

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

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

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

WELL API NO. 30-025-52565
5. Indicate Type of Lease STATE ☒ FEE ☐
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name TAG STATE COM
8. Well Number 503H
9. OGRID Number 331595
10. Pool name [96585] WC-025 G-06 S203511G; BONE SPRING

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)	
1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐	7. Lease Name or Unit Agreement Name TAG STATE COM
2. Name of Operator FRANKLIN MOUNTAIN ENERGY 3, LLC	8. Well Number 503H
3. Address of Operator 44 COOK STREET, SUITE 1000, DENVER, CO 80206	9. OGRID Number 331595
4. Well Location Unit Letter <u>B</u> : <u>266</u> feet from the <u>NORTH</u> line and <u>2025</u> feet from the <u>EAST</u> line Section <u>2</u> Township <u>20S</u> Range <u>35E</u> NMPM County <u>Lea</u>	10. Pool name [96585] WC-025 G-06 S203511G; BONE SPRING
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3674	

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

NOTICE OF INTENTION TO:

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

SUBSEQUENT REPORT OF:

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

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

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

Surface Hole Location: FME requests approval to move wellhead surface location from B-2-20S-35E, 266 FNL 2025 FEL to **A-2-20S-35E, 266 FNL 1246 FEL.**

Target formation remains the same.

Bottom Hole Location remains the same.

Lateral Hole Size change: from 8.75" to 7.875".

Please see attached revised C-102, directional plan, 14-point plan and geoprog.

Spud Date:

Rig Release Date:

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

SIGNATURE Rachael Overbey TITLE Dir. Ops Planning & Regulatory DATE 9/30/2024

Type or print name Rachael Overbey E-mail address: roverbey@fmellc.com PHONE: 303.570.4057

For State Use Only

APPROVED BY: _____ TITLE _____ DATE _____

Conditions of Approval (if any):

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☐ Initial Submittal
			☒ Amended Report
		☐ As Drilled	

WELL LOCATION INFORMATION

API Number 30-025-52565	Pool Code 96585	Pool Name WILDCAT G-06 S203511G; BONE SPRING
Property Code 335369	Property Name TAG STATE COM	Well Number 503H
OGRID No. 331595	Operator Name FRANKLIN MOUNTAIN ENERGY 3, LLC	Ground Level Elevation 3,670.2'
Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL 1	Section 2	Township 20S	Range 35E	Lot	Ft. from N/S 266 NORTH	Ft. from E/W 1,246 EAST	Latitude (NAD 83) 32.608791°	Longitude (NAD 83) -103.423416°	County LEA
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Bottom Hole Location

UL O	Section 11	Township 20S	Range 35E	Lot	Ft. from N/S 100 SOUTH	Ft. from E/W 2,290 EAST	Latitude (NAD 83) 32.580754°	Longitude (NAD 83) -103.426778°	County LEA
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Dedicated Acres 641.27	Infill or Defining Well Defining	Defining Well API 30-025-52565	Overlapping Spacing Unit (Y/N) N	Consolidation Code F
Order Numbers. R-23252		Well setbacks are under Common Ownership: ☒ Yes ☐ No		

Kick Off Point (KOP)

UL 2	Section 2	Township 20S	Range 35E	Lot	Ft. from N/S 51 NORTH	Ft. from E/W 2,198 EAST	Latitude (NAD 83) 32.609386°	Longitude (NAD 83) -103.426512°	County LEA
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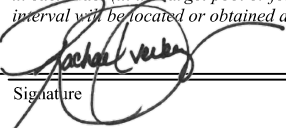
First Take Point (FTP)

UL 2	Section 2	Township 20S	Range 35E	Lot	Ft. from N/S 620 NORTH	Ft. from E/W 2,272 EAST	Latitude (NAD 83) 32.607824°	Longitude (NAD 83) -103.426745°	County LEA
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Last Take Point (LTP)

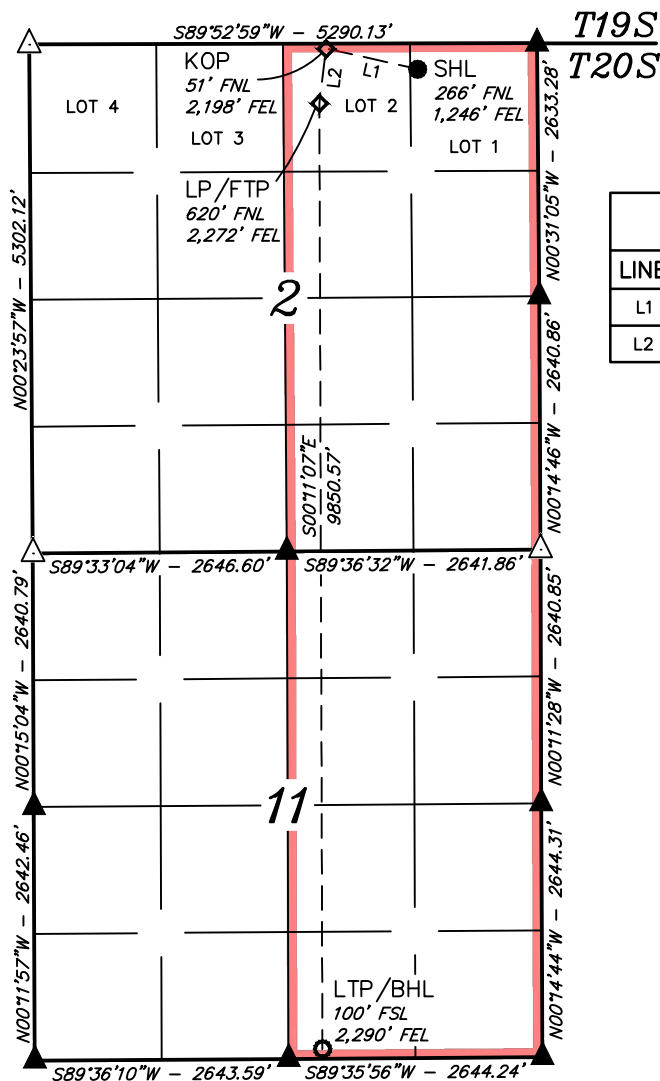
UL O	Section 11	Township 20S	Range 35E	Lot	Ft. from N/S 100 SOUTH	Ft. from E/W 2,290 EAST	Latitude (NAD 83) 32.580754°	Longitude (NAD 83) -103.426778°	County LEA
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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
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OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i>  9/27/2024 Signature _____ Date _____ Rachael Overbey Printed Name _____ roverbey@fmellc.com Email Address _____	SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from the 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.</i>  Signature and Seal of Professional Surveyor 23782 December 12, 2023 Certificate Number _____ Date of Survey _____
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Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

