

|                            |                                                                      |                                        |
|----------------------------|----------------------------------------------------------------------|----------------------------------------|
| Well Name: MASTER FED COM  | Well Location: T24S / R35E / SEC 14 / NWNE / 32.224074 / -103.334285 | County or Parish/State: LEA / NM       |
| Well Number: 603H          | Type of Well: OIL WELL                                               | Allottee or Tribe Name:                |
| Lease Number: NMNM138888   | Unit or CA Name:                                                     | Unit or CA Number:                     |
| US Well Number: 3002548595 | Well Status: Drilling Well                                           | Operator: FRANKLIN MOUNTAIN ENERGY LLC |

Notice of Intent

Sundry ID: 2745888

|                                                |                              |
|------------------------------------------------|------------------------------|
| Type of Submission: Notice of Intent           | Type of Action: APD Change   |
| Date Sundry Submitted: 08/12/2023              | Time Sundry Submitted: 10:56 |
| Date proposed operation will begin: 08/01/2023 |                              |

**Procedure Description:** Franklin Mountain Energy, LLC (FME), Operator, respectfully requests approval to make the following changes to the proposed drilling plan for the above referenced well. BHL Change: FME requests approval to change the BHL for this well to 150' FSL 1689' FEL Sec 23 24S 35E. SHL remains the same. Please see attached Directional Plan, revised 14-point plan, geo prog and C-102.

NOI Attachments

Procedure Description

- Master\_Fed\_Com\_603H\_Updated\_14PP\_13\_20230812105605.pdf
- Master\_Fed\_Com\_603H\_Plan\_3\_20230812105605.pdf
- C\_102\_Master\_Fed\_Com\_603H\_2023\_Extend\_20230812105552.pdf
- Master\_Fed\_Com\_603H\_GEOPROG\_prelim\_V2\_20230812105552.pdf

Received by OCD: 8/18/2023 6:40:03 PM

Page 2 of 22

|                            |                                                                      |                                        |
|----------------------------|----------------------------------------------------------------------|----------------------------------------|
| Well Name: MASTER FED COM  | Well Location: T24S / R35E / SEC 14 / NWNE / 32.224074 / -103.334285 | County or Parish/State: LEA / NM       |
| Well Number: 603H          | Type of Well: OIL WELL                                               | Allottee or Tribe Name:                |
| Lease Number: NMNM138888   | Unit or CA Name:                                                     | Unit or CA Number:                     |
| US Well Number: 3002548595 | Well Status: Drilling Well                                           | Operator: FRANKLIN MOUNTAIN ENERGY LLC |

Conditions of Approval

Additional

Master\_Fed\_Com\_603H\_Dr\_COA\_20230818134516.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

|                                                      |                                  |
|------------------------------------------------------|----------------------------------|
| Operator Electronic Signature: RACHAEL OVERBEY       | Signed on: AUG 12, 2023 10:56 AM |
| Name: FRANKLIN MOUNTAIN ENERGY LLC                   |                                  |
| Title: Director – Operations Planning and Regulatory |                                  |
| Street Address: 44 COOK STREET, SUITE 1000           |                                  |
| City: Denver                                         | State: CO                        |
| Phone: (720) 414-7868                                |                                  |
| Email address: roverbey@fmellc.com                   |                                  |

Field

|                      |        |      |
|----------------------|--------|------|
| Representative Name: |        |      |
| Street Address:      |        |      |
| City:                | State: | Zip: |
| Phone:               |        |      |
| Email address:       |        |      |

BLM Point of Contact

|                                 |                                       |
|---------------------------------|---------------------------------------|
| BLM POC Name: CHRISTOPHER WALLS | BLM POC Title: Petroleum Engineer     |
| BLM POC Phone: 5752342234       | BLM POC Email Address: cwalls@blm.gov |
| Disposition: Approved           | Disposition Date: 08/18/2023          |
| Signature: CHRISTOPHER R WALL   |                                       |

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                                         |  |                                                            |  |                                                                |                                   |
|-----------------------------------------|--|------------------------------------------------------------|--|----------------------------------------------------------------|-----------------------------------|
| <sup>1</sup> API Number<br>30-025-48595 |  | <sup>2</sup> Pool Code<br>98185                            |  | <sup>3</sup> Pool Name<br>C-025 G-09 S253502B; LWR BONE SPRING |                                   |
| <sup>4</sup> Property Code<br>330334    |  | <sup>5</sup> Property Name<br>MASTER FED COM               |  |                                                                | <sup>6</sup> Well Number<br>603H  |
| <sup>7</sup> OGRID No.<br>373910        |  | <sup>8</sup> Operator Name<br>FRANKLIN MOUNTAIN ENERGY LLC |  |                                                                | <sup>9</sup> Elevation<br>3427.2' |

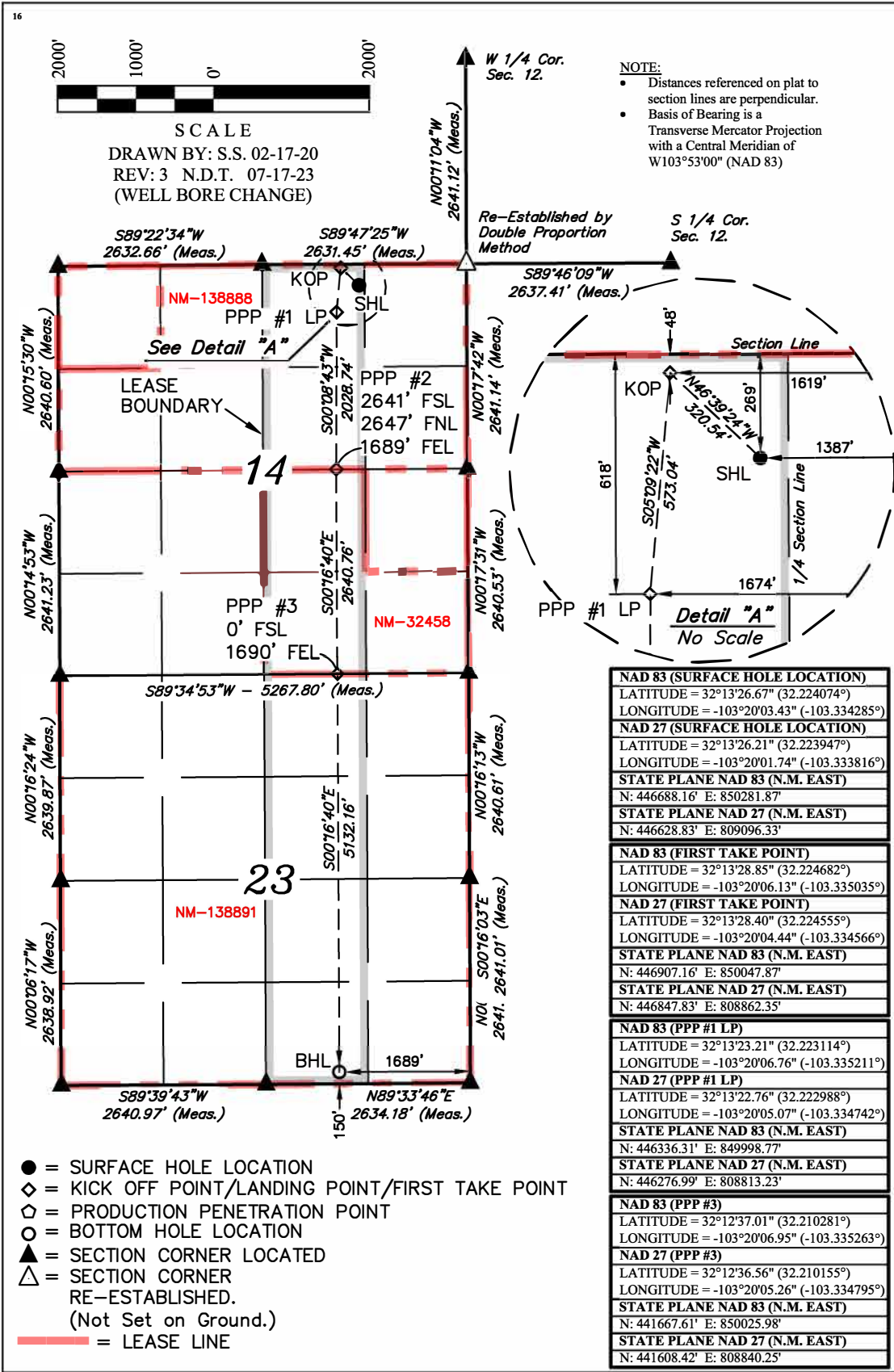
<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| B             | 14      | 24S      | 35E   |         | 269           | NORTH            | 1387          | EAST           | LEA    |

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

| UL or lot no.                        | Section | Township                      | Range | Lot Idn                          | Feet from the | North/South line        | Feet from the | East/West line | County |
|--------------------------------------|---------|-------------------------------|-------|----------------------------------|---------------|-------------------------|---------------|----------------|--------|
| O                                    | 23      | 24S                           | 35E   |                                  | 150           | SOUTH                   | 1689          | EAST           | LEA    |
| <sup>12</sup> Dedicated Acres<br>320 |         | <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: 7/20/2023

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:



Certificate Number:

|                                                                                                                            |
|----------------------------------------------------------------------------------------------------------------------------|
| <b>NAD 83 (SURFACE HOLE LOCATION)</b><br>LATITUDE = 32°13'26.67" (32.224074°)<br>LONGITUDE = -103°20'03.43" (-103.334285°) |
| <b>NAD 27 (SURFACE HOLE LOCATION)</b><br>LATITUDE = 32°13'26.21" (32.223947°)<br>LONGITUDE = -103°20'01.74" (-103.333816°) |
| <b>STATE PLANE NAD 83 (N.M. EAST)</b><br>N: 446688.16' E: 850281.87'                                                       |
| <b>STATE PLANE NAD 27 (N.M. EAST)</b><br>N: 446628.83' E: 809096.33'                                                       |
| <b>NAD 83 (FIRST TAKE POINT)</b><br>LATITUDE = 32°13'28.85" (32.224682°)<br>LONGITUDE = -103°20'06.13" (-103.335035°)      |
| <b>NAD 27 (FIRST TAKE POINT)</b><br>LATITUDE = 32°13'28.40" (32.224555°)<br>LONGITUDE = -103°20'04.44" (-103.334566°)      |
| <b>STATE PLANE NAD 83 (N.M. EAST)</b><br>N: 446907.16' E: 850047.87'                                                       |
| <b>STATE PLANE NAD 27 (N.M. EAST)</b><br>N: 446847.83' E: 808862.35'                                                       |
| <b>NAD 83 (PPP #1 LP)</b><br>LATITUDE = 32°13'23.21" (32.223114°)<br>LONGITUDE = -103°20'06.76" (-103.335211°)             |
| <b>NAD 27 (PPP #1 LP)</b><br>LATITUDE = 32°13'22.76" (32.222988°)<br>LONGITUDE = -103°20'05.07" (-103.334742°)             |
| <b>STATE PLANE NAD 83 (N.M. EAST)</b><br>N: 446336.31' E: 849998.77'                                                       |
| <b>STATE PLANE NAD 27 (N.M. EAST)</b><br>N: 446276.99' E: 808813.23'                                                       |
| <b>NAD 83 (PPP #3)</b><br>LATITUDE = 32°12'37.01" (32.210281°)<br>LONGITUDE = -103°20'06.95" (-103.335263°)                |
| <b>NAD 27 (PPP #3)</b><br>LATITUDE = 32°12'36.56" (32.210155°)<br>LONGITUDE = -103°20'05.26" (-103.334795°)                |
| <b>STATE PLANE NAD 83 (N.M. EAST)</b><br>N: 441667.61' E: 850025.98'                                                       |
| <b>STATE PLANE NAD 27 (N.M. EAST)</b><br>N: 441608.42' E: 808840.25'                                                       |
| <b>NAD 83 (PPP #2)</b><br>LATITUDE = 32°13'03.14" (32.217539°)<br>LONGITUDE = -103°20'06.94" (-103.335261°)                |
| <b>NAD 27 (PPP #2)</b><br>LATITUDE = 32°13'02.68" (32.217412°)<br>LONGITUDE = -103°20'05.25" (-103.334793°)                |
| <b>STATE PLANE NAD 83 (N.M. EAST)</b><br>N: 444307.87' E: 850002.12'                                                       |
| <b>STATE PLANE NAD 27 (N.M. EAST)</b><br>N: 444248.61' E: 808816.50'                                                       |
| <b>NAD 83 (BOTTOM HOLE LOCATION)</b><br>LATITUDE = 32°11'46.24" (32.196177°)<br>LONGITUDE = -103°20'06.96" (-103.335267°)  |
| <b>NAD 27 (BOTTOM HOLE LOCATION)</b><br>LATITUDE = 32°11'45.78" (32.196051°)<br>LONGITUDE = -103°20'05.28" (-103.334800°)  |
| <b>STATE PLANE NAD 83 (N.M. EAST)</b><br>N: 436536.41' E: 850072.34'                                                       |
| <b>STATE PLANE NAD 27 (N.M. EAST)</b><br>N: 436477.36' E: 808886.41'                                                       |

## Geologic Prognosis



|                     |                                   |
|---------------------|-----------------------------------|
| <b>Well Name</b>    | <b>Master Fed Com 603H</b>        |
| <b>Operator</b>     | Franklin Mountain Energy, LLC     |
| <b>Project Area</b> | Mirror Unit                       |
| <b>Well Type</b>    | 10,000' Third Bone Spring Lateral |
| <b>API</b>          | 30025485950000                    |
| <b>Rig</b>          |                                   |

|                              |                 |               |                |     |           |        |      |     |  |
|------------------------------|-----------------|---------------|----------------|-----|-----------|--------|------|-----|--|
| <b>State</b>                 | NM              | <b>County</b> | Lea            |     |           |        |      |     |  |
| <b>SHL</b>                   | <b>Township</b> | 24S/35E       | <b>Section</b> | 14  | 1,387'    | FEL    | 269' | FNL |  |
| <b>BHL</b>                   | <b>Township</b> | 24S/35E       | <b>Section</b> | 23  | 1,689'    | FEL    | 150' | FSL |  |
| <b>Surface Latitude</b>      | <b>NAD 83</b>   |               | 32.224074      |     |           |        |      |     |  |
| <b>Surface Longitude</b>     | <b>NAD 83</b>   |               | 103.334285     |     |           |        |      |     |  |
| <b>Bottom Hole Latitude</b>  | <b>NAD 83</b>   |               | 32.196177      |     |           |        |      |     |  |
| <b>Bottom Hole Longitude</b> | <b>NAD 83</b>   |               | 103.335267     |     |           |        |      |     |  |
| <b>Ground Level</b>          | 3,425'          |               | <b>Rig KB</b>  | 30' | <b>KB</b> | 3,455' |      |     |  |

| Formations                    | PROG SS | PROG TVD | Picked TVD | delta | Potential/Issues                 |
|-------------------------------|---------|----------|------------|-------|----------------------------------|
| Cenozoic Alluvium (surface)   | 3,425'  | 30'      | 30'        | 0     | Sand/Gravels/unconsolidated      |
| Rustler                       | 1,998'  | 1,457'   |            |       | Carbonates                       |
| Salado                        | 1,578'  | 1,877'   |            |       | Salt, Carbonate & Clastics       |
| Base Salt                     | -304'   | 3,759'   |            |       | Shaley Carbonate & Shale         |
| Lamar                         | -1,939' | 5,394'   |            |       | Carbonate & Clastics             |
| Bell Canyon                   | -2,043' | 5,498'   |            |       | Sandstone - oil/gas/water        |
| Cherry Canyon                 | -2,674' | 6,129'   |            |       | Sandstone - oil/gas/water        |
| Brushy Canyon                 | -4,033' | 7,488'   |            |       | Sand/carb/shales - oil/gas/water |
| Bone Spring Lime              | -5,377' | 8,832'   |            |       | Shale/Carbonates - oil/gas       |
| Avalon                        | -5,433' | 8,888'   |            |       | Shale/Carbonates - oil/gas       |
| Chert Zone                    | -5,575' | 9,030'   |            |       | Carbonate/chert                  |
| First Bone Spring Sand        | -6,465' | 9,919'   |            |       | Sandstone - oil/gas/water        |
| Second Bone Spring Carbonates | -6,560' | 10,015'  |            |       | Shale/Carbonates - oil/gas       |
| Second Bone Spring Sand       | -7,055' | 10,509'  |            |       | Sandstone - oil/gas/water        |
| Third Bone Spring Carbonates  | -7,640' | 11,095'  |            |       | Shale/Carbonates - oil/gas       |
| Third Bone Spring Sand        | -8,093' | 11,548'  |            |       | Sandstone - oil/gas/water        |
| HZ Target at SHL              | -8,185' | 11,640'  |            |       | Overpressure shale/sand- Oil/Gas |
| Wolfcamp                      | -8,459' | 11,914'  |            |       | Overpressure shale/sand- Oil/Gas |
| Wolfcamp A                    | -8,516' | 11,971'  |            |       | Overpressure Shale - Oil/Gas     |
| Wolfcamp B                    | -8,642' | 12,096'  |            |       | Overpressure Shale - Oil/Gas     |
|                               |         |          |            |       |                                  |
|                               |         |          |            |       |                                  |

Target interval is expected to have an average apparent dip of ~0.7 degrees down along the lateral based on the Wolfcamp A structure

Target window tolerance is set at +/- 10'

Target Line: 11,640' KBTVD @ 0' VS w/ 90.0° inc.

Offset Log: Elevate 702H\_PH (30025485900000)

Updated: 6/26/2023

|                                              |                                                                      |              |  |                                                            |              |
|----------------------------------------------|----------------------------------------------------------------------|--------------|--|------------------------------------------------------------|--------------|
| <b>FME Geologist</b>                         |                                                                      | Ellen Wilcox |  | <a href="mailto:ewilcox@fmellc.com">ewilcox@fmellc.com</a> |              |
|                                              |                                                                      | Office       |  | Cell                                                       | 585.880.1737 |
| <b>FME Engineer</b>                          |                                                                      |              |  |                                                            |              |
|                                              |                                                                      |              |  |                                                            |              |
| <b>Electric Logs</b>                         |                                                                      |              |  |                                                            |              |
|                                              |                                                                      |              |  | <b>From</b>                                                | <b>To</b>    |
| Open-Hole                                    |                                                                      |              |  |                                                            |              |
|                                              | n/a                                                                  |              |  |                                                            |              |
|                                              |                                                                      |              |  |                                                            |              |
| MWD/LWD                                      |                                                                      |              |  |                                                            |              |
|                                              | MWD GR                                                               |              |  | Int. 1 Csg. Point                                          | TD           |
|                                              |                                                                      |              |  |                                                            |              |
| <b>Mud Log:</b>                              |                                                                      |              |  |                                                            |              |
| t 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 Kessel (bkessel@fmellc.com)                                      |              |  | email                                                      |              |
|                                              |                                                                      |              |  |                                                            |              |
| <b>Cuttings/Samples Shipment Information</b> |                                                                      |              |  |                                                            |              |
|                                              |                                                                      |              |  |                                                            |              |
|                                              |                                                                      |              |  |                                                            |              |
|                                              |                                                                      |              |  |                                                            |              |

# Franklin Mountain Energy

Lea Co., NM (NAD-83)  
Mirror MH Pad 1 & 2  
Master Fed Com 603H

OH

Plan 3

## Standard Planning Report

03 July, 2023





Project: Lea Co., NM (NAD-83)  
 Site: Mirror MH Pad 1 & 2  
 Well: Master Fed Com 603H  
 Wellbore: OH  
 Design: Plan 3  
 Lat: 32.224074  
 Long: -103.334285  
 GL: 3427.20  
 KB: 30' KB @ 3457.20usft



