.91       | 618,106.01                      | 813,951.56     | 32.6960854                   | -103.4471537  | -206.06                 | 0.00                    | 0.00                   | 0.00                  |
| 4,583.62                         | 6.00    | 31.67   | 4,571.00              | 213.26                         | 126.49       | 618,113.45                      | 813,956.14     | 32.6961057                   | -103.4471386  | -213.50                 | 0.00                    | 0.00                   | 0.00                  |
| Queen                            |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 4,600.00                         | 6.00    | 31.67   | 4,587.29              | 214.72                         | 127.39       | 618,114.91                      | 813,957.04     | 32.6961097                   | -103.4471356  | -214.96                 | 0.00                    | 0.00                   | 0.00                  |
| 4,700.00                         | 6.00    | 31.67   | 4,686.74              | 223.61                         | 132.88       | 618,123.80                      | 813,962.53     | 32.6961340                   | -103.4471176  | -223.86                 | 0.00                    | 0.00                   | 0.00                  |
| 4,800.00                         | 6.00    | 31.67   | 4,786.19              | 232.50                         | 138.36       | 618,132.69                      | 813,968.01     | 32.6961583                   | -103.4470995  | -232.76                 | 0.00                    | 0.00                   | 0.00                  |
| 4,900.00                         | 6.00    | 31.67   | 4,885.64              | 241.39                         | 143.85       | 618,141.58                      | 813,973.50     | 32.6961827                   | -103.4470814  | -241.67                 | 0.00                    | 0.00                   | 0.00                  |
| 5,000.00                         | 6.00    | 31.67   | 4,985.10              | 250.28                         | 149.33       | 618,150.47                      | 813,978.98     | 32.6962070                   | -103.4470634  | -250.57                 | 0.00                    | 0.00                   | 0.00                  |
| 5,100.00                         | 6.00    | 31.67   | 5,084.55              | 259.18                         | 154.82       | 618,159.37                      | 813,984.47     | 32.6962313                   | -103.4470453  | -259.47                 | 0.00                    | 0.00                   | 0.00                  |
| 5,200.00                         | 6.00    | 31.67   | 5,184.00              | 268.07                         | 160.30       | 618,168.26                      | 813,989.95     | 32.6962556                   | -103.4470272  | -268.38                 | 0.00                    | 0.00                   | 0.00                  |
| 5,300.00                         | 6.00    | 31.67   | 5,283.46              | 276.96                         | 165.79       | 618,177.15                      | 813,995.44     | 32.6962799                   | -103.4470091  | -277.28                 | 0.00                    | 0.00                   | 0.00                  |
| 5,368.88                         | 6.00    | 31.67   | 5,351.96              | 283.09                         | 169.57       | 618,183.28                      | 813,999.22     | 32.6962967                   | -103.4469967  | -283.41                 | 0.00                    | 0.00                   | 0.00                  |
| Start Drop -1.50                 |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 5,400.00                         | 5.53    | 31.67   | 5,382.92              | 285.75                         | 171.21       | 618,185.94                      | 814,000.86     | 32.6963039                   | -103.4469913  | -286.07                 | 1.50                    | -1.50                  | 0.00                  |
| 5,500.00                         | 4.03    | 31.67   | 5,482.57              | 292.84                         | 175.58       | 618,193.03                      | 814,005.23     | 32.6963233                   | -103.4469769  | -293.17                 | 1.50                    | -1.50                  | 0.00                  |
| 5,600.00                         | 2.53    | 31.67   | 5,582.40              | 297.71                         | 178.59       | 618,197.90                      | 814,008.24     | 32.6963366                   | -103.4469670  | -298.05                 | 1.50                    | -1.50                  | 0.00                  |
| 5,700.00                         | 1.03    | 31.67   | 5,682.35              | 300.35                         | 180.22       | 618,200.54                      | 814,009.87     | 32.6963439                   | -103.4469616  | -300.70                 | 1.50                    | -1.50                  | 0.00                  |
| 5,768.69                         | 0.00    | 172.00  | 5,751.04              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 1.50                    | -1.50                  | 0.00                  |
| Start 3950.00 hold at 5768.69 MD |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 5,800.00                         | 0.00    | 0.00    | 5,782.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| 5,900.00                         | 0.00    | 0.00    | 5,882.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Planned Survey