Property Name TAG STATE COM	Well Number 503H	Drawn By C.S.C. 12-20-23	Revised By REV. 2 Z.T. 09-25-24 (ADD KOP & LP/FTP)
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LINE TABLE		
LINE	DIRECTION	LENGTH
L1	N77°26'37"W	977.76'
L2	S06°56'34"W	573.04'

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°36'31.65" (32.608791°)
LONGITUDE = -103°25'24.30" (-103.423416°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°36'31.20" (32.608668°)
LONGITUDE = -103°25'22.55" (-103.422930°)
STATE PLANE NAD 83 (N.M. EAST)
N: 586407.98' E: 821526.35'
STATE PLANE NAD 27 (N.M. EAST)
N: 586345.21' E: 780345.10'

NAD 83 (KICK OFF POINT)
LATITUDE = 32°36'33.79" (32.609386°)
LONGITUDE = -103°25'35.44" (-103.426512°)
NAD 27 (KICK OFF POINT)
LATITUDE = 32°36'33.35" (32.609263°)
LONGITUDE = -103°25'33.69" (-103.426025°)
STATE PLANE NAD 83 (N.M. EAST)
N: 586616.47' E: 820571.23'
STATE PLANE NAD 27 (N.M. EAST)
N: 586553.68' E: 779390.01'

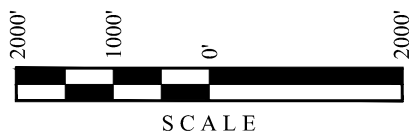
NAD 83 (LP/FTP)
LATITUDE = 32°36'28.17" (32.607824°)
LONGITUDE = -103°25'36.28" (-103.426745°)
NAD 27 (LP/FTP)
LATITUDE = 32°36'27.72" (32.607701°)
LONGITUDE = -103°25'34.53" (-103.426258°)
STATE PLANE NAD 83 (N.M. EAST)
N: 586047.43' E: 820504.38'
STATE PLANE NAD 27 (N.M. EAST)
N: 585984.65' E: 779323.14'

NAD 83 (LTP/BHL)
LATITUDE = 32°34'50.71" (32.580754°)
LONGITUDE = -103°25'36.40" (-103.426778°)
NAD 27 (LTP/BHL)
LATITUDE = 32°34'50.27" (32.580631°)
LONGITUDE = -103°25'34.66" (-103.426293°)
STATE PLANE NAD 83 (N.M. EAST)
N: 576198.67' E: 820577.91'
STATE PLANE NAD 27 (N.M. EAST)
N: 576136.13' E: 779396.33'

- = SURFACE HOLE LOCATION
- ◆ = KICK OFF POINT/LANDING POINT/FIRST TAKE POINT
- = LAST TAKE POINT/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.





Franklin Mountain Energy LLC

PV_Lea County, NM(N83-NME3001)

Tag Mid Pad

(05) Tag State Com 503H - Slot (02) TSC 503H

503H

Plan: APD-Rev02

Standard Planning Report

31 August, 2024



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02) TSC 503H
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 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	503H		
Design:	APD-Rev02		

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 503H - Slot (02) TSC 503H					
Well Position	+N/-S	0.00 usft	Northing:	586,407.78 usft	Latitude:	32.60879050
	+E/-W	0.00 usft	Easting:	821,525.83 usft	Longitude:	-103.42341773
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,673.00 usft
Grid Convergence:		0.49 °				

Wellbore	503H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	1/7/2024	6.21	60.18	47,466.13659448

Design	APD-Rev02				
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	8/31/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.00	20,269.45 APD-Rev02 (503H)	MWD+IFR1+MS		
			OWSG MWD + IFR1 + Multi-SI		



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02) TSC 503H
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 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	503H		
Design:	APD-Rev02		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,733.33	11.00	275.00	2,728.84	6.12	-69.91	1.50	1.50	0.00	275.00	
3,733.33	11.00	275.00	3,710.46	22.75	-259.99	0.00	0.00	0.00	0.00	
3,884.33	12.01	285.19	3,858.44	28.12	-289.51	1.50	0.67	6.75	68.65	
6,794.84	12.01	285.19	6,705.25	186.79	-873.93	0.00	0.00	0.00	0.00	
7,595.43	0.00	0.00	7,500.00	208.69	-954.60	1.50	-1.50	0.00	180.00	
9,519.47	0.00	0.00	9,424.04	208.69	-954.60	0.00	0.00	0.00	0.00	
10,419.47	90.00	186.70	9,997.00	-360.35	-1,021.45	10.00	10.00	0.00	186.70	
10,782.54	90.00	179.44	9,997.00	-722.66	-1,040.87	2.00	0.00	-2.00	-90.00	
20,269.45	90.00	179.44	9,997.00	-10,209.11	-947.92	0.00	0.00	0.00	0.00	02-PBHL(TGSC-503H



