<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240

Phone: (575) 393-6161 Fax: (575) 393-0720 <u>District II</u>

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

<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

<u>District IV</u> 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 335883

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

Operator Name and Address		2. OGRID Number						
Franklin Mountain Energy 3, LLC	331595							
44 Cook Street	3. API Number							
Denver, CO 80206		30-025-51196						
4. Property Code	5. Property Name	6. Well No.						
333824	EAGLE STATE COM	502H						

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
С	3	19S	35E	3	400	N	1945	W	Lea

8. Proposed Bottom Hole Location

ſ	UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
	K	10	19S	35E	K	1428	S	2000	W	Lea

9. Pool Information

***************************************	The state of the s
SCHARB;BONE SPRING	55610

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3848
16. Multiple	17. Proposed Depth	18. Formation	20. Spud Date	
N	18465	2nd Bone Spring Sand		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

	Tit topood dading and doment togram									
Туре	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	9150	428	3000				
Prod	8.75	5.5	20	18465	2325	9150				

Casing/Cement Program: Additional Comments

Tapered production string will be ran with a X-over installed at the KOP of 9,150'. 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

Туре	Working Pressure	Test Pressure	Manufacturer
Double Ram	10000	5000	Cactus

knowledge and be	elief.	s true and complete to the best of my NMAC ⊠ and/or 19.15.14.9 (B) NMAC		OIL CONSERVATION	ON DIVISION
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		

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

Phone: (575) 748-1283 Fax: (575) 748-9720 <u>District III</u> 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 <u>District IV</u>

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number	² Pool Code						
30-025-51196	55610	SCHARB;BONE SPRING					
⁴ Property Code 333824	s Pr EAGL	⁶ Well Number 502H					
⁷ OGRID No. 331595		⁸ Operator Name FRANKLIN MOUNTAIN ENERGY 3, LLC					

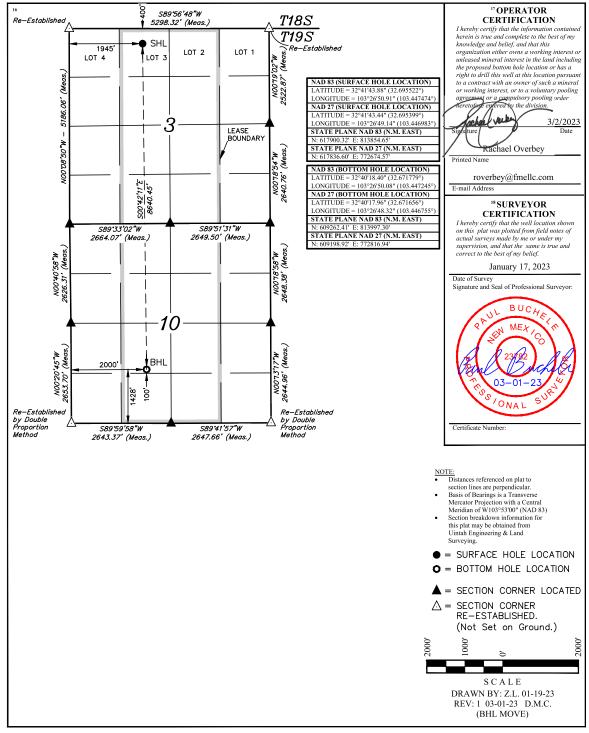
¹⁰ Surface Location

UL or lot no. 3	Section 3	Township 19S	Range 35E	Lot Idn	Feet from the 400	North/South line NORTH	Feet from the 1945	East/West line WEST	County LEA

"Bottom Hole Location If Different From Surface

UL or lot no. K	Section 10	Township 19S	Range 35E	Lot Idn	F	eet from the 1428	North/South line SOUTH	Feet from the 2000	East/West line WEST	County LEA
12 Dedicated Acre 639.26	es 13	³ Joint or Infill	14 Conso	lidation Code		15 Order No.				

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



Form APD Conditions

Permit 335883

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

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

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**

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
Franklin Mountain Energy 3, LLC [331595]	30-025-51196
44 Cook Street	Well:
Denver, CO 80206	EAGLE STATE COM #502H

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 502H

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

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,855'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,076	1,809'			Carbonates
Salado	1,841	2,044'			Salt, Carbonate & Clastics
Base Salt	922	2,963'			Shaley Carbonate & Shale
Yates	522	3,363'			Carbonate & Clastics
Seven Rivers	74	3,811'			Sandstone - oil/gas/water
Queen	-686	4,571'			Sandstone - oil/gas/water
Cherry Canyon	-2,127	6,012'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-3,583	7,469'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-5,153	9,038'			Shale/Carbonates - oil/gas
Second Bone Spring Carbonates	-5,418	9,304'			Chert/Cartxonate
Second Bone Spring Sand	-5,582	9,467'			Sandstone - oil/gas/water
HZ Target at Landing	-5,871	9,756'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-6,012	9,897'			Shale/Carbonates - oil/gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	6,012'	Oil
1 st Bone Spring Sand	9,038'	Oil
2 nd Bone Spring Sand	9,467'	Oil
3 rd Bone Carbonate	9,897'	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
						BTC					
Surface 13 3/8"	54.5	J-55	2730	1130	853	909	1900	1.02	1.14	4.19	4.47
0-1,900'											
						BTC					
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	1042	4000	2.08	2.26	3.52	4.01
0-4,000'											
						CDC-HTQ					
Production 7"	32	HCP-110	12460	10760	1025	1053	9150	2.18	2.51	2.61	2.68
0-9,150'											
						CDC-HTQ					
Production 5 1/2"	20	HCP-110	12640	12200	641	667	9315	1.15	2.80	2.24	2.33
9,150'-18,465'						TVD	9756				2.26

Tapered production string will be ran with a X-over installed at the KOP of 9,150'.



