

Well Name: PF FED COM	Well Location: T26S / R35E / SEC 1 / TR A / 32.07879 / -103.31611	County or Parish/State: LEA / NM
Well Number: 104H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM117126	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002549975	Well Status: Drilling Well	Operator: FRANKLIN MOUNTAIN ENERGY LLC

Notice of Intent

Sundry ID: 2663982

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/25/2022

Time Sundry Submitted: 01:46

Date proposed operation will begin: 04/06/2022

Procedure Description: Franklin Mountain Energy, LLC (FME), Operator, respectfully requests approval to make the following changes to the proposed drilling plan for the above referenced well: Target Change: FME requests approval to change the formation target for this well from 8420' TVD to 8629' TVD (Wildcat Upper Bone Spring/Avalon). SHL and BHL remains the same. Please see attached Plan 2, revised 14-point plan and geo prog.

NOI Attachments

Procedure Description

- FME__PF_Fed_Com_104H_Plan_Data_p2_20220325134631.pdf
- FME_Federal_14_Point_Plan_PF_104_updated_20220325134631.pdf
- PF_Fed_Com_104H_GEOPROG_prelim_v2_20220325134631.pdf

Well Name: PF FED COM	Well Location: T26S / R35E / SEC 1 / TR A / 32.07879 / -103.31611	County or Parish/State: LEA / NM
Well Number: 104H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM117126	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002549975	Well Status: Drilling Well	Operator: FRANKLIN MOUNTAIN ENERGY LLC

Conditions of Approval

Additional

1_26_35_A_Sundry_ID_2663982_PF_Fed_Com_104H_Lea_NM117126_Franklin_Mountain_Energy_LLC_13_22c_10_18_2021_LV_20220422084510.pdf

Operator

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

Operator Electronic Signature: RACHAEL OVERBEY	Signed on: MAR 25, 2022 01:46 PM
Name: FRANKLIN MOUNTAIN ENERGY LLC	
Title: Director – Operations Planning and Regulatory	
Street Address: 2401 E 2nd Avenue, Suite 300	
City: Denver	State: CO
Phone: (720) 414-7868	
Email address: roverbey@fmellc.com	

Field

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

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 06/13/2022
Signature: Chris Walls	

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
	97088	WC-025 G-08 S2535340;BONE SPRING
⁴ Property Code	⁵ Property Name	⁶ Well Number
	PF FED COM	104H
⁷ OGRID No.	⁸ Operator Name	⁹ Elevation
373910	FRANKLIN MOUNTAIN ENERGY LLC	3030.1'