| Measured<br>Depth<br>(usft) | INC<br>(°) | AZI<br>(°) | Vertical<br>Depth<br>(usft) | Local Coordinates<br>+N/-S<br>(usft) | +E/-W<br>(usft) | Map Coordinates<br>Northing<br>(usft) | Easting<br>(usft) | Geo Coordinates<br>Latitude<br>(°) | Longitude<br>(°) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |
|-----------------------------|------------|------------|-----------------------------|--------------------------------------|-----------------|---------------------------------------|-------------------|------------------------------------|------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 6,000.00                    | 0.00       | 0.00       | 5,982.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,030.65                    | 0.00       | 0.00       | 6,013.00                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| Cherry Canyon               |            |            |                             |                                      |                 |                                       |                   |                                    |                  |                               |                               |                              |                             |
| 6,100.00                    | 0.00       | 0.00       | 6,082.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,200.00                    | 0.00       | 0.00       | 6,182.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,300.00                    | 0.00       | 0.00       | 6,282.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,400.00                    | 0.00       | 0.00       | 6,382.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,500.00                    | 0.00       | 0.00       | 6,482.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,600.00                    | 0.00       | 0.00       | 6,582.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,700.00                    | 0.00       | 0.00       | 6,682.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,800.00                    | 0.00       | 0.00       | 6,782.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 6,900.00                    | 0.00       | 0.00       | 6,882.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,000.00                    | 0.00       | 0.00       | 6,982.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,100.00                    | 0.00       | 0.00       | 7,082.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,200.00                    | 0.00       | 0.00       | 7,182.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,300.00                    | 0.00       | 0.00       | 7,282.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,400.00                    | 0.00       | 0.00       | 7,382.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,487.65                    | 0.00       | 0.00       | 7,470.00                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| Bone Spring Lime            |            |            |                             |                                      |                 |                                       |                   |                                    |                  |                               |                               |                              |                             |
| 7,500.00                    | 0.00       | 0.00       | 7,482.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,600.00                    | 0.00       | 0.00       | 7,582.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,700.00                    | 0.00       | 0.00       | 7,682.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,800.00                    | 0.00       | 0.00       | 7,782.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 7,900.00                    | 0.00       | 0.00       | 7,882.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,000.00                    | 0.00       | 0.00       | 7,982.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,100.00                    | 0.00       | 0.00       | 8,082.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,200.00                    | 0.00       | 0.00       | 8,182.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,300.00                    | 0.00       | 0.00       | 8,282.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,400.00                    | 0.00       | 0.00       | 8,382.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,500.00                    | 0.00       | 0.00       | 8,482.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,600.00                    | 0.00       | 0.00       | 8,582.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,700.00                    | 0.00       | 0.00       | 8,682.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,800.00                    | 0.00       | 0.00       | 8,782.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 8,900.00                    | 0.00       | 0.00       | 8,882.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 9,000.00                    | 0.00       | 0.00       | 8,982.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| 9,056.65                    | 0.00       | 0.00       | 9,039.00                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |
| First Bone Spring Sand      |            |            |                             |                                      |                 |                                       |                   |                                    |                  |                               |                               |                              |                             |
| 9,100.00                    | 0.00       | 0.00       | 9,082.35                    | 300.88                               | 180.54          | 618,201.07                            | 814,010.19        | 32.6963453                         | -103.4469605     | -301.22                       | 0.00                          | 0.00                         | 0.00                        |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Planned Survey