## WELL DETAILS: Master Fed Com 603H

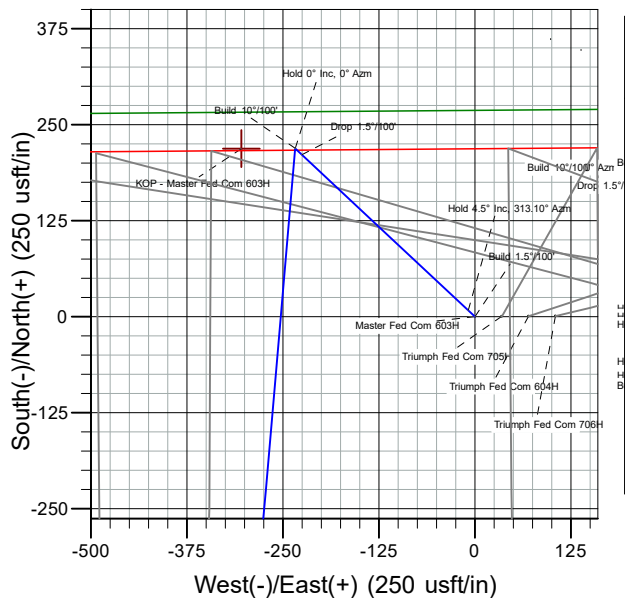
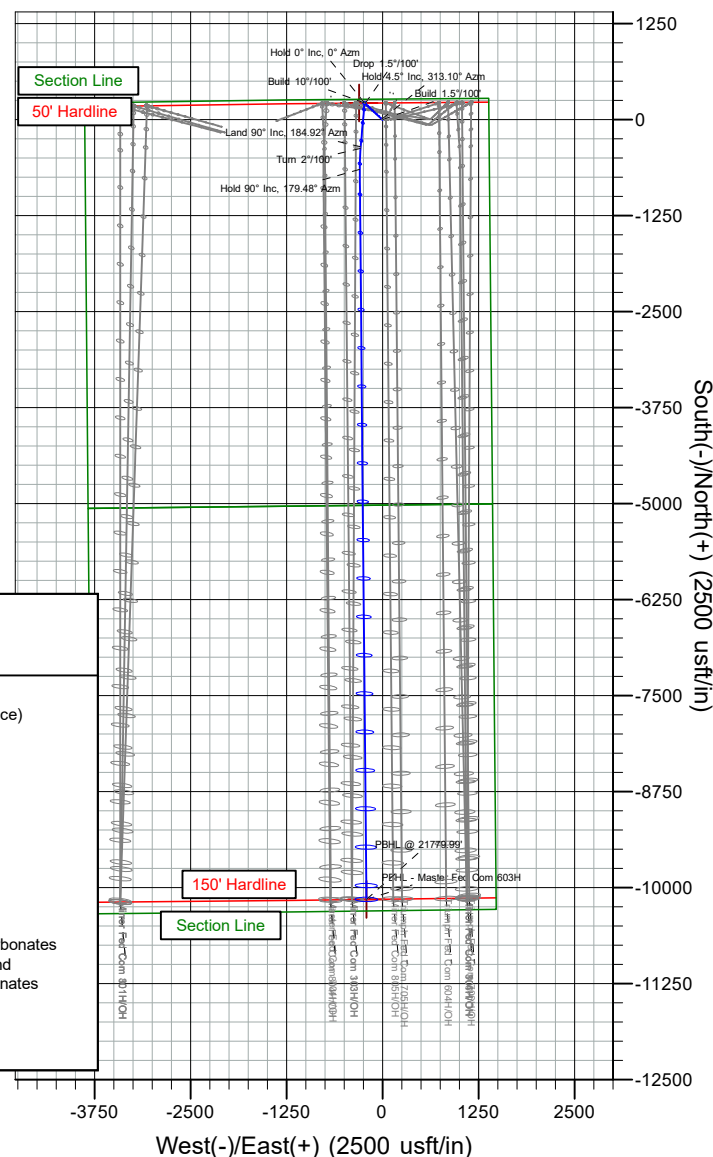
| +N/-S | +E/-W | Northing  | Easting   | Latitude  | Longitude   |
|-------|-------|-----------|-----------|-----------|-------------|
| 0.00  | 0.00  | 446688.16 | 850281.87 | 32.224074 | -103.334285 |

## WELLBORE TARGET DETAILS (LAT/LONG)

| Name                       | TVD      | +N/-S     | +E/-W   | Northing  | Easting   | Shape |
|----------------------------|----------|-----------|---------|-----------|-----------|-------|
| KOP - Master Fed Com 603H  | 11067.00 | 219.00    | -304.00 | 446907.16 | 849977.87 | Point |
| PBHL - Master Fed Com 603H | 11640.00 | -10151.75 | -209.53 | 436536.41 | 850072.34 | Point |

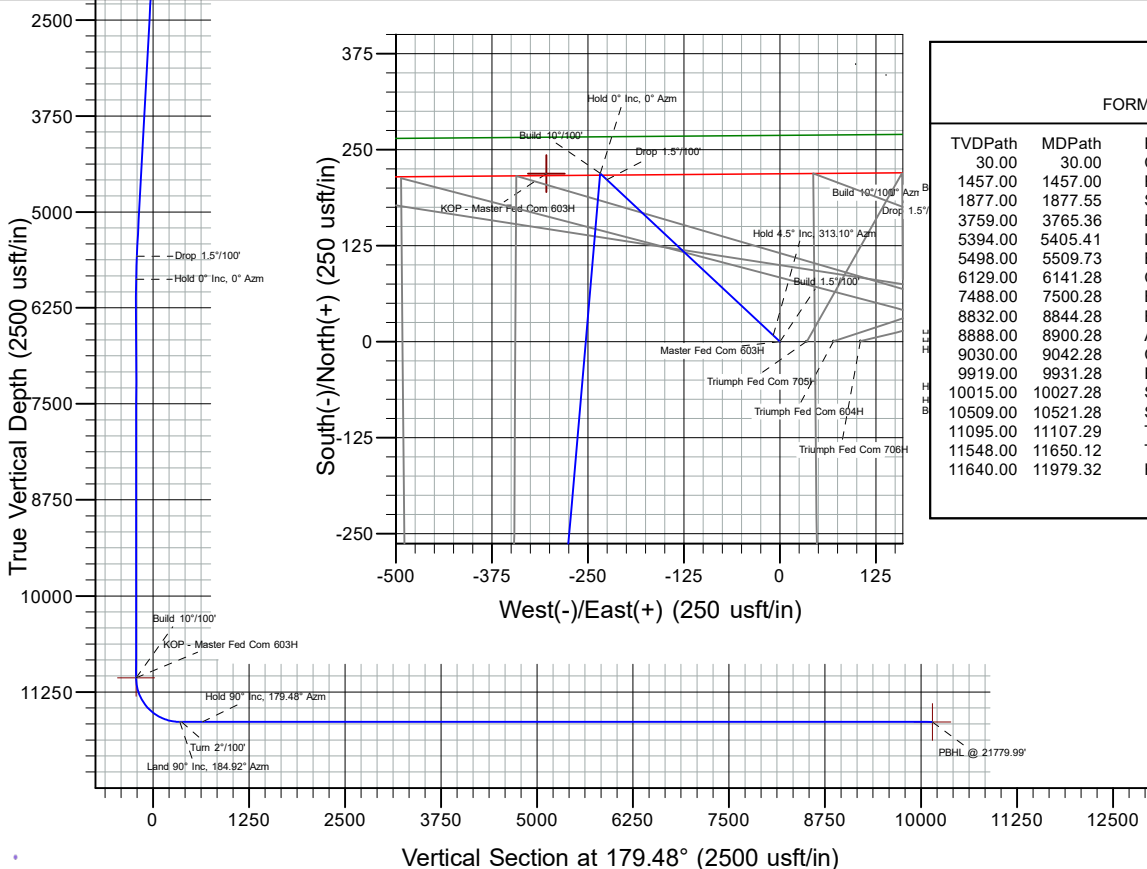
## SECTION DETAILS

| MD       | Inc   | Azi    | TVD      | +N/-S     | +E/-W   | Dleg  | TFace  | Vsect    | Annotation                 |
|----------|-------|--------|----------|-----------|---------|-------|--------|----------|----------------------------|
| 0.00     | 0.00  | 0.00   | 0.00     | 0.00      | 0.00    | 0.00  | 0.00   | 0.00     |                            |
| 1500.00  | 0.00  | 0.00   | 1500.00  | 0.00      | 0.00    | 0.00  | 0.00   | 0.00     | Build 1.5°/100'            |
| 1799.80  | 4.50  | 313.10 | 1799.49  | 8.04      | -8.59   | 1.50  | 313.10 | -8.11    | Hold 4.5° Inc, 313.10° Azm |
| 5587.48  | 4.50  | 313.10 | 5575.51  | 210.96    | -225.41 | 0.00  | 0.00   | -213.00  | Drop 1.5°/100'             |
| 5887.28  | 0.00  | 0.00   | 5875.00  | 219.00    | -234.00 | 1.50  | 180.00 | -221.11  | Hold 0° Inc, 0° Azm        |
| 11079.32 | 0.00  | 0.00   | 11067.04 | 219.00    | -234.00 | 0.00  | 0.00   | -221.11  | Build 10°/100'             |
| 11979.32 | 90.00 | 184.92 | 11640.00 | -351.85   | -283.10 | 10.00 | 184.92 | 349.27   | Land 90° Inc, 184.92° Azm  |
| 12001.48 | 90.00 | 184.92 | 11640.00 | -373.93   | -285.00 | 0.00  | 0.00   | 371.33   | Turn 2°/100'               |
| 12273.17 | 90.00 | 179.48 | 11640.00 | -645.32   | -295.42 | 2.00  | -90.00 | 642.61   | Hold 90° Inc, 179.48° Azm  |
| 21779.99 | 90.00 | 179.48 | 11640.00 | -10151.75 | -209.53 | 0.00  | 0.00   | 10149.43 | PBHL @ 21779.99'           |