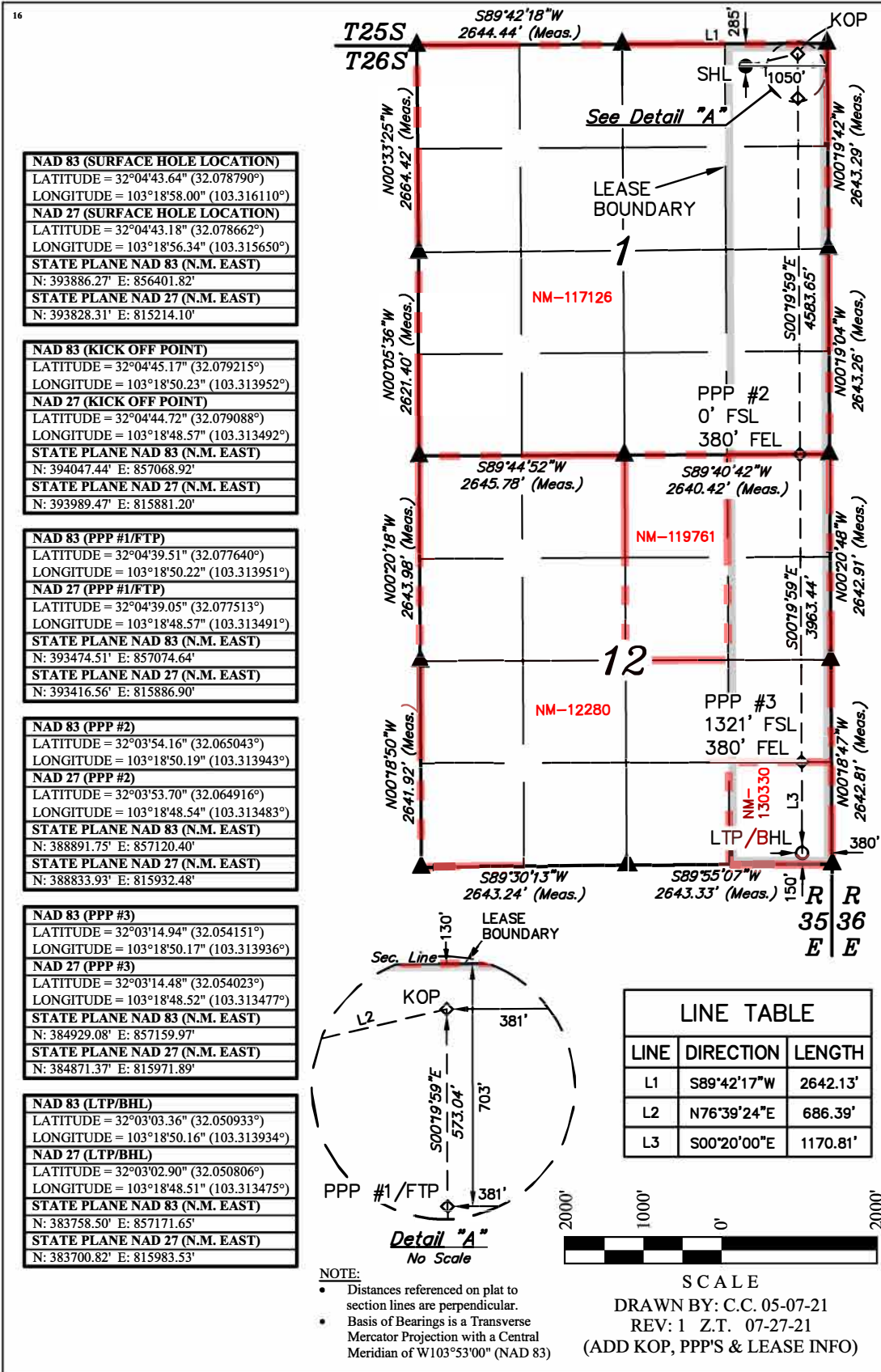
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	1	26S	35E		285	NORTH	1050	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
P	12	26S	35E		150	SOUTH	380	EAST	LEA
¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.						
320									

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.



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: *Rachael Overbey* Date: 7/1/2022
Printed Name: Rachael Overbey
E-mail Address: roverbey@fmellc.com

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.

April 28, 2021
Date of Survey
Signature and Seal of Professional Surveyor:
Paul Buchele
23782
07-27-21
PROFESSIONAL SURVEYOR

Certificate Number:

FRANKLIN MOUNTAIN ENERGY

Lea County, NM (NAD83)

PF Fed Com Pad

PF Fed Com 104H - Slot 104H

Wellbore #1

Plan: Plan #2

Standard Planning Report

25 March, 2022

Planning Report

Database:	EDM 5000.15 Multi User	Local Co-ordinate Reference:	Well PF Fed Com 104H - Slot 104H
Company:	FRANKLIN MOUNTAIN ENERGY	TVD Reference:	3031.00+30 @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.00+30 @ 3061.00usft
Site:	PF Fed Com Pad	North Reference:	Grid
Well:	PF Fed Com 104H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Project	Lea County, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	PF Fed Com Pad				
Site Position:		Northing:	393,886.27 usft	Latitude:	32.078790
From:	Map	Easting:	856,401.82 usft	Longitude:	-103.316111
Position Uncertainty:	0.00 usft	Slot Radius:	13.200 in	Grid Convergence:	0.54

Well	PF Fed Com 104H - Slot 104H					
Well Position	+N/-S	0.00 usft	Northing:	393,886.27 usft	Latitude:	32.078790
	+E/-W	0.00 usft	Easting:	856,401.82 usft	Longitude:	-103.316111
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,031.00 usft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	3/23/2022	6.27	59.62	47,417

