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 360189

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

1. Operator Name and Address	2. OGRID Number
Franklin Mountain Energy 3, LLC 44 Cook Street Denver, CO 80206	331595
	3. API Number 30-025-52567

4. Property Code	5. Property Name	6. Well No.
335369	TAG STATE COM	603H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
B	2	20S	35E	B	266	N	1935	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
O	11	20S	35E	O	100	S	1490	E	Lea

9. Pool Information

WC-025 G-06 S203511G;BONE SPRING	96585

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3673
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	20777	3rd Bone Spring Sand		7/1/2024
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	2055	1563	0
Int1	12.25	9.625	40	4360	909	0
Prod	8.75	7	32	10026	467	3360
Prod	8.75	5.5	20	20777	2683	10026

Casing/Cement Program: Additional Comments

Please see attached 14 Point Plan.

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.

Signature:

OIL CONSERVATION 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:	2/26/2024	Expiration Date: 2/26/2026
Date:	2/20/2024	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
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	96585	WILDCAT G-06 S203511G; BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
	TAG STATE COM	603H

[7] OGRID No.	[8] Operator Name	[9] Elevation
331595	FRANKLIN MOUNTAIN ENERGY 3, LLC	3673.2'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	2	20S	35E		266	NORTH	1935	EAST	LEA

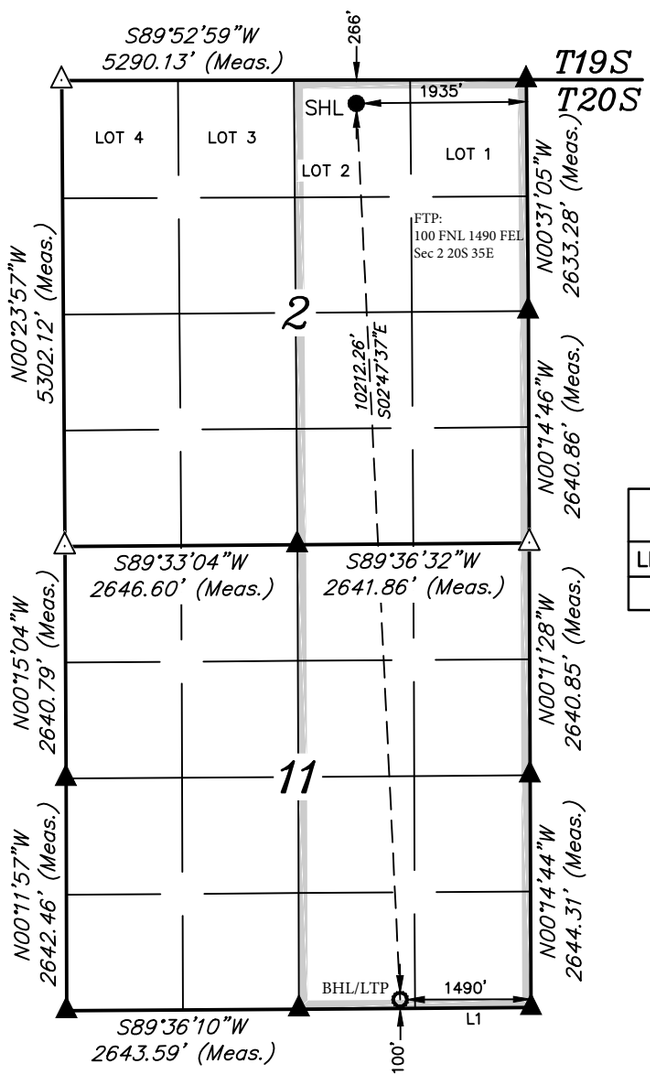
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	11	20S	35E		100	SOUTH	1490	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
641.27			

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.

[16]



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°35'56"W	2644.24'

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°36'31.67" (32.608796°)
LONGITUDE = -103°25'32.36" (-103.425655°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°36'31.22" (32.608673°)
LONGITUDE = -103°25'30.61" (-103.425168°)
STATE PLANE NAD 83 (N.M. EAST)
N: 586403.99' E: 820836.94'
STATE PLANE NAD 27 (N.M. EAST)
N: 586341.21' E: 779655.70'

NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 32°34'50.74" (32.580760°)
LONGITUDE = -103°25'27.05" (-103.424182°)
NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 32°34'50.29" (32.580637°)
LONGITUDE = -103°25'25.31" (-103.423697°)
STATE PLANE NAD 83 (N.M. EAST)
N: 576207.66' E: 821377.73'
STATE PLANE NAD 27 (N.M. EAST)
N: 576145.12' E: 780196.14'

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

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

2000' 1000' 0' 2000'

SCALE

DRAWN BY: C.S.C. 12-20-23

[17] OPERATOR CERTIFICATION

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

Signature 1/4/2024 Date

Rachael Overbey
Printed Name

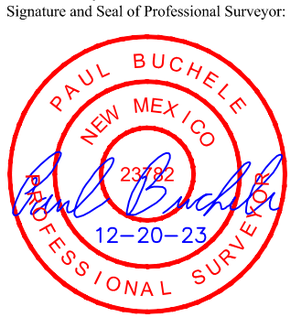
roverbey@fmellc.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

December 12, 2023
Date of Survey

Signature and Seal of Professional Surveyor:



Certificate Number:

OCD Permitting

An Unexpected Error Has Occurred

Please restart your browser and try to complete this action again. If you continue to experience this issue please contact an OCD representative.