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	Hole	Cas	ing		L	.ead					Tail			Excess
Туре	Size	Size	Setting Depth	Sacks	Type of cmt	Yield ft3/sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Yield ft3/sk	Water gal/sk	тос	
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%CaCl2, 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- 9150	428	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	9150- 18465						2325	HSLD 80, 13.ppg , 32#/sk Salt, 4% STE, 1#/sk Gyp Seal	1.52	7.59	9150	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 $\frac{1}{2}$ " 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	Туре	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' – 18465' 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 9756' TVD (deepest point of the well) is 155F with an estimated maximum bottom-hole pressure (BHP) at the same point of 6,087 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/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
 - The Mud program will be designed to minimize the volume of H2S circulated to surface.
 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.

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. A batch drilling sequence sundry will be submitted for State approval prior to spud. A drilling rig with walking/skidding capabilities will be used.

12. Disposal/environmental concerns:

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

13. Wellhead:

A multi-bowl wellhead system will be utilized.

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

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

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

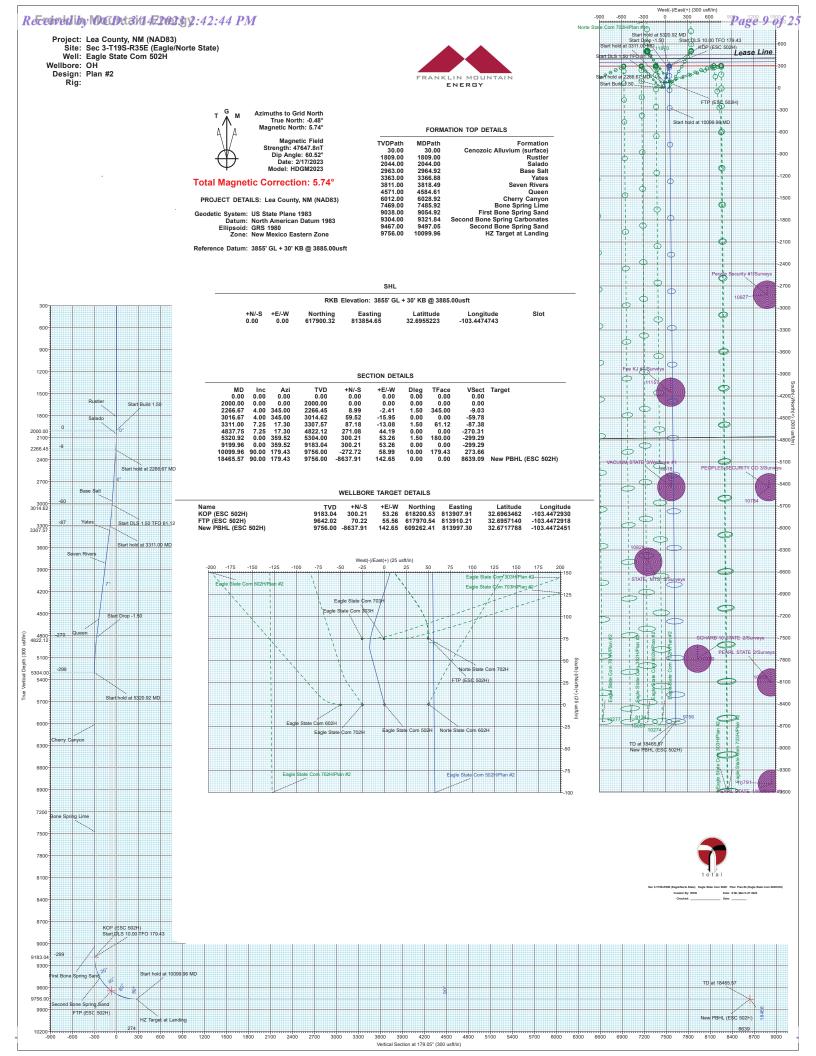
All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

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

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

14. Additional variance requests

- A. Casing.
- 1. Variance is requested to wave/reduce the centralizer requirements for the 7" and 5 ½" production casing due to the tight clearance with 8 3/4" hole.



