

**District I**

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

**District II**

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

**District III**

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

**District IV**

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

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

Form C-101  
August 1, 2011

Permit 335415

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

1. Operator Name and Address Franklin Mountain Energy 3, LLC 44 Cook Street Denver, CO 80206		2. OGRID Number 331595
		3. API Number 30-025-51195
4. Property Code 333824	5. Property Name EAGLE STATE COM	6. Well No. 501H

**7. Surface Location**

UL - Lot D	Section 3	Township 19S	Range 35E	Lot Idn 4	Feet From 325	N/S Line N	Feet From 670	E/W Line W	County Lea
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**8. Proposed Bottom Hole Location**

UL - Lot L	Section 10	Township 19S	Range 35E	Lot Idn L	Feet From 1427	N/S Line S	Feet From 800	E/W Line W	County Lea
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**9. Pool Information**

SCHARB;BONE SPRING	55610
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**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3868
16. Multiple N	17. Proposed Depth 18515	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 5/1/2023
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

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

**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	1900	1457	0
Int1	12.25	9.625	40	4000	841	0
Prod	8.75	7	32	9200	431	3000
Prod	8.75	5.5	20	18515	2325	9200

**Casing/Cement Program: Additional Comments**

Tapered production string will be ran with a X-over installed at the KOP of 9,200'. Cementing Stage tool can be placed in the 1st Intermediate string as a contingency to ensure required TOC to surface. To increase efficiency of drilling operations and minimize disturbance of the area the batch-drilling approach will be used. Off-line cementing may be utilized for Surface and Intermediate strings to further optimization of drilling process and reduction of disturbance.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	10000	5000	Cactus

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.  
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable.

**OIL CONSERVATION DIVISION**

Signature:

Printed Name: Electronically filed by Rachael A Overbey	Approved By: Paul F Kautz
Title: Project Manager	Title: Geologist
Email Address: roverbey@fmellc.com	Approved Date: 3/14/2023 Expiration Date: 3/14/2025
Date: 3/8/2023 Phone: 303-570-4057	Conditions of Approval Attached

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-025-51195</b>	<sup>2</sup> Pool Code 55610	<sup>3</sup> Pool Name SCHARB:BONE SPRING
<sup>4</sup> Property Code <b>333824</b>	<sup>5</sup> Property Name EAGLE STATE COM	<sup>6</sup> Well Number 501H
<sup>7</sup> OGRID No. 331595	<sup>8</sup> Operator Name FRANKLIN MOUNTAIN ENERGY 3, LLC	<sup>9</sup> Elevation 3868.0'

<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
4	3	19S	35E		325	NORTH	670	WEST	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
L	10	19S	35E		1427	SOUTH	800	WEST	LEA
<sup>12</sup> Dedicated Acres 279.67	<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.

<p><sup>16</sup></p>	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p>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.</p> <p>Signature: <i>Rachael Overbey</i> Date: 3/2/2023</p> <p>Printed Name: Rachael Overbey</p> <p>E-mail Address: roverbey@fmlc.com</p>
	<p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>January 17, 2023</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>Certificate Number:</p>

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)
- Section breakdown information for this plat may be obtained from Uintah Engineering & Land Surveying.

● = SURFACE HOLE LOCATION  
○ = BOTTOM HOLE LOCATION

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



SCALE

DRAWN BY: Z.L. 01-19-23  
REV: 1 03-01-23 D.M.C.  
(BHL MOVE)

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Form APD Conditions

Permit 335415

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: Franklin Mountain Energy 3, LLC [331595] 44 Cook Street Denver, CO 80206	API Number: 30-025-51195
	Well: EAGLE STATE COM #501H

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



## Eagle State Com 501H

1. Geologic name of surface location: Permian

2. Estimated tops of important geological markers:

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,855'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,079	1,807'			Carbonates
Salado	1,839	2,047'			Salt, Carbonate & Clastics
Base Salt	927	2,959'			Shaley Carbonate & Shale
Yates	527	3,359'			Carbonate & Clastics
Seven Rivers	78	3,808'			Sandstone - oil/gas/water
Queen	-682	4,568'			Sandstone - oil/gas/water
Cherry Canyon	-2,163	6,049'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-3,612	7,498'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-5,194	9,080'			Shale/Carbonates - oil/gas
Second Bone Spring Carbonates	-5,460	9,346'			Chert/Carbonate
Second Bone Spring Sand	-5,653	9,539'			Sandstone - oil/gas/water
HZ Target at Landing	-5,932	9,817'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-6,051	9,937'			Shale/Carbonates - oil/gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	6,049'	Oil
1 <sup>st</sup> Bone Spring Sand	9,080'	Oil
2 <sup>nd</sup> Bone Spring Sand	9,539'	Oil
3 <sup>rd</sup> Bone Carbonate	9,937'	Oil

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Surface freshwater sands will be protected by setting 13 3/8" casing at 1,900' and circulating cement back to surface.

4. Casing Program:

All casing strings will be run new.

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8" 0-1,900'	54.5	J-55	2730	1130	853	BTC 909	1900	1.02	1.14	4.19	4.47
Intermediate 9 5/8" 0-4,000'	40	HCL-80	7430	4230	916	BTC 1042	4000	2.08	2.26	3.52	4.01
Production 7" 0-9,200'	32	HCP-110	12460	10760	1025	CDC-HTQ 1053	9200	2.17	2.50	2.60	2.67
Production 5 1/2" 9,200'-18,515'	20	HCP-110	12640	12200	641	CDC-HTQ 667 TVD	9315 9817	1.15	2.80	2.24	2.33 2.25

Tapered production string will be ran with a X-over installed at the KOP of 9,200'.



### Cementing Program:

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

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

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

String Type	Hole Size	Casing Size	Setting Depth	Sacks	Type of cmt	Lead Yield ft <sup>3</sup> /sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft <sup>3</sup> /sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1900	1016	85:15 Compass Poz, 12.8 ppg Class C, 5%Gel, 3#/sk Kol Seal, 4.64#/sk Salt	2.05	11.12	0	441	Tail, 14.8 ppg, 100% Class C, 1%CaCl <sub>2</sub> , 0.1%	1.34	6.35	1500	100%
Int	12.25	9.625	4000	640	Lead, 11.3 ppg, HSLD 82 10% Gel, 4%STE, 2#/sk, Gyp Seal	2.74	16.31	0	201	Econolite Tail, 14.8 ppg, 100% Class C, 0.08% C-51	1.33	6.33	3600	100%
Prod	8.75	7	0-9200	431	HSLD 9420, 10.5 ppg, Class C, 1#/sk Salt, 4% STE 1% C-45	3.99	25.51	3000						100%
Prod	8.75	5.5	9200-18515						2325	HSLD 80, 13.ppg , 32#/sk Salt, 4% STE, 1#/sk Gyp Seal	1.52	7.59	9200	50%

### 5. Minimum Specifications for Pressure Control:

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated, and the ram-type will be equipped with blind rams on bottom and 4 ½" x 7" variable pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5,000/250 psig and the annular preventer to 5,000/250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig.