## FORMATION TOPS

| TVDPath  | MDPath   | Formation                     |
|----------|----------|-------------------------------|
| 30.00    | 30.00    | Cenozoic Alluvium (surface)   |
| 1457.00  | 1457.00  | Rustler                       |
| 1877.00  | 1877.55  | Salado                        |
| 3759.00  | 3765.36  | Base Salt                     |
| 5394.00  | 5405.41  | Lamar                         |
| 5498.00  | 5509.73  | Bell Canyon                   |
| 6129.00  | 6141.28  | Cherry Canyon                 |
| 7488.00  | 7500.28  | Brushy Canyon                 |
| 8832.00  | 8844.28  | Bone Spring Lime              |
| 8888.00  | 8900.28  | Avalon                        |
| 9030.00  | 9042.28  | Chert Zone                    |
| 9919.00  | 9931.28  | First Bone Spring Sand        |
| 10015.00 | 10027.28 | Second Bone Spring Carbonates |
| 10509.00 | 10521.28 | Second Bone Spring Sand       |
| 11095.00 | 11107.29 | Third Bone Spring Carbonates  |
| 11548.00 | 11650.12 | Third Bone Spring Sand        |
| 11640.00 | 11979.32 | HZ Target                     |



Azimuths to Grid North  
 True North: -0.53°  
 Magnetic North: 5.76°

Magnetic Field  
 Strength: 47453.6nT  
 Dip Angle: 59.72°  
 Date: 7/2/2023  
 Model: HRGM

Plan: Plan 3 (Master Fed Com 603H/OH)

Created By: Dusty Moyer

Date: 13:08, July 03 2023

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
| <b>Database:</b> | EDM 5000.17 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Master Fed Com 603H |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

|                    |                           |                      |                |
|--------------------|---------------------------|----------------------|----------------|
| <b>Project</b>     | Lea Co., NM (NAD-83)      |                      |                |
| <b>Map System:</b> | US State Plane 1983       | <b>System Datum:</b> | Mean Sea Level |
| <b>Geo Datum:</b>  | North American Datum 1983 |                      |                |
| <b>Map Zone:</b>   | New Mexico Eastern Zone   |                      |                |

| Site                  |           | Mirror MH Pad 1 & 2 |                 |            |             |
|-----------------------|-----------|---------------------|-----------------|------------|-------------|
| Site Position:        |           | Northing:           | 446,622.75 usft | Latitude:  | 32.223879   |
| From:                 | Map       | Easting:            | 850,849.76 usft | Longitude: | -103.332451 |
| Position Uncertainty: | 0.00 usft | Slot Radius:        | 13-3/16 "       |            |             |

| Well                 | Master Fed Com 603H |           |                     |                 |               |               |
|----------------------|---------------------|-----------|---------------------|-----------------|---------------|---------------|
| Well Position        | +N/-S               | 0.00 usft | Northing:           | 446,688.16 usft | Latitude:     | 32.224074     |
|                      | +E/-W               | 0.00 usft | Easting:            | 850,281.87 usft | Longitude:    | -103.334285   |
| Position Uncertainty |                     | 0.00 usft | Wellhead Elevation: | usft            | Ground Level: | 3,427.20 usft |
| Grid Convergence:    |                     | 0.53 °    |                     |                 |               |               |

|                  |                   |                    |                        |                      |                            |
|------------------|-------------------|--------------------|------------------------|----------------------|----------------------------|
| <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> |
|                  | HRGM              | 7/2/2023           | 6.30                   | 59.72                | 47,453.55721302            |

|                          |                                |                     |                     |                      |      |
|--------------------------|--------------------------------|---------------------|---------------------|----------------------|------|
| <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                | 179.48               |      |

|                                 |                        |                          |                  |                 |  |
|---------------------------------|------------------------|--------------------------|------------------|-----------------|--|
| <b>Plan Survey Tool Program</b> | <b>Date</b>            | 7/3/2023                 |                  |                 |  |
| <b>Depth From (usft)</b>        | <b>Depth To (usft)</b> | <b>Survey (Wellbore)</b> | <b>Tool Name</b> | <b>Remarks</b>  |  |
| 1                               | 0.00                   | 21,779.99                | Plan 3 (OH)      | MWD+HDGM        |  |
|                                 |                        |                          |                  | OWSG MWD + HRGM |  |

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
| <b>Database:</b> | EDM 5000.17 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Master Fed Com 603H |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

| Plan Sections         |                 |             |                       |              |              |                         |                        |                       |         |        |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|------------------------|-----------------------|---------|--------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
| 0.00                  | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |
| 1,500.00              | 0.00            | 0.00        | 1,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |
| 1,799.80              | 4.50            | 313.10      | 1,799.49              | 8.04         | -8.59        | 1.50                    | 1.50                   | 0.00                  | 313.10  |        |
| 5,587.48              | 4.50            | 313.10      | 5,575.51              | 210.96       | -225.41      | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |
| 5,887.28              | 0.00            | 0.00        | 5,875.00              | 219.00       | -234.00      | 1.50                    | -1.50                  | 0.00                  | 180.00  |        |
| 11,079.32             | 0.00            | 0.00        | 11,067.04             | 219.00       | -234.00      | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |
| 11,979.32             | 90.00           | 184.92      | 11,640.00             | -351.85      | -283.10      | 10.00                   | 10.00                  | 0.00                  | 184.92  |        |
| 12,001.48             | 90.00           | 184.92      | 11,640.00             | -373.93      | -285.00      | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |
| 12,273.17             | 90.00           | 179.48      | 11,640.00             | -645.32      | -295.42      | 2.00                    | 0.00                   | -2.00                 | -90.00  |        |
| 21,779.99             | 90.00           | 179.48      | 11,640.00             | -10,151.75   | -209.53      | 0.00                    | 0.00                   | 0.00                  | 0.00    |        |

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
| <b>Database:</b> | EDM 5000.17 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Master Fed Com 603H |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

| Planned Survey                     |                 |             |                       |              |              |                         |                         |                        |                       |
|------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)              | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 0.00                               | 0.00            | 0.00        | 0.00                  | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 30.00                              | 0.00            | 0.00        | 30.00                 | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Cenozoic Alluvium (surface)</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 100.00                             | 0.00            | 0.00        | 100.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 200.00                             | 0.00            | 0.00        | 200.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 300.00                             | 0.00            | 0.00        | 300.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 400.00                             | 0.00            | 0.00        | 400.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 500.00                             | 0.00            | 0.00        | 500.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 600.00                             | 0.00            | 0.00        | 600.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 700.00                             | 0.00            | 0.00        | 700.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 800.00                             | 0.00            | 0.00        | 800.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 900.00                             | 0.00            | 0.00        | 900.00                | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,000.00                           | 0.00            | 0.00        | 1,000.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,100.00                           | 0.00            | 0.00        | 1,100.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,200.00                           | 0.00            | 0.00        | 1,200.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,300.00                           | 0.00            | 0.00        | 1,300.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,400.00                           | 0.00            | 0.00        | 1,400.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| 1,457.00                           | 0.00            | 0.00        | 1,457.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Rustler</b>                     |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,500.00                           | 0.00            | 0.00        | 1,500.00              | 0.00         | 0.00         | 0.00                    | 0.00                    | 0.00                   | 0.00                  |
| <b>Build 1.5°/100'</b>             |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,600.00                           | 1.50            | 313.10      | 1,599.99              | 0.89         | -0.96        | -0.90                   | 1.50                    | 1.50                   | 0.00                  |
| 1,700.00                           | 3.00            | 313.10      | 1,699.91              | 3.58         | -3.82        | -3.61                   | 1.50                    | 1.50                   | 0.00                  |
| 1,799.80                           | 4.50            | 313.10      | 1,799.49              | 8.04         | -8.59        | -8.11                   | 1.50                    | 1.50                   | 0.00                  |
| <b>Hold 4.5° Inc, 313.10° Azm</b>  |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,800.00                           | 4.50            | 313.10      | 1,799.69              | 8.05         | -8.60        | -8.12                   | 0.00                    | 0.00                   | 0.00                  |
| 1,877.55                           | 4.50            | 313.10      | 1,877.00              | 12.20        | -13.04       | -12.32                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Salado</b>                      |                 |             |                       |              |              |                         |                         |                        |                       |
| 1,900.00                           | 4.50            | 313.10      | 1,899.38              | 13.40        | -14.32       | -13.53                  | 0.00                    | 0.00                   | 0.00                  |
| 2,000.00                           | 4.50            | 313.10      | 1,999.08              | 18.76        | -20.05       | -18.94                  | 0.00                    | 0.00                   | 0.00                  |
| 2,100.00                           | 4.50            | 313.10      | 2,098.77              | 24.12        | -25.77       | -24.35                  | 0.00                    | 0.00                   | 0.00                  |
| 2,200.00                           | 4.50            | 313.10      | 2,198.46              | 29.48        | -31.50       | -29.76                  | 0.00                    | 0.00                   | 0.00                  |
| 2,300.00                           | 4.50            | 313.10      | 2,298.15              | 34.83        | -37.22       | -35.17                  | 0.00                    | 0.00                   | 0.00                  |
| 2,400.00                           | 4.50            | 313.10      | 2,397.84              | 40.19        | -42.94       | -40.58                  | 0.00                    | 0.00                   | 0.00                  |
| 2,500.00                           | 4.50            | 313.10      | 2,497.54              | 45.55        | -48.67       | -45.99                  | 0.00                    | 0.00                   | 0.00                  |
| 2,600.00                           | 4.50            | 313.10      | 2,597.23              | 50.91        | -54.39       | -51.40                  | 0.00                    | 0.00                   | 0.00                  |
| 2,700.00                           | 4.50            | 313.10      | 2,696.92              | 56.26        | -60.12       | -56.81                  | 0.00                    | 0.00                   | 0.00                  |
| 2,800.00                           | 4.50            | 313.10      | 2,796.61              | 61.62        | -65.84       | -62.22                  | 0.00                    | 0.00                   | 0.00                  |
| 2,900.00                           | 4.50            | 313.10      | 2,896.31              | 66.98        | -71.57       | -67.63                  | 0.00                    | 0.00                   | 0.00                  |
| 3,000.00                           | 4.50            | 313.10      | 2,996.00              | 72.34        | -77.29       | -73.04                  | 0.00                    | 0.00                   | 0.00                  |
| 3,100.00                           | 4.50            | 313.10      | 3,095.69              | 77.70        | -83.02       | -78.45                  | 0.00                    | 0.00                   | 0.00                  |
| 3,200.00                           | 4.50            | 313.10      | 3,195.38              | 83.05        | -88.74       | -83.85                  | 0.00                    | 0.00                   | 0.00                  |
| 3,300.00                           | 4.50            | 313.10      | 3,295.07              | 88.41        | -94.47       | -89.26                  | 0.00                    | 0.00                   | 0.00                  |
| 3,400.00                           | 4.50            | 313.10      | 3,394.77              | 93.77        | -100.19      | -94.67                  | 0.00                    | 0.00                   | 0.00                  |
| 3,500.00                           | 4.50            | 313.10      | 3,494.46              | 99.13        | -105.92      | -100.08                 | 0.00                    | 0.00                   | 0.00                  |
| 3,600.00                           | 4.50            | 313.10      | 3,594.15              | 104.48       | -111.64      | -105.49                 | 0.00                    | 0.00                   | 0.00                  |
| 3,700.00                           | 4.50            | 313.10      | 3,693.84              | 109.84       | -117.36      | -110.90                 | 0.00                    | 0.00                   | 0.00                  |
| 3,765.36                           | 4.50            | 313.10      | 3,759.00              | 113.34       | -121.11      | -114.44                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Base Salt</b>                   |                 |             |                       |              |              |                         |                         |                        |                       |
| 3,800.00                           | 4.50            | 313.10      | 3,793.53              | 115.20       | -123.09      | -116.31                 | 0.00                    | 0.00                   | 0.00                  |
| 3,900.00                           | 4.50            | 313.10      | 3,893.23              | 120.56       | -128.81      | -121.72                 | 0.00                    | 0.00                   | 0.00                  |
| 4,000.00                           | 4.50            | 313.10      | 3,992.92              | 125.91       | -134.54      | -127.13                 | 0.00                    | 0.00                   | 0.00                  |
| 4,100.00                           | 4.50            | 313.10      | 4,092.61              | 131.27       | -140.26      | -132.54                 | 0.00                    | 0.00                   | 0.00                  |