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02)
Company:	Franklin Mountain Energy LLC	TVD Reference:	TSC 503H
Project:	PV_Lea County, NM(N83-NME3001)	MD Reference:	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	North Reference:	3673+30 @ 3703.00usft
Well:	(05) Tag State Com 503H	Survey Calculation Method:	Grid
Wellbore:	503H		Minimum Curvature
Design:	APD-Rev02		

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	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,794.00	0.00	0.00	1,794.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler										
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,900.00	0.00	0.00	1,900.00	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	
2,064.00	0.96	275.00	2,064.00	0.05	-0.53	-0.05	1.50	1.50	0.00	
Salado										
2,100.00	1.50	275.00	2,099.99	0.11	-1.30	-0.13	1.50	1.50	0.00	
2,200.00	3.00	275.00	2,199.91	0.46	-5.21	-0.51	1.50	1.50	0.00	
2,300.00	4.50	275.00	2,299.69	1.03	-11.73	-1.14	1.50	1.50	0.00	
2,400.00	6.00	275.00	2,399.27	1.82	-20.85	-2.03	1.50	1.50	0.00	
2,500.00	7.50	275.00	2,498.57	2.85	-32.55	-3.17	1.50	1.50	0.00	
2,600.00	9.00	275.00	2,597.54	4.10	-46.85	-4.56	1.50	1.50	0.00	
2,700.00	10.50	275.00	2,696.09	5.57	-63.72	-6.20	1.50	1.50	0.00	
2,733.33	11.00	275.00	2,728.84	6.12	-69.91	-6.80	1.50	1.50	0.00	
2,800.00	11.00	275.00	2,794.28	7.23	-82.58	-8.03	0.00	0.00	0.00	
2,900.00	11.00	275.00	2,892.44	8.89	-101.59	-9.88	0.00	0.00	0.00	
3,000.00	11.00	275.00	2,990.60	10.55	-120.60	-11.73	0.00	0.00	0.00	
3,100.00	11.00	275.00	3,088.77	12.21	-139.61	-13.58	0.00	0.00	0.00	
3,139.97	11.00	275.00	3,128.00	12.88	-147.21	-14.32	0.00	0.00	0.00	
Base Salt										
3,200.00	11.00	275.00	3,186.93	13.88	-158.62	-15.43	0.00	0.00	0.00	
3,300.00	11.00	275.00	3,285.09	15.54	-177.63	-17.28	0.00	0.00	0.00	
3,400.00	11.00	275.00	3,383.25	17.20	-196.63	-19.13	0.00	0.00	0.00	
3,500.00	11.00	275.00	3,481.42	18.87	-215.64	-20.98	0.00	0.00	0.00	
3,509.76	11.00	275.00	3,491.00	19.03	-217.50	-21.16	0.00	0.00	0.00	
Yates										
3,600.00	11.00	275.00	3,579.58	20.53	-234.65	-22.83	0.00	0.00	0.00	
3,700.00	11.00	275.00	3,677.74	22.19	-253.66	-24.68	0.00	0.00	0.00	
3,733.33	11.00	275.00	3,710.46	22.75	-259.99	-25.29	0.00	0.00	0.00	
3,800.00	11.40	279.72	3,775.86	24.41	-272.83	-27.08	1.50	0.60	7.07	
3,884.33	12.01	285.19	3,858.44	28.12	-289.51	-30.95	1.50	0.72	6.49	



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02)
Company:	Franklin Mountain Energy LLC	TVD Reference:	TSC 503H
Project:	PV_Lea County, NM(N83-NME3001)	MD Reference:	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	North Reference:	3673+30 @ 3703.00usft
Well:	(05) Tag State Com 503H	Survey Calculation Method:	Grid
Wellbore:	503H		Minimum Curvature
Design:	APD-Rev02		