Thank you.

FRANKLIN MOUNTAIN ENERGY™

Franklin Mountain Energy LLC

PV_Lea County, NM(N83-NME3001)
Tag Mid Pad
(05) Tag State Com 603H - Slot (05) TSC 603H

603H

Plan: APD-Rev01

Standard Planning Report

10 January, 2024

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

Project PV_Lea County, NM(N83-NME3001)

Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site Tag Mid Pad

Site Position:		**Northing:**	586,403.23 usft	**Latitude:**	32.60879700
From:	Map	**Easting:**	820,716.96 usft	**Longitude:**	-103.42604440
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well (05) Tag State Com 603H - Slot (05) TSC 603H

Well Position	**+N/-S**	0.00 usft	**Northing:**	586,403.99 usft	**Latitude:**	32.60879627
	+E/-W	0.00 usft	**Easting:**	820,836.94 usft	**Longitude:**	-103.42565478
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,673.00 usft
Grid Convergence:		0.49 °				

Wellbore 603H

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	1/7/2024	6.21	60.18	47,466.16492810

Design APD-Rev01

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	179.44

Plan Survey Tool Program **Date** 1/10/2024

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,777.66	APD-Rev01 (603H)	MWD+IFR1+MS OWSG MWD + IFR1 + Multi-St	

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,888.79	5.83	57.31	1,888.12	10.68	16.64	1.50	1.50	0.00	57.31	
5,436.85	5.83	57.31	5,417.82	205.40	320.04	0.00	0.00	0.00	0.00	
6,020.04	0.00	0.00	6,000.00	221.42	345.00	1.00	-1.00	0.00	180.00	
10,026.08	0.00	0.00	10,006.04	221.42	345.00	0.00	0.00	0.00	0.00	
10,926.08	90.00	172.30	10,579.00	-346.37	421.77	10.00	10.00	0.00	172.30	
11,282.92	90.00	179.44	10,579.00	-702.05	447.46	2.00	0.00	2.00	90.00	
20,777.66	90.00	179.44	10,579.00	-10,196.33	540.79	0.00	0.00	0.00	0.00	02-PBHL(TGSC-603H