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
| <b>Database:</b> | EDM 5000.17 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Master Fed Com 603H |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

| Planned Survey             |                 |             |                       |              |              |                         |                         |                        |                       |  |
|----------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|--|
| Measured Depth (usft)      | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |  |
| 4,200.00                   | 4.50            | 313.10      | 4,192.30              | 136.63       | -145.99      | -137.95                 | 0.00                    | 0.00                   | 0.00                  |  |
| 4,300.00                   | 4.50            | 313.10      | 4,292.00              | 141.99       | -151.71      | -143.36                 | 0.00                    | 0.00                   | 0.00                  |  |
| 4,400.00                   | 4.50            | 313.10      | 4,391.69              | 147.34       | -157.44      | -148.77                 | 0.00                    | 0.00                   | 0.00                  |  |
| 4,500.00                   | 4.50            | 313.10      | 4,491.38              | 152.70       | -163.16      | -154.18                 | 0.00                    | 0.00                   | 0.00                  |  |
| 4,600.00                   | 4.50            | 313.10      | 4,591.07              | 158.06       | -168.89      | -159.59                 | 0.00                    | 0.00                   | 0.00                  |  |
| 4,700.00                   | 4.50            | 313.10      | 4,690.76              | 163.42       | -174.61      | -165.00                 | 0.00                    | 0.00                   | 0.00                  |  |
| 4,800.00                   | 4.50            | 313.10      | 4,790.46              | 168.77       | -180.33      | -170.40                 | 0.00                    | 0.00                   | 0.00                  |  |
| 4,900.00                   | 4.50            | 313.10      | 4,890.15              | 174.13       | -186.06      | -175.81                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,000.00                   | 4.50            | 313.10      | 4,989.84              | 179.49       | -191.78      | -181.22                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,100.00                   | 4.50            | 313.10      | 5,089.53              | 184.85       | -197.51      | -186.63                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,200.00                   | 4.50            | 313.10      | 5,189.22              | 190.21       | -203.23      | -192.04                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,300.00                   | 4.50            | 313.10      | 5,288.92              | 195.56       | -208.96      | -197.45                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,400.00                   | 4.50            | 313.10      | 5,388.61              | 200.92       | -214.68      | -202.86                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,405.41                   | 4.50            | 313.10      | 5,394.00              | 201.21       | -214.99      | -203.15                 | 0.00                    | 0.00                   | 0.00                  |  |
| <b>Lamar</b>               |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,500.00                   | 4.50            | 313.10      | 5,488.30              | 206.28       | -220.41      | -208.27                 | 0.00                    | 0.00                   | 0.00                  |  |
| 5,509.73                   | 4.50            | 313.10      | 5,498.00              | 206.80       | -220.96      | -208.80                 | 0.00                    | 0.00                   | 0.00                  |  |
| <b>Bell Canyon</b>         |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,587.48                   | 4.50            | 313.10      | 5,575.51              | 210.96       | -225.41      | -213.00                 | 0.00                    | 0.00                   | 0.00                  |  |
| <b>Drop 1.5°/100'</b>      |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,600.00                   | 4.31            | 313.10      | 5,588.00              | 211.62       | -226.12      | -213.67                 | 1.50                    | -1.50                  | 0.00                  |  |
| 5,700.00                   | 2.81            | 313.10      | 5,687.80              | 215.86       | -230.65      | -217.95                 | 1.50                    | -1.50                  | 0.00                  |  |
| 5,800.00                   | 1.31            | 313.10      | 5,787.73              | 218.32       | -233.27      | -220.43                 | 1.50                    | -1.50                  | 0.00                  |  |
| 5,887.28                   | 0.00            | 0.00        | 5,875.00              | 219.00       | -234.00      | -221.11                 | 1.50                    | -1.50                  | 0.00                  |  |
| <b>Hold 0° Inc, 0° Azm</b> |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 5,900.00                   | 0.00            | 0.00        | 5,887.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,000.00                   | 0.00            | 0.00        | 5,987.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,100.00                   | 0.00            | 0.00        | 6,087.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,141.28                   | 0.00            | 0.00        | 6,129.00              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| <b>Cherry Canyon</b>       |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 6,200.00                   | 0.00            | 0.00        | 6,187.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,300.00                   | 0.00            | 0.00        | 6,287.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,400.00                   | 0.00            | 0.00        | 6,387.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,500.00                   | 0.00            | 0.00        | 6,487.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,600.00                   | 0.00            | 0.00        | 6,587.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,700.00                   | 0.00            | 0.00        | 6,687.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,800.00                   | 0.00            | 0.00        | 6,787.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 6,900.00                   | 0.00            | 0.00        | 6,887.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,000.00                   | 0.00            | 0.00        | 6,987.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,100.00                   | 0.00            | 0.00        | 7,087.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,200.00                   | 0.00            | 0.00        | 7,187.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,300.00                   | 0.00            | 0.00        | 7,287.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,400.00                   | 0.00            | 0.00        | 7,387.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,500.00                   | 0.00            | 0.00        | 7,487.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,500.28                   | 0.00            | 0.00        | 7,488.00              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| <b>Brushy Canyon</b>       |                 |             |                       |              |              |                         |                         |                        |                       |  |
| 7,600.00                   | 0.00            | 0.00        | 7,587.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,700.00                   | 0.00            | 0.00        | 7,687.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,800.00                   | 0.00            | 0.00        | 7,787.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 7,900.00                   | 0.00            | 0.00        | 7,887.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,000.00                   | 0.00            | 0.00        | 7,987.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,100.00                   | 0.00            | 0.00        | 8,087.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |
| 8,200.00                   | 0.00            | 0.00        | 8,187.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |  |

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
| <b>Database:</b> | EDM 5000.17 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Master Fed Com 603H |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

| Planned Survey                       |                 |             |                       |              |              |                         |                         |                        |                       |
|--------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 8,300.00                             | 0.00            | 0.00        | 8,287.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 8,400.00                             | 0.00            | 0.00        | 8,387.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 8,500.00                             | 0.00            | 0.00        | 8,487.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 8,600.00                             | 0.00            | 0.00        | 8,587.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 8,700.00                             | 0.00            | 0.00        | 8,687.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 8,800.00                             | 0.00            | 0.00        | 8,787.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 8,844.28                             | 0.00            | 0.00        | 8,832.00              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Bone Spring Lime</b>              |                 |             |                       |              |              |                         |                         |                        |                       |
| 8,900.00                             | 0.00            | 0.00        | 8,887.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 8,900.28                             | 0.00            | 0.00        | 8,888.00              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Avalon</b>                        |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,000.00                             | 0.00            | 0.00        | 8,987.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,042.28                             | 0.00            | 0.00        | 9,030.00              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Chert Zone</b>                    |                 |             |                       |              |              |                         |                         |                        |                       |
| 9,100.00                             | 0.00            | 0.00        | 9,087.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,200.00                             | 0.00            | 0.00        | 9,187.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,300.00                             | 0.00            | 0.00        | 9,287.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,400.00                             | 0.00            | 0.00        | 9,387.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,500.00                             | 0.00            | 0.00        | 9,487.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,600.00                             | 0.00            | 0.00        | 9,587.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,700.00                             | 0.00            | 0.00        | 9,687.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,800.00                             | 0.00            | 0.00        | 9,787.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,900.00                             | 0.00            | 0.00        | 9,887.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 9,931.28                             | 0.00            | 0.00        | 9,919.00              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| <b>First Bone Spring Sand</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,000.00                            | 0.00            | 0.00        | 9,987.72              | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,027.28                            | 0.00            | 0.00        | 10,015.00             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Second Bone Spring Carbonates</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,100.00                            | 0.00            | 0.00        | 10,087.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,200.00                            | 0.00            | 0.00        | 10,187.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,300.00                            | 0.00            | 0.00        | 10,287.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,400.00                            | 0.00            | 0.00        | 10,387.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,500.00                            | 0.00            | 0.00        | 10,487.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,521.28                            | 0.00            | 0.00        | 10,509.00             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Second Bone Spring Sand</b>       |                 |             |                       |              |              |                         |                         |                        |                       |
| 10,600.00                            | 0.00            | 0.00        | 10,587.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,700.00                            | 0.00            | 0.00        | 10,687.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,800.00                            | 0.00            | 0.00        | 10,787.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 10,900.00                            | 0.00            | 0.00        | 10,887.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 11,000.00                            | 0.00            | 0.00        | 10,987.72             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| 11,079.32                            | 0.00            | 0.00        | 11,067.04             | 219.00       | -234.00      | -221.11                 | 0.00                    | 0.00                   | 0.00                  |
| <b>Build 10°/100'</b>                |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,100.00                            | 2.07            | 184.92      | 11,087.72             | 218.63       | -234.03      | -220.74                 | 10.00                   | 10.00                  | 0.00                  |
| 11,107.29                            | 2.80            | 184.92      | 11,095.00             | 218.32       | -234.06      | -220.44                 | 10.00                   | 10.00                  | 0.00                  |
| <b>Third Bone Spring Carbonates</b>  |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,200.00                            | 12.07           | 184.92      | 11,186.83             | 206.38       | -235.09      | -208.51                 | 10.00                   | 10.00                  | 0.00                  |
| 11,300.00                            | 22.07           | 184.92      | 11,282.31             | 177.18       | -237.60      | -179.33                 | 10.00                   | 10.00                  | 0.00                  |
| 11,400.00                            | 32.07           | 184.92      | 11,371.24             | 131.90       | -241.49      | -134.08                 | 10.00                   | 10.00                  | 0.00                  |
| 11,500.00                            | 42.07           | 184.92      | 11,450.93             | 71.92        | -246.65      | -74.15                  | 10.00                   | 10.00                  | 0.00                  |
| 11,600.00                            | 52.07           | 184.92      | 11,518.96             | -0.94        | -252.92      | -1.36                   | 10.00                   | 10.00                  | 0.00                  |
| 11,650.12                            | 57.07           | 184.92      | 11,548.00             | -41.61       | -256.42      | 39.28                   | 9.98                    | 9.98                   | 0.00                  |
| <b>Third Bone Spring Sand</b>        |                 |             |                       |              |              |                         |                         |                        |                       |
| 11,700.00                            | 62.07           | 184.92      | 11,573.25             | -84.45       | -260.10      | 82.09                   | 10.02                   | 10.02                  | 0.00                  |