| Measured Depth (usft)                | INC (°) | AZI (°) | Vertical Depth (usft) | Local Coordinates +N/-S (usft) | +E/-W (usft) | Map Coordinates Northing (usft) | Easting (usft) | Geo Coordinates Latitude (°) | Longitude (°) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|--------------------------------------|---------|---------|-----------------------|--------------------------------|--------------|---------------------------------|----------------|------------------------------|---------------|-------------------------|-------------------------|------------------------|-----------------------|
| 9,200.00                             | 0.00    | 0.00    | 9,182.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                             | 0.00    | 0.00    | 9,282.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| 9,322.65                             | 0.00    | 0.00    | 9,305.00              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Second Bone Spring Carbonates</b> |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 9,400.00                             | 0.00    | 0.00    | 9,382.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| 9,486.65                             | 0.00    | 0.00    | 9,469.00              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Second Bone Spring Sand</b>       |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 9,500.00                             | 0.00    | 0.00    | 9,482.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                             | 0.00    | 0.00    | 9,582.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                             | 0.00    | 0.00    | 9,682.35              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| 9,718.69                             | 0.00    | 0.00    | 9,701.04              | 300.88                         | 180.54       | 618,201.07                      | 814,010.19     | 32.6963453                   | -103.4469605  | -301.22                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Start Build 10.00</b>             |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 9,750.00                             | 3.13    | 172.00  | 9,732.33              | 300.03                         | 180.66       | 618,200.22                      | 814,010.31     | 32.6963430                   | -103.4469602  | -300.38                 | 10.00                   | 10.00                  | 0.00                  |
| 9,800.00                             | 8.13    | 172.00  | 9,782.08              | 295.17                         | 181.34       | 618,195.36                      | 814,010.99     | 32.6963296                   | -103.4469581  | -295.52                 | 10.00                   | 10.00                  | 0.00                  |
| 9,850.00                             | 13.13   | 172.00  | 9,831.20              | 286.04                         | 182.63       | 618,186.23                      | 814,012.28     | 32.6963045                   | -103.4469542  | -286.39                 | 10.00                   | 10.00                  | 0.00                  |
| 9,900.00                             | 18.13   | 172.00  | 9,879.34              | 272.71                         | 184.50       | 618,172.90                      | 814,014.15     | 32.6962678                   | -103.4469484  | -273.06                 | 10.00                   | 10.00                  | 0.00                  |
| 9,919.75                             | 20.11   | 172.00  | 9,898.00              | 266.30                         | 185.40       | 618,166.49                      | 814,015.05     | 32.6962502                   | -103.4469457  | -266.66                 | 10.00                   | 10.00                  | 0.00                  |
| <b>Third Bone Spring Carbonates</b>  |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 9,950.00                             | 23.13   | 172.00  | 9,926.12              | 255.27                         | 186.95       | 618,155.46                      | 814,016.60     | 32.6962198                   | -103.4469409  | -255.63                 | 10.00                   | 10.00                  | 0.00                  |
| 10,000.00                            | 28.13   | 172.00  | 9,971.18              | 233.86                         | 189.96       | 618,134.05                      | 814,019.61     | 32.6961609                   | -103.4469317  | -234.22                 | 10.00                   | 10.00                  | 0.00                  |
| 10,005.48                            | 28.68   | 172.00  | 9,976.00              | 231.28                         | 190.32       | 618,131.47                      | 814,019.97     | 32.6961538                   | -103.4469306  | -231.64                 | 10.00                   | 10.00                  | 0.00                  |
| <b>Third Bone Spring Sand</b>        |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 10,050.00                            | 33.13   | 172.00  | 10,014.19             | 208.64                         | 193.51       | 618,108.83                      | 814,023.16     | 32.6960915                   | -103.4469209  | -209.01                 | 10.00                   | 10.00                  | 0.00                  |
| 10,100.00                            | 38.13   | 172.00  | 10,054.82             | 179.80                         | 197.56       | 618,079.99                      | 814,027.21     | 32.6960121                   | -103.4469085  | -180.18                 | 10.00                   | 10.00                  | 0.00                  |
| 10,150.00                            | 43.13   | 172.00  | 10,092.75             | 147.57                         | 202.09       | 618,047.76                      | 814,031.74     | 32.6959235                   | -103.4468947  | -147.96                 | 10.00                   | 10.00                  | 0.00                  |
| 10,200.00                            | 48.13   | 172.00  | 10,127.71             | 112.19                         | 207.06       | 618,012.38                      | 814,036.71     | 32.6958261                   | -103.4468795  | -112.58                 | 10.00                   | 10.00                  | 0.00                  |
| 10,208.00                            | 48.93   | 172.00  | 10,133.00             | 106.25                         | 207.89       | 618,006.44                      | 814,037.54     | 32.6958098                   | -103.4468769  | -106.65                 | 10.00                   | 10.00                  | 0.00                  |
| <b>Wolfcamp</b>                      |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 10,250.00                            | 53.13   | 172.00  | 10,159.41             | 73.92                          | 212.44       | 617,974.11                      | 814,042.09     | 32.6957208                   | -103.4468630  | -74.33                  | 10.00                   | 10.00                  | 0.00                  |
| 10,300.00                            | 58.13   | 172.00  | 10,187.63             | 33.07                          | 218.18       | 617,933.26                      | 814,047.83     | 32.6956084                   | -103.4468455  | -33.48                  | 10.00                   | 10.00                  | 0.00                  |
| 10,350.00                            | 63.13   | 172.00  | 10,212.14             | -10.07                         | 224.24       | 617,890.12                      | 814,053.89     | 32.6954897                   | -103.4468269  | 9.64                    | 10.00                   | 10.00                  | 0.00                  |
| 10,400.00                            | 68.13   | 172.00  | 10,232.77             | -55.16                         | 230.58       | 617,845.03                      | 814,060.23     | 32.6953656                   | -103.4468076  | 54.72                   | 10.00                   | 10.00                  | 0.00                  |
| 10,450.00                            | 73.13   | 172.00  | 10,249.35             | -101.85                        | 237.14       | 617,798.34                      | 814,066.79     | 32.6952371                   | -103.4467875  | 101.40                  | 10.00                   | 10.00                  | 0.00                  |
| 10,500.00                            | 78.13   | 172.00  | 10,261.75             | -149.80                        | 243.88       | 617,750.39                      | 814,073.53     | 32.6951052                   | -103.4467669  | 149.34                  | 10.00                   | 10.00                  | 0.00                  |
| 10,550.00                            | 83.13   | 172.00  | 10,269.89             | -198.64                        | 250.74       | 617,701.55                      | 814,080.39     | 32.6949708                   | -103.4467459  | 198.16                  | 10.00                   | 10.00                  | 0.00                  |
| 10,600.00                            | 88.13   | 172.00  | 10,273.70             | -248.00                        | 257.68       | 617,652.19                      | 814,087.33     | 32.6948350                   | -103.4467247  | 247.50                  | 10.00                   | 10.00                  | 0.00                  |
| 10,618.69                            | 90.00   | 172.00  | 10,274.00             | -266.50                        | 260.28       | 617,633.69                      | 814,089.93     | 32.6947841                   | -103.4467168  | 266.00                  | 10.00                   | 10.00                  | 0.00                  |
| <b>Start Turn 0.00 - HZ Target</b>   |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 10,700.00                            | 90.00   | 173.63  | 10,274.00             | -347.17                        | 270.45       | 617,553.02                      | 814,100.10     | 32.6945622                   | -103.4466859  | 346.65                  | 2.00                    | 0.00                   | 2.00                  |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Planned Survey