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00
Cenozoic Alluvium (surface)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	1.50	57.31	1,599.99	0.71	1.10	-0.70	1.50	1.50	0.00
1,700.00	3.00	57.31	1,699.91	2.83	4.41	-2.78	1.50	1.50	0.00
1,800.00	4.50	57.31	1,799.69	6.36	9.91	-6.26	1.50	1.50	0.00
1,888.79	5.83	57.31	1,888.12	10.68	16.64	-10.51	1.50	1.50	0.00
1,900.00	5.83	57.31	1,899.27	11.29	17.60	-11.12	0.00	0.00	0.00
2,000.00	5.83	57.31	1,998.75	16.78	26.15	-16.53	0.00	0.00	0.00
2,004.27	5.83	57.31	2,003.00	17.02	26.51	-16.76	0.00	0.00	0.00
Rustler									
2,100.00	5.83	57.31	2,098.24	22.27	34.70	-21.93	0.00	0.00	0.00
2,200.00	5.83	57.31	2,197.72	27.76	43.25	-27.33	0.00	0.00	0.00
2,281.70	5.83	57.31	2,279.00	32.24	50.24	-31.75	0.00	0.00	0.00
Salado									
2,300.00	5.83	57.31	2,297.20	33.25	51.80	-32.74	0.00	0.00	0.00
2,400.00	5.83	57.31	2,396.68	38.73	60.35	-38.14	0.00	0.00	0.00
2,500.00	5.83	57.31	2,496.17	44.22	68.90	-43.55	0.00	0.00	0.00
2,600.00	5.83	57.31	2,595.65	49.71	77.46	-48.95	0.00	0.00	0.00
2,700.00	5.83	57.31	2,695.13	55.20	86.01	-54.36	0.00	0.00	0.00
2,800.00	5.83	57.31	2,794.61	60.69	94.56	-59.76	0.00	0.00	0.00
2,900.00	5.83	57.31	2,894.10	66.18	103.11	-65.16	0.00	0.00	0.00
3,000.00	5.83	57.31	2,993.58	71.66	111.66	-70.57	0.00	0.00	0.00
3,100.00	5.83	57.31	3,093.06	77.15	120.21	-75.97	0.00	0.00	0.00
3,200.00	5.83	57.31	3,192.54	82.64	128.76	-81.38	0.00	0.00	0.00
3,300.00	5.83	57.31	3,292.03	88.13	137.31	-86.78	0.00	0.00	0.00
3,400.00	5.83	57.31	3,391.51	93.62	145.87	-92.19	0.00	0.00	0.00
3,494.98	5.83	57.31	3,486.00	98.83	153.99	-97.32	0.00	0.00	0.00
Base Salt									
3,500.00	5.83	57.31	3,490.99	99.10	154.42	-97.59	0.00	0.00	0.00
3,600.00	5.83	57.31	3,590.47	104.59	162.97	-102.99	0.00	0.00	0.00
3,700.00	5.83	57.31	3,689.95	110.08	171.52	-108.40	0.00	0.00	0.00
3,732.21	5.83	57.31	3,722.00	111.85	174.27	-110.14	0.00	0.00	0.00
Yates									
3,800.00	5.83	57.31	3,789.44	115.57	180.07	-113.80	0.00	0.00	0.00
3,900.00	5.83	57.31	3,888.92	121.06	188.62	-119.21	0.00	0.00	0.00
4,000.00	5.83	57.31	3,988.40	126.55	197.17	-124.61	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,100.00	5.83	57.31	4,087.88	132.03	205.72	-130.02	0.00	0.00	0.00
4,159.42	5.83	57.31	4,147.00	135.29	210.81	-133.23	0.00	0.00	0.00
Seven Rivers									
4,200.00	5.83	57.31	4,187.37	137.52	214.28	-135.42	0.00	0.00	0.00
4,300.00	5.83	57.31	4,286.85	143.01	222.83	-140.83	0.00	0.00	0.00
4,400.00	5.83	57.31	4,386.33	148.50	231.38	-146.23	0.00	0.00	0.00
4,500.00	5.83	57.31	4,485.81	153.99	239.93	-151.63	0.00	0.00	0.00
4,600.00	5.83	57.31	4,585.30	159.47	248.48	-157.04	0.00	0.00	0.00
4,686.15	5.83	57.31	4,671.00	164.20	255.85	-161.69	0.00	0.00	0.00
Queen									
4,700.00	5.83	57.31	4,684.78	164.96	257.03	-162.44	0.00	0.00	0.00
4,800.00	5.83	57.31	4,784.26	170.45	265.58	-167.85	0.00	0.00	0.00
4,900.00	5.83	57.31	4,883.74	175.94	274.14	-173.25	0.00	0.00	0.00
5,000.00	5.83	57.31	4,983.23	181.43	282.69	-178.66	0.00	0.00	0.00
5,100.00	5.83	57.31	5,082.71	186.92	291.24	-184.06	0.00	0.00	0.00
5,200.00	5.83	57.31	5,182.19	192.40	299.79	-189.46	0.00	0.00	0.00
5,300.00	5.83	57.31	5,281.67	197.89	308.34	-194.87	0.00	0.00	0.00
5,400.00	5.83	57.31	5,381.16	203.38	316.89	-200.27	0.00	0.00	0.00
5,436.85	5.83	57.31	5,417.82	205.40	320.04	-202.27	0.00	0.00	0.00
5,500.00	5.20	57.31	5,480.67	208.68	325.15	-205.49	1.00	-1.00	0.00
5,600.00	4.20	57.31	5,580.34	213.11	332.05	-209.85	1.00	-1.00	0.00
5,700.00	3.20	57.31	5,680.13	216.59	337.48	-213.28	1.00	-1.00	0.00
5,800.00	2.20	57.31	5,780.01	219.14	341.44	-215.79	1.00	-1.00	0.00
5,900.00	1.20	57.31	5,879.97	220.74	343.94	-217.37	1.00	-1.00	0.00
6,000.00	0.20	57.31	5,979.96	221.40	344.97	-218.02	1.00	-1.00	0.00
6,020.04	0.00	0.00	6,000.00	221.42	345.00	-218.04	1.00	-1.00	0.00
6,100.00	0.00	0.00	6,079.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,169.04	0.00	0.00	6,149.00	221.42	345.00	-218.04	0.00	0.00	0.00
Delaware Mtn Group									
6,200.00	0.00	0.00	6,179.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,300.00	0.00	0.00	6,279.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,400.00	0.00	0.00	6,379.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,500.00	0.00	0.00	6,479.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,600.00	0.00	0.00	6,579.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,700.00	0.00	0.00	6,679.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,800.00	0.00	0.00	6,779.96	221.42	345.00	-218.04	0.00	0.00	0.00