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
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| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

| Planned Survey                               |                 |             |                       |              |              |                         |                         |                        |                       |
|----------------------------------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft)                        | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 11,800.00                                    | 72.07           | 184.92      | 11,612.17             | -176.09      | -267.98      | 173.65                  | 10.00                   | 10.00                  | 0.00                  |
| 11,900.00                                    | 82.07           | 184.92      | 11,634.52             | -273.08      | -276.33      | 270.56                  | 10.00                   | 10.00                  | 0.00                  |
| 11,979.32                                    | 90.00           | 184.92      | 11,640.00             | -351.85      | -283.10      | 349.27                  | 10.00                   | 10.00                  | 0.00                  |
| <b>Land 90° Inc, 184.92° Azm - HZ Target</b> |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,000.00                                    | 90.00           | 184.92      | 11,640.00             | -372.46      | -284.87      | 369.86                  | 0.00                    | 0.00                   | 0.00                  |
| 12,001.48                                    | 90.00           | 184.92      | 11,640.00             | -373.93      | -285.00      | 371.33                  | 0.00                    | 0.00                   | 0.00                  |
| <b>Turn 2°/100'</b>                          |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,100.00                                    | 90.00           | 182.95      | 11,640.00             | -472.21      | -291.75      | 469.55                  | 2.00                    | 0.00                   | -2.00                 |
| 12,200.00                                    | 90.00           | 180.95      | 11,640.00             | -572.15      | -295.15      | 569.45                  | 2.00                    | 0.00                   | -2.00                 |
| 12,273.17                                    | 90.00           | 179.48      | 11,640.00             | -645.32      | -295.42      | 642.61                  | 2.00                    | 0.00                   | -2.00                 |
| <b>Hold 90° Inc, 179.48° Azm</b>             |                 |             |                       |              |              |                         |                         |                        |                       |
| 12,300.00                                    | 90.00           | 179.48      | 11,640.00             | -672.15      | -295.18      | 669.44                  | 0.00                    | 0.00                   | 0.00                  |
| 12,400.00                                    | 90.00           | 179.48      | 11,640.00             | -772.14      | -294.28      | 769.44                  | 0.00                    | 0.00                   | 0.00                  |
| 12,500.00                                    | 90.00           | 179.48      | 11,640.00             | -872.14      | -293.37      | 869.44                  | 0.00                    | 0.00                   | 0.00                  |
| 12,600.00                                    | 90.00           | 179.48      | 11,640.00             | -972.14      | -292.47      | 969.44                  | 0.00                    | 0.00                   | 0.00                  |
| 12,700.00                                    | 90.00           | 179.48      | 11,640.00             | -1,072.13    | -291.57      | 1,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 12,800.00                                    | 90.00           | 179.48      | 11,640.00             | -1,172.13    | -290.66      | 1,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 12,900.00                                    | 90.00           | 179.48      | 11,640.00             | -1,272.12    | -289.76      | 1,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,000.00                                    | 90.00           | 179.48      | 11,640.00             | -1,372.12    | -288.86      | 1,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,100.00                                    | 90.00           | 179.48      | 11,640.00             | -1,472.11    | -287.95      | 1,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,200.00                                    | 90.00           | 179.48      | 11,640.00             | -1,572.11    | -287.05      | 1,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,300.00                                    | 90.00           | 179.48      | 11,640.00             | -1,672.11    | -286.14      | 1,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,400.00                                    | 90.00           | 179.48      | 11,640.00             | -1,772.10    | -285.24      | 1,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,500.00                                    | 90.00           | 179.48      | 11,640.00             | -1,872.10    | -284.34      | 1,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,600.00                                    | 90.00           | 179.48      | 11,640.00             | -1,972.09    | -283.43      | 1,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,700.00                                    | 90.00           | 179.48      | 11,640.00             | -2,072.09    | -282.53      | 2,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,800.00                                    | 90.00           | 179.48      | 11,640.00             | -2,172.09    | -281.63      | 2,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 13,900.00                                    | 90.00           | 179.48      | 11,640.00             | -2,272.08    | -280.72      | 2,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,000.00                                    | 90.00           | 179.48      | 11,640.00             | -2,372.08    | -279.82      | 2,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,100.00                                    | 90.00           | 179.48      | 11,640.00             | -2,472.07    | -278.92      | 2,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,200.00                                    | 90.00           | 179.48      | 11,640.00             | -2,572.07    | -278.01      | 2,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,300.00                                    | 90.00           | 179.48      | 11,640.00             | -2,672.07    | -277.11      | 2,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,400.00                                    | 90.00           | 179.48      | 11,640.00             | -2,772.06    | -276.21      | 2,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,500.00                                    | 90.00           | 179.48      | 11,640.00             | -2,872.06    | -275.30      | 2,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,600.00                                    | 90.00           | 179.48      | 11,640.00             | -2,972.05    | -274.40      | 2,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,700.00                                    | 90.00           | 179.48      | 11,640.00             | -3,072.05    | -273.50      | 3,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,800.00                                    | 90.00           | 179.48      | 11,640.00             | -3,172.05    | -272.59      | 3,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 14,900.00                                    | 90.00           | 179.48      | 11,640.00             | -3,272.04    | -271.69      | 3,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,000.00                                    | 90.00           | 179.48      | 11,640.00             | -3,372.04    | -270.79      | 3,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,100.00                                    | 90.00           | 179.48      | 11,640.00             | -3,472.03    | -269.88      | 3,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,200.00                                    | 90.00           | 179.48      | 11,640.00             | -3,572.03    | -268.98      | 3,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,300.00                                    | 90.00           | 179.48      | 11,640.00             | -3,672.03    | -268.08      | 3,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,400.00                                    | 90.00           | 179.48      | 11,640.00             | -3,772.02    | -267.17      | 3,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,500.00                                    | 90.00           | 179.48      | 11,640.00             | -3,872.02    | -266.27      | 3,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,600.00                                    | 90.00           | 179.48      | 11,640.00             | -3,972.01    | -265.36      | 3,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,700.00                                    | 90.00           | 179.48      | 11,640.00             | -4,072.01    | -264.46      | 4,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,800.00                                    | 90.00           | 179.48      | 11,640.00             | -4,172.00    | -263.56      | 4,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 15,900.00                                    | 90.00           | 179.48      | 11,640.00             | -4,272.00    | -262.65      | 4,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,000.00                                    | 90.00           | 179.48      | 11,640.00             | -4,372.00    | -261.75      | 4,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,100.00                                    | 90.00           | 179.48      | 11,640.00             | -4,471.99    | -260.85      | 4,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,200.00                                    | 90.00           | 179.48      | 11,640.00             | -4,571.99    | -259.94      | 4,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,300.00                                    | 90.00           | 179.48      | 11,640.00             | -4,671.98    | -259.04      | 4,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,400.00                                    | 90.00           | 179.48      | 11,640.00             | -4,771.98    | -258.14      | 4,769.44                | 0.00                    | 0.00                   | 0.00                  |