| Measured Depth (usft)             | INC (°) | AZI (°) | Vertical Depth (usft) | Local Coordinates +N/-S (usft) | +E/-W (usft) | Map Coordinates Northing (usft) | Easting (usft) | Geo Coordinates Latitude (°) | Longitude (°) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------------------|---------|---------|-----------------------|--------------------------------|--------------|---------------------------------|----------------|------------------------------|---------------|-------------------------|-------------------------|------------------------|-----------------------|
| 10,800.00                         | 90.00   | 175.63  | 10,274.00             | -446.72                        | 279.82       | 617,453.47                      | 814,109.47     | 32.6942883                   | -103.4466582  | 446.19                  | 2.00                    | 0.00                   | 2.00                  |
| 10,900.00                         | 90.00   | 177.63  | 10,274.00             | -546.55                        | 285.70       | 617,353.64                      | 814,115.35     | 32.6940139                   | -103.4466418  | 546.00                  | 2.00                    | 0.00                   | 2.00                  |
| 10,990.19                         | 90.00   | 179.43  | 10,274.00             | -636.71                        | 288.02       | 617,263.48                      | 814,117.67     | 32.6937660                   | -103.4466367  | 636.15                  | 2.00                    | 0.00                   | 2.00                  |
| Start 8000.42 hold at 10990.19 MD |         |         |                       |                                |              |                                 |                |                              |               |                         |                         |                        |                       |
| 11,000.00                         | 90.00   | 179.43  | 10,274.00             | -646.51                        | 288.12       | 617,253.68                      | 814,117.77     | 32.6937391                   | -103.4466366  | 645.96                  | 0.00                    | 0.00                   | 0.00                  |
| 11,100.00                         | 90.00   | 179.43  | 10,274.00             | -746.51                        | 289.11       | 617,153.68                      | 814,118.76     | 32.6934642                   | -103.4466361  | 745.95                  | 0.00                    | 0.00                   | 0.00                  |
| 11,200.00                         | 90.00   | 179.43  | 10,274.00             | -846.50                        | 290.11       | 617,053.69                      | 814,119.76     | 32.6931894                   | -103.4466356  | 845.94                  | 0.00                    | 0.00                   | 0.00                  |
| 11,300.00                         | 90.00   | 179.43  | 10,274.00             | -946.50                        | 291.10       | 616,953.69                      | 814,120.75     | 32.6929145                   | -103.4466351  | 945.94                  | 0.00                    | 0.00                   | 0.00                  |
| 11,400.00                         | 90.00   | 179.43  | 10,274.00             | -1,046.49                      | 292.10       | 616,853.70                      | 814,121.75     | 32.6926397                   | -103.4466346  | 1,045.93                | 0.00                    | 0.00                   | 0.00                  |
| 11,500.00                         | 90.00   | 179.43  | 10,274.00             | -1,146.49                      | 293.09       | 616,753.70                      | 814,122.74     | 32.6923648                   | -103.4466340  | 1,145.92                | 0.00                    | 0.00                   | 0.00                  |
| 11,600.00                         | 90.00   | 179.43  | 10,274.00             | -1,246.48                      | 294.09       | 616,653.71                      | 814,123.74     | 32.6920900                   | -103.4466335  | 1,245.92                | 0.00                    | 0.00                   | 0.00                  |
| 11,700.00                         | 90.00   | 179.43  | 10,274.00             | -1,346.48                      | 295.08       | 616,553.71                      | 814,124.73     | 32.6918151                   | -103.4466330  | 1,345.91                | 0.00                    | 0.00                   | 0.00                  |
| 11,800.00                         | 90.00   | 179.43  | 10,274.00             | -1,446.47                      | 296.08       | 616,453.72                      | 814,125.73     | 32.6915403                   | -103.4466325  | 1,445.90                | 0.00                    | 0.00                   | 0.00                  |
| 11,900.00                         | 90.00   | 179.43  | 10,274.00             | -1,546.47                      | 297.07       | 616,353.72                      | 814,126.72     | 32.6912654                   | -103.4466320  | 1,545.89                | 0.00                    | 0.00                   | 0.00                  |
| 12,000.00                         | 90.00   | 179.43  | 10,274.00             | -1,646.46                      | 298.07       | 616,253.73                      | 814,127.72     | 32.6909906                   | -103.4466315  | 1,645.89                | 0.00                    | 0.00                   | 0.00                  |
| 12,100.00                         | 90.00   | 179.43  | 10,274.00             | -1,746.46                      | 299.06       | 616,153.73                      | 814,128.71     | 32.6907157                   | -103.4466309  | 1,745.88                | 0.00                    | 0.00                   | 0.00                  |
| 12,200.00                         | 90.00   | 179.43  | 10,274.00             | -1,846.45                      | 300.06       | 616,053.74                      | 814,129.71     | 32.6904409                   | -103.4466304  | 1,845.87                | 0.00                    | 0.00                   | 0.00                  |
| 12,300.00                         | 90.00   | 179.43  | 10,274.00             | -1,946.45                      | 301.05       | 615,953.74                      | 814,130.70     | 32.6901660                   | -103.4466299  | 1,945.87                | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00                         | 90.00   | 179.43  | 10,274.00             | -2,046.44                      | 302.05       | 615,853.75                      | 814,131.70     | 32.6898912                   | -103.4466294  | 2,045.86                | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00                         | 90.00   | 179.43  | 10,274.00             | -2,146.44                      | 303.04       | 615,753.75                      | 814,132.69     | 32.6896164                   | -103.4466289  | 2,145.85                | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00                         | 90.00   | 179.43  | 10,274.00             | -2,246.43                      | 304.03       | 615,653.76                      | 814,133.68     | 32.6893415                   | -103.4466284  | 2,245.84                | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00                         | 90.00   | 179.43  | 10,274.00             | -2,346.43                      | 305.03       | 615,553.76                      | 814,134.68     | 32.6890667                   | -103.4466278  | 2,345.84                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00                         | 90.00   | 179.43  | 10,274.00             | -2,446.42                      | 306.02       | 615,453.77                      | 814,135.67     | 32.6887918                   | -103.4466273  | 2,445.83                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00                         | 90.00   | 179.43  | 10,274.00             | -2,546.42                      | 307.02       | 615,353.77                      | 814,136.67     | 32.6885170                   | -103.4466268  | 2,545.82                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00                         | 90.00   | 179.43  | 10,274.00             | -2,646.41                      | 308.01       | 615,253.78                      | 814,137.66     | 32.6882421                   | -103.4466263  | 2,645.82                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00                         | 90.00   | 179.43  | 10,274.00             | -2,746.41                      | 309.01       | 615,153.78                      | 814,138.66     | 32.6879673                   | -103.4466258  | 2,745.81                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00                         | 90.00   | 179.43  | 10,274.00             | -2,846.40                      | 310.00       | 615,053.79                      | 814,139.65     | 32.6876924                   | -103.4466253  | 2,845.80                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00                         | 90.00   | 179.43  | 10,274.00             | -2,946.40                      | 311.00       | 614,953.79                      | 814,140.65     | 32.6874176                   | -103.4466247  | 2,945.80                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00                         | 90.00   | 179.43  | 10,274.00             | -3,046.39                      | 311.99       | 614,853.80                      | 814,141.64     | 32.6871427                   | -103.4466242  | 3,045.79                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00                         | 90.00   | 179.43  | 10,274.00             | -3,146.39                      | 312.99       | 614,753.80                      | 814,142.64     | 32.6868679                   | -103.4466237  | 3,145.78                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00                         | 90.00   | 179.43  | 10,274.00             | -3,246.38                      | 313.98       | 614,653.81                      | 814,143.63     | 32.6865930                   | -103.4466232  | 3,245.77                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00                         | 90.00   | 179.43  | 10,274.00             | -3,346.38                      | 314.98       | 614,553.81                      | 814,144.63     | 32.6863182                   | -103.4466227  | 3,345.77                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00                         | 90.00   | 179.43  | 10,274.00             | -3,446.37                      | 315.97       | 614,453.82                      | 814,145.62     | 32.6860433                   | -103.4466222  | 3,445.76                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00                         | 90.00   | 179.43  | 10,274.00             | -3,546.37                      | 316.97       | 614,353.82                      | 814,146.62     | 32.6857685                   | -103.4466216  | 3,545.75                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00                         | 90.00   | 179.43  | 10,274.00             | -3,646.36                      | 317.96       | 614,253.83                      | 814,147.61     | 32.6854937                   | -103.4466211  | 3,645.75                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00                         | 90.00   | 179.43  | 10,274.00             | -3,746.36                      | 318.96       | 614,153.83                      | 814,148.61     | 32.6852188                   | -103.4466206  | 3,745.74                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00                         | 90.00   | 179.43  | 10,274.00             | -3,846.35                      | 319.95       | 614,053.84                      | 814,149.60     | 32.6849440                   | -103.4466201  | 3,845.73                | 0.00                    | 0.00                   | 0.00                  |
| 14,300.00                         | 90.00   | 179.43  | 10,274.00             | -3,946.35                      | 320.95       | 613,953.84                      | 814,150.60     | 32.6846691                   | -103.4466196  | 3,945.72                | 0.00                    | 0.00                   | 0.00                  |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Planned Survey