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

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



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

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

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 – 1,900'	Fresh - Gel	8.6-8.8	28-34	N/c
1,900' – 4,000'	Brine	8.8-10.2	28-34	N/c
4,000' – 18515' Lateral	Oil Base	9.0-11.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 10-11 ppg. In order to maintain hole stability, mud weights up to 12 ppg may be utilized.

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

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

## 7. Auxiliary well control and monitoring equipment:

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

## 8. Logging, testing and coring program:

GR-CCL-CNL Will be run in cased hole during completions phase of operations.  
Open-hole logs are not planned for this well.

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

The estimated bottom-hole temperature at 9817' TVD (deepest point of the well) is 155F with an estimated maximum bottom-hole pressure (BHP) at the same point of 6,125 psig (based on 12 ppg MW). Hydrogen Sulfide may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

## 10. Hydrogen Sulfide Plan:

- A. All personnel shall receive proper awareness H2S training.
- B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment
  - a. Well Control Equipment
    - i. Flare line 150' from wellhead to be ignited by auto ignition sparking system.
    - ii. Choke manifold with a remotely operated hydraulic choke.
    - iii. Mud/gas separator
  - b. Protective equipment for essential personnel
    - i. Breathing Apparatus
      - 1. Rescue packs (SCBA) – 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.



2. Work/Escapes packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity
3. Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.
- ii. Auxiliary Rescue Equipment
  1. Stretcher
  2. Two OSHA full body harnesses
  3. 100 feet of 5/8 inches OSHA approved rope
  4. 1-20# class ABC fire extinguisher
- c. H<sub>2</sub>S 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 H<sub>2</sub>S is encountered, measured values and formations will be provided to the BLM.
- d. Visual Warning Systems
  - i. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
  - ii. A colored condition flag will be on display, reflecting the current condition at the site at the time.
  - iii. Two windsocks will be placed in strategic locations, visible from all angles.
- e. Mud Program
  - i. The Mud program will be designed to minimize the volume of H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones.
- f. Metallurgy
  - i. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service at the anticipated operating pressures to prevent sour sulfide stress cracking.
- g. Communication
  - i. Communication will be via cell phones and walkie talkies on location.

Based on concentrations of offset wells, proximity to main roads, and distance to populated areas, the radius of exposure created by a potential release was determined to be minimal and low enough to not necessitate an H<sub>2</sub>S contingency plan. This will be reevaluated during wellbore construction if H<sub>2</sub>S is observed and after the well is on production.

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

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

**12. Disposal/environmental concerns:**

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

**13. Wellhead:**

A multi-bowl wellhead system will be utilized.

After running the 13 3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 21 days.

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

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

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

A solid steel body pack-off will be utilized after running and cementing the intermediate casing string. After installation of the first intermediate string the pack-off and lower flanges will be pressure tested to 5000 psi.

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

**14. Additional variance requests**

A. Casing.

1. Variance is requested to wave/reduce the centralizer requirements for the 7" and 5 1/2" production casing due to the tight clearance with 8 3/4" hole.



Project: Lea County, NM (NAD83)  
 Site: Sec 3-T19S-R35E (Eagle/Norte State)  
 Well: Eagle State Com 501H  
 Wellbore: OH  
 Design: Plan #3  
 Rig:



Azimuths to Grid North  
 True North: -0.48°  
 Magnetic North: 5.74°

Magnetic Field  
 Strength: 47650.3nT  
 Dip Angle: 60.52°  
 Date: 2/17/2023  
 Model: HDGM2023

**Total Magnetic Correction: 5.74°**

PROJECT DETAILS: Lea County, NM (NAD83)

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

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

#### FORMATION TOP DETAILS

TVDPATH	MDPath	Formation
30.00	30.00	Cenozoic Alluvium (surface)
1807.00	1807.00	Rustler
2047.00	2047.00	Salado
2959.00	2960.13	Base Salt
3359.00	3360.68	Yates
3808.00	3810.30	Seven Rivers
4568.00	4571.03	Queen
6049.00	6053.44	Cherry Canyon
7498.00	7503.83	Bone Spring Lime
9080.00	9086.09	First Bone Spring Sand
9346.00	9352.63	Second Bone Spring Carbonates
9539.00	9559.97	Second Bone Spring Sand
9817.00	10150.13	HZ Target at Landing