6,900.00	0.00	0.00	6,879.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,000.00	0.00	0.00	6,979.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,100.00	0.00	0.00	7,079.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,200.00	0.00	0.00	7,179.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,300.00	0.00	0.00	7,279.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,400.00	0.00	0.00	7,379.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,500.00	0.00	0.00	7,479.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,600.00	0.00	0.00	7,579.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,700.00	0.00	0.00	7,679.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,800.00	0.00	0.00	7,779.96	221.42	345.00	-218.04	0.00	0.00	0.00
7,900.00	0.00	0.00	7,879.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,000.00	0.00	0.00	7,979.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,071.04	0.00	0.00	8,051.00	221.42	345.00	-218.04	0.00	0.00	0.00
Bone Spring Lime									
8,100.00	0.00	0.00	8,079.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,200.00	0.00	0.00	8,179.96	221.42	345.00	-218.04	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,300.00	0.00	0.00	8,279.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,400.00	0.00	0.00	8,379.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,500.00	0.00	0.00	8,479.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,600.00	0.00	0.00	8,579.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,700.00	0.00	0.00	8,679.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,800.00	0.00	0.00	8,779.96	221.42	345.00	-218.04	0.00	0.00	0.00
8,900.00	0.00	0.00	8,879.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,000.00	0.00	0.00	8,979.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,100.00	0.00	0.00	9,079.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,200.00	0.00	0.00	9,179.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,300.00	0.00	0.00	9,279.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,315.04	0.00	0.00	9,295.00	221.42	345.00	-218.04	0.00	0.00	0.00
First Bone Spring Sand									
9,400.00	0.00	0.00	9,379.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,500.00	0.00	0.00	9,479.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,592.04	0.00	0.00	9,572.00	221.42	345.00	-218.04	0.00	0.00	0.00
Second Bone Spring Carbonate									
9,600.00	0.00	0.00	9,579.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,700.00	0.00	0.00	9,679.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,800.00	0.00	0.00	9,779.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,900.00	0.00	0.00	9,879.96	221.42	345.00	-218.04	0.00	0.00	0.00
9,990.04	0.00	0.00	9,970.00	221.42	345.00	-218.04	0.00	0.00	0.00
Second Bone Spring Sand									
10,000.00	0.00	0.00	9,979.96	221.42	345.00	-218.04	0.00	0.00	0.00
10,026.08	0.00	0.00	10,006.04	221.42	345.00	-218.04	0.00	0.00	0.00
KOP: 10026.08' MD/ -218.04' VS/10006.04' TVD									
10,050.00	2.39	172.30	10,029.95	220.93	345.07	-217.54	10.00	10.00	0.00
10,100.00	7.39	172.30	10,079.75	216.70	345.64	-213.31	10.00	10.00	0.00
10,150.00	12.39	172.30	10,129.00	208.19	346.79	-204.79	10.00	10.00	0.00
10,200.00	17.39	172.30	10,177.30	195.46	348.51	-192.05	10.00	10.00	0.00
10,250.00	22.39	172.30	10,224.30	178.61	350.79	-175.17	10.00	10.00	0.00
10,269.81	24.37	172.30	10,242.48	170.82	351.84	-167.37	10.00	10.00	0.00
100FLL: 10269.81' MD/ -167.37' VS/10242.48' TVD									
10,300.00	27.39	172.30	10,269.64	157.76	353.61	-154.30	10.00	10.00	0.00
10,350.00	32.39	172.30	10,312.98	133.07	356.94	-129.58	10.00	10.00	0.00
10,400.00	37.39	172.30	10,353.98	104.74	360.78	-101.21	10.00	10.00	0.00
10,450.00	42.39	172.30	10,392.33	72.97	365.07	-69.40	10.00	10.00	0.00
10,500.00	47.39	172.30	10,427.74	38.01	369.80	-34.40	10.00	10.00	0.00
10,507.88	48.18	172.30	10,433.03	32.23	370.58	-28.61	10.00	10.00	0.00
01-T98(TGSC-603H)									
10,524.60	49.85	172.30	10,444.00	19.72	372.27	-16.08	10.00	10.00	0.00
Third Bone Spring Carbonate									
10,550.00	52.39	172.30	10,459.94	0.13	374.92	3.54	10.00	10.00	0.00
10,600.00	57.39	172.30	10,488.69	-40.39	380.40	44.11	10.00	10.00	0.00
10,650.00	62.39	172.30	10,513.76	-83.24	386.19	87.02	10.00	10.00	0.00
10,700.00	67.39	172.30	10,534.97	-128.10	392.26	131.93	10.00	10.00	0.00
10,708.02	68.19	172.30	10,538.00	-135.45	393.25	139.29	10.00	10.00	0.00
Third Bone Spring Sand									
10,750.00	72.39	172.30	10,552.15	-174.61	398.55	178.50	10.00	10.00	0.00
10,800.00	77.39	172.30	10,565.18	-222.43	405.01	226.38	10.00	10.00	0.00
10,850.00	82.39	172.30	10,573.95	-271.20	411.60	275.21	10.00	10.00	0.00
10,900.00	87.39	172.30	10,578.40	-320.53	418.28	324.61	10.00	10.00	0.00