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)	
3,900.00	12.01	285.19	3,873.77	28.97	-292.66	-31.84	0.00	0.00	0.00	
4,000.00	12.01	285.19	3,971.58	34.42	-312.74	-37.49	0.00	0.00	0.00	
4,009.63	12.01	285.19	3,981.00	34.95	-314.67	-38.03	0.00	0.00	0.00	
Seven Rivers										
4,100.00	12.01	285.19	4,069.39	39.88	-332.81	-43.13	0.00	0.00	0.00	
4,200.00	12.01	285.19	4,167.20	45.33	-352.89	-48.78	0.00	0.00	0.00	
4,300.00	12.01	285.19	4,265.01	50.78	-372.97	-54.43	0.00	0.00	0.00	
4,400.00	12.01	285.19	4,362.83	56.23	-393.05	-60.08	0.00	0.00	0.00	
4,500.00	12.01	285.19	4,460.64	61.68	-413.13	-65.73	0.00	0.00	0.00	
4,600.00	12.01	285.19	4,558.45	67.13	-433.21	-71.38	0.00	0.00	0.00	
4,685.42	12.01	285.19	4,642.00	71.79	-450.36	-76.20	0.00	0.00	0.00	
Queen										
4,700.00	12.01	285.19	4,656.26	72.59	-453.29	-77.02	0.00	0.00	0.00	
4,800.00	12.01	285.19	4,754.07	78.04	-473.37	-82.67	0.00	0.00	0.00	
4,900.00	12.01	285.19	4,851.88	83.49	-493.45	-88.32	0.00	0.00	0.00	
5,000.00	12.01	285.19	4,949.69	88.94	-513.53	-93.97	0.00	0.00	0.00	
5,100.00	12.01	285.19	5,047.51	94.39	-533.61	-99.62	0.00	0.00	0.00	
5,200.00	12.01	285.19	5,145.32	99.84	-553.69	-105.26	0.00	0.00	0.00	
5,300.00	12.01	285.19	5,243.13	105.29	-573.77	-110.91	0.00	0.00	0.00	
5,400.00	12.01	285.19	5,340.94	110.75	-593.85	-116.56	0.00	0.00	0.00	
5,500.00	12.01	285.19	5,438.75	116.20	-613.93	-122.21	0.00	0.00	0.00	
5,600.00	12.01	285.19	5,536.56	121.65	-634.01	-127.86	0.00	0.00	0.00	
5,700.00	12.01	285.19	5,634.37	127.10	-654.09	-133.50	0.00	0.00	0.00	
5,800.00	12.01	285.19	5,732.19	132.55	-674.17	-139.15	0.00	0.00	0.00	
5,900.00	12.01	285.19	5,830.00	138.00	-694.25	-144.80	0.00	0.00	0.00	
6,000.00	12.01	285.19	5,927.81	143.46	-714.33	-150.45	0.00	0.00	0.00	
6,100.00	12.01	285.19	6,025.62	148.91	-734.41	-156.10	0.00	0.00	0.00	
6,112.66	12.01	285.19	6,038.00	149.60	-736.95	-156.81	0.00	0.00	0.00	
Delaware Mtn Group										
6,200.00	12.01	285.19	6,123.43	154.36	-754.49	-161.74	0.00	0.00	0.00	
6,300.00	12.01	285.19	6,221.24	159.81	-774.57	-167.39	0.00	0.00	0.00	
6,400.00	12.01	285.19	6,319.06	165.26	-794.64	-173.04	0.00	0.00	0.00	
6,500.00	12.01	285.19	6,416.87	170.71	-814.72	-178.69	0.00	0.00	0.00	
6,600.00	12.01	285.19	6,514.68	176.17	-834.80	-184.34	0.00	0.00	0.00	
6,700.00	12.01	285.19	6,612.49	181.62	-854.88	-189.98	0.00	0.00	0.00	
6,794.84	12.01	285.19	6,705.25	186.79	-873.93	-195.34	0.00	0.00	0.00	
6,800.00	11.93	285.19	6,710.30	187.07	-874.96	-195.63	1.50	-1.50	0.00	
6,900.00	10.43	285.19	6,808.40	192.15	-893.67	-200.89	1.50	-1.50	0.00	
7,000.00	8.93	285.19	6,906.97	196.55	-909.90	-205.46	1.50	-1.50	0.00	
7,100.00	7.43	285.19	7,005.95	200.28	-923.64	-209.32	1.50	-1.50	0.00	
7,200.00	5.93	285.19	7,105.27	203.33	-934.86	-212.48	1.50	-1.50	0.00	
7,300.00	4.43	285.19	7,204.86	205.70	-943.58	-214.93	1.50	-1.50	0.00	
7,400.00	2.93	285.19	7,304.65	207.38	-949.78	-216.68	1.50	-1.50	0.00	
7,500.00	1.43	285.19	7,404.58	208.38	-953.45	-217.71	1.50	-1.50	0.00	
7,595.43	0.00	0.00	7,500.00	208.69	-954.60	-218.03	1.50	-1.50	0.00	
7,600.00	0.00	0.00	7,504.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
7,700.00	0.00	0.00	7,604.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
7,800.00	0.00	0.00	7,704.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
7,900.00	0.00	0.00	7,804.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
7,971.43	0.00	0.00	7,876.00	208.69	-954.60	-218.03	0.00	0.00	0.00	
Bone Spring Lime										
8,000.00	0.00	0.00	7,904.57	208.69	-954.60	-218.03	0.00	0.00	0.00	



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02) TSC 503H
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 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	503H		
Design:	APD-Rev02		