#### SHL

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

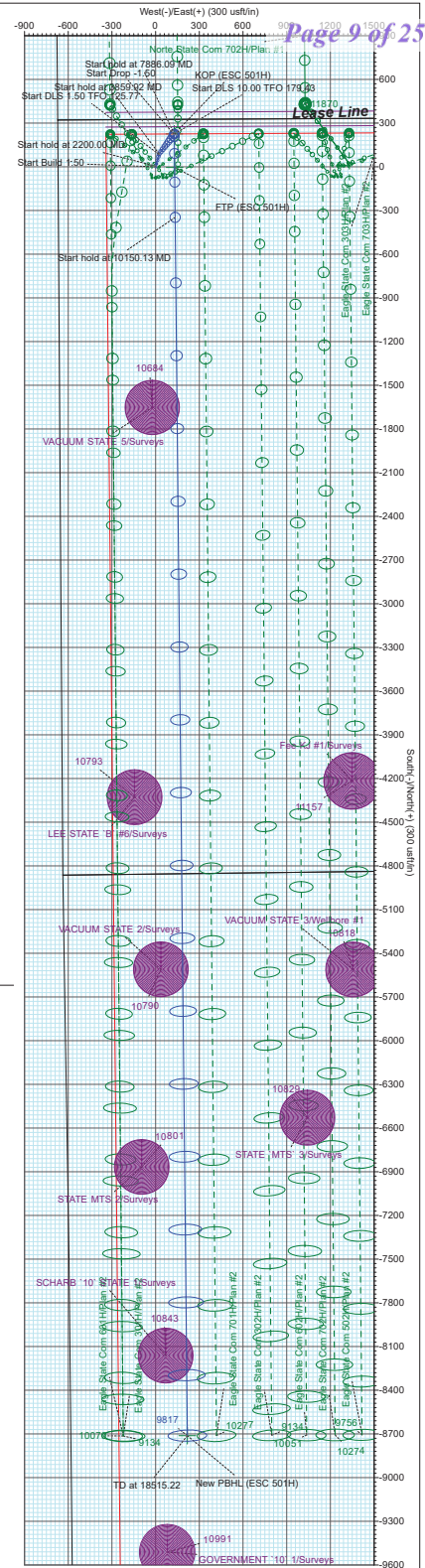
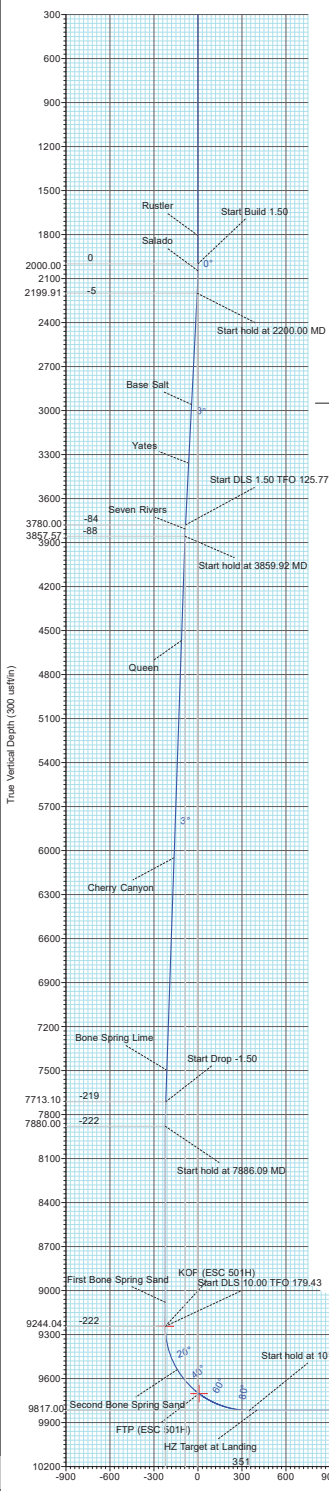
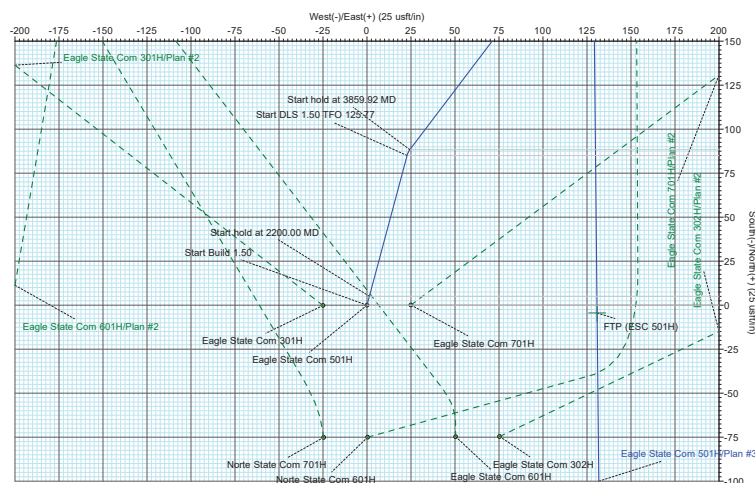
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	617968.71	812579.48	32.6957395	-103.4516171	

#### SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
2200.00	3.00	15.00	2199.91	5.06	1.35	1.50	15.00	-5.02	
3782.26	3.00	15.00	3780.00	85.04	22.79	0.00	0.00	-84.45	
3859.92	2.50	37.18	3857.57	88.36	24.34	1.50	125.77	-87.72	
7719.14	2.50	37.18	7713.10	222.71	126.24	0.00	0.00	-219.46	
7886.09	0.00	359.52	7880.00	225.61	128.45	1.50	180.00	-222.33	
9250.13	0.00	359.52	9244.04	225.61	128.45	0.00	0.00	-222.33	KOP (ESC 501H)
10150.13	90.00	179.43	9817.00	-347.32	134.19	10.00	179.43	350.56	
18515.22	90.00	179.43	9817.00	-8711.99	218.00	0.00	0.00	8714.72	New PBHL (ESC 501H)

#### WELLBORE TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
KOP (ESC 501H)	9244.04	225.61	128.45	618194.32	812707.93	32.6963566	-103.4511936
FTP (ESC 501H)	9703.02	-4.38	130.75	617964.33	812710.23	32.6957244	-103.4511923
New PBHL (ESC 501H)	9817.00	-8711.99	218.00	609256.72	812797.48	32.6717906	-103.4511440



Sec 3-T19S-R35E (Eagle/Norte State) Eagle State Com 501H Plan #3 (Eagle State Com 501H)  
 Created By: RDM Date: 10/23/2023  
 Checked: Date:

TD at 18515.22

New PBHL (ESC 501H)

# Franklin Mountain Energy

Lea County, NM (NAD83)

Sec 3-T19S-R35E (Eagle/Norte State)

Eagle State Com 501H

OH

Plan: Plan #3

## Standard Planning Report - Geographic

07 March, 2023



# Total Directional

## Planning Report - Geographic



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Eagle State Com 501H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Site:</b>	Sec 3-T19S-R35E (Eagle/Norte State)	<b>North Reference:</b>	Grid
<b>Well:</b>	Eagle State Com 501H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	OH		
<b>Design:</b>	Plan #3		

<b>Project</b>	Lea County, NM (NAD83)		
<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		

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

<b>Well</b>	Eagle State Com 501H		
<b>Well Position</b>	<b>+N/-S</b>	0.00 usft	<b>Northing:</b>
	<b>+E/-W</b>	0.00 usft	<b>Easting:</b>
<b>Position Uncertainty</b>	0.50 usft	<b>Wellhead Elevation:</b>	usft
<b>Grid Convergence:</b>	0.48 °	<b>Latitude:</b>	32.6957395
		<b>Longitude:</b>	-103.4516171
		<b>Ground Level:</b>	3,855.00 usft

<b>Wellbore</b>	OH				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM2023	2/17/2023	6.22	60.52	47,650.30000000

<b>Design</b>	Plan #3			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.00	0.00	0.00	178.57

<b>Plan Survey Tool Program</b>	<b>Date</b>	3/7/2023		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.00	18,515.22 Plan #3 (OH)	MWD+HDGM	
			OWSG MWD + HDGM	

# Total Directional

## Planning Report - Geographic



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Eagle State Com 501H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Site:</b>	Sec 3-T19S-R35E (Eagle/Norte State)	<b>North Reference:</b>	Grid
<b>Well:</b>	Eagle State Com 501H	<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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	3.00	15.00	2,199.91	5.06	1.35	1.50	1.50	0.00	15.00	
3,782.26	3.00	15.00	3,780.00	85.04	22.79	0.00	0.00	0.00	0.00	
3,859.92	2.50	37.18	3,857.57	88.36	24.34	1.50	-0.64	28.56	125.77	
7,719.14	2.50	37.18	7,713.10	222.71	126.24	0.00	0.00	0.00	0.00	
7,886.09	0.00	359.52	7,880.00	225.61	128.45	1.50	-1.50	0.00	180.00	
9,250.13	0.00	359.52	9,244.04	225.61	128.45	0.00	0.00	0.00	0.00	KOP (ESC 501H)
10,150.13	90.00	179.43	9,817.00	-347.32	134.19	10.00	10.00	19.99	179.43	
18,515.22	90.00	179.43	9,817.00	-8,711.99	218.00	0.00	0.00	0.00	0.00	New PBHL (ESC 501H)