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,926.08	90.00	172.30	10,579.00	-346.37	421.77	350.48	10.00	10.00	0.00
EOC: 10926.08' MD/ 350.48' VS/10579.00' TVD - HZ Target									
11,000.00	90.00	173.78	10,579.00	-419.74	430.73	423.93	2.00	0.00	2.00
11,100.00	90.00	175.78	10,579.00	-519.32	439.83	523.60	2.00	0.00	2.00
11,200.00	90.00	177.78	10,579.00	-619.16	445.45	623.48	2.00	0.00	2.00
11,282.92	90.00	179.44	10,579.00	-702.05	447.46	706.39	2.00	0.00	2.00
11,300.00	90.00	179.44	10,579.00	-719.13	447.63	723.47	0.00	0.00	0.00
11,400.00	90.00	179.44	10,579.00	-819.13	448.61	823.47	0.00	0.00	0.00
11,500.00	90.00	179.44	10,579.00	-919.12	449.60	923.47	0.00	0.00	0.00
11,600.00	90.00	179.44	10,579.00	-1,019.12	450.58	1,023.47	0.00	0.00	0.00
11,700.00	90.00	179.44	10,579.00	-1,119.11	451.56	1,123.47	0.00	0.00	0.00
11,800.00	90.00	179.44	10,579.00	-1,219.11	452.54	1,223.47	0.00	0.00	0.00
11,900.00	90.00	179.44	10,579.00	-1,319.10	453.53	1,323.47	0.00	0.00	0.00
12,000.00	90.00	179.44	10,579.00	-1,419.10	454.51	1,423.47	0.00	0.00	0.00
12,100.00	90.00	179.44	10,579.00	-1,519.09	455.49	1,523.47	0.00	0.00	0.00
12,200.00	90.00	179.44	10,579.00	-1,619.09	456.48	1,623.47	0.00	0.00	0.00
12,300.00	90.00	179.44	10,579.00	-1,719.08	457.46	1,723.47	0.00	0.00	0.00
12,400.00	90.00	179.44	10,579.00	-1,819.08	458.44	1,823.47	0.00	0.00	0.00
12,500.00	90.00	179.44	10,579.00	-1,919.07	459.42	1,923.47	0.00	0.00	0.00
12,600.00	90.00	179.44	10,579.00	-2,019.07	460.41	2,023.47	0.00	0.00	0.00
12,700.00	90.00	179.44	10,579.00	-2,119.06	461.39	2,123.47	0.00	0.00	0.00
12,800.00	90.00	179.44	10,579.00	-2,219.06	462.37	2,223.47	0.00	0.00	0.00
12,900.00	90.00	179.44	10,579.00	-2,319.06	463.36	2,323.47	0.00	0.00	0.00
13,000.00	90.00	179.44	10,579.00	-2,419.05	464.34	2,423.47	0.00	0.00	0.00
13,100.00	90.00	179.44	10,579.00	-2,519.05	465.32	2,523.47	0.00	0.00	0.00
13,200.00	90.00	179.44	10,579.00	-2,619.04	466.31	2,623.47	0.00	0.00	0.00
13,300.00	90.00	179.44	10,579.00	-2,719.04	467.29	2,723.47	0.00	0.00	0.00
13,400.00	90.00	179.44	10,579.00	-2,819.03	468.27	2,823.47	0.00	0.00	0.00
13,500.00	90.00	179.44	10,579.00	-2,919.03	469.25	2,923.47	0.00	0.00	0.00
13,600.00	90.00	179.44	10,579.00	-3,019.02	470.24	3,023.47	0.00	0.00	0.00
13,700.00	90.00	179.44	10,579.00	-3,119.02	471.22	3,123.47	0.00	0.00	0.00
13,800.00	90.00	179.44	10,579.00	-3,219.01	472.20	3,223.47	0.00	0.00	0.00
13,900.00	90.00	179.44	10,579.00	-3,319.01	473.19	3,323.47	0.00	0.00	0.00
14,000.00	90.00	179.44	10,579.00	-3,419.00	474.17	3,423.47	0.00	0.00	0.00
14,100.00	90.00	179.44	10,579.00	-3,519.00	475.15	3,523.47	0.00	0.00	0.00
14,200.00	90.00	179.44	10,579.00	-3,618.99	476.13	3,623.47	0.00	0.00	0.00
14,300.00	90.00	179.44	10,579.00	-3,718.99	477.12	3,723.47	0.00	0.00	0.00
14,400.00	90.00	179.44	10,579.00	-3,818.98	478.10	3,823.47	0.00	0.00	0.00
14,500.00	90.00	179.44	10,579.00	-3,918.98	479.08	3,923.47	0.00	0.00	0.00
14,600.00	90.00	179.44	10,579.00	-4,018.97	480.07	4,023.47	0.00	0.00	0.00
14,700.00	90.00	179.44	10,579.00	-4,118.97	481.05	4,123.47	0.00	0.00	0.00
14,800.00	90.00	179.44	10,579.00	-4,218.96	482.03	4,223.47	0.00	0.00	0.00
14,900.00	90.00	179.44	10,579.00	-4,318.96	483.02	4,323.47	0.00	0.00	0.00
15,000.00	90.00	179.44	10,579.00	-4,418.95	484.00	4,423.47	0.00	0.00	0.00
15,100.00	90.00	179.44	10,579.00	-4,518.95	484.98	4,523.47	0.00	0.00	0.00
15,200.00	90.00	179.44	10,579.00	-4,618.94	485.96	4,623.47	0.00	0.00	0.00
15,300.00	90.00	179.44	10,579.00	-4,718.94	486.95	4,723.47	0.00	0.00	0.00
15,400.00	90.00	179.44	10,579.00	-4,818.93	487.93	4,823.47	0.00	0.00	0.00
15,500.00	90.00	179.44	10,579.00	-4,918.93	488.91	4,923.47	0.00	0.00	0.00
15,600.00	90.00	179.44	10,579.00	-5,018.92	489.90	5,023.47	0.00	0.00	0.00
15,700.00	90.00	179.44	10,579.00	-5,118.92	490.88	5,123.47	0.00	0.00	0.00