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)	
8,100.00	0.00	0.00	8,004.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,200.00	0.00	0.00	8,104.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,300.00	0.00	0.00	8,204.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,400.00	0.00	0.00	8,304.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,500.00	0.00	0.00	8,404.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,600.00	0.00	0.00	8,504.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,700.00	0.00	0.00	8,604.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,800.00	0.00	0.00	8,704.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
8,900.00	0.00	0.00	8,804.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
9,000.00	0.00	0.00	8,904.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
9,100.00	0.00	0.00	9,004.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
9,200.00	0.00	0.00	9,104.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
9,300.00	0.00	0.00	9,204.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
9,400.00	0.00	0.00	9,304.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
9,412.43	0.00	0.00	9,317.00	208.69	-954.60	-218.03	0.00	0.00	0.00	
First Bone Spring Sand										
9,500.00	0.00	0.00	9,404.57	208.69	-954.60	-218.03	0.00	0.00	0.00	
9,519.47	0.00	0.00	9,424.04	208.69	-954.60	-218.03	0.00	0.00	0.00	
KOP: 9519.47' MD/ -218.03' VS/9424.04' TVD										
9,550.00	3.05	186.70	9,454.55	207.88	-954.69	-217.23	10.00	10.00	0.00	
9,600.00	8.05	186.70	9,504.30	203.08	-955.26	-212.43	10.00	10.00	0.00	
9,650.00	13.05	186.70	9,553.44	193.99	-956.33	-203.35	10.00	10.00	0.00	
9,666.03	14.66	186.70	9,569.00	190.18	-956.77	-199.54	10.00	10.00	0.00	
Second Bone Spring Carbonate										
9,700.00	18.05	186.70	9,601.59	180.68	-957.89	-190.05	10.00	10.00	0.00	
9,750.00	23.05	186.70	9,648.40	163.25	-959.94	-172.65	10.00	10.00	0.00	
9,758.57	23.91	186.70	9,656.26	159.86	-960.34	-169.26	10.00	10.00	0.00	
100FLL: 9758.57' MD/ -169.26' VS/9656.26' TVD										
9,800.00	28.05	186.70	9,693.49	141.84	-962.45	-151.26	10.00	10.00	0.00	
9,850.00	33.05	186.70	9,736.54	116.60	-965.42	-126.05	10.00	10.00	0.00	
9,900.00	38.05	186.70	9,777.20	87.74	-968.81	-97.22	10.00	10.00	0.00	
9,950.00	43.05	186.70	9,815.18	55.46	-972.60	-64.99	10.00	10.00	0.00	
10,000.00	48.05	186.70	9,850.18	20.02	-976.76	-29.59	10.00	10.00	0.00	
01-T98(TGSC-503H)										
10,045.14	52.57	186.70	9,879.00	-14.46	-980.81	4.85	10.00	10.00	0.00	
Second Bone Spring Sand										
10,050.00	53.05	186.70	9,881.94	-18.31	-981.27	8.70	10.00	10.00	0.00	
10,100.00	58.05	186.70	9,910.21	-59.25	-986.08	49.59	10.00	10.00	0.00	
10,150.00	63.05	186.70	9,934.79	-102.48	-991.15	92.76	10.00	10.00	0.00	
10,200.00	68.05	186.70	9,955.47	-147.67	-996.46	137.90	10.00	10.00	0.00	
10,250.00	73.05	186.70	9,972.12	-194.48	-1,001.96	184.66	10.00	10.00	0.00	
10,300.00	78.05	186.70	9,984.59	-242.55	-1,007.61	232.67	10.00	10.00	0.00	
10,350.00	83.05	186.70	9,992.79	-291.52	-1,013.36	281.58	10.00	10.00	0.00	
10,400.00	88.05	186.70	9,996.67	-341.02	-1,019.18	331.02	10.00	10.00	0.00	
10,419.47	90.00	186.70	9,997.00	-360.35	-1,021.45	350.33	10.00	10.00	0.00	
EOC: 10419.47' MD/ 350.33' VS/9997.00' TVD - HZ Target										
10,500.00	90.00	185.09	9,997.00	-440.45	-1,029.72	430.34	2.00	0.00	-2.00	
10,600.00	90.00	183.09	9,997.00	-540.19	-1,036.85	530.01	2.00	0.00	-2.00	
10,700.00	90.00	181.09	9,997.00	-640.12	-1,040.49	629.90	2.00	0.00	-2.00	
10,782.54	90.00	179.44	9,997.00	-722.66	-1,040.87	712.43	2.00	0.00	-2.00	
10,800.00	90.00	179.44	9,997.00	-740.12	-1,040.70	729.88	0.00	0.00	0.00	
10,900.00	90.00	179.44	9,997.00	-840.11	-1,039.72	829.88	0.00	0.00	0.00	