# Total Directional Planning Report - Geographic



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Eagle State Com 501H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Site:</b>	Sec 3-T19S-R35E (Eagle/Norte State)	<b>North Reference:</b>	Grid
<b>Well:</b>	Eagle State Com 501H	<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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.00	0.00	0.00	0.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
30.00	0.00	0.00	30.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
Cenozoic Alluvium (surface)										
100.00	0.00	0.00	100.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
200.00	0.00	0.00	200.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
300.00	0.00	0.00	300.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
400.00	0.00	0.00	400.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
500.00	0.00	0.00	500.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
600.00	0.00	0.00	600.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
700.00	0.00	0.00	700.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
800.00	0.00	0.00	800.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
900.00	0.00	0.00	900.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,000.00	0.00	0.00	1,000.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
1,807.00	0.00	0.00	1,807.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
Rustler										
1,900.00	0.00	0.00	1,900.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	617,968.71	812,579.48	32.6957395	-103.4516171	
2,047.00	0.71	15.00	2,047.00	0.28	0.07	617,968.99	812,579.55	32.6957402	-103.4516169	
Salado										
2,100.00	1.50	15.00	2,099.99	1.26	0.34	617,969.98	812,579.82	32.6957429	-103.4516160	
2,200.00	3.00	15.00	2,199.91	5.06	1.35	617,973.77	812,580.83	32.6957533	-103.4516126	
2,300.00	3.00	15.00	2,299.77	10.11	2.71	617,978.83	812,582.19	32.6957672	-103.4516081	
2,400.00	3.00	15.00	2,399.63	15.17	4.06	617,983.88	812,583.54	32.6957811	-103.4516035	
2,500.00	3.00	15.00	2,499.50	20.22	5.42	617,988.94	812,584.90	32.6957949	-103.4515990	
2,600.00	3.00	15.00	2,599.36	25.28	6.77	617,993.99	812,586.25	32.6958088	-103.4515944	
2,700.00	3.00	15.00	2,699.22	30.33	8.13	617,999.05	812,587.61	32.6958227	-103.4515899	
2,800.00	3.00	15.00	2,799.09	35.39	9.48	618,004.10	812,588.96	32.6958365	-103.4515854	
2,900.00	3.00	15.00	2,898.95	40.44	10.84	618,009.16	812,590.31	32.6958504	-103.4515808	
2,960.13	3.00	15.00	2,959.00	43.48	11.65	618,012.20	812,591.13	32.6958587	-103.4515781	
Base Salt										
3,000.00	3.00	15.00	2,998.81	45.50	12.19	618,014.21	812,591.67	32.6958642	-103.4515763	
3,100.00	3.00	15.00	3,098.68	50.55	13.55	618,019.27	812,593.02	32.6958781	-103.4515717	
3,200.00	3.00	15.00	3,198.54	55.61	14.90	618,024.32	812,594.38	32.6958920	-103.4515672	
3,300.00	3.00	15.00	3,298.40	60.66	16.25	618,029.38	812,595.73	32.6959058	-103.4515627	
3,360.68	3.00	15.00	3,359.00	63.73	17.08	618,032.45	812,596.56	32.6959142	-103.4515599	
Yates										
3,400.00	3.00	15.00	3,398.26	65.72	17.61	618,034.43	812,597.09	32.6959197	-103.4515581	
3,500.00	3.00	15.00	3,498.13	70.77	18.96	618,039.49	812,598.44	32.6959336	-103.4515536	
3,600.00	3.00	15.00	3,597.99	75.83	20.32	618,044.54	812,599.80	32.6959474	-103.4515490	
3,700.00	3.00	15.00	3,697.85	80.89	21.67	618,049.60	812,601.15	32.6959613	-103.4515445	
3,782.26	3.00	15.00	3,780.00	85.04	22.79	618,053.76	812,602.27	32.6959727	-103.4515408	
3,800.00	2.85	19.34	3,797.72	85.91	23.05	618,054.62	812,602.53	32.6959751	-103.4515399	
3,810.30	2.78	22.07	3,808.00	86.38	23.23	618,055.10	812,602.71	32.6959763	-103.4515393	
Seven Rivers										
3,859.92	2.50	37.18	3,857.57	88.36	24.34	618,057.07	812,603.82	32.6959818	-103.4515356	
3,900.00	2.50	37.18	3,897.61	89.75	25.40	618,058.47	812,604.88	32.6959856	-103.4515322	