Franklin Mountain Energy

Lea County, NM (NAD83) Sec 3-T19S-R35E (Eagle/Norte State) Eagle State Com 502H

OH

Plan: Plan #2

Standard Planning Report - Geographic

07 March, 2023



Planning Report - Geographic



Database: Company: Project:

EDM 5000.1 Single User Db Franklin Mountain Energy Lea County, NM (NAD83)

Well: Wellbore:

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

Eagle State Com 502H OH

Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Eagle State Com 502H

3855' GL + 30' KB @ 3885.00usft 3855' GL + 30' KB @ 3885.00usft

Minimum Curvature

Design: **Project**

Site:

Lea County, NM (NAD83)

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983 New Mexico Eastern Zone

System Datum:

Mean Sea Level

Map Zone:

Site

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

Site Position: From:

Мар

Northing: Easting:

617,968.58 usft Latitude: 812,554.48 usft Longitude:

32.6957397 -103.4516984

Position Uncertainty:

0.00 usft

Slot Radius:

13-3/16 "

Well

Well Position

Eagle State Com 502H

+N/-S +E/-W 0.00 usft

Northing: Easting:

617,900.32 usft 813,854.65 usfl Latitude: Longitude:

32.6955223 -103.4474743

Position Uncertainty

0.50 usft

Wellhead Elevation:

usf Ground Level: 3.855.00 usft

Grid Convergence:

0.48°

0.00 usft

Wellbore

ОН

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2023	2/17/2023	6.22	60.52	47,647.80000000

Design

Plan #2

Audit Notes:

Version:

1

Phase:

PLAN

Tie On Depth:

0.00 Direction

Vertical Section:

Depth From (TVD) (usft) 0.00

+N/-S (usft)

+E/-W (usft) 0.00

(°) 179.05

Plan Survey Tool Program

0.00

Depth From

(usft)

Depth To

(usft)

Survey (Wellbore)

18,465.57 Plan #2 (OH)

Date 3/6/2023

Tool Name

0.00

Remarks

MWD+HDGM

OWSG MWD + HDGM

Planning Report - Geographic



Database: Company: Project: Site: EDM 5000.1 Single User Db Franklin Mountain Energy Lea County, NM (NAD83)

Sec 3-T19S-R35E (Eagle/Norte State)
Eagle State Com 502H

Well: Eagle St Wellbore: OH Design: Plan #2 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Eagle State Com 502H

3855' GL + 30' KB @ 3885.00usft 3855' GL + 30' KB @ 3885.00usft

Grid

lan Section	s									
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	
2,266.67	4.00	345.00	2,266.45	8.99	-2.41	1.50	1.50	0.00	345.00	
3,016.67	4.00	345.00	3,014.62	59.52	-15.95	0.00	0.00	0.00	0.00	
3,311.00	7.25	17.30	3,307.57	87.18	-13.08	1.50	1.10	10.97	61.12	
4,837.75	7.25	17.30	4,822.12	271.08	44.19	0.00	0.00	0.00	0.00	
5,320.92	0.00	359.52	5,304.00	300.21	53.26	1.50	-1.50	0.00	180.00	
9,199.96	0.00	359.52	9,183.04	300.21	53.26	0.00	0.00	0.00	0.00	
10,099.96	90.00	179.43	9,756.00	-272.72	58.99	10.00	10.00	19.99	179.43	
18,465.57	90.00	179.43	9,756.00	-8,637.91	142.65	0.00	0.00	0.00	0.00	New PBHL (ESC 5

Planning Report - Geographic



Database: Company: Project:

Site:

EDM 5000.1 Single User Db Franklin Mountain Energy Lea County, NM (NAD83)