15,800.00	90.00	179.44	10,579.00	-5,218.92	491.86	5,223.47	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,900.00	90.00	179.44	10,579.00	-5,318.91	492.84	5,323.47	0.00	0.00	0.00
16,000.00	90.00	179.44	10,579.00	-5,418.91	493.83	5,423.47	0.00	0.00	0.00
16,100.00	90.00	179.44	10,579.00	-5,518.90	494.81	5,523.47	0.00	0.00	0.00
16,200.00	90.00	179.44	10,579.00	-5,618.90	495.79	5,623.47	0.00	0.00	0.00
16,300.00	90.00	179.44	10,579.00	-5,718.89	496.78	5,723.47	0.00	0.00	0.00
16,400.00	90.00	179.44	10,579.00	-5,818.89	497.76	5,823.47	0.00	0.00	0.00
16,500.00	90.00	179.44	10,579.00	-5,918.88	498.74	5,923.47	0.00	0.00	0.00
16,600.00	90.00	179.44	10,579.00	-6,018.88	499.73	6,023.47	0.00	0.00	0.00
16,700.00	90.00	179.44	10,579.00	-6,118.87	500.71	6,123.47	0.00	0.00	0.00
16,800.00	90.00	179.44	10,579.00	-6,218.87	501.69	6,223.47	0.00	0.00	0.00
16,900.00	90.00	179.44	10,579.00	-6,318.86	502.67	6,323.47	0.00	0.00	0.00
17,000.00	90.00	179.44	10,579.00	-6,418.86	503.66	6,423.47	0.00	0.00	0.00
17,100.00	90.00	179.44	10,579.00	-6,518.85	504.64	6,523.47	0.00	0.00	0.00
17,200.00	90.00	179.44	10,579.00	-6,618.85	505.62	6,623.47	0.00	0.00	0.00
17,300.00	90.00	179.44	10,579.00	-6,718.84	506.61	6,723.47	0.00	0.00	0.00
17,400.00	90.00	179.44	10,579.00	-6,818.84	507.59	6,823.47	0.00	0.00	0.00
17,500.00	90.00	179.44	10,579.00	-6,918.83	508.57	6,923.47	0.00	0.00	0.00
17,600.00	90.00	179.44	10,579.00	-7,018.83	509.56	7,023.47	0.00	0.00	0.00
17,700.00	90.00	179.44	10,579.00	-7,118.82	510.54	7,123.47	0.00	0.00	0.00
17,800.00	90.00	179.44	10,579.00	-7,218.82	511.52	7,223.47	0.00	0.00	0.00
17,900.00	90.00	179.44	10,579.00	-7,318.81	512.50	7,323.47	0.00	0.00	0.00
18,000.00	90.00	179.44	10,579.00	-7,418.81	513.49	7,423.47	0.00	0.00	0.00
18,100.00	90.00	179.44	10,579.00	-7,518.80	514.47	7,523.47	0.00	0.00	0.00
18,200.00	90.00	179.44	10,579.00	-7,618.80	515.45	7,623.47	0.00	0.00	0.00
18,300.00	90.00	179.44	10,579.00	-7,718.79	516.44	7,723.47	0.00	0.00	0.00
18,400.00	90.00	179.44	10,579.00	-7,818.79	517.42	7,823.47	0.00	0.00	0.00
18,500.00	90.00	179.44	10,579.00	-7,918.78	518.40	7,923.47	0.00	0.00	0.00
18,600.00	90.00	179.44	10,579.00	-8,018.78	519.38	8,023.47	0.00	0.00	0.00
18,700.00	90.00	179.44	10,579.00	-8,118.77	520.37	8,123.47	0.00	0.00	0.00
18,800.00	90.00	179.44	10,579.00	-8,218.77	521.35	8,223.47	0.00	0.00	0.00
18,900.00	90.00	179.44	10,579.00	-8,318.77	522.33	8,323.47	0.00	0.00	0.00
19,000.00	90.00	179.44	10,579.00	-8,418.76	523.32	8,423.47	0.00	0.00	0.00
19,100.00	90.00	179.44	10,579.00	-8,518.76	524.30	8,523.47	0.00	0.00	0.00
19,200.00	90.00	179.44	10,579.00	-8,618.75	525.28	8,623.47	0.00	0.00	0.00
19,300.00	90.00	179.44	10,579.00	-8,718.75	526.27	8,723.47	0.00	0.00	0.00
19,400.00	90.00	179.44	10,579.00	-8,818.74	527.25	8,823.47	0.00	0.00	0.00
19,500.00	90.00	179.44	10,579.00	-8,918.74	528.23	8,923.47	0.00	0.00	0.00
19,600.00	90.00	179.44	10,579.00	-9,018.73	529.21	9,023.47	0.00	0.00	0.00
19,700.00	90.00	179.44	10,579.00	-9,118.73	530.20	9,123.47	0.00	0.00	0.00
19,800.00	90.00	179.44	10,579.00	-9,218.72	531.18	9,223.47	0.00	0.00	0.00
19,900.00	90.00	179.44	10,579.00	-9,318.72	532.16	9,323.47	0.00	0.00	0.00
20,000.00	90.00	179.44	10,579.00	-9,418.71	533.15	9,423.47	0.00	0.00	0.00
20,100.00	90.00	179.44	10,579.00	-9,518.71	534.13	9,523.47	0.00	0.00	0.00
20,200.00	90.00	179.44	10,579.00	-9,618.70	535.11	9,623.47	0.00	0.00	0.00
20,300.00	90.00	179.44	10,579.00	-9,718.70	536.09	9,723.47	0.00	0.00	0.00
20,400.00	90.00	179.44	10,579.00	-9,818.69	537.08	9,823.47	0.00	0.00	0.00
20,500.00	90.00	179.44	10,579.00	-9,918.69	538.06	9,923.47	0.00	0.00	0.00
20,600.00	90.00	179.44	10,579.00	-10,018.68	539.04	10,023.47	0.00	0.00	0.00
20,700.00	90.00	179.44	10,579.00	-10,118.68	540.03	10,123.47	0.00	0.00	0.00
20,777.66	90.00	179.44	10,579.00	-10,196.33	540.79	10,201.13	0.00	0.00	0.00