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
| <b>Database:</b> | EDM 5000.17 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Master Fed Com 603H |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| 16,500.00             | 90.00           | 179.48      | 11,640.00             | -4,871.98    | -257.23      | 4,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,600.00             | 90.00           | 179.48      | 11,640.00             | -4,971.97    | -256.33      | 4,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,700.00             | 90.00           | 179.48      | 11,640.00             | -5,071.97    | -255.43      | 5,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,800.00             | 90.00           | 179.48      | 11,640.00             | -5,171.96    | -254.52      | 5,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 16,900.00             | 90.00           | 179.48      | 11,640.00             | -5,271.96    | -253.62      | 5,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,000.00             | 90.00           | 179.48      | 11,640.00             | -5,371.96    | -252.72      | 5,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,100.00             | 90.00           | 179.48      | 11,640.00             | -5,471.95    | -251.81      | 5,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,200.00             | 90.00           | 179.48      | 11,640.00             | -5,571.95    | -250.91      | 5,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,300.00             | 90.00           | 179.48      | 11,640.00             | -5,671.94    | -250.01      | 5,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,400.00             | 90.00           | 179.48      | 11,640.00             | -5,771.94    | -249.10      | 5,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,500.00             | 90.00           | 179.48      | 11,640.00             | -5,871.94    | -248.20      | 5,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,600.00             | 90.00           | 179.48      | 11,640.00             | -5,971.93    | -247.30      | 5,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,700.00             | 90.00           | 179.48      | 11,640.00             | -6,071.93    | -246.39      | 6,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,800.00             | 90.00           | 179.48      | 11,640.00             | -6,171.92    | -245.49      | 6,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 17,900.00             | 90.00           | 179.48      | 11,640.00             | -6,271.92    | -244.58      | 6,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,000.00             | 90.00           | 179.48      | 11,640.00             | -6,371.92    | -243.68      | 6,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,100.00             | 90.00           | 179.48      | 11,640.00             | -6,471.91    | -242.78      | 6,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,200.00             | 90.00           | 179.48      | 11,640.00             | -6,571.91    | -241.87      | 6,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,300.00             | 90.00           | 179.48      | 11,640.00             | -6,671.90    | -240.97      | 6,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,400.00             | 90.00           | 179.48      | 11,640.00             | -6,771.90    | -240.07      | 6,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,500.00             | 90.00           | 179.48      | 11,640.00             | -6,871.89    | -239.16      | 6,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,600.00             | 90.00           | 179.48      | 11,640.00             | -6,971.89    | -238.26      | 6,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,700.00             | 90.00           | 179.48      | 11,640.00             | -7,071.89    | -237.36      | 7,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,800.00             | 90.00           | 179.48      | 11,640.00             | -7,171.88    | -236.45      | 7,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 18,900.00             | 90.00           | 179.48      | 11,640.00             | -7,271.88    | -235.55      | 7,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,000.00             | 90.00           | 179.48      | 11,640.00             | -7,371.87    | -234.65      | 7,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,100.00             | 90.00           | 179.48      | 11,640.00             | -7,471.87    | -233.74      | 7,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,200.00             | 90.00           | 179.48      | 11,640.00             | -7,571.87    | -232.84      | 7,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,300.00             | 90.00           | 179.48      | 11,640.00             | -7,671.86    | -231.94      | 7,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,400.00             | 90.00           | 179.48      | 11,640.00             | -7,771.86    | -231.03      | 7,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,500.00             | 90.00           | 179.48      | 11,640.00             | -7,871.85    | -230.13      | 7,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,600.00             | 90.00           | 179.48      | 11,640.00             | -7,971.85    | -229.23      | 7,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,700.00             | 90.00           | 179.48      | 11,640.00             | -8,071.85    | -228.32      | 8,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,800.00             | 90.00           | 179.48      | 11,640.00             | -8,171.84    | -227.42      | 8,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 19,900.00             | 90.00           | 179.48      | 11,640.00             | -8,271.84    | -226.52      | 8,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,000.00             | 90.00           | 179.48      | 11,640.00             | -8,371.83    | -225.61      | 8,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,100.00             | 90.00           | 179.48      | 11,640.00             | -8,471.83    | -224.71      | 8,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,200.00             | 90.00           | 179.48      | 11,640.00             | -8,571.83    | -223.80      | 8,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,300.00             | 90.00           | 179.48      | 11,640.00             | -8,671.82    | -222.90      | 8,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,400.00             | 90.00           | 179.48      | 11,640.00             | -8,771.82    | -222.00      | 8,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,500.00             | 90.00           | 179.48      | 11,640.00             | -8,871.81    | -221.09      | 8,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,600.00             | 90.00           | 179.48      | 11,640.00             | -8,971.81    | -220.19      | 8,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,700.00             | 90.00           | 179.48      | 11,640.00             | -9,071.80    | -219.29      | 9,069.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,800.00             | 90.00           | 179.48      | 11,640.00             | -9,171.80    | -218.38      | 9,169.44                | 0.00                    | 0.00                   | 0.00                  |
| 20,900.00             | 90.00           | 179.48      | 11,640.00             | -9,271.80    | -217.48      | 9,269.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,000.00             | 90.00           | 179.48      | 11,640.00             | -9,371.79    | -216.58      | 9,369.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,100.00             | 90.00           | 179.48      | 11,640.00             | -9,471.79    | -215.67      | 9,469.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,200.00             | 90.00           | 179.48      | 11,640.00             | -9,571.78    | -214.77      | 9,569.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,300.00             | 90.00           | 179.48      | 11,640.00             | -9,671.78    | -213.87      | 9,669.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,400.00             | 90.00           | 179.48      | 11,640.00             | -9,771.78    | -212.96      | 9,769.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,500.00             | 90.00           | 179.48      | 11,640.00             | -9,871.77    | -212.06      | 9,869.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,600.00             | 90.00           | 179.48      | 11,640.00             | -9,971.77    | -211.16      | 9,969.44                | 0.00                    | 0.00                   | 0.00                  |
| 21,700.00             | 90.00           | 179.48      | 11,640.00             | -10,071.76   | -210.25      | 10,069.44               | 0.00                    | 0.00                   | 0.00                  |
| 21,779.99             | 90.00           | 179.48      | 11,640.00             | -10,151.75   | -209.53      | 10,149.43               | 0.00                    | 0.00                   | 0.00                  |

## Planning Report



|                  |                            |                                     |                          |
|------------------|----------------------------|-------------------------------------|--------------------------|
| <b>Database:</b> | EDM 5000.17 Single User Db | <b>Local Co-ordinate Reference:</b> | Well Master Fed Com 603H |
| <b>Company:</b>  | Franklin Mountain Energy   | <b>TVD Reference:</b>               | 30' KB @ 3457.20usft     |
| <b>Project:</b>  | Lea Co., NM (NAD-83)       | <b>MD Reference:</b>                | 30' KB @ 3457.20usft     |
| <b>Site:</b>     | Mirror MH Pad 1 & 2        | <b>North Reference:</b>             | Grid                     |
| <b>Well:</b>     | Master Fed Com 603H        | <b>Survey Calculation Method:</b>   | Minimum Curvature        |
| <b>Wellbore:</b> | OH                         |                                     |                          |
| <b>Design:</b>   | Plan 3                     |                                     |                          |

| Planned Survey        |                 |             |                       |              |              |                         |                         |                        |                       |
|-----------------------|-----------------|-------------|-----------------------|--------------|--------------|-------------------------|-------------------------|------------------------|-----------------------|
| Measured Depth (usft) | Inclination (°) | Azimuth (°) | Vertical Depth (usft) | +N/-S (usft) | +E/-W (usft) | Vertical Section (usft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
| PBHL @ 21779.99'      |                 |             |                       |              |              |                         |                         |                        |                       |

| Design Targets                                                                                  |               |              |            |              |              |                 |                |           |             |
|-------------------------------------------------------------------------------------------------|---------------|--------------|------------|--------------|--------------|-----------------|----------------|-----------|-------------|
| Target Name                                                                                     | Dip Angle (°) | Dip Dir. (°) | TVD (usft) | +N/-S (usft) | +E/-W (usft) | Northing (usft) | Easting (usft) | Latitude  | Longitude   |
| KOP - Master Fed Com<br>- hit/miss target<br>- Shape<br>- Point                                 | 0.00          | 0.00         | 11,067.00  | 219.00       | -304.00      | 446,907.16      | 849,977.87     | 32.224683 | -103.335262 |
| - plan misses target center by 70.00usft at 11079.38usft MD (11067.11 TVD, 219.00 N, -234.00 E) |               |              |            |              |              |                 |                |           |             |
| PBHL - Master Fed Com<br>- plan hits target center<br>- Point                                   | 0.00          | 0.00         | 11,640.00  | -10,151.75   | -209.53      | 436,536.41      | 850,072.34     | 32.196177 | -103.335267 |

| Formations            |                       |                               |           |         |                   |  |
|-----------------------|-----------------------|-------------------------------|-----------|---------|-------------------|--|
| Measured Depth (usft) | Vertical Depth (usft) | Name                          | Lithology | Dip (°) | Dip Direction (°) |  |
| 30.00                 | 30.00                 | Cenozoic Alluvium (surface)   |           |         |                   |  |
| 1,457.00              | 1,457.00              | Rustler                       |           | 0.00    |                   |  |
| 1,877.55              | 1,877.00              | Salado                        |           | 0.00    |                   |  |
| 3,765.36              | 3,759.00              | Base Salt                     |           | 0.00    |                   |  |
| 5,405.41              | 5,394.00              | Lamar                         |           | 0.00    |                   |  |
| 5,509.73              | 5,498.00              | Bell Canyon                   |           | 0.00    |                   |  |
| 6,141.28              | 6,129.00              | Cherry Canyon                 |           | 0.00    |                   |  |
| 7,500.28              | 7,488.00              | Brushy Canyon                 |           | 0.00    |                   |  |
| 8,844.28              | 8,832.00              | Bone Spring Lime              |           | 0.00    |                   |  |
| 8,900.28              | 8,888.00              | Avalon                        |           | 0.00    |                   |  |
| 9,042.28              | 9,030.00              | Chert Zone                    |           | 0.00    |                   |  |
| 9,931.28              | 9,919.00              | First Bone Spring Sand        |           | 0.00    |                   |  |
| 10,027.28             | 10,015.00             | Second Bone Spring Carbonates |           | 0.00    |                   |  |
| 10,521.28             | 10,509.00             | Second Bone Spring Sand       |           | 0.00    |                   |  |
| 11,107.29             | 11,095.00             | Third Bone Spring Carbonates  |           | 0.00    |                   |  |
| 11,650.12             | 11,548.00             | Third Bone Spring Sand        |           | 0.00    |                   |  |
| 11,979.32             | 11,640.00             | HZ Target                     |           | 0.00    |                   |  |