# Total Directional

## Planning Report - Geographic



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Eagle State Com 501H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Site:</b>	Sec 3-T19S-R35E (Eagle/Norte State)	<b>North Reference:</b>	Grid
<b>Well:</b>	Eagle State Com 501H	<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)	Map Northing (usft)	Map Easting (usft)			
								Latitude	Longitude	
4,000.00	2.50	37.18	3,997.52	93.24	28.04	618,061.95	812,607.52	32.6959951	-103.4515235	
4,100.00	2.50	37.18	4,097.42	96.72	30.68	618,065.43	812,610.16	32.6960046	-103.4515148	
4,200.00	2.50	37.18	4,197.33	100.20	33.32	618,068.91	812,612.80	32.6960141	-103.4515061	
4,300.00	2.50	37.18	4,297.23	103.68	35.96	618,072.39	812,615.44	32.6960236	-103.4514975	
4,400.00	2.50	37.18	4,397.14	107.16	38.60	618,075.87	812,618.08	32.6960331	-103.4514888	
4,500.00	2.50	37.18	4,497.04	110.64	41.24	618,079.35	812,620.72	32.6960426	-103.4514801	
4,571.03	2.50	37.18	4,568.00	113.11	43.12	618,081.83	812,622.59	32.6960494	-103.4514739	
Queen										
4,600.00	2.50	37.18	4,596.95	114.12	43.88	618,082.84	812,623.36	32.6960521	-103.4514714	
4,700.00	2.50	37.18	4,696.85	117.60	46.52	618,086.32	812,626.00	32.6960616	-103.4514627	
4,800.00	2.50	37.18	4,796.75	121.08	49.16	618,089.80	812,628.64	32.6960711	-103.4514541	
4,900.00	2.50	37.18	4,896.66	124.57	51.80	618,093.28	812,631.28	32.6960806	-103.4514454	
5,000.00	2.50	37.18	4,996.56	128.05	54.44	618,096.76	812,633.92	32.6960901	-103.4514367	
5,100.00	2.50	37.18	5,096.47	131.53	57.08	618,100.24	812,636.56	32.6960997	-103.4514280	
5,200.00	2.50	37.18	5,196.37	135.01	59.72	618,103.72	812,639.20	32.6961092	-103.4514194	
5,300.00	2.50	37.18	5,296.28	138.49	62.36	618,107.20	812,641.84	32.6961187	-103.4514107	
5,400.00	2.50	37.18	5,396.18	141.97	65.00	618,110.69	812,644.48	32.6961282	-103.4514020	
5,500.00	2.50	37.18	5,496.09	145.45	67.65	618,114.17	812,647.12	32.6961377	-103.4513933	
5,600.00	2.50	37.18	5,595.99	148.93	70.29	618,117.65	812,649.76	32.6961472	-103.4513847	
5,700.00	2.50	37.18	5,695.90	152.42	72.93	618,121.13	812,652.40	32.6961567	-103.4513760	
5,800.00	2.50	37.18	5,795.80	155.90	75.57	618,124.61	812,655.04	32.6961662	-103.4513673	
5,900.00	2.50	37.18	5,895.70	159.38	78.21	618,128.09	812,657.69	32.6961757	-103.4513586	
6,000.00	2.50	37.18	5,995.61	162.86	80.85	618,131.57	812,660.33	32.6961852	-103.4513500	
6,053.44	2.50	37.18	6,049.00	164.72	82.26	618,133.43	812,661.74	32.6961903	-103.4513453	
Cherry Canyon										
6,100.00	2.50	37.18	6,095.51	166.34	83.49	618,135.05	812,662.97	32.6961947	-103.4513413	
6,200.00	2.50	37.18	6,195.42	169.82	86.13	618,138.54	812,665.61	32.6962042	-103.4513326	
6,300.00	2.50	37.18	6,295.32	173.30	88.77	618,142.02	812,668.25	32.6962137	-103.4513239	
6,400.00	2.50	37.18	6,395.23	176.78	91.41	618,145.50	812,670.89	32.6962232	-103.4513152	
6,500.00	2.50	37.18	6,495.13	180.27	94.05	618,148.98	812,673.53	32.6962328	-103.4513066	
6,600.00	2.50	37.18	6,595.04	183.75	96.69	618,152.46	812,676.17	32.6962423	-103.4512979	
6,700.00	2.50	37.18	6,694.94	187.23	99.33	618,155.94	812,678.81	32.6962518	-103.4512892	
6,800.00	2.50	37.18	6,794.84	190.71	101.97	618,159.42	812,681.45	32.6962613	-103.4512805	
6,900.00	2.50	37.18	6,894.75	194.19	104.61	618,162.90	812,684.09	32.6962708	-103.4512719	
7,000.00	2.50	37.18	6,994.65	197.67	107.25	618,166.38	812,686.73	32.6962803	-103.4512632	
7,100.00	2.50	37.18	7,094.56	201.15	109.89	618,169.87	812,689.37	32.6962898	-103.4512545	
7,200.00	2.50	37.18	7,194.46	204.63	112.53	618,173.35	812,692.01	32.6962993	-103.4512458	
7,300.00	2.50	37.18	7,294.37	208.11	115.17	618,176.83	812,694.65	32.6963088	-103.4512372	
7,400.00	2.50	37.18	7,394.27	211.60	117.81	618,180.31	812,697.29	32.6963183	-103.4512285	
7,500.00	2.50	37.18	7,494.18	215.08	120.46	618,183.79	812,699.93	32.6963278	-103.4512198	
7,503.83	2.50	37.18	7,498.00	215.21	120.56	618,183.92	812,700.03	32.6963282	-103.4512195	
Bone Spring Lime										
7,600.00	2.50	37.18	7,594.08	218.56	123.10	618,187.27	812,702.57	32.6963373	-103.4512111	
7,700.00	2.50	37.18	7,693.99	222.04	125.74	618,190.75	812,705.21	32.6963468	-103.4512024	
7,719.14	2.50	37.18	7,713.10	222.71	126.24	618,191.42	812,705.72	32.6963487	-103.4512008	
7,800.00	1.29	37.18	7,793.92	224.84	127.86	618,193.55	812,707.34	32.6963545	-103.4511955	
7,886.09	0.00	359.52	7,880.00	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
7,900.00	0.00	0.00	7,893.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
8,000.00	0.00	0.00	7,993.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
8,100.00	0.00	0.00	8,093.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
8,200.00	0.00	0.00	8,193.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
8,300.00	0.00	0.00	8,293.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
8,400.00	0.00	0.00	8,393.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
8,500.00	0.00	0.00	8,493.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	