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02) TSC 503H
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 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	503H		
Design:	APD-Rev02		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,000.00	90.00	179.44	9,997.00	-940.11	-1,038.74	929.88	0.00	0.00	0.00
11,100.00	90.00	179.44	9,997.00	-1,040.10	-1,037.76	1,029.88	0.00	0.00	0.00
11,200.00	90.00	179.44	9,997.00	-1,140.10	-1,036.78	1,129.88	0.00	0.00	0.00
11,300.00	90.00	179.44	9,997.00	-1,240.09	-1,035.80	1,229.88	0.00	0.00	0.00
11,400.00	90.00	179.44	9,997.00	-1,340.09	-1,034.82	1,329.88	0.00	0.00	0.00
11,500.00	90.00	179.44	9,997.00	-1,440.08	-1,033.84	1,429.88	0.00	0.00	0.00
11,600.00	90.00	179.44	9,997.00	-1,540.08	-1,032.87	1,529.88	0.00	0.00	0.00
11,700.00	90.00	179.44	9,997.00	-1,640.07	-1,031.89	1,629.88	0.00	0.00	0.00
11,800.00	90.00	179.44	9,997.00	-1,740.07	-1,030.91	1,729.88	0.00	0.00	0.00
11,900.00	90.00	179.44	9,997.00	-1,840.06	-1,029.93	1,829.88	0.00	0.00	0.00
12,000.00	90.00	179.44	9,997.00	-1,940.06	-1,028.95	1,929.88	0.00	0.00	0.00
12,100.00	90.00	179.44	9,997.00	-2,040.05	-1,027.97	2,029.88	0.00	0.00	0.00
12,200.00	90.00	179.44	9,997.00	-2,140.05	-1,026.99	2,129.88	0.00	0.00	0.00
12,300.00	90.00	179.44	9,997.00	-2,240.04	-1,026.01	2,229.88	0.00	0.00	0.00
12,400.00	90.00	179.44	9,997.00	-2,340.04	-1,025.03	2,329.88	0.00	0.00	0.00
12,500.00	90.00	179.44	9,997.00	-2,440.03	-1,024.05	2,429.88	0.00	0.00	0.00
12,600.00	90.00	179.44	9,997.00	-2,540.03	-1,023.07	2,529.88	0.00	0.00	0.00
12,700.00	90.00	179.44	9,997.00	-2,640.02	-1,022.09	2,629.88	0.00	0.00	0.00
12,800.00	90.00	179.44	9,997.00	-2,740.02	-1,021.11	2,729.88	0.00	0.00	0.00
12,900.00	90.00	179.44	9,997.00	-2,840.02	-1,020.13	2,829.88	0.00	0.00	0.00
13,000.00	90.00	179.44	9,997.00	-2,940.01	-1,019.15	2,929.88	0.00	0.00	0.00
13,100.00	90.00	179.44	9,997.00	-3,040.01	-1,018.17	3,029.88	0.00	0.00	0.00
13,200.00	90.00	179.44	9,997.00	-3,140.00	-1,017.19	3,129.88	0.00	0.00	0.00
13,300.00	90.00	179.44	9,997.00	-3,240.00	-1,016.21	3,229.88	0.00	0.00	0.00
13,400.00	90.00	179.44	9,997.00	-3,339.99	-1,015.23	3,329.88	0.00	0.00	0.00
13,500.00	90.00	179.44	9,997.00	-3,439.99	-1,014.25	3,429.88	0.00	0.00	0.00
13,600.00	90.00	179.44	9,997.00	-3,539.98	-1,013.27	3,529.88	0.00	0.00	0.00
13,700.00	90.00	179.44	9,997.00	-3,639.98	-1,012.29	3,629.88	0.00	0.00	0.00
13,800.00	90.00	179.44	9,997.00	-3,739.97	-1,011.31	3,729.88	0.00	0.00	0.00
13,900.00	90.00	179.44	9,997.00	-3,839.97	-1,010.33	3,829.88	0.00	0.00	0.00
14,000.00	90.00	179.44	9,997.00	-3,939.96	-1,009.35	3,929.88	0.00	0.00	0.00
14,100.00	90.00	179.44	9,997.00	-4,039.96	-1,008.37	4,029.88	0.00	0.00	0.00
14,200.00	90.00	179.44	9,997.00	-4,139.95	-1,007.39	4,129.88	0.00	0.00	0.00
14,300.00	90.00	179.44	9,997.00	-4,239.95	-1,006.41	4,229.88	0.00	0.00	0.00
14,400.00	90.00	179.44	9,997.00	-4,339.94	-1,005.43	4,329.88	0.00	0.00	0.00
14,500.00	90.00	179.44	9,997.00	-4,439.94	-1,004.45	4,429.88	0.00	0.00	0.00
14,600.00	90.00	179.44	9,997.00	-4,539.93	-1,003.47	4,529.88	0.00	0.00	0.00
14,700.00	90.00	179.44	9,997.00	-4,639.93	-1,002.49	4,629.88	0.00	0.00	0.00
14,800.00	90.00	179.44	9,997.00	-4,739.92	-1,001.51	4,729.88	0.00	0.00	0.00
14,900.00	90.00	179.44	9,997.00	-4,839.92	-1,000.53	4,829.88	0.00	0.00	0.00
15,000.00	90.00	179.44	9,997.00	-4,939.91	-999.55	4,929.88	0.00	0.00	0.00
15,100.00	90.00	179.44	9,997.00	-5,039.91	-998.57	5,029.88	0.00	0.00	0.00
15,200.00	90.00	179.44	9,997.00	-5,139.90	-997.59	5,129.88	0.00	0.00	0.00
15,300.00	90.00	179.44	9,997.00	-5,239.90	-996.61	5,229.88	0.00	0.00	0.00
15,400.00	90.00	179.44	9,997.00	-5,339.90	-995.63	5,329.88	0.00	0.00	0.00
15,500.00	90.00	179.44	9,997.00	-5,439.89	-994.65	5,429.88	0.00	0.00	0.00
15,600.00	90.00	179.44	9,997.00	-5,539.89	-993.67	5,529.88	0.00	0.00	0.00
15,700.00	90.00	179.44	9,997.00	-5,639.88	-992.69	5,629.88	0.00	0.00	0.00
15,800.00	90.00	179.44	9,997.00	-5,739.88	-991.71	5,729.88	0.00	0.00	0.00
15,900.00	90.00	179.44	9,997.00	-5,839.87	-990.73	5,829.88	0.00	0.00	0.00
16,000.00	90.00	179.44	9,997.00	-5,939.87	-989.75	5,929.88	0.00	0.00	0.00
16,100.00	90.00	179.44	9,997.00	-6,039.86	-988.77	6,029.88	0.00	0.00	0.00
16,200.00	90.00	179.44	9,997.00	-6,139.86	-987.79	6,129.88	0.00	0.00	0.00