Design	Plan #2			
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	179.43

Plan Survey Tool Program	Date	3/25/2022		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,720.18	Plan #2 (Wellbore #1)	MWD OWSG Rev5
				OWSG MWD - Standard

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,652.90	8.29	76.43	2,650.97	9.37	38.83	1.50	1.50	0.00	76.43	
6,855.91	8.29	76.43	6,810.03	151.63	628.17	0.00	0.00	0.00	0.00	
7,408.81	0.00	0.00	7,361.00	161.00	667.00	1.50	-1.50	0.00	180.00	
8,103.85	0.00	0.00	8,056.04	161.00	667.00	0.00	0.00	0.00	0.00	
9,003.85	90.00	179.43	8,629.00	-411.93	672.73	10.00	10.00	19.94	179.43	
18,720.18	90.00	179.43	8,629.00	-10,127.77	769.83	0.00	0.00	0.00	0.00	PF Fed Com 104H Bt

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Site:	PF Fed Com Pad	North Reference:	Grid
Well:	PF Fed Com 104H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
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									
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
1,034.00	0.00	0.00	1,034.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
1,800.00	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
2,013.00	0.00	0.00	2,013.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	1.50	76.43	2,199.99	0.31	1.27	-0.29	1.50	1.50	0.00
2,300.00	3.00	76.43	2,299.91	1.23	5.09	-1.18	1.50	1.50	0.00
2,400.00	4.50	76.43	2,399.69	2.76	11.45	-2.65	1.50	1.50	0.00
2,500.00	6.00	76.43	2,499.27	4.91	20.34	-4.71	1.50	1.50	0.00
2,600.00	7.50	76.43	2,598.57	7.67	31.77	-7.35	1.50	1.50	0.00
2,652.90	8.29	76.43	2,650.97	9.37	38.83	-8.99	1.50	1.50	0.00
2,700.00	8.29	76.43	2,697.58	10.97	45.44	-10.51	0.00	0.00	0.00
2,800.00	8.29	76.43	2,796.53	14.35	59.46	-13.76	0.00	0.00	0.00
2,900.00	8.29	76.43	2,895.49	17.74	73.48	-17.00	0.00	0.00	0.00
3,000.00	8.29	76.43	2,994.44	21.12	87.50	-20.25	0.00	0.00	0.00
3,100.00	8.29	76.43	3,093.40	24.51	101.52	-23.49	0.00	0.00	0.00
3,200.00	8.29	76.43	3,192.35	27.89	115.54	-26.74	0.00	0.00	0.00
3,300.00	8.29	76.43	3,291.30	31.27	129.57	-29.98	0.00	0.00	0.00
3,400.00	8.29	76.43	3,390.26	34.66	143.59	-33.23	0.00	0.00	0.00
3,498.77	8.29	76.43	3,488.00	38.00	157.44	-36.43	0.00	0.00	0.00
Base Salt									
3,500.00	8.29	76.43	3,489.21	38.04	157.61	-36.47	0.00	0.00	0.00
3,600.00	8.29	76.43	3,588.17	41.43	171.63	-39.72	0.00	0.00	0.00
3,700.00	8.29	76.43	3,687.12	44.81	185.65	-42.96	0.00	0.00	0.00
3,800.00	8.29	76.43	3,786.07	48.20	199.68	-46.21	0.00	0.00	0.00
3,900.00	8.29	76.43	3,885.03	51.58	213.70	-49.45	0.00	0.00	0.00
4,000.00	8.29	76.43	3,983.98	54.97	227.72	-52.70	0.00	0.00	0.00
4,100.00	8.29	76.43	4,082.94	58.35	241.74	-55.94	0.00	0.00	0.00
4,200.00	8.29	76.43	4,181.89	61.74	255.76	-59.19	0.00	0.00	0.00
4,300.00	8.29	76.43	4,280.85	65.12	269.78	-62.43	0.00	0.00	0.00
4,400.00	8.29	76.43	4,379.80	68.50	283.81	-65.68	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.15 Multi User	Local Co-ordinate Reference:	Well PF Fed Com 104H - Slot 104H
Company:	FRANKLIN MOUNTAIN ENERGY	TVD Reference:	3031.00+30 @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.00+30 @ 3061.00usft
Site:	PF Fed Com Pad	North Reference:	Grid
Well:	PF Fed Com 104H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.00	8.29	76.43	4,478.75	71.89	297.83	-68.92	0.00	0.00	0.00