# Total Directional Planning Report - Geographic



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<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Site:</b>	Sec 3-T19S-R35E (Eagle/Norte State)	<b>North Reference:</b>	Grid
<b>Well:</b>	Eagle State Com 501H	<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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,600.00	0.00	0.00	8,593.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
8,700.00	0.00	0.00	8,693.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
8,800.00	0.00	0.00	8,793.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
8,900.00	0.00	0.00	8,893.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
9,000.00	0.00	0.00	8,993.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
9,086.09	0.00	0.00	9,080.00	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
<b>First Bone Spring Sand</b>									
9,100.00	0.00	0.00	9,093.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
9,200.00	0.00	0.00	9,193.91	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
9,250.13	0.00	359.52	9,244.04	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935
<b>KOP (ESC 501H)</b>									
9,300.00	4.99	179.43	9,293.85	223.44	128.47	618,192.16	812,707.95	32.6963506	-103.4511935
9,350.00	9.99	179.43	9,343.41	216.93	128.53	618,185.64	812,708.01	32.6963327	-103.4511935
9,352.63	10.25	179.43	9,346.00	216.47	128.54	618,185.18	812,708.02	32.6963315	-103.4511935
<b>Second Bone Spring Carbonates</b>									
9,400.00	14.99	179.43	9,392.21	206.12	128.64	618,174.84	812,708.12	32.6963030	-103.4511934
9,450.00	19.99	179.43	9,439.88	191.10	128.79	618,159.82	812,708.27	32.6962617	-103.4511934
9,500.00	24.99	179.43	9,486.07	171.99	128.98	618,140.70	812,708.46	32.6962092	-103.4511932
9,550.00	29.99	179.43	9,530.41	148.92	129.21	618,117.63	812,708.69	32.6961458	-103.4511931
9,559.97	30.98	179.43	9,539.00	143.86	129.27	618,112.57	812,708.74	32.6961319	-103.4511931
<b>Second Bone Spring Sand</b>									
9,600.00	34.99	179.43	9,572.57	122.07	129.48	618,090.79	812,708.96	32.6960720	-103.4511930
9,650.00	39.99	179.43	9,612.23	91.65	129.79	618,060.37	812,709.27	32.6959884	-103.4511928
9,700.00	44.99	179.43	9,649.09	57.89	130.13	618,026.61	812,709.60	32.6958956	-103.4511926
9,750.00	49.99	179.43	9,682.87	21.05	130.50	617,989.77	812,709.97	32.6957943	-103.4511924
9,782.45	53.23	179.43	9,703.02	-4.38	130.75	617,964.33	812,710.23	32.6957244	-103.4511923
<b>FTP (ESC 501H)</b>									
9,800.00	54.99	179.43	9,713.31	-18.60	130.89	617,950.12	812,710.37	32.6956854	-103.4511922
9,850.00	59.99	179.43	9,740.17	-60.74	131.32	617,907.97	812,710.79	32.6955695	-103.4511920
9,900.00	64.99	179.43	9,763.26	-105.07	131.76	617,863.64	812,711.24	32.6954477	-103.4511917
9,950.00	69.99	179.43	9,782.40	-151.25	132.22	617,817.47	812,711.70	32.6953208	-103.4511915
10,000.00	74.99	179.43	9,797.44	-198.91	132.70	617,769.80	812,712.18	32.6951898	-103.4511912
10,050.00	79.99	179.43	9,808.27	-247.70	133.19	617,721.01	812,712.67	32.6950556	-103.4511909
10,100.00	84.99	179.43	9,814.81	-297.26	133.69	617,671.46	812,713.16	32.6949194	-103.4511907
10,150.13	90.00	179.43	9,817.00	-347.32	134.19	617,621.40	812,713.66	32.6947818	-103.4511904
<b>HZ Target at Landing</b>									
10,200.00	90.00	179.43	9,817.00	-397.19	134.69	617,571.53	812,714.16	32.6946448	-103.4511901
10,300.00	90.00	179.43	9,817.00	-497.18	135.69	617,471.53	812,715.17	32.6943699	-103.4511895
10,400.00	90.00	179.43	9,817.00	-597.18	136.69	617,371.54	812,716.17	32.6940951	-103.4511890
10,500.00	90.00	179.43	9,817.00	-697.17	137.69	617,271.54	812,717.17	32.6938202	-103.4511884
10,600.00	90.00	179.43	9,817.00	-797.17	138.69	617,171.55	812,718.17	32.6935454	-103.4511879
10,700.00	90.00	179.43	9,817.00	-897.16	139.70	617,071.55	812,719.17	32.6932705	-103.4511873
10,800.00	90.00	179.43	9,817.00	-997.16	140.70	616,971.56	812,720.18	32.6929957	-103.4511868
10,900.00	90.00	179.43	9,817.00	-1,097.15	141.70	616,871.56	812,721.18	32.6927208	-103.4511862
11,000.00	90.00	179.43	9,817.00	-1,197.15	142.70	616,771.57	812,722.18	32.6924460	-103.4511857
11,100.00	90.00	179.43	9,817.00	-1,297.14	143.70	616,671.57	812,723.18	32.6921712	-103.4511851
11,200.00	90.00	179.43	9,817.00	-1,397.14	144.71	616,571.58	812,724.18	32.6918963	-103.4511846
11,300.00	90.00	179.43	9,817.00	-1,497.13	145.71	616,471.58	812,725.19	32.6916215	-103.4511840
11,400.00	90.00	179.43	9,817.00	-1,597.13	146.71	616,371.59	812,726.19	32.6913466	-103.4511835
11,500.00	90.00	179.43	9,817.00	-1,697.12	147.71	616,271.59	812,727.19	32.6910718	-103.4511829
11,600.00	90.00	179.43	9,817.00	-1,797.12	148.71	616,171.60	812,728.19	32.6907969	-103.4511823
11,700.00	90.00	179.43	9,817.00	-1,897.11	149.72	616,071.60	812,729.19	32.6905221	-103.4511818
11,800.00	90.00	179.43	9,817.00	-1,997.11	150.72	615,971.61	812,730.20	32.6902472	-103.4511812
11,900.00	90.00	179.43	9,817.00	-2,097.10	151.72	615,871.61	812,731.20	32.6899724	-103.4511807