Planning Report



|           |                            |                              |                          |
|-----------|----------------------------|------------------------------|--------------------------|
| Database: | EDM 5000.17 Single User Db | Local Co-ordinate Reference: | Well Master Fed Com 603H |
| Company:  | Franklin Mountain Energy   | TVD Reference:               | 30' KB @ 3457.20usft     |
| Project:  | Lea Co., NM (NAD-83)       | MD Reference:                | 30' KB @ 3457.20usft     |
| Site:     | Mirror MH Pad 1 & 2        | North Reference:             | Grid                     |
| Well:     | Master Fed Com 603H        | Survey Calculation Method:   | Minimum Curvature        |
| Wellbore: | OH                         |                              |                          |
| Design:   | Plan 3                     |                              |                          |

| Plan Annotations            |                             |                   |                 |                            |  |
|-----------------------------|-----------------------------|-------------------|-----------------|----------------------------|--|
| Measured<br>Depth<br>(usft) | Vertical<br>Depth<br>(usft) | Local Coordinates |                 | Comment                    |  |
|                             |                             | +N/-S<br>(usft)   | +E/-W<br>(usft) |                            |  |
| 1,500.00                    | 1,500.00                    | 0.00              | 0.00            | Build 1.5°/100'            |  |
| 1,799.80                    | 1,799.49                    | 8.04              | -8.59           | Hold 4.5° Inc, 313.10° Azm |  |
| 5,587.48                    | 5,575.51                    | 210.96            | -225.41         | Drop 1.5°/100'             |  |
| 5,887.28                    | 5,875.00                    | 219.00            | -234.00         | Hold 0° Inc, 0° Azm        |  |
| 11,079.32                   | 11,067.04                   | 219.00            | -234.00         | Build 10°/100'             |  |
| 11,979.32                   | 11,640.00                   | -351.85           | -283.10         | Land 90° Inc, 184.92° Azm  |  |
| 12,001.48                   | 11,640.00                   | -373.93           | -285.00         | Turn 2°/100'               |  |
| 12,273.17                   | 11,640.00                   | -645.32           | -295.42         | Hold 90° Inc, 179.48° Azm  |  |
| 21,779.99                   | 11,640.00                   | -10,151.75        | -209.53         | PBHL @ 21779.99'           |  |



## Master Fed Com 603H

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)   | 3,425'  | 30'      | 30'        | 0     | Sand/Gravels/unconsolidated      |
| Rustler                       | 1,998'  | 1,457'   |            |       | Carbonates                       |
| Salado                        | 1,578'  | 1,877'   |            |       | Salt, Carbonate & Clastics       |
| Base Salt                     | -304'   | 3,759'   |            |       | Shaley Carbonate & Shale         |
| Lamar                         | -1,939' | 5,394'   |            |       | Carbonate & Clastics             |
| Bell Canyon                   | -2,043' | 5,498'   |            |       | Sandstone - oil/gas/water        |
| Cherry Canyon                 | -2,674' | 6,129'   |            |       | Sandstone - oil/gas/water        |
| Brushy Canyon                 | -4,033' | 7,488'   |            |       | Sand/carb/shales - oil/gas/water |
| Bone Spring Lime              | -5,377' | 8,832'   |            |       | Shale/Carbonates - oil/gas       |
| Avalon                        | -5,433' | 8,888'   |            |       | Shale/Carbonates - oil/gas       |
| Chert Zone                    | -5,575' | 9,030'   |            |       | Carbonate/chert                  |
| First Bone Spring Sand        | -6,465' | 9,919'   |            |       | Sandstone - oil/gas/water        |
| Second Bone Spring Carbonates | -6,560' | 10,015'  |            |       | Shale/Carbonates - oil/gas       |
| Second Bone Spring Sand       | -7,055' | 10,509'  |            |       | Sandstone - oil/gas/water        |
| Third Bone Spring Carbonates  | -7,640' | 11,095'  |            |       | Shale/Carbonates - oil/gas       |
| Third Bone Spring Sand        | -8,093' | 11,548'  |            |       | Sandstone - oil/gas/water        |
| HZ Target at SHL              | -8,185' | 11,640'  |            |       | Overpressure shale/sand- Oil/Gas |
| Wolfcamp                      | -8,459' | 11,914'  |            |       | Overpressure shale/sand- Oil/Gas |
| Wolfcamp A                    | -8,516' | 11,971'  |            |       | Overpressure Shale - Oil/Gas     |
| Wolfcamp B                    | -8,642' | 12,096'  |            |       | Overpressure Shale - Oil/Gas     |

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

|                     |         |             |
|---------------------|---------|-------------|
| Upper Permian Sands | 0-400'  | Fresh Water |
| Delaware Sands      | 5,498'  | Oil         |
| Avalon              | 8,888'  | Oil         |
| Bone Spring         | 9,919'  | Oil         |
| Wolfcamp            | 11,914' | 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 1,550' and circulating cement back to surface.

4. Casing Program:

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

| Casing string       | Weight | Grade   | Burst | Collapse | Tension | Conn           | Length           | API design factor |          |         |              |
|---------------------|--------|---------|-------|----------|---------|----------------|------------------|-------------------|----------|---------|--------------|
|                     |        |         |       |          |         |                |                  | Burst             | Collapse | Tension | Coupling     |
| Surface 13 3/8"     | 54.5   | J-55    | 2730  | 1130     | 853     | BTC<br>909     | 1,550            | 1.11              | 1.40     | 4.62    | 4.93         |
| Intermediate 9 5/8" | 40     | HCL-80  | 7430  | 4230     | 916     | BTC<br>1042    | 5,450            | 1.71              | 1.66     | 2.88    | 3.28         |
| Intermediate 7 5/8" | 29.7   | HCP-110 | 8280  | 7150     | 827     | Liberty<br>558 | 10,900           | 1.22              | 1.40     | 1.95    | 1.32         |
| Long string 5 1/2"  | 23     | P-110   | 14520 | 14520    | 729     | Eagle<br>606   | 21,780<br>11,640 | 1.32              | 1.42     | 1.21    | 1.01<br>1.65 |



7-5/8" casing will be set at 10,900' MD / 10,887' TVD at 0° inclination. Stress calculations on 5-1/2" casing performed assuming 21,780' depth. Actual max vertical depth is 11,640'.

### Cementing Program:

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

| String Type | Hole Size | Casing |               | Sacks | Type of cmt                                                                                       | Lead                      |              |  | TOC ft | Sacks | Type of cmt                                                                      | Tail                      |              |  | TOC   | Excess |
|-------------|-----------|--------|---------------|-------|---------------------------------------------------------------------------------------------------|---------------------------|--------------|--|--------|-------|----------------------------------------------------------------------------------|---------------------------|--------------|--|-------|--------|
|             |           | Size   | Setting Depth |       |                                                                                                   | Yield ft <sup>3</sup> /sk | Water gal/sk |  |        |       |                                                                                  | Yield ft <sup>3</sup> /sk | Water gal/sk |  |       |        |
| Surf        | 17.5      | 13.375 | 1,550         | 994   | Extenda Cem, 13.5 ppg Class C, 3lb/sk Kol-Seal<br><br>0.125pps Poly-E-Flake                       | 1.747                     | 9.06         |  | 0      | 335   | Tail, 14.8 ppg, Class C,<br><br>1% CaCl <sub>2</sub> , 0.125pps Celo-Flake       | 1.349                     | 6.51         |  | 1,250 | 100%   |
| Int1        | 12.25     | 9.625  | 5,450         | 1943  | Lead, 12.8 ppg, Class C, 5% Salt<br><br>0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal                   | 1.45                      | 6.9          |  | 0      | 154   | Tail, 14.8 ppg, Class C,<br>0.1% HR 800 .125 pps Poly-E-Flake                    | 1.33                      | 6.3          |  | 5,150 | 100%   |
| Int2        | 8.75      | 7.625  | 10,900        | 74    | Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgemaker Gel, 5%<br><br>Salt, 5pps LCM, 0.25pps IntegraSeal | 5.1                       | 27.2         |  | 4,450  | 342   | IntegraCem 14.8 ppg, Class H,<br><br>P50H; 0.15% ASA 301; 0.5% FL-66; 0.25% R-21 | 1.33                      | 6.31         |  | 7,500 | 30%    |
| Prod        | 6.75      | 5.5    | 21,780        | 831   | Tail, 13.5 ppg, Class HSLD 82H; 0.4% CFL-2; 4% STE; 0.07% CSA-1000; .29#/sk Salt; .29#/sk Gypseal | 1.43                      | 6.87         |  | 9,900  |       |                                                                                  |                           |              |  |       | 20%    |

### 5. Minimum Specifications for Pressure Control:

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

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

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

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

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

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



## 6. Types and characteristics of the proposed mud system:

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

| Depth                        | Type        | Weight (ppg) | Viscosity | Water Loss |
|------------------------------|-------------|--------------|-----------|------------|
| 0 – 1,550'                   | Fresh - Gel | 8.6-8.8      | 28-34     | N/c        |
| 1,550' – 10,900'             | Brine       | 8.8-10.2     | 28-34     | N/c        |
| 10,900' – 21,780'<br>Lateral | Oil Base    | 10.0-12.0    | 58-68     | 3 – 6      |

The highest mud weight needed to balance formation is expected to be 10-12 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 11,640' TVD (deepest point of the well) is 185°F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,263 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 H<sub>2</sub>S training.
- B. Briefing Area: Two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment
  - a. Well Control Equipment
    - i. Flare line 100' from wellhead to be ignited by auto ignition sparking system.
    - ii. Choke manifold with a remotely operated hydraulic choke.
    - iii. Mud/gas separator.
  - b. Protective equipment for essential personnel
    - i. Breathing Apparatus
      - 1. Rescue packs (SCBA) – 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.
      - 2. Work / Escape packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity.



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

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

#### **11. Anticipated starting date and duration of operations:**

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

**12. Disposal/environmental concerns:**

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

**13. Wellhead:**

A multi-bowl wellhead system will be utilized.

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

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

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

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

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

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

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

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

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

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

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

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

CONDITIONS

Action 254414

CONDITIONS

|                                                                                             |                                                      |
|---------------------------------------------------------------------------------------------|------------------------------------------------------|
| Operator:<br>Franklin Mountain Energy LLC<br>44 Cook Street, Suite 1000<br>Denver, CO 80206 | OGRID:<br>373910                                     |
|                                                                                             | Action Number:<br>254414                             |
|                                                                                             | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

CONDITIONS

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| pkautz     | None      | 9/22/2023      |