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

Well: Eagle State Com 502H

Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Eagle State Com 502H

3855' GL + 30' KB @ 3885.00usft 3855' GL + 30' KB @ 3885.00usft

Grid

Planned Sur	vov								
Planned Sur	vey								
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	617,900.32	813,854.65	32.6955223	-103.4474743
30.00	0.00	0.00	30.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
	oic Alluvium								
100.00		0.00	100.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
200.00		0.00	200.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
300.00 400.00		0.00 0.00	300.00 400.00	0.00 0.00	0.00 0.00	617,900.32 617,900.32	813,854.65 813,854.65	32.6955223 32.6955223	-103.4474743 -103.4474743
500.00		0.00	500.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
600.00		0.00	600.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
700.00		0.00	700.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
800.00		0.00	800.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
900.00	0.00	0.00	900.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,000.00		0.00	1,000.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,100.00		0.00	1,100.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,200.00		0.00	1,200.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,300.00 1,400.00		0.00 0.00	1,300.00 1,400.00	0.00 0.00	0.00 0.00	617,900.32 617,900.32	813,854.65 813,854.65	32.6955223 32.6955223	-103.4474743 -103.4474743
1,500.00		0.00	1,400.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,600.00		0.00	1,600.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,700.00		0.00	1,700.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,800.00		0.00	1,800.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
1,809.00	0.00	0.00	1,809.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
Rustle	r								
1,900.00		0.00	1,900.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
2,000.00		0.00	2,000.00	0.00	0.00	617,900.32	813,854.65	32.6955223	-103.4474743
2,044.00		345.00	2,044.00	0.24	-0.07	617,900.57	813,854.58	32.6955230	-103.4474745
Salado		345.00	2,099.99	1.26	0.24	617 001 50	813,854.31	22 6055250	102 4474752
2,100.00 2,200.00		345.00	2,099.99	5.06	-0.34 -1.35	617,901.59 617,905.38	813,853.29	32.6955258 32.6955362	-103.4474753 -103.4474785
2,266.67		345.00	2,155.51	8.99	-2.41	617,909.31	813,852.24	32.6955471	-103.4474819
2,300.00		345.00	2,299.70	11.23	-3.01	617,911.56	813,851.64	32.6955532	-103.4474837
2,400.00		345.00	2,399.46	17.97	-4.82	617,918.30	813,849.83	32.6955718	-103.4474894
2,500.00	4.00	345.00	2,499.22	24.71	-6.62	617,925.03	813,848.03	32.6955904	-103.4474951
2,600.00		345.00	2,598.97	31.45	-8.43	617,931.77	813,846.22	32.6956089	-103.4475008
2,700.00		345.00	2,698.73	38.19	-10.23	617,938.51	813,844.42	32.6956275	-103.4475065
2,800.00		345.00	2,798.48	44.92	-12.04	617,945.25	813,842.61	32.6956460	-103.4475122
2,900.00 2,964.92		345.00 345.00	2,898.24 2,963.00	51.66 56.04	-13.84 -15.01	617,951.99 617,956.36	813,840.81 813,839.63	32.6956646 32.6956767	-103.4475179 -103.4475216
		343.00	2,903.00	30.04	-13.01	017,930.30	013,039.03	32.0930707	-103.4473210
3,000.00		345.00	2,998.00	58.40	-15.65	617,958.72	813,839.00	32.6956832	-103.4475235
3,016.67		345.00	3,014.62	59.52	-15.95	617,959.85	813,838.70	32.6956863	-103.4475245
3,100.00		358.39	3,097.72	65.77	-16.80	617,966.09	813,837.85	32.6957034	-103.4475271
3,200.00	5.85	9.36	3,197.29	74.91	-16.09	617,975.24	813,838.56	32.6957286	-103.4475245
3,300.00		16.65	3,296.65	85.86	-13.49	617,986.19	813,841.16	32.6957586	-103.4475158
3,311.00		17.30	3,307.57	87.18	-13.08	617,987.50	813,841.56	32.6957622	-103.4475144
3,366.88	3 7.25	17.30	3,363.00	93.91	-10.99	617,994.23	813,843.66	32.6957807	-103.4475074
Yates	705	47.00	2 205 00	07.00	0.75	647 000 00	042 044 00	20 6057040	402 4475000
3,400.00 3,500.00		17.30 17.30	3,395.86 3,495.06	97.90 109.94	-9.75 -5.99	617,998.22 618,010.27	813,844.90 813,848.65	32.6957916 32.6958246	-103.4475033 -103.4474908
3,600.00		17.30	3,594.26	121.99	-3.99 -2.24	618,022.31	813,852.40	32.6958576	-103.4474783
3,700.00		17.30	3,693.46	134.03	1.51	618,034.36	813,856.16	32.6958906	-103.4474657
3,800.00		17.30	3,792.66	146.08	5.26	618,046.40	813,859.91	32.6959237	-103.4474532
3,818.49		17.30	3,811.00	148.31	5.95	618,048.63	813,860.60	32.6959298	-103.4474509
Seven	Rivers								

Planning Report - Geographic



Database: Company: Project:

Site:

EDM 5000.1 Single User Db Franklin Mountain Energy Lea County, NM (NAD83)

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

Well: Eagle State Com 502H

Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Eagle State Com 502H

3855' GL + 30' KB @ 3885.00usft 3855' GL + 30' KB @ 3885.00usft

Grid

Design.	i iaii	··-							
Planned Surv	vey .								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
3,900.00		17.30	3,891.86	158.12	9.01	618,058.45	813,863.66	32.6959567	-103.4474407
4,000.00		17.30	3,991.06	170.17	12.76	618,070.49	813,867.41	32.6959897	-103.4474282
4,100.00		17.30	4,090.26	182.21	16.51	618,082.54	813,871.16	32.6960227	-103.4474157
4,200.00		17.30	4,189.46	194.26	20.26	618,094.58	813,874.91	32.6960557	-103.4474031
4,300.00		17.30	4,288.67	206.30	24.01	618,106.63	813,878.66	32.6960888	-103.4473906
4,400.00		17.30	4,387.87	218.35	27.77	618,118.67	813,882.41	32.6961218	-103.4473781
4,500.00		17.30	4,487.07	230.39	31.52	618,130.72	813,886.17	32.6961548	-103.4473656
4,584.61	7.25	17.30	4,571.00	240.58	34.69	618,140.91	813,889.34	32.6961827	-103.4473550
Queen 4,600.00	7.25	17.30	4,586.27	242.44	35.27	618,142.76	813,889.92	32.6961878	-103.4473531
4,700.00		17.30	4,685.47	254.48	39.02	618,154.81	813,893.67	32.6962208	-103.4473405
4,800.00		17.30	4,784.67	266.53	42.77	618,166.85	813,897.42	32.6962538	-103.4473280
4,837.75		17.30	4,822.12	271.08	44.19	618,171.40	813,898.83	32.6962663	-103.4473233
4,900.00	6.31	17.30	4,883.93	278.09	46.37	618,178.42	813,901.02	32.6962855	-103.4473160
5,000.00		17.30	4,983.46	287.35	49.25	618,187.67	813,903.90	32.6963109	-103.4473064
5,100.00		17.30	5,083.20	294.12	51.36	618,194.44	813,906.01	32.6963295	-103.4472993
5,200.00		17.30	5,183.10	298.39	52.69	618,198.71	813,907.34	32.6963412	-103.4472949
5,300.00		17.30	5,283.08	300.16	53.24	618,200.48	813,907.89	32.6963460	-103.4472931
5,320.92		359.52	5,304.00	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
5,400.00 5,500.00		0.00 0.00	5,383.08 5,483.08	300.21 300.21	53.26 53.26	618,200.54 618,200.54	813,907.91 813,907.91	32.6963462 32.6963462	-103.4472930 -103.4472930
5,600.00		0.00	5,463.06	300.21	53.26	618,200.54	813,907.91	32.6963462 32.6963462	-103.4472930
5,700.00		0.00	5,683.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
5,800.00		0.00	5,783.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
5,900.00		0.00	5,883.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
6,000.00		0.00	5,983.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
6,028.92	0.00	0.00	6,012.00	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
	Canyon								
6,100.00		0.00	6,083.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
6,200.00		0.00	6,183.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
6,300.00		0.00 0.00	6,283.08	300.21	53.26	618,200.54	813,907.91	32.6963462 32.6963462	-103.4472930
6,400.00 6,500.00		0.00	6,383.08 6,483.08	300.21 300.21	53.26 53.26	618,200.54 618,200.54	813,907.91 813,907.91	32.6963462 32.6963462	-103.4472930 -103.4472930
6,600.00		0.00	6,583.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
6,700.00		0.00	6,683.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
6,800.00		0.00	6,783.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
6,900.00		0.00	6,883.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,000.00	0.00	0.00	6,983.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,100.00		0.00	7,083.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,200.00		0.00	7,183.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,300.00		0.00	7,283.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,400.00		0.00	7,383.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,485.92		0.00	7,469.00	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,500.00	Spring Lime 0.00	0.00	7,483.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,600.00		0.00	7,583.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,700.00		0.00	7,583.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,800.00		0.00	7,783.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
7,900.00		0.00	7,883.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,000.00		0.00	7,983.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,100.00	0.00	0.00	8,083.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,200.00		0.00	8,183.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,300.00		0.00	8,283.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,400.00	0.00	0.00	8,383.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930