4,600.00	8.29	76.43	4,577.71	75.27	311.85	-72.17	0.00	0.00	0.00
4,700.00	8.29	76.43	4,676.66	78.66	325.87	-75.41	0.00	0.00	0.00
4,800.00	8.29	76.43	4,775.62	82.04	339.89	-78.66	0.00	0.00	0.00
4,900.00	8.29	76.43	4,874.57	85.43	353.91	-81.90	0.00	0.00	0.00
5,000.00	8.29	76.43	4,973.53	88.81	367.94	-85.15	0.00	0.00	0.00
5,032.82	8.29	76.43	5,006.00	89.92	372.54	-86.21	0.00	0.00	0.00
Lamar									
5,100.00	8.29	76.43	5,072.48	92.20	381.96	-88.39	0.00	0.00	0.00
5,139.94	8.29	76.43	5,112.00	93.55	387.56	-89.69	0.00	0.00	0.00
Bell Canyon									
5,200.00	8.29	76.43	5,171.43	95.58	395.98	-91.64	0.00	0.00	0.00
5,300.00	8.29	76.43	5,270.39	98.97	410.00	-94.88	0.00	0.00	0.00
5,400.00	8.29	76.43	5,369.34	102.35	424.02	-98.13	0.00	0.00	0.00
5,500.00	8.29	76.43	5,468.30	105.74	438.05	-101.37	0.00	0.00	0.00
5,600.00	8.29	76.43	5,567.25	109.12	452.07	-104.62	0.00	0.00	0.00
5,700.00	8.29	76.43	5,666.20	112.50	466.09	-107.86	0.00	0.00	0.00
5,800.00	8.29	76.43	5,765.16	115.89	480.11	-111.11	0.00	0.00	0.00
5,900.00	8.29	76.43	5,864.11	119.27	494.13	-114.35	0.00	0.00	0.00
6,000.00	8.29	76.43	5,963.07	122.66	508.15	-117.60	0.00	0.00	0.00
6,074.71	8.29	76.43	6,037.00	125.19	518.63	-120.02	0.00	0.00	0.00
Cherry Canyon									
6,100.00	8.29	76.43	6,062.02	126.04	522.18	-120.84	0.00	0.00	0.00
6,200.00	8.29	76.43	6,160.98	129.43	536.20	-124.09	0.00	0.00	0.00
6,300.00	8.29	76.43	6,259.93	132.81	550.22	-127.33	0.00	0.00	0.00
6,400.00	8.29	76.43	6,358.88	136.20	564.24	-130.58	0.00	0.00	0.00
6,500.00	8.29	76.43	6,457.84	139.58	578.26	-133.82	0.00	0.00	0.00
6,600.00	8.29	76.43	6,556.79	142.97	592.29	-137.07	0.00	0.00	0.00
6,700.00	8.29	76.43	6,655.75	146.35	606.31	-140.31	0.00	0.00	0.00
6,800.00	8.29	76.43	6,754.70	149.73	620.33	-143.56	0.00	0.00	0.00
6,855.91	8.29	76.43	6,810.03	151.63	628.17	-145.37	0.00	0.00	0.00
6,900.00	7.63	76.43	6,853.69	153.06	634.11	-146.74	1.50	-1.50	0.00
7,000.00	6.13	76.43	6,952.97	155.87	645.75	-149.44	1.50	-1.50	0.00
7,100.00	4.63	76.43	7,052.52	158.07	654.87	-151.55	1.50	-1.50	0.00
7,200.00	3.13	76.43	7,152.29	159.66	661.45	-153.07	1.50	-1.50	0.00
7,300.00	1.63	76.43	7,252.20	160.64	665.49	-154.01	1.50	-1.50	0.00
7,400.00	0.13	76.43	7,352.19	161.00	666.99	-154.35	1.50	-1.50	0.00
7,408.81	0.00	0.00	7,361.00	161.00	667.00	-154.36	1.50	-1.50	0.00
7,430.81	0.00	0.00	7,383.00	161.00	667.00	-154.36	0.00	0.00	0.00
Brushy Canyon									
7,500.00	0.00	0.00	7,452.19	161.00	667.00	-154.36	0.00	0.00	0.00
7,600.00	0.00	0.00	7,552.19	161.00	667.00	-154.36	0.00	0.00	0.00
7,700.00	0.00	0.00	7,652.19	161.00	667.00	-154.36	0.00	0.00	0.00
7,800.00	0.00	0.00	7,752.19	161.00	667.00	-154.36	0.00	0.00	0.00
7,900.00	0.00	0.00	7,852.19	161.00	667.00	-154.36	0.00	0.00	0.00
8,000.00	0.00	0.00	7,952.19	161.00	667.00	-154.36	0.00	0.00	0.00
8,100.00	0.00	0.00	8,052.19	161.00	667.00	-154.36	0.00	0.00	0.00
8,103.85	0.00	0.00	8,056.04	161.00	667.00	-154.36	0.00	0.00	0.00
8,200.00	9.61	179.43	8,151.74	152.95	667.08	-146.31	10.00	10.00	0.00
8,300.00	19.61	179.43	8,248.38	127.75	667.33	-121.11	10.00	10.00	0.00
8,400.00	29.61	179.43	8,339.18	86.16	667.75	-79.51	10.00	10.00	0.00
8,500.00	39.61	179.43	8,421.37	29.43	668.32	-22.78	10.00	10.00	0.00
8,556.43	45.26	179.43	8,463.00	-8.63	668.70	15.29	10.00	10.00	0.00