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02)
Company:	Franklin Mountain Energy LLC	TVD Reference:	TSC 503H
Project:	PV_Lea County, NM(N83-NME3001)	MD Reference:	3673+30 @ 3703.00usft
Site:	Tag Mid Pad	North Reference:	3673+30 @ 3703.00usft
Well:	(05) Tag State Com 503H	Survey Calculation Method:	Grid
Wellbore:	503H		Minimum Curvature
Design:	APD-Rev02		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
16,300.00	90.00	179.44	9,997.00	-6,239.85	-986.81	6,229.88	0.00	0.00	0.00	
16,400.00	90.00	179.44	9,997.00	-6,339.85	-985.83	6,329.88	0.00	0.00	0.00	
16,500.00	90.00	179.44	9,997.00	-6,439.84	-984.85	6,429.88	0.00	0.00	0.00	
16,600.00	90.00	179.44	9,997.00	-6,539.84	-983.88	6,529.88	0.00	0.00	0.00	
16,700.00	90.00	179.44	9,997.00	-6,639.83	-982.90	6,629.88	0.00	0.00	0.00	
16,800.00	90.00	179.44	9,997.00	-6,739.83	-981.92	6,729.88	0.00	0.00	0.00	
16,900.00	90.00	179.44	9,997.00	-6,839.82	-980.94	6,829.88	0.00	0.00	0.00	
17,000.00	90.00	179.44	9,997.00	-6,939.82	-979.96	6,929.88	0.00	0.00	0.00	
17,100.00	90.00	179.44	9,997.00	-7,039.81	-978.98	7,029.88	0.00	0.00	0.00	
17,200.00	90.00	179.44	9,997.00	-7,139.81	-978.00	7,129.88	0.00	0.00	0.00	
17,300.00	90.00	179.44	9,997.00	-7,239.80	-977.02	7,229.88	0.00	0.00	0.00	
17,400.00	90.00	179.44	9,997.00	-7,339.80	-976.04	7,329.88	0.00	0.00	0.00	
17,500.00	90.00	179.44	9,997.00	-7,439.79	-975.06	7,429.88	0.00	0.00	0.00	
17,600.00	90.00	179.44	9,997.00	-7,539.79	-974.08	7,529.88	0.00	0.00	0.00	
17,700.00	90.00	179.44	9,997.00	-7,639.79	-973.10	7,629.88	0.00	0.00	0.00	
17,800.00	90.00	179.44	9,997.00	-7,739.78	-972.12	7,729.88	0.00	0.00	0.00	
17,900.00	90.00	179.44	9,997.00	-7,839.78	-971.14	7,829.88	0.00	0.00	0.00	
18,000.00	90.00	179.44	9,997.00	-7,939.77	-970.16	7,929.88	0.00	0.00	0.00	
18,100.00	90.00	179.44	9,997.00	-8,039.77	-969.18	8,029.88	0.00	0.00	0.00	
18,200.00	90.00	179.44	9,997.00	-8,139.76	-968.20	8,129.88	0.00	0.00	0.00	
18,300.00	90.00	179.44	9,997.00	-8,239.76	-967.22	8,229.88	0.00	0.00	0.00	
18,400.00	90.00	179.44	9,997.00	-8,339.75	-966.24	8,329.88	0.00	0.00	0.00	
18,500.00	90.00	179.44	9,997.00	-8,439.75	-965.26	8,429.88	0.00	0.00	0.00	
18,600.00	90.00	179.44	9,997.00	-8,539.74	-964.28	8,529.88	0.00	0.00	0.00	
18,700.00	90.00	179.44	9,997.00	-8,639.74	-963.30	8,629.88	0.00	0.00	0.00	
18,800.00	90.00	179.44	9,997.00	-8,739.73	-962.32	8,729.88	0.00	0.00	0.00	
18,900.00	90.00	179.44	9,997.00	-8,839.73	-961.34	8,829.88	0.00	0.00	0.00	
19,000.00	90.00	179.44	9,997.00	-8,939.72	-960.36	8,929.88	0.00	0.00	0.00	
19,100.00	90.00	179.44	9,997.00	-9,039.72	-959.38	9,029.88	0.00	0.00	0.00	
19,200.00	90.00	179.44	9,997.00	-9,139.71	-958.40	9,129.88	0.00	0.00	0.00	
19,300.00	90.00	179.44	9,997.00	-9,239.71	-957.42	9,229.88	0.00	0.00	0.00	
19,400.00	90.00	179.44	9,997.00	-9,339.70	-956.44	9,329.88	0.00	0.00	0.00	
19,500.00	90.00	179.44	9,997.00	-9,439.70	-955.46	9,429.88	0.00	0.00	0.00	
19,600.00	90.00	179.44	9,997.00	-9,539.69	-954.48	9,529.88	0.00	0.00	0.00	
19,700.00	90.00	179.44	9,997.00	-9,639.69	-953.50	9,629.88	0.00	0.00	0.00	
19,800.00	90.00	179.44	9,997.00	-9,739.68	-952.52	9,729.88	0.00	0.00	0.00	
19,900.00	90.00	179.44	9,997.00	-9,839.68	-951.54	9,829.88	0.00	0.00	0.00	
20,000.00	90.00	179.44	9,997.00	-9,939.67	-950.56	9,929.88	0.00	0.00	0.00	
20,100.00	90.00	179.44	9,997.00	-10,039.67	-949.58	10,029.88	0.00	0.00	0.00	
20,200.00	90.00	179.44	9,997.00	-10,139.67	-948.60	10,129.88	0.00	0.00	0.00	
20,269.45	90.00	179.44	9,997.00	-10,209.11	-947.92	10,199.33	0.00	0.00	0.00	
TD: 20269.45' MD/ 10199.33' VS/9997.00' TVD - 02-PBHL(TGSC-503H)										



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (05) Tag State Com 503H - Slot (02) TSC 503H
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 503H	Survey Calculation Method:	Minimum Curvature
Wellbore:	503H		
Design:	APD-Rev02		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
01-T98(TGSC-503H)	0.00	0.00	9,997.00	162.57	-1,048.94	586,570.35	820,476.89	32.60926193	-103.42681931
- plan misses target center by 216.99usft at 10000.00usft MD (9850.18 TVD, 20.02 N, -976.76 E)									
- Point									
02-PBHL(TGSC-503H)	0.00	0.00	9,997.00	-10,209.11	-947.92	576,198.67	820,577.91	32.58075405	-103.42677837
- plan hits target center									
- Point									

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
30.00	30.00	Cenozoic Alluvium (surface)				
1,794.00	1,794.00	Rustler				
2,064.00	2,064.00	Salado				
3,139.97	3,128.00	Base Salt				
3,509.76	3,491.00	Yates				
4,009.63	3,981.00	Seven Rivers				
4,685.42	4,642.00	Queen				
6,112.66	6,038.00	Delaware Mtn Group				
7,971.43	7,876.00	Bone Spring Lime				
9,412.43	9,317.00	First Bone Spring Sand				
9,666.03	9,569.00	Second Bone Spring Carbonate				
10,045.14	9,879.00	Second Bone Spring Sand				
10,419.47	9,997.00	HZ Target				