Planning Report - Geographic



Database: Company: Project:

Site:

EDM 5000.1 Single User Db Franklin Mountain Energy Lea County, NM (NAD83)

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

Well: Eagle State Com 502H

Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Eagle State Com 502H

3855' GL + 30' KB @ 3885.00usft 3855' GL + 30' KB @ 3885.00usft

Grid

Planned Surv	ev								
i idillica dal v	o,								
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
8,500.00	0.00	0.00	8,483.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,600.00		0.00	8,583.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,700.00		0.00	8,683.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,800.00		0.00	8,783.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
8,900.00 9,000.00		0.00 0.00	8,883.08 8,983.08	300.21 300.21	53.26 53.26	618,200.54 618,200.54	813,907.91 813,907.91	32.6963462 32.6963462	-103.4472930
9,054.92		0.00	9,038.00	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930 -103.4472930
	one Spring S		3,000.00	300.21	33.20	010,200.04	010,007.01	32.0303402	-100.447 2000
9,100.00		0.00	9,083.08	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
9,199.96		359.52	9,183.04	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
KOP (E	SC 502H)								
9,250.00		179.43	9,233.02	298.03	53.28	618,198.35	813,907.93	32.6963402	-103.4472930
9,300.00		179.43	9,282.57	291.50	53.35	618,191.83	813,908.00	32.6963222	-103.4472930
9,321.84		179.43	9,304.00	287.30	53.39	618,187.62	813,908.04	32.6963107	-103.4472929
9.350.00	d Bone Sprir 15.00	-		200.60	E2 46	649 494 00	813.908.10	22 6062025	102 4472020
9,350.00		179.43 179.43	9,331.37 9,379.04	280.68 265.65	53.46 53.61	618,181.00 618,165.97	813,908.25	32.6962925 32.6962512	-103.4472929 -103.4472928
9,450.00		179.43	9,425.22	246.52	53.80	618,146.84	813,908.45	32.6961986	-103.4472927
9,497.05		179.43	9,467.00	224.90	54.01	618,125.22	813,908.66	32.6961392	-103.4472926
Second	l Bone Sprir						·		
9,500.00		179.43	9,469.56	223.43	54.03	618,123.76	813,908.68	32.6961351	-103.4472926
9,550.00		179.43	9,511.71	196.58	54.30	618,096.90	813,908.95	32.6960613	-103.4472924
9,600.00		179.43	9,551.36	166.15	54.60	618,066.47	813,909.25	32.6959777	-103.4472923
9,650.00		179.43	9,588.21	132.38	54.94	618,032.70	813,909.59	32.6958849	-103.4472921
9,700.00 9,732.29		179.43 179.43	9,621.98 9,642.02	95.52 70.22	55.31 55.56	617,995.85 617,970.54	813,909.96 813,910.21	32.6957836 32.6957140	-103.4472919 -103.4472918
	SC 502H)	173.43	9,042.02	10.22	33.30	017,970.54	013,910.21	32.0337 140	-103.4472910
9,750.00		179.43	9,652.40	55.87	55.70	617,956.19	813,910.35	32.6956746	-103.4472917
9,800.00		179.43	9,679.26	13.71	56.13	617,914.04	813,910.77	32.6955587	-103.4472915
9,850.00	65.00	179.43	9,702.33	-30.62	56.57	617,869.70	813,911.22	32.6954368	-103.4472912
9,900.00		179.43	9,721.46	-76.80	57.03	617,823.52	813,911.68	32.6953099	-103.4472910
9,950.00		179.43	9,736.49	-124.47	57.51	617,775.85	813,912.16	32.6951789	-103.4472907
10,000.00		179.43	9,747.30	-173.27	58.00	617,727.05	813,912.64	32.6950448	-103.4472905
10,050.00 10,099.96		179.43 179.43	9,753.82 9,756.00	-222.82 -272.72	58.49 58.99	617,677.50 617,627.61	813,913.14 813,913.64	32.6949086 32.6947714	-103.4472902 -103.4472899
,	get at Landii		9,730.00	-212.12	30.99	017,027.01	013,913.04	32.0947714	-103.447.2099
10,200.00	•	179.43	9,756.00	-372.75	59.99	617,527.57	813,914.64	32.6944965	-103.4472894
10,300.00		179.43	9,756.00	-472.75	60.99	617,427.58	813,915.64	32.6942216	-103.4472889
10,400.00	90.00	179.43	9,756.00	-572.74	61.99	617,327.58	813,916.64	32.6939468	-103.4472883
10,500.00		179.43	9,756.00	-672.74	62.99	617,227.59	813,917.64	32.6936719	-103.4472878
10,600.00		179.43	9,756.00	-772.73	63.99	617,127.59	813,918.64	32.6933971	-103.4472873
10,700.00		179.43	9,756.00	-872.73	64.99	617,027.60	813,919.64	32.6931222	-103.4472867
10,800.00 10,900.00		179.43 179.43	9,756.00 9,756.00	-972.72 -1,072.72	65.99 66.99	616,927.60 616,827.61	813,920.64 813,921.64	32.6928474 32.6925725	-103.4472862 -103.4472857
11,000.00		179.43	9,756.00	-1,072.72	67.99	616,727.61	813,922.64	32.6922977	-103.4472851
11,100.00		179.43	9,756.00	-1,272.71	68.99	616,627.62	813,923.64	32.6920228	-103.4472846
11,200.00		179.43	9,756.00	-1,372.70	69.99	616,527.62	813,924.64	32.6917480	-103.4472840
11,300.00		179.43	9,756.00	-1,472.70	70.99	616,427.63	813,925.64	32.6914732	-103.4472835
11,400.00		179.43	9,756.00	-1,572.69	71.99	616,327.63	813,926.64	32.6911983	-103.4472830
11,500.00		179.43	9,756.00	-1,672.69	72.99	616,227.64	813,927.64	32.6909235	-103.4472824
11,600.00		179.43	9,756.00 9,756.00	-1,772.68	73.99	616,127.64	813,928.64	32.6906486	-103.4472819
11,700.00 11,800.00		179.43 179.43	9,756.00	-1,872.68 -1,972.67	74.99 75.99	616,027.65 615,927.65	813,929.64 813,930.64	32.6903738 32.6900989	-103.4472814 -103.4472808
11,900.00		179.43	9,756.00	-2,072.67	76.99	615,827.66	813,931.64	32.6898241	-103.4472803
,000.00	00.00		5,. 55.55	_,0.2.07	. 0.00	5.5,5£1.00	0.0,001.0 r	JJUUJ_ 11	.55.1112000