Planning Report

Database:	EDM 5000.15 Multi User	Local Co-ordinate Reference:	Well PF Fed Com 104H - Slot 104H
Company:	FRANKLIN MOUNTAIN ENERGY	TVD Reference:	3031.00+30 @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.00+30 @ 3061.00usft
Site:	PF Fed Com Pad	North Reference:	Grid
Well:	PF Fed Com 104H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
Bone Spring Lime										
8,600.00	49.61	179.43	8,492.46	-40.71	669.02	47.37	10.00	10.00	0.00	
8,626.24	52.24	179.43	8,509.00	-61.08	669.22	67.73	10.00	10.00	0.00	
Avalon										
8,700.00	59.61	179.43	8,550.30	-122.14	669.83	128.79	10.00	10.00	0.00	
8,800.00	69.61	179.43	8,593.11	-212.36	670.73	219.02	10.00	10.00	0.00	
8,900.00	79.61	179.43	8,619.61	-308.65	671.69	315.32	10.00	10.00	0.00	
9,000.00	89.61	179.43	8,628.98	-408.08	672.69	414.75	10.00	10.00	0.00	
9,003.85	90.00	179.43	8,629.00	-411.93	672.73	418.60	10.00	10.00	0.00	
9,100.00	90.00	179.43	8,629.00	-508.07	673.69	514.75	0.00	0.00	0.00	
9,200.00	90.00	179.43	8,629.00	-608.07	674.69	614.75	0.00	0.00	0.00	
9,300.00	90.00	179.43	8,629.00	-708.06	675.69	714.75	0.00	0.00	0.00	
9,400.00	90.00	179.43	8,629.00	-808.06	676.69	814.75	0.00	0.00	0.00	
9,500.00	90.00	179.43	8,629.00	-908.05	677.68	914.75	0.00	0.00	0.00	
9,600.00	90.00	179.43	8,629.00	-1,008.05	678.68	1,014.75	0.00	0.00	0.00	
9,700.00	90.00	179.43	8,629.00	-1,108.04	679.68	1,114.75	0.00	0.00	0.00	
9,800.00	90.00	179.43	8,629.00	-1,208.04	680.68	1,214.75	0.00	0.00	0.00	
9,900.00	90.00	179.43	8,629.00	-1,308.03	681.68	1,314.75	0.00	0.00	0.00	
10,000.00	90.00	179.43	8,629.00	-1,408.03	682.68	1,414.75	0.00	0.00	0.00	
10,100.00	90.00	179.43	8,629.00	-1,508.02	683.68	1,514.75	0.00	0.00	0.00	
10,200.00	90.00	179.43	8,629.00	-1,608.02	684.68	1,614.75	0.00	0.00	0.00	
10,300.00	90.00	179.43	8,629.00	-1,708.01	685.68	1,714.75	0.00	0.00	0.00	
10,400.00	90.00	179.43	8,629.00	-1,808.01	686.68	1,814.75	0.00	0.00	0.00	
10,500.00	90.00	179.43	8,629.00	-1,908.00	687.68	1,914.75	0.00	0.00	0.00	
10,600.00	90.00	179.43	8,629.00	-2,008.00	688.68	2,014.75	0.00	0.00	0.00	
10,700.00	90.00	179.43	8,629.00	-2,107.99	689.68	2,114.75	0.00	0.00	0.00	
10,800.00	90.00	179.43	8,629.00	-2,207.99	690.68	2,214.75	0.00	0.00	0.00	