# Total Directional

## Planning Report - Geographic



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Eagle State Com 501H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Site:</b>	Sec 3-T19S-R35E (Eagle/Norte State)	<b>North Reference:</b>	Grid
<b>Well:</b>	Eagle State Com 501H	<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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
12,000.00	90.00	179.43	9,817.00	-2,197.10	152.72	615,771.62	812,732.20	32.6896975	-103.4511801	
12,100.00	90.00	179.43	9,817.00	-2,297.09	153.72	615,671.62	812,733.20	32.6894227	-103.4511796	
12,200.00	90.00	179.43	9,817.00	-2,397.09	154.73	615,571.63	812,734.20	32.6891478	-103.4511790	
12,300.00	90.00	179.43	9,817.00	-2,497.08	155.73	615,471.63	812,735.21	32.6888730	-103.4511785	
12,400.00	90.00	179.43	9,817.00	-2,597.08	156.73	615,371.64	812,736.21	32.6885981	-103.4511779	
12,500.00	90.00	179.43	9,817.00	-2,697.07	157.73	615,271.64	812,737.21	32.6883233	-103.4511774	
12,600.00	90.00	179.43	9,817.00	-2,797.07	158.73	615,171.65	812,738.21	32.6880484	-103.4511768	
12,700.00	90.00	179.43	9,817.00	-2,897.06	159.73	615,071.65	812,739.21	32.6877736	-103.4511763	
12,800.00	90.00	179.43	9,817.00	-2,997.06	160.74	614,971.66	812,740.22	32.6874988	-103.4511757	
12,900.00	90.00	179.43	9,817.00	-3,097.05	161.74	614,871.66	812,741.22	32.6872239	-103.4511751	
13,000.00	90.00	179.43	9,817.00	-3,197.05	162.74	614,771.67	812,742.22	32.6869491	-103.4511746	
13,100.00	90.00	179.43	9,817.00	-3,297.04	163.74	614,671.67	812,743.22	32.6866742	-103.4511740	
13,200.00	90.00	179.43	9,817.00	-3,397.04	164.74	614,571.68	812,744.22	32.6863994	-103.4511735	
13,300.00	90.00	179.43	9,817.00	-3,497.03	165.75	614,471.68	812,745.22	32.6861245	-103.4511729	
13,400.00	90.00	179.43	9,817.00	-3,597.03	166.75	614,371.69	812,746.23	32.6858497	-103.4511724	
13,500.00	90.00	179.43	9,817.00	-3,697.02	167.75	614,271.69	812,747.23	32.6855748	-103.4511718	
13,600.00	90.00	179.43	9,817.00	-3,797.02	168.75	614,171.70	812,748.23	32.6853000	-103.4511713	
13,700.00	90.00	179.43	9,817.00	-3,897.01	169.75	614,071.70	812,749.23	32.6850251	-103.4511707	
13,800.00	90.00	179.43	9,817.00	-3,997.01	170.76	613,971.71	812,750.23	32.6847503	-103.4511702	
13,900.00	90.00	179.43	9,817.00	-4,097.00	171.76	613,871.71	812,751.24	32.6844754	-103.4511696	
14,000.00	90.00	179.43	9,817.00	-4,197.00	172.76	613,771.72	812,752.24	32.6842006	-103.4511691	
14,100.00	90.00	179.43	9,817.00	-4,296.99	173.76	613,671.72	812,753.24	32.6839257	-103.4511685	
14,200.00	90.00	179.43	9,817.00	-4,396.99	174.76	613,571.73	812,754.24	32.6836509	-103.4511679	
14,300.00	90.00	179.43	9,817.00	-4,496.98	175.77	613,471.73	812,755.24	32.6833761	-103.4511674	
14,400.00	90.00	179.43	9,817.00	-4,596.98	176.77	613,371.74	812,756.25	32.6831012	-103.4511668	
14,500.00	90.00	179.43	9,817.00	-4,696.97	177.77	613,271.74	812,757.25	32.6828264	-103.4511663	
14,600.00	90.00	179.43	9,817.00	-4,796.97	178.77	613,171.75	812,758.25	32.6825515	-103.4511657	
14,700.00	90.00	179.43	9,817.00	-4,896.96	179.77	613,071.75	812,759.25	32.6822767	-103.4511652	
14,800.00	90.00	179.43	9,817.00	-4,996.96	180.78	612,971.76	812,760.25	32.6820018	-103.4511646	
14,900.00	90.00	179.43	9,817.00	-5,096.95	181.78	612,871.76	812,761.26	32.6817270	-103.4511641	
15,000.00	90.00	179.43	9,817.00	-5,196.95	182.78	612,771.77	812,762.26	32.6814521	-103.4511635	
15,100.00	90.00	179.43	9,817.00	-5,296.94	183.78	612,671.77	812,763.26	32.6811773	-103.4511630	
15,200.00	90.00	179.43	9,817.00	-5,396.94	184.78	612,571.78	812,764.26	32.6809024	-103.4511624	
15,300.00	90.00	179.43	9,817.00	-5,496.93	185.79	612,471.78	812,765.26	32.6806276	-103.4511619	
15,400.00	90.00	179.43	9,817.00	-5,596.93	186.79	612,371.79	812,766.27	32.6803527	-103.4511613	
15,500.00	90.00	179.43	9,817.00	-5,696.92	187.79	612,271.79	812,767.27	32.6800779	-103.4511607	
15,600.00	90.00	179.43	9,817.00	-5,796.92	188.79	612,171.80	812,768.27	32.6798030	-103.4511602	
15,700.00	90.00	179.43	9,817.00	-5,896.91	189.79	612,071.80	812,769.27	32.6795282	-103.4511596	
15,800.00	90.00	179.43	9,817.00	-5,996.91	190.80	611,971.81	812,770.27	32.6792533	-103.4511591	
15,900.00	90.00	179.43	9,817.00	-6,096.90	191.80	611,871.81	812,771.28	32.6789785	-103.4511585	
16,000.00	90.00	179.43	9,817.00	-6,196.90	192.80	611,771.82	812,772.28	32.6787037	-103.4511580	
16,100.00	90.00	179.43	9,817.00	-6,296.89	193.80	611,671.82	812,773.28	32.6784288	-103.4511574	
16,200.00	90.00	179.43	9,817.00	-6,396.89	194.80	611,571.83	812,774.28	32.6781540	-103.4511569	
16,300.00	90.00	179.43	9,817.00	-6,496.88	195.80	611,471.83	812,775.28	32.6778791	-103.4511563	
16,400.00	90.00	179.43	9,817.00	-6,596.88	196.81	611,371.84	812,776.28	32.6776043	-103.4511558	
16,500.00	90.00	179.43	9,817.00	-6,696.87	197.81	611,271.84	812,777.29	32.6773294	-103.4511552	
16,600.00	90.00	179.43	9,817.00	-6,796.87	198.81	611,171.85	812,778.29	32.6770546	-103.4511546	
16,700.00	90.00	179.43	9,817.00	-6,896.86	199.81	611,071.85	812,779.29	32.6767797	-103.4511541	
16,800.00	90.00	179.43	9,817.00	-6,996.86	200.81	610,971.86	812,780.29	32.6765049	-103.4511535	
16,900.00	90.00	179.43	9,817.00	-7,096.85	201.82	610,871.86	812,781.29	32.6762300	-103.4511530	
17,000.00	90.00	179.43	9,817.00	-7,196.85	202.82	610,771.87	812,782.30	32.6759552	-103.4511524	
17,100.00	90.00	179.43	9,817.00	-7,296.84	203.82	610,671.87	812,783.30	32.6756803	-103.4511519	
17,200.00	90.00	179.43	9,817.00	-7,396.84	204.82	610,571.88	812,784.30	32.6754055	-103.4511513	
17,300.00	90.00	179.43	9,817.00	-7,496.83	205.82	610,471.88	812,785.30	32.6751306	-103.4511508	
17,400.00	90.00	179.43	9,817.00	-7,596.83	206.83	610,371.89	812,786.30	32.6748558	-103.4511502	



# Total Directional Planning Report - Geographic



<b>Database:</b>	EDM 5000.1 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Eagle State Com 501H
<b>Company:</b>	Franklin Mountain Energy	<b>TVD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Project:</b>	Lea County, NM (NAD83)	<b>MD Reference:</b>	3855' GL + 30' KB @ 3885.00usft
<b>Site:</b>	Sec 3-T19S-R35E (Eagle/Norte State)	<b>North Reference:</b>	Grid
<b>Well:</b>	Eagle State Com 501H	<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)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
17,500.00	90.00	179.43	9,817.00	-7,696.82	207.83	610,271.89	812,787.31	32.6745809	-103.4511497	
17,600.00	90.00	179.43	9,817.00	-7,796.82	208.83	610,171.90	812,788.31	32.6743061	-103.4511491	
17,700.00	90.00	179.43	9,817.00	-7,896.81	209.83	610,071.90	812,789.31	32.6740312	-103.4511485	
17,800.00	90.00	179.43	9,817.00	-7,996.81	210.83	609,971.91	812,790.31	32.6737564	-103.4511480	
17,900.00	90.00	179.43	9,817.00	-8,096.80	211.84	609,871.91	812,791.31	32.6734816	-103.4511474	
18,000.00	90.00	179.43	9,817.00	-8,196.80	212.84	609,771.92	812,792.32	32.6732067	-103.4511469	
18,100.00	90.00	179.43	9,817.00	-8,296.79	213.84	609,671.92	812,793.32	32.6729319	-103.4511463	
18,200.00	90.00	179.43	9,817.00	-8,396.79	214.84	609,571.93	812,794.32	32.6726570	-103.4511458	
18,300.00	90.00	179.43	9,817.00	-8,496.78	215.84	609,471.93	812,795.32	32.6723822	-103.4511452	
18,400.00	90.00	179.43	9,817.00	-8,596.78	216.85	609,371.94	812,796.32	32.6721073	-103.4511447	
18,500.00	90.00	179.43	9,817.00	-8,696.77	217.85	609,271.94	812,797.33	32.6718325	-103.4511441	
18,515.22	90.00	179.43	9,817.00	-8,711.99	218.00	609,256.72	812,797.48	32.6717906	-103.4511440	
New PBHL (ESC 501H)										