TD: 20777.66' MD/ 10201.13' VS/10579.00' TVD - 02-PBHL(TGSC-603H)

FRANKLIN MOUNTAIN ENERGY™

Planning Report

Database:	TZ USA 17.2	**Local Co-ordinate Reference:**	Well (05) Tag State Com 603H - Slot (05) TSC 603H
Company:	Franklin Mountain Energy LLC	**TVD Reference:**	3673+30 @ 3703.00usft
Project:	PV_Lea County, NM(N83-NME3001)	**MD Reference:**	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	**North Reference:**	Grid
Well:	(05) Tag State Com 603H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	603H		
Design:	APD-Rev01		

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
01-T98(TGSC-603H) - plan misses target center by 213.26usft at 10507.88usft MD (10433.03 TVD, 32.23 N, 370.58 E) - Point	0.00	0.00	10,579.00	171.37	439.96	586,575.37	821,276.89	32.60925694	-103.42422142
02-PBHL(TGSC-603H) - plan hits target center - Point	0.00	0.00	10,579.00	-10,196.33	540.79	576,207.66	821,377.73	32.58076000	-103.42418179

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
30.00	30.00	Cenozoic Alluvium (surface)			
2,004.27	2,003.00	Rustler			
2,281.70	2,279.00	Salado			
3,494.98	3,486.00	Base Salt			
3,732.21	3,722.00	Yates			
4,159.42	4,147.00	Seven Rivers			
4,686.15	4,671.00	Queen			
6,169.04	6,149.00	Delaware Mtn Group			
8,071.04	8,051.00	Bone Spring Lime			
9,315.04	9,295.00	First Bone Spring Sand			
9,592.04	9,572.00	Second Bone Spring Carbonate			
9,990.04	9,970.00	Second Bone Spring Sand			
10,524.60	10,444.00	Third Bone Spring Carbonate			
10,708.02	10,538.00	Third Bone Spring Sand			
10,926.08	10,579.00	HZ Target			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
10,026.08	10,006.04	221.42	345.00	KOP: 10026.08' MD/ -218.04' VS/10006.04' TVD
10,269.81	10,242.48	170.82	351.84	100FLL: 10269.81' MD/ -167.37' VS/10242.48' TVD
10,926.08	10,579.00	-346.37	421.77	EOC: 10926.08' MD/ 350.48' VS/10579.00' TVD
20,777.66	10,579.00	-10,196.33	540.79	TD: 20777.66' MD/ 10201.13' VS/10579.00' TVD

FRANKLIN MOUNTAIN ENERGY

Tag State Com 603H

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

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,673'	30'	30'	0	Sand/Gravels/Unconsolidated
Rustler	1,700'	2,003'			Carbonates
Salado	1,424'	2,279'			Salt, Carbonate & Clastics
Base Salt	217'	3,486'			Shaley Carbonate & Shale
Yates	-19'	3,722'			Anhydrite/Shale
Seven Rivers	-443'	4,147'			Interbedded Shale/Carbonate
Queen	-968'	4,671'			Sandstone & Dolomite & Anhydrite
Delaware Mtn Group	-2,446'	6,149'			Sandstone/Carb/Shale - oil/gas/water
Bone Spring Lime	-4,348'	8,051'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-5,592'	9,295'			Sandstone - oil/gas/water
Second Bone Spring Carbonate	-5,869'	9,572'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-6,266'	9,970'			Sandstone - oil/gas/water
Third Bone Spring Carbonate	-6,741'	10,444'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-6,835'	10,538'			Sandstone - oil/gas/water
HZ Target	-6,876'	10,579'			Sandstone - oil/gas/water
Wolfcamp	-6,955'	10,658'			Overpressure Shale/Sand- oil/gas

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

Upper Permian Sands	0- 400’	Fresh Water
Delaware Sands	6,149'	Oil
1st Bone Spring Sand	9,295'	Oil
2nd Bone Spring Carb	9,572'	Oil
2nd Bone Spring Sand	9,970'	Oil
3rd Bone Spring Sand	10,538'	Oil
Wolfcamp	N/A	Oil
Wolfcamp B	N/A	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 2,055' and circulating cement back to surface.

4. **Casing Program:**
All casing strings will be run new.

FRANKLIN MOUNTAIN ENERGY

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8"	54.5	J-55	2730	1130	853	BTC 909	2,055	0.98	1.06	4.02	4.29
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	4,360	1.97	2.07	3.34	3.80
Production 7"	32	HCP-110	12460	10760	1025	CDC-HTQ 1053	10,026	1.86	2.29	2.44	2.50
Production 5 1/2"	20	HCP-110	12640	12200	641	CDC-HTQ 667	10,751	1.15	2.42	2.03	2.12
							10,579				2.14

Tapered production string will be ran with a X-over installed at the KOP of 10,026'.