10,900.00	90.00	179.43	8,629.00	-2,307.98	691.68	2,314.75	0.00	0.00	0.00	
11,000.00	90.00	179.43	8,629.00	-2,407.98	692.68	2,414.75	0.00	0.00	0.00	
11,100.00	90.00	179.43	8,629.00	-2,507.97	693.67	2,514.75	0.00	0.00	0.00	
11,200.00	90.00	179.43	8,629.00	-2,607.97	694.67	2,614.75	0.00	0.00	0.00	
11,300.00	90.00	179.43	8,629.00	-2,707.96	695.67	2,714.75	0.00	0.00	0.00	
11,400.00	90.00	179.43	8,629.00	-2,807.96	696.67	2,814.75	0.00	0.00	0.00	
11,500.00	90.00	179.43	8,629.00	-2,907.95	697.67	2,914.75	0.00	0.00	0.00	
11,600.00	90.00	179.43	8,629.00	-3,007.95	698.67	3,014.75	0.00	0.00	0.00	
11,700.00	90.00	179.43	8,629.00	-3,107.94	699.67	3,114.75	0.00	0.00	0.00	
11,800.00	90.00	179.43	8,629.00	-3,207.94	700.67	3,214.75	0.00	0.00	0.00	
11,900.00	90.00	179.43	8,629.00	-3,307.93	701.67	3,314.75	0.00	0.00	0.00	
12,000.00	90.00	179.43	8,629.00	-3,407.93	702.67	3,414.75	0.00	0.00	0.00	
12,100.00	90.00	179.43	8,629.00	-3,507.92	703.67	3,514.75	0.00	0.00	0.00	
12,200.00	90.00	179.43	8,629.00	-3,607.92	704.67	3,614.75	0.00	0.00	0.00	
12,300.00	90.00	179.43	8,629.00	-3,707.91	705.67	3,714.75	0.00	0.00	0.00	
12,400.00	90.00	179.43	8,629.00	-3,807.91	706.67	3,814.75	0.00	0.00	0.00	
12,500.00	90.00	179.43	8,629.00	-3,907.90	707.67	3,914.75	0.00	0.00	0.00	
12,600.00	90.00	179.43	8,629.00	-4,007.90	708.67	4,014.75	0.00	0.00	0.00	
12,700.00	90.00	179.43	8,629.00	-4,107.89	709.67	4,114.75	0.00	0.00	0.00	
12,800.00	90.00	179.43	8,629.00	-4,207.89	710.66	4,214.75	0.00	0.00	0.00	
12,900.00	90.00	179.43	8,629.00	-4,307.88	711.66	4,314.75	0.00	0.00	0.00	
13,000.00	90.00	179.43	8,629.00	-4,407.88	712.66	4,414.75	0.00	0.00	0.00	
13,100.00	90.00	179.43	8,629.00	-4,507.87	713.66	4,514.75	0.00	0.00	0.00	
13,200.00	90.00	179.43	8,629.00	-4,607.87	714.66	4,614.75	0.00	0.00	0.00	
13,300.00	90.00	179.43	8,629.00	-4,707.86	715.66	4,714.75	0.00	0.00	0.00	
13,400.00	90.00	179.43	8,629.00	-4,807.86	716.66	4,814.75	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.15 Multi User	Local Co-ordinate Reference:	Well PF Fed Com 104H - Slot 104H
Company:	FRANKLIN MOUNTAIN ENERGY	TVD Reference:	3031.00+30 @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.00+30 @ 3061.00usft