| Measured Depth (usft) | INC (°) | AZI (°) | Vertical Depth (usft) | Local Coordinates +N/-S (usft) | +E/-W (usft) | Map Coordinates Northing (usft) | Easting (usft) | Geo Coordinates Latitude (°) | Longitude (°) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|-----------------------|---------|---------|-----------------------|--------------------------------|--------------|---------------------------------|----------------|------------------------------|---------------|-------------------------|-------------------------|------------------------|-----------------------|
| 14,400.00             | 90.00   | 179.43  | 10,274.00             | -4,046.34                      | 321.94       | 613,853.85                      | 814,151.59     | 32.6843943                   | -103.4466191  | 4,045.72                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00             | 90.00   | 179.43  | 10,274.00             | -4,146.34                      | 322.94       | 613,753.85                      | 814,152.59     | 32.6841194                   | -103.4466185  | 4,145.71                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00             | 90.00   | 179.43  | 10,274.00             | -4,246.33                      | 323.93       | 613,653.86                      | 814,153.58     | 32.6838446                   | -103.4466180  | 4,245.70                | 0.00                    | 0.00                   | 0.00                  |
| 14,700.00             | 90.00   | 179.43  | 10,274.00             | -4,346.33                      | 324.93       | 613,553.86                      | 814,154.58     | 32.6835697                   | -103.4466175  | 4,345.70                | 0.00                    | 0.00                   | 0.00                  |
| 14,800.00             | 90.00   | 179.43  | 10,274.00             | -4,446.32                      | 325.92       | 613,453.87                      | 814,155.57     | 32.6832949                   | -103.4466170  | 4,445.69                | 0.00                    | 0.00                   | 0.00                  |
| 14,900.00             | 90.00   | 179.43  | 10,274.00             | -4,546.32                      | 326.92       | 613,353.87                      | 814,156.57     | 32.6830200                   | -103.4466165  | 4,545.68                | 0.00                    | 0.00                   | 0.00                  |
| 15,000.00             | 90.00   | 179.43  | 10,274.00             | -4,646.31                      | 327.91       | 613,253.88                      | 814,157.56     | 32.6827452                   | -103.4466160  | 4,645.68                | 0.00                    | 0.00                   | 0.00                  |
| 15,100.00             | 90.00   | 179.43  | 10,274.00             | -4,746.31                      | 328.91       | 613,153.88                      | 814,158.56     | 32.6824703                   | -103.4466154  | 4,745.67                | 0.00                    | 0.00                   | 0.00                  |
| 15,200.00             | 90.00   | 179.43  | 10,274.00             | -4,846.30                      | 329.90       | 613,053.89                      | 814,159.55     | 32.6821955                   | -103.4466149  | 4,845.66                | 0.00                    | 0.00                   | 0.00                  |
| 15,300.00             | 90.00   | 179.43  | 10,274.00             | -4,946.30                      | 330.89       | 612,953.89                      | 814,160.54     | 32.6819206                   | -103.4466144  | 4,945.65                | 0.00                    | 0.00                   | 0.00                  |
| 15,400.00             | 90.00   | 179.43  | 10,274.00             | -5,046.29                      | 331.89       | 612,853.90                      | 814,161.54     | 32.6816458                   | -103.4466139  | 5,045.65                | 0.00                    | 0.00                   | 0.00                  |
| 15,500.00             | 90.00   | 179.43  | 10,274.00             | -5,146.29                      | 332.88       | 612,753.90                      | 814,162.53     | 32.6813710                   | -103.4466134  | 5,145.64                | 0.00                    | 0.00                   | 0.00                  |
| 15,600.00             | 90.00   | 179.43  | 10,274.00             | -5,246.28                      | 333.88       | 612,653.91                      | 814,163.53     | 32.6810961                   | -103.4466129  | 5,245.63                | 0.00                    | 0.00                   | 0.00                  |
| 15,700.00             | 90.00   | 179.43  | 10,274.00             | -5,346.28                      | 334.87       | 612,553.91                      | 814,164.52     | 32.6808213                   | -103.4466123  | 5,345.63                | 0.00                    | 0.00                   | 0.00                  |
| 15,800.00             | 90.00   | 179.43  | 10,274.00             | -5,446.27                      | 335.87       | 612,453.92                      | 814,165.52     | 32.6805464                   | -103.4466118  | 5,445.62                | 0.00                    | 0.00                   | 0.00                  |
| 15,900.00             | 90.00   | 179.43  | 10,274.00             | -5,546.27                      | 336.86       | 612,353.92                      | 814,166.51     | 32.6802716                   | -103.4466113  | 5,545.61                | 0.00                    | 0.00                   | 0.00                  |
| 16,000.00             | 90.00   | 179.43  | 10,274.00             | -5,646.26                      | 337.86       | 612,253.93                      | 814,167.51     | 32.6799967                   | -103.4466108  | 5,645.61                | 0.00                    | 0.00                   | 0.00                  |
| 16,100.00             | 90.00   | 179.43  | 10,274.00             | -5,746.26                      | 338.85       | 612,153.93                      | 814,168.50     | 32.6797219                   | -103.4466103  | 5,745.60                | 0.00                    | 0.00                   | 0.00                  |