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, Intermediate, and Production strings to further optimization of drilling process and reduction of disturbance.

String Type	Hole Size	Casing Size	Casing Setting Depth	Lead Sacks	Lead Type of cmt	Lead Yield ft3/sk	Lead Water gal/sk	Lead TOC ft	Tail Sacks	Tail Type of cmt	Tail Yield ft3/sk	Tail Water gal/sk	Tail TOC	Excess
Surf	17.5	13.375	2,055	1122	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	0	100%
Int1	12.25	9.625	4,360	708	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	3,960	100%
Prod	8.75	7	10,026	467	HSLD 9420, 10.5 ppg, Class C, 1#/sk Salt, 4% STE 1% C-45	3.99	25.51	3,360						100%
Prod	8.75	5.5	20,777						2683	HSLD 80, 13.ppg , 32#/sk Salt, 4% STE, 1#/sk Gyp Seal	1.52	7.59	10,026	50%

FRANKLIN MOUNTAIN ENERGY

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 3,500/250 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 3,500/250 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 – 2,055'	Fresh - Gel	8.6-8.8	28-34	N/c
2,055' – 4,360'	Brine	8.8-10.2	28-34	N/c
4,360'' – 10,926'	Brine	8.8-10.2	28-34	N/c
10,926' – 20,777' Lateral	Oil Base	9.0-11	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 9-11 ppg. In order to maintain hole stability, mud weights up to 11 ppg may be utilized.
An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.
Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary well control and monitoring equipment:

(A) A kelly cock will be kept in the drill string at all times.
(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be 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.

FRANKLIN MOUNTAIN ENERGY

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

The estimated bottom-hole temperature at 10,579' TVD (deepest point of the well) is 185F with an estimated maximum bottom-hole pressure (BHP) at the same point of 6,051' psig (based on 11 ppg MW). Hydrogen Sulfide may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

A. All personnel shall receive proper awareness H2S training.
B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
C. Required Emergency Equipment
    a. Well Control Equipment
        i. Flare line 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

FRANKLIN MOUNTAIN ENERGY

i. 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 30 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.

FRANKLIN MOUNTAIN ENERGY

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.

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:** __2/3/2024___

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: _____Treble 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

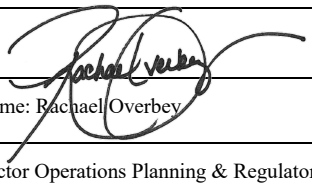
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(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@fmellc.com
Date: 2/3/2024
Phone: 720-414-7868

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

NATURAL GAS MANAGEMENT PLAN

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

Well Name	API 14 Digit	ULSTR	Surface Location FTG	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Tag State Com 302H	TBD	Lot 2-2-20S-35E	266 FNL 1995 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 303H	TBD	Lot 2-2-20S-35E	266 FNL 1965 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 304H	TBD	Lot 1-2-20S-35E	266 FNL 1126 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 503H	TBD	Lot 2-2-20S-35E	266 FNL 2025 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 504H	TBD	Lot 1-2-20S-35E	266 FNL 1186 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 603H	TBD	Lot 2-2-20S-35E	266 FNL 1935 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 604H	TBD	Lot 1-2-20S-35E	266 FNL 1096 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 703H	TBD	Lot 2-2-20S-35E	266 FNL 2055 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 704H	TBD	Lot 1-2-20S-35E	266 FNL 1156 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 803H	TBD	Lot 2-2-20S-35E	266 FNL 1905 FEL	800 +/-	700 +/-	2500 +/-
Tag State Com 804H	TBD	Lot 1-2-20S-35E	266 FNL 1066 FEL	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
Tag State Com 302H	TBD	6/15/2024	9/13/2024	10/8/2024	11/7/2024	11/9/2024
Tag State Com 303H	TBD	6/15/2024	9/13/2024	10/8/2024	11/7/2024	11/9/2024
Tag State Com 304H	TBD	7/1/2024	9/29/2024	10/24/2024	11/23/2024	11/25/2024
Tag State Com 503H	TBD	6/15/2024	9/13/2024	10/8/2024	11/7/2024	11/9/2024
Tag State Com 504H	TBD	7/1/2024	9/29/2024	10/24/2024	11/23/2024	11/25/2024
Tag State Com 603H	TBD	6/15/2024	9/13/2024	10/8/2024	11/7/2024	11/9/2024
Tag State Com 604H	TBD	7/1/2024	9/29/2024	10/24/2024	11/23/2024	11/25/2024
Tag State Com 703H	TBD	6/15/2024	9/13/2024	10/8/2024	11/7/2024	11/9/2024
Tag State Com 704H	TBD	7/1/2024	9/29/2024	10/24/2024	11/23/2024	11/25/2024
Tag State Com 803H	TBD	6/15/2024	9/13/2024	10/8/2024	11/7/2024	11/9/2024
Tag State Com 804H	TBD	7/1/2024	9/29/2024	10/24/2024	11/23/2024	11/25/2024

FRANKLIN MOUNTAIN ENERGY

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:*

FRANKLIN MOUNTAIN ENERGY

- 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.

Tag NGMP Map
Jan 2024
- Capacities reflected are FME's understanding of 3rd party midstream system capacities