Design Targets										
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
KOP (ESC 501H) - plan hits target center - Point	0.00	359.52	9,244.04	225.61	128.45	618,194.33	812,707.92	32.6963566	-103.4511935	
FTP (ESC 501H) - plan hits target center - Point	0.00	0.00	9,703.02	-4.38	130.75	617,964.34	812,710.23	32.6957244	-103.4511923	
New PBHL (ESC 501H) - plan hits target center - Point	0.00	359.52	9,817.00	-8,711.99	218.00	609,256.72	812,797.48	32.6717906	-103.4511440	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
30.00	30.00	Cenozoic Alluvium (surface)		0.00	179.43	
1,807.00	1,807.00	Rustler		0.00	179.43	
2,047.00	2,047.00	Salado		0.00	179.43	
2,960.13	2,959.00	Base Salt		0.00	179.43	
3,360.68	3,359.00	Yates		0.00	179.43	
3,810.30	3,808.00	Seven Rivers		0.00	179.43	
4,571.03	4,568.00	Queen		0.00	179.43	
6,053.44	6,049.00	Cherry Canyon		0.00	179.43	
7,503.83	7,498.00	Bone Spring Lime		0.00	179.43	
9,086.09	9,080.00	First Bone Spring Sand		0.00	179.43	
9,352.63	9,346.00	Second Bone Spring Carbonates		0.00	179.43	
9,559.97	9,539.00	Second Bone Spring Sand		0.00	179.43	
10,150.13	9,817.00	HZ Target at Landing		0.00	179.43	

State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

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

## NATURAL GAS MANAGEMENT PLAN

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

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** Franklin Mountain Energy 3, LLC **OGRID:** 331595 **Date:** 2/28/2023

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

If Other, please describe: \_\_\_\_\_

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
See Attached Well List						

**IV. Central Delivery Point Name:** Eagle/Norte CTB [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
See Attached Well List						

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

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

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

## **Section 2 – Enhanced Plan**

### **EFFECTIVE APRIL 1, 2022**

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

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

#### **IX. Anticipated Natural Gas Production:**

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

#### **X. Natural Gas Gathering System (NGGS):**

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

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

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

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

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

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

### **Section 3 - Certifications**

**Effective May 25, 2021**

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

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

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

***If Operator checks this box, Operator will select one of the following:***

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

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

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

### **Section 4 - Notices**

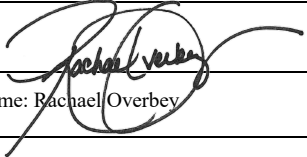
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

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

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

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

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

Signature: 
Printed Name: Rachael Overbey
Title: Director Operations Planning & Regulatory
E-mail Address: roverbey@fmelle.com
Date: 2/28/2023
Phone: 720-414-7868
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:

**NATURAL GAS MANAGEMENT PLAN**

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

Well Name	API 14 Digit	ULSTR	Surface Location FTG	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Eagle State Com 301H	TBD	Lot 4, 3-19S-35E	325 FNL 645 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 302H	TBD	Lot 4, 3-19S-35E	400 FNL 745 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 303H	TBD	Lot 3, 3-19S-35E	325 FNL 1920 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 501H	TBD	Lot 4, 3-19S-35E	325 FNL 670 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 502H	TBD	Lot 3, 3-19S-35E	400 FNL 1945 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 601H	TBD	Lot 4, 3-19S-35E	400 FNL 720 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 602H	TBD	Lot 3, 3-19S-35E	400 FNL 1895 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 701H	TBD	Lot 4, 3-19S-35E	325 FNL 695 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 702H	TBD	Lot 3, 3-19S-35E	400 FNL 1920 FWL	800 +/-	700 +/-	2500 +/-
Eagle State Com 703H	TBD	Lot 3, 3-19S-35E	325 FNL 1945 FWL	800 +/-	700 +/-	2500 +/-
Norte State Com 601H	TBD	Lot 4, 3-19S-35E	400 FNL 670 FWL	800 +/-	700 +/-	2500 +/-
Norte State Com 602H	TBD	Lot 3, 3-19S-35E	400 FNL 1995 FWL	800 +/-	700 +/-	2500 +/-
Norte State Com 701H	TBD	Lot 4, 3-19S-35E	400 FNL 645 FWL	800 +/-	700 +/-	2500 +/-
Norte State Com 702H	TBD	Lot 3, 3-19S-35E	325 FNL 1995 FWL	800 +/-	700 +/-	2500 +/-

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

Well Name	API 14 Digit	Spud Date (Batch Drilling)	TD Reached Date	Completion Commencement Date	Initial Flowback Date	First Production Date
Eagle State Com 301H	TBD	5/1/2023	8/21/2023	9/5/2023	9/15/2023	9/17/2023
Eagle State Com 302H	TBD	5/1/2023	8/21/2023	9/5/2023	9/15/2023	9/17/2023
Eagle State Com 303H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Eagle State Com 501H	TBD	5/1/2023	8/21/2023	9/5/2023	9/15/2023	9/17/2023
Eagle State Com 502H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Eagle State Com 601H	TBD	5/1/2023	8/21/2023	9/5/2023	9/15/2023	9/17/2023
Eagle State Com 602H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Eagle State Com 701H	TBD	5/1/2023	8/21/2023	9/5/2023	9/15/2023	9/17/2023
Eagle State Com 702H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Eagle State Com 703H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Norte State Com 601H	TBD	5/1/2023	8/21/2023	9/5/2023	9/15/2023	9/17/2023
Norte State Com 602H	TBD	6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023
Norte State Com 701H	TBD	5/1/2023	8/21/2023	9/5/2023	9/15/2023	9/17/2023
Norte State Com 702H		6/1/2023	9/21/2023	10/6/2023	10/16/2023	10/18/2023



## Natural Gas Management Plan

### Items VI-VIII

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

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

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

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



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

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

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



Eagle/Norte NGMP Map  
Feb 2023  
- Capacities reflected are FME's understanding of 3rd party midstream system capacities