| 16,200.00             | 90.00   | 179.43  | 10,274.00             | -5,846.25                      | 339.85       | 612,053.94                      | 814,169.50     | 32.6794470                   | -103.4466098  | 5,845.59                | 0.00                    | 0.00                   | 0.00                  |
| 16,300.00             | 90.00   | 179.43  | 10,274.00             | -5,946.25                      | 340.84       | 611,953.94                      | 814,170.49     | 32.6791722                   | -103.4466092  | 5,945.58                | 0.00                    | 0.00                   | 0.00                  |
| 16,400.00             | 90.00   | 179.43  | 10,274.00             | -6,046.24                      | 341.84       | 611,853.95                      | 814,171.49     | 32.6788973                   | -103.4466087  | 6,045.58                | 0.00                    | 0.00                   | 0.00                  |
| 16,500.00             | 90.00   | 179.43  | 10,274.00             | -6,146.24                      | 342.83       | 611,753.95                      | 814,172.48     | 32.6786225                   | -103.4466082  | 6,145.57                | 0.00                    | 0.00                   | 0.00                  |
| 16,600.00             | 90.00   | 179.43  | 10,274.00             | -6,246.23                      | 343.83       | 611,653.96                      | 814,173.48     | 32.6783476                   | -103.4466077  | 6,245.56                | 0.00                    | 0.00                   | 0.00                  |
| 16,700.00             | 90.00   | 179.43  | 10,274.00             | -6,346.23                      | 344.82       | 611,553.96                      | 814,174.47     | 32.6780728                   | -103.4466072  | 6,345.56                | 0.00                    | 0.00                   | 0.00                  |
| 16,800.00             | 90.00   | 179.43  | 10,274.00             | -6,446.22                      | 345.82       | 611,453.97                      | 814,175.47     | 32.6777979                   | -103.4466066  | 6,445.55                | 0.00                    | 0.00                   | 0.00                  |
| 16,900.00             | 90.00   | 179.43  | 10,274.00             | -6,546.22                      | 346.81       | 611,353.97                      | 814,176.46     | 32.6775231                   | -103.4466061  | 6,545.54                | 0.00                    | 0.00                   | 0.00                  |
| 17,000.00             | 90.00   | 179.43  | 10,274.00             | -6,646.21                      | 347.81       | 611,253.98                      | 814,177.46     | 32.6772482                   | -103.4466056  | 6,645.53                | 0.00                    | 0.00                   | 0.00                  |
| 17,100.00             | 90.00   | 179.43  | 10,274.00             | -6,746.21                      | 348.80       | 611,153.98                      | 814,178.45     | 32.6769734                   | -103.4466051  | 6,745.53                | 0.00                    | 0.00                   | 0.00                  |
| 17,200.00             | 90.00   | 179.43  | 10,274.00             | -6,846.20                      | 349.80       | 611,053.99                      | 814,179.45     | 32.6766986                   | -103.4466046  | 6,845.52                | 0.00                    | 0.00                   | 0.00                  |
| 17,300.00             | 90.00   | 179.43  | 10,274.00             | -6,946.20                      | 350.79       | 610,953.99                      | 814,180.44     | 32.6764237                   | -103.4466041  | 6,945.51                | 0.00                    | 0.00                   | 0.00                  |
| 17,400.00             | 90.00   | 179.43  | 10,274.00             | -7,046.20                      | 351.79       | 610,854.00                      | 814,181.44     | 32.6761489                   | -103.4466035  | 7,045.51                | 0.00                    | 0.00                   | 0.00                  |
| 17,500.00             | 90.00   | 179.43  | 10,274.00             | -7,146.19                      | 352.78       | 610,754.00                      | 814,182.43     | 32.6758740                   | -103.4466030  | 7,145.50                | 0.00                    | 0.00                   | 0.00                  |
| 17,600.00             | 90.00   | 179.43  | 10,274.00             | -7,246.19                      | 353.78       | 610,654.01                      | 814,183.43     | 32.6755992                   | -103.4466025  | 7,245.49                | 0.00                    | 0.00                   | 0.00                  |
| 17,700.00             | 90.00   | 179.43  | 10,274.00             | -7,346.18                      | 354.77       | 610,554.01                      | 814,184.42     | 32.6753243                   | -103.4466020  | 7,345.49                | 0.00                    | 0.00                   | 0.00                  |
| 17,800.00             | 90.00   | 179.43  | 10,274.00             | -7,446.18                      | 355.77       | 610,454.01                      | 814,185.42     | 32.6750495                   | -103.4466015  | 7,445.48                | 0.00                    | 0.00                   | 0.00                  |
| 17,900.00             | 90.00   | 179.43  | 10,274.00             | -7,546.17                      | 356.76       | 610,354.02                      | 814,186.41     | 32.6747746                   | -103.4466010  | 7,545.47                | 0.00                    | 0.00                   | 0.00                  |
| 18,000.00             | 90.00   | 179.43  | 10,274.00             | -7,646.17                      | 357.76       | 610,254.02                      | 814,187.41     | 32.6744998                   | -103.4466004  | 7,645.46                | 0.00                    | 0.00                   | 0.00                  |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Planned Survey