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
9,519.47	9,424.04	208.69	-954.60	KOP: 9519.47' MD/ -218.03' VS/9424.04' TVD	
9,758.57	9,656.26	159.86	-960.34	100FLL: 9758.57' MD/ -169.26' VS/9656.26' TVD	
10,419.47	9,997.00	-360.35	-1,021.45	EOC: 10419.47' MD/ 350.33' VS/9997.00' TVD	
20,269.45	9,997.00	-10,209.11	-947.92	TD: 20269.45' MD/ 10199.33' VS/9997.00' TVD	



Tag State Com 503H

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)	3,670'	30'	30'	0	Sand/Gravels/Unconsolidated
Rustler	1906	1,794'			Carbonates
Salado	1636	2,064'			Salt, Anhydrite & Clastics
Base Salt	572	3,128'			Shaley Carbonate & Shale
Yates	209	3,491'			Anhydrite/Shale
Seven Rivers	-281	3,981'			Interbedded Shale/Carbonate
Queen	-943	4,642'			Sandstone & Dolomite & Anhydrite
Delaware Mtn Group	-2338	6,038'			Sandstone/Carb/Shale - oil/gas/water
Bone Spring Lime	-4176	7,876'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-5617	9,317'			Sandstone - oil/gas/water
Second Bone Spring Carbonate	-5869	9,569'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-6179	9,879'			Sandstone - oil/gas/water
HZ Target	-6297	9,997'			Sandstone - oil/gas/water
Third Bone Spring Carbonate	-6676	10,376'			Shale/Carbonates - oil/gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	6,038'	Oil
1 st Bone Spring Sand	9,317'	Oil
2 nd Bone Spring Carb	9,569'	Oil
2 nd Bone Spring Sand	9,879'	Oil
3 rd Bone Spring Sand	N/A	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 1,844' and circulating cement back to surface.

4. **Casing Program:**

All casing strings will be run new.

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8"	54.5	J-55	2730	1130	853	BTC 909	1,844	1.03	1.18	4.25	4.53
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	4,214	2.01	2.14	3.41	3.88
Production 7"	32	HCP-110	12460	10760	1025	CDC-HTQ 1053	9,519	1.93	2.42	2.53	2.60
Production 5 1/2"	20	HCP-110	12640	12200	641	CDC-HTQ 667	10,750 9,997	1.15	2.43	2.03	2.12 2.22

Tapered production string will be ran with a X-over installed at the KOP of 9,519'.



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		Lead					Tail					
		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	TOC	Excess
Surf	17.5	13.375	1,844	930	85:15 Compass Poz, 12.8 ppg Class C, 5%Gel,3#/sk Kol Seal, 4.64#/sk Salt	2.05	11.12	0	233	Tail, 14.8 ppg, 100% Class C, 1%CaCl2, 0.1%	1.34	6.35	1,444	90%
Int1	12.25	9.625	4,214	694	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	3,814	100%
Prod	8.75	7	9,519	280	HSLD 9420, 10.5 ppg, Class C, 1#/sk Salt, 4% STE 1% C-45	3.99	25.51	3,214	20%					
Prod	7.875	5.5	20,269						1530	HSLD 80, 13.ppg , 32#/sk Salt, 4% STE, 1#/sk Gyp Seal	1.52	7.59	9,519	20%

5. Minimum Specifications for Pressure Control:

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

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5,000/250 psig and the annular preventer to 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 – 1,844'	Fresh - Gel	8.6-8.8	28-34	N/c
1,844' – 4,214'	Brine	8.8-10.2	28-34	N/c
4,214' – 10,419'	Brine	8.8-10.2	28-34	N/c
10,419' – 20,269' Lateral	OBM/WBM	8.4-11	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.

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

The estimated bottom-hole temperature at 9,997' TVD (deepest point of the well) is 170F with an estimated maximum bottom-hole pressure (BHP) at the same point of 5,718' 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/Escapes packs – 4 packs shall be stored on the rig floor with sufficient air hose not to restrict work activity
 - 3. Emergency Escape Packs – 4 packs shall be stored in the doghouse for emergency evacuation.
- ii. Auxiliary Rescue Equipment
 - 1. Stretcher
 - 2. Two OSHA full body harnesses
 - 3. 100 feet of 5/8 inches OSHA approved rope
 - 4. 1-20# class ABC fire extinguisher
- c. H2S Detection and Monitoring Equipment
 - i. A stationary detector with three sensors will be placed in the doghouse if equipped, set to visually alarm at 10 ppm and audible at 14 ppm. The detector will be calibrated a minimum of every 30 days or as needed. The sensors will be placed in the following places:
 - 1. Rig Floor
 - 2. Below Rig Floor / Near BOPs
 - 3. End of flow line or where well bore fluid is being discharged (near shakers)
 - ii. If H2S is encountered, measured values and formations will be provided to the BLM.
- d. Visual Warning Systems
 - i. One color code condition sign will be placed at the entrance to the site reflecting the possible conditions at the site.
 - ii. A colored condition flag will be on display, reflecting the current condition at the site at the time.
 - iii. Two windsocks will be placed in strategic locations, visible from all angles.
- e. Mud Program
 - i. The Mud program will be designed to minimize the volume of 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.

14. Additional variance requests

A. Casing.

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 388510

CONDITIONS

Operator: Franklin Mountain Energy 3, LLC 44 Cook Street Denver, CO 80206	OGRID: 331595
	Action Number: 388510
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	ALL PREVIOUS COA's APPLY.	10/1/2024