Planning Report - Geographic



Database: Company: Project:

Site:

EDM 5000.1 Single User Db Franklin Mountain Energy Lea County, NM (NAD83)

Sec 3-T19S-R35E (Eagle/Norte State)
Eagle State Com 502H

Well: Eagle St Wellbore: OH Design: Plan #2 Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Eagle State Com 502H

3855' GL + 30' KB @ 3885.00usft 3855' GL + 30' KB @ 3885.00usft

Grid

Design:	Plan	#2							
Planned Surv	ev								
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	9,756.00	-2,172.66	77.99	615,727.66	813,932.64	32.6895492	-103.4472798
12,100.00	90.00	179.43	9,756.00	-2,272.66	78.99	615,627.67	813,933.64	32.6892744	-103.4472792
12,200.00	90.00	179.43	9,756.00	-2,372.65	79.99	615,527.67	813,934.64	32.6889995	-103.4472787
12,300.00	90.00	179.43	9,756.00	-2,472.65	80.99	615,427.68	813,935.64	32.6887247	-103.4472782
12,400.00	90.00	179.43	9,756.00	-2,572.64	81.99	615,327.68	813,936.64	32.6884498	-103.4472776
12,500.00	90.00	179.43	9,756.00	-2,672.64	82.99	615,227.69	813,937.64	32.6881750	-103.4472771
12,600.00	90.00	179.43	9,756.00	-2,772.63	83.99	615,127.69	813,938.64	32.6879001	-103.4472766
12,700.00	90.00	179.43	9,756.00	-2,872.63	84.99	615,027.70	813,939.64	32.6876253	-103.4472760
12,800.00	90.00	179.43	9,756.00	-2,972.62	85.99	614,927.70	813,940.64	32.6873505	-103.4472755
12,900.00	90.00	179.43	9,756.00	-3,072.62	86.99	614,827.71	813,941.64	32.6870756	-103.4472749
13,000.00	90.00	179.43	9,756.00	-3,172.61	87.99	614,727.71	813,942.64	32.6868008	-103.4472744
13,100.00	90.00	179.43	9,756.00	-3,272.61	88.99	614,627.72	813,943.64	32.6865259	-103.4472739
13,200.00 13,300.00	90.00 90.00	179.43 179.43	9,756.00 9,756.00	-3,372.60 -3,472.60	89.99 90.99	614,527.72 614,427.73	813,944.64 813,945.64	32.6862511 32.6859762	-103.4472733 -103.4472728
13,400.00	90.00	179.43	9,756.00	-3,472.60 -3,572.59	91.99	614,327.73	813,946.64	32.6857014	-103.4472723
13,500.00	90.00	179.43	9,756.00	-3,672.59	92.99	614,227.74	813,947.64	32.6854265	-103.4472717
13,600.00	90.00	179.43	9,756.00	-3,772.58	93.99	614,127.74	813,948.64	32.6851517	-103.4472712
13,700.00	90.00	179.43	9,756.00	-3,872.58	94.99	614,027.75	813,949.64	32.6848768	-103.4472707
13,800.00	90.00	179.43	9,756.00	-3,972.57	95.99	613,927.75	813,950.64	32.6846020	-103.4472701
13,900.00	90.00	179.43	9,756.00	-4,072.57	96.99	613,827.76	813,951.64	32.6843271	-103.4472696
14,000.00	90.00	179.43	9,756.00	-4,172.56	97.99	613,727.76	813,952.64	32.6840523	-103.4472690
14,100.00	90.00	179.43	9,756.00	-4,272.56	98.99	613,627.77	813,953.64	32.6837774	-103.4472685
14,200.00	90.00	179.43	9,756.00	-4,372.55	99.99	613,527.77	813,954.64	32.6835026	-103.4472680
14,300.00	90.00	179.43	9,756.00	-4,472.55	100.99	613,427.78	813,955.64	32.6832278	-103.4472674
14,400.00	90.00	179.43	9,756.00	-4,572.54	101.99	613,327.78	813,956.64	32.6829529	-103.4472669
14,500.00	90.00	179.43	9,756.00	-4,672.54	102.99	613,227.79	813,957.64	32.6826781	-103.4472664
14,600.00	90.00	179.43	9,756.00	-4,772.53	103.99	613,127.79	813,958.64	32.6824032	-103.4472658
14,700.00	90.00	179.43	9,756.00	-4,872.53	104.99	613,027.80	813,959.64	32.6821284	-103.4472653
14,800.00	90.00	179.43	9,756.00	-4,972.52	105.99	612,927.80	813,960.64	32.6818535	-103.4472648
14,900.00	90.00	179.43	9,756.00	-5,072.52	106.99	612,827.81	813,961.64	32.6815787	-103.4472642
15,000.00	90.00	179.43	9,756.00	-5,172.51	107.99	612,727.81	813,962.64	32.6813038	-103.4472637
15,100.00	90.00	179.43	9,756.00	-5,272.51	108.99	612,627.82	813,963.64	32.6810290	-103.4472632
15,200.00	90.00	179.43	9,756.00	-5,372.50	109.99	612,527.82	813,964.64	32.6807541	-103.4472626
15,300.00	90.00	179.43	9,756.00	-5,472.50	110.99	612,427.83	813,965.64	32.6804793	-103.4472621
15,400.00	90.00	179.43	9,756.00	-5,572.49	111.99	612,327.83	813,966.64	32.6802044	-103.4472615
15,500.00	90.00	179.43	9,756.00	-5,672.49	112.99	612,227.84	813,967.64	32.6799296	-103.4472610
15,600.00	90.00	179.43	9,756.00	-5,772.48	113.99	612,127.84	813,968.64	32.6796547	-103.4472605
15,700.00 15,800.00	90.00 90.00	179.43 179.43	9,756.00 9,756.00	-5,872.48 -5,972.47	114.99 115.99	612,027.85 611,927.85	813,969.64 813,970.64	32.6793799 32.6791050	-103.4472599 -103.4472594
15,800.00	90.00	179.43	9,756.00	-5,972.47 -6,072.47	116.99	611,827.86	813,970.64	32.6788302	-103.4472589
16,000.00	90.00	179.43	9,756.00	-6,172.46	117.99	611,727.86	813,972.64	32.6785554	-103.4472583
16,100.00	90.00	179.43	9,756.00	-6,272.46	118.99	611,627.87	813,973.64	32.6782805	-103.4472578
16,200.00	90.00	179.43	9,756.00	-6,372.45	119.99	611,527.87	813,974.64	32.6780057	-103.4472573
16,300.00	90.00	179.43	9,756.00	-6,472.45	120.99	611,427.88	813,975.64	32.6777308	-103.4472567
16,400.00	90.00	179.43	9,756.00	-6,572.44	121.99	611,327.88	813,976.64	32.6774560	-103.4472562
16,500.00	90.00	179.43	9,756.00	-6,672.44	122.99	611,227.89	813,977.64	32.6771811	-103.4472556
16,600.00	90.00	179.43	9,756.00	-6,772.43	123.99	611,127.89	813,978.64	32.6769063	-103.4472551
16,700.00	90.00	179.43	9,756.00	-6,872.43	124.99	611,027.90	813,979.64	32.6766314	-103.4472546
16,800.00	90.00	179.43	9,756.00	-6,972.42	125.99	610,927.90	813,980.64	32.6763566	-103.4472540
16,900.00	90.00	179.43	9,756.00	-7,072.42	126.99	610,827.91	813,981.64	32.6760817	-103.4472535
17,000.00	90.00	179.43	9,756.00	-7,172.41	127.99	610,727.91	813,982.64	32.6758069	-103.4472530
17,100.00	90.00	179.43	9,756.00	-7,272.41	128.99	610,627.92	813,983.64	32.6755320	-103.4472524
17,200.00	90.00	179.43	9,756.00	-7,372.40	129.99	610,527.92	813,984.64	32.6752572	-103.4472519
17,300.00	90.00	179.43	9,756.00	-7,472.40	130.99	610,427.93	813,985.64	32.6749823	-103.4472514
17,400.00	90.00	179.43	9,756.00	-7,572.39	131.99	610,327.93	813,986.64	32.6747075	-103.4472508