| Measured<br>Depth<br>(usft) | INC<br>(°) | AZI<br>(°) | Vertical<br>Depth<br>(usft) | Local Coordinates<br>+N/-S<br>(usft) | +E/-W<br>(usft) | Map Coordinates<br>Northing<br>(usft) | Easting<br>(usft) | Geo Coordinates<br>Latitude<br>(°) | Longitude<br>(°) | Vertical<br>Section<br>(usft) | Dogleg<br>Rate<br>(°/100usft) | Build<br>Rate<br>(°/100usft) | Turn<br>Rate<br>(°/100usft) |
|-----------------------------|------------|------------|-----------------------------|--------------------------------------|-----------------|---------------------------------------|-------------------|------------------------------------|------------------|-------------------------------|-------------------------------|------------------------------|-----------------------------|
| 18,100.00                   | 90.00      | 179.43     | 10,274.00                   | -7,746.16                            | 358.75          | 610,154.03                            | 814,188.40        | 32.6742249                         | -103.4465999     | 7,745.46                      | 0.00                          | 0.00                         | 0.00                        |
| 18,200.00                   | 90.00      | 179.43     | 10,274.00                   | -7,846.16                            | 359.74          | 610,054.03                            | 814,189.39        | 32.6739501                         | -103.4465994     | 7,845.45                      | 0.00                          | 0.00                         | 0.00                        |
| 18,300.00                   | 90.00      | 179.43     | 10,274.00                   | -7,946.15                            | 360.74          | 609,954.04                            | 814,190.39        | 32.6736752                         | -103.4465989     | 7,945.44                      | 0.00                          | 0.00                         | 0.00                        |
| 18,400.00                   | 90.00      | 179.43     | 10,274.00                   | -8,046.15                            | 361.73          | 609,854.04                            | 814,191.38        | 32.6734004                         | -103.4465984     | 8,045.44                      | 0.00                          | 0.00                         | 0.00                        |
| 18,500.00                   | 90.00      | 179.43     | 10,274.00                   | -8,146.14                            | 362.73          | 609,754.05                            | 814,192.38        | 32.6731255                         | -103.4465978     | 8,145.43                      | 0.00                          | 0.00                         | 0.00                        |
| 18,600.00                   | 90.00      | 179.43     | 10,274.00                   | -8,246.14                            | 363.72          | 609,654.05                            | 814,193.37        | 32.6728507                         | -103.4465973     | 8,245.42                      | 0.00                          | 0.00                         | 0.00                        |
| 18,700.00                   | 90.00      | 179.43     | 10,274.00                   | -8,346.13                            | 364.72          | 609,554.06                            | 814,194.37        | 32.6725758                         | -103.4465968     | 8,345.42                      | 0.00                          | 0.00                         | 0.00                        |
| 18,800.00                   | 90.00      | 179.43     | 10,274.00                   | -8,446.13                            | 365.71          | 609,454.06                            | 814,195.36        | 32.6723010                         | -103.4465963     | 8,445.41                      | 0.00                          | 0.00                         | 0.00                        |
| 18,900.00                   | 90.00      | 179.43     | 10,274.00                   | -8,546.12                            | 366.71          | 609,354.07                            | 814,196.36        | 32.6720261                         | -103.4465958     | 8,545.40                      | 0.00                          | 0.00                         | 0.00                        |
| 18,990.61                   | 90.00      | 179.43     | 10,274.00                   | -8,636.73                            | 367.61          | 609,263.46                            | 814,197.26        | 32.6717771                         | -103.4465953     | 8,636.01                      | 0.00                          | 0.00                         | 0.00                        |
| TD at 18990.61              |            |            |                             |                                      |                 |                                       |                   |                                    |                  |                               |                               |                              |                             |