Planning Report - Geographic



Database: Company: Project:

Design Targets

Site:

EDM 5000.1 Single User Db Franklin Mountain Energy Lea County, NM (NAD83)

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

Well: Eagle State Com 502H

Wellbore: OH
Design: Plan #2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Eagle State Com 502H

3855' GL + 30' KB @ 3885.00usft 3855' GL + 30' KB @ 3885.00usft

Grid

Planned Surv	rey								
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	9,756.00	-7,672.39	132.99	610,227.94	813,987.64	32.6744326	-103.4472503
17,600.00	90.00	179.43	9,756.00	-7,772.38	133.99	610,127.94	813,988.64	32.6741578	-103.4472497
17,700.00	90.00	179.43	9,756.00	-7,872.38	134.99	610,027.95	813,989.64	32.6738830	-103.4472492
17,800.00	90.00	179.43	9,756.00	-7,972.37	135.99	609,927.95	813,990.64	32.6736081	-103.4472487
17,900.00	90.00	179.43	9,756.00	-8,072.37	136.99	609,827.96	813,991.64	32.6733333	-103.4472481
18,000.00	90.00	179.43	9,756.00	-8,172.36	137.99	609,727.96	813,992.64	32.6730584	-103.4472476
18,100.00	90.00	179.43	9,756.00	-8,272.36	138.99	609,627.97	813,993.64	32.6727836	-103.4472471
18,200.00	90.00	179.43	9,756.00	-8,372.35	139.99	609,527.97	813,994.64	32.6725087	-103.4472465
18,300.00	90.00	179.43	9,756.00	-8,472.35	140.99	609,427.98	813,995.64	32.6722339	-103.4472460
18,400.00	90.00	179.43	9,756.00	-8,572.34	141.99	609,327.98	813,996.64	32.6719590	-103.4472455
18,465.57	90.00	179.43	9,756.00	-8,637.91	142.65	609,262.41	813,997.30	32.6717788	-103.4472451
New PE	BHL (ESC 50)2H)							

200.g.: .u. goto									
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 502H) - plan hits target ce - Point	0.00 enter	359.52	9,183.04	300.21	53.26	618,200.54	813,907.91	32.6963462	-103.4472930
FTP (ESC 502H) - plan hits target ce - Point	0.00 enter	0.00	9,642.02	70.22	55.56	617,970.55	813,910.21	32.6957140	-103.4472918
New PBHL (ESC 502I - plan hits target ce - Point	0.00 enter	359.52	9,756.00	-8,637.91	142.65	609,262.41	813,997.30	32.6717788	-103.4472451

Formations						
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
	30.00	30.00	Cenozoic Alluvium (surface)			
	1,809.00	1,809.00	Rustler			
	2,044.00	2,044.00	Salado			
	2,964.92	2,963.00	Base Salt			
	3,366.88	3,363.00	Yates			
	3,818.49	3,811.00	Seven Rivers			
	4,584.61	4,571.00	Queen			
	6,028.92	6,012.00	Cherry Canyon			
	7,485.92	7,469.00	Bone Spring Lime			
	9,054.92	9,038.00	First Bone Spring Sand			
	9,321.84	9,304.00	Second Bone Spring Carbonates			
	9,497.05	•	Second Bone Spring Sand			
	10,099.96	9,756.00	HZ Target at Landing			

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 <u>Effective May 25, 2021</u>

I. Operator:Franklin	Mountain I	Energy 3, LLC	OG	RID:331595		Date:2/_28_/2023		
II. Type: ⊠ Original [☐ Amendme	ent due to 🗆 19.15.	27.9.D(6)(a) NM	IAC □ 19.15.27.9	.D(6)(b) NMAC [☐ Other.		
If Other, please describe: _								
III. Well(s): Provide the to be recompleted from a s					f wells proposed t	to be drilled or proposed		
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				
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.** \boxtimes 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 \square will \square 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 \Box does \Box 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.

(i)

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: power generation on lease; (a) **(b)** power generation for grid; compression on lease; (c) (d) liquids removal on lease; reinjection for underground storage; (e) **(f)** reinjection for temporary storage; **(g)** reinjection for enhanced oil recovery; fuel cell production; and (h)

Section 4 - Notices

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

other alternative beneficial uses approved by the division.

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

NATURAL GAS MANAGEMENT PLAN

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

				Anticipated Oil	Anticipated	Anticipated Produced
Well Name	API 14 Digit	ULSTR	Surface Location FTG	BBL/D	Gas MCF/D	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.

				Completion	Initial	
		Spud Date		Commencement	Flowback	
Well Name	API 14 Digit	(Batch Drilling)	TD Reached Date	Date	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 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:



- o 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