## Design Targets

## Target Name

| - hit/miss target<br>- Shape                                                                                                | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(usft) | +N/-S<br>(usft) | +E/-W<br>(usft) | Northing<br>(usft) | Easting<br>(usft) | Latitude   | Longitude    |
|-----------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|---------------|-----------------|-----------------|--------------------|-------------------|------------|--------------|
| KOP (ESC 702H)<br>- plan misses target center by 287.28usft at 9718.69usft MD (9701.04 TVD, 300.88 N, 180.54 E)<br>- Point  | 0.00             | 359.52          | 9,701.04      | 299.39          | -106.74         | 618,199.58         | 813,722.91        | 32.6963478 | -103.4478943 |
| FTP (ESC 702H)<br>- plan misses target center by 315.42usft at 10219.57usft MD (10140.52 TVD, 97.53 N, 209.12 E)<br>- Point | 0.00             | 0.00            | 10,160.02     | 69.39           | -104.43         | 617,969.59         | 813,725.21        | 32.6957156 | -103.4478931 |
| New PBHL (ESC 702H)<br>- plan hits target center<br>- Point                                                                 | 0.00             | 359.52          | 10,274.00     | -8,636.73       | 367.61          | 609,263.46         | 814,197.26        | 32.6717771 | -103.4465953 |



## Total Directional Services, LLC

## Survey Report



|                  |                          |                                     |                                 |
|------------------|--------------------------|-------------------------------------|---------------------------------|
| <b>Company:</b>  | Franklin Mountain Energy | <b>Local Co-ordinate Reference:</b> | Well Eagle State Com 702H       |
| <b>Project:</b>  | Lea County, NM (NAD83)   | <b>TVD Reference:</b>               | 3855' GL + 30' KB @ 3885.00usft |
| <b>Site:</b>     | Sec 03-T19S-R35E         | <b>MD Reference:</b>                | 3855' GL + 30' KB @ 3885.00usft |
| <b>Well:</b>     | Eagle State Com 702H     | <b>North Reference:</b>             | Grid                            |
| <b>Wellbore:</b> | OH                       | <b>Survey Calculation Method:</b>   | Minimum Curvature               |
| <b>Design:</b>   | Plan #3                  | <b>Database:</b>                    | EDM 5000.1 Single User Db       |

## Formations

| Measured Depth (usft) | Vertical Depth (usft) | Name                          | Lithology | Dip (°) | Dip Direction (°) |
|-----------------------|-----------------------|-------------------------------|-----------|---------|-------------------|
| 30.00                 | 30.00                 | Cenozoic Alluvium (surface)   |           |         |                   |
| 1,809.00              | 1,809.00              | Rustler                       |           |         |                   |
| 2,044.00              | 2,044.00              | Salado                        |           |         |                   |
| 2,966.78              | 2,963.00              | Base Salt                     |           |         |                   |
| 3,368.98              | 3,363.00              | Yates                         |           |         |                   |
| 3,819.44              | 3,811.00              | Seven Rivers                  |           |         |                   |
| 4,583.62              | 4,571.00              | Queen                         |           |         |                   |
| 6,030.65              | 6,013.00              | Cherry Canyon                 |           |         |                   |
| 7,487.65              | 7,470.00              | Bone Spring Lime              |           |         |                   |
| 9,056.65              | 9,039.00              | First Bone Spring Sand        |           |         |                   |
| 9,322.65              | 9,305.00              | Second Bone Spring Carbonates |           |         |                   |
| 9,486.65              | 9,469.00              | Second Bone Spring Sand       |           |         |                   |
| 9,919.75              | 9,898.00              | Third Bone Spring Carbonates  |           |         |                   |
| 10,005.48             | 9,976.00              | Third Bone Spring Sand        |           |         |                   |
| 10,208.00             | 10,133.00             | Wolfcamp                      |           |         |                   |
| 10,618.69             | 10,274.00             | HZ Target                     |           |         |                   |

## Plan Annotations

| Measured Depth (usft) | Vertical Depth (usft) | Local Coordinates |              | Comment                           |
|-----------------------|-----------------------|-------------------|--------------|-----------------------------------|
|                       |                       | +N/-S (usft)      | +E/-W (usft) |                                   |
| 2000                  | 2000                  | 0                 | 0            | Start Build 1.50                  |
| 2267                  | 2266                  | 9                 | 2            | Start DLS 1.50 TFO 44.52          |
| 2430                  | 2429                  | 22                | 8            | Start 2938.92 hold at 2429.96 MD  |
| 5369                  | 5352                  | 283               | 170          | Start Drop -1.50                  |
| 5769                  | 5751                  | 301               | 181          | Start 3950.00 hold at 5768.69 MD  |
| 9719                  | 9701                  | 301               | 181          | Start Build 10.00                 |
| 10,619                | 10,274                | -267              | 260          | Start Turn 0.00                   |
| 10,990                | 10,274                | -637              | 288          | Start 8000.42 hold at 10990.19 MD |
| 18,991                | 10,274                | -8637             | 368          | TD at 18990.61                    |

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

**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

CONDITIONS  
  
Action 211848

CONDITIONS

|                                                                                        |                                                          |
|----------------------------------------------------------------------------------------|----------------------------------------------------------|
| Operator:<br><br>Franklin Mountain Energy 3, LLC<br>44 Cook Street<br>Denver, CO 80206 | OGRID:<br><br>331595                                     |
|                                                                                        | Action Number:<br><br>211848                             |
|                                                                                        | Action Type:<br><br>[C-103] NOI Change of Plans (C-103A) |

CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| pkautz     | None      | 5/1/2023       |