Site:	PF Fed Com Pad	North Reference:	Grid
Well:	PF Fed Com 104H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
13,500.00	90.00	179.43	8,629.00	-4,907.85	717.66	4,914.75	0.00	0.00	0.00	
13,600.00	90.00	179.43	8,629.00	-5,007.85	718.66	5,014.75	0.00	0.00	0.00	
13,700.00	90.00	179.43	8,629.00	-5,107.84	719.66	5,114.75	0.00	0.00	0.00	
13,800.00	90.00	179.43	8,629.00	-5,207.84	720.66	5,214.75	0.00	0.00	0.00	
13,900.00	90.00	179.43	8,629.00	-5,307.83	721.66	5,314.75	0.00	0.00	0.00	
14,000.00	90.00	179.43	8,629.00	-5,407.83	722.66	5,414.75	0.00	0.00	0.00	
14,100.00	90.00	179.43	8,629.00	-5,507.82	723.66	5,514.75	0.00	0.00	0.00	
14,200.00	90.00	179.43	8,629.00	-5,607.82	724.66	5,614.75	0.00	0.00	0.00	
14,300.00	90.00	179.43	8,629.00	-5,707.81	725.66	5,714.75	0.00	0.00	0.00	
14,400.00	90.00	179.43	8,629.00	-5,807.81	726.65	5,814.75	0.00	0.00	0.00	
14,500.00	90.00	179.43	8,629.00	-5,907.80	727.65	5,914.75	0.00	0.00	0.00	
14,600.00	90.00	179.43	8,629.00	-6,007.80	728.65	6,014.75	0.00	0.00	0.00	
14,700.00	90.00	179.43	8,629.00	-6,107.79	729.65	6,114.75	0.00	0.00	0.00	
14,800.00	90.00	179.43	8,629.00	-6,207.79	730.65	6,214.75	0.00	0.00	0.00	
14,900.00	90.00	179.43	8,629.00	-6,307.78	731.65	6,314.75	0.00	0.00	0.00	
15,000.00	90.00	179.43	8,629.00	-6,407.78	732.65	6,414.75	0.00	0.00	0.00	
15,100.00	90.00	179.43	8,629.00	-6,507.77	733.65	6,514.75	0.00	0.00	0.00	
15,200.00	90.00	179.43	8,629.00	-6,607.77	734.65	6,614.75	0.00	0.00	0.00	
15,300.00	90.00	179.43	8,629.00	-6,707.76	735.65	6,714.75	0.00	0.00	0.00	
15,400.00	90.00	179.43	8,629.00	-6,807.76	736.65	6,814.75	0.00	0.00	0.00	
15,500.00	90.00	179.43	8,629.00	-6,907.75	737.65	6,914.75	0.00	0.00	0.00	
15,600.00	90.00	179.43	8,629.00	-7,007.75	738.65	7,014.75	0.00	0.00	0.00	
15,700.00	90.00	179.43	8,629.00	-7,107.74	739.65	7,114.75	0.00	0.00	0.00	
15,800.00	90.00	179.43	8,629.00	-7,207.74	740.65	7,214.75	0.00	0.00	0.00	
15,900.00	90.00	179.43	8,629.00	-7,307.73	741.65	7,314.75	0.00	0.00	0.00	
16,000.00	90.00	179.43	8,629.00	-7,407.73	742.64	7,414.75	0.00	0.00	0.00	
16,100.00	90.00	179.43	8,629.00	-7,507.72	743.64	7,514.75	0.00	0.00	0.00	
16,200.00	90.00	179.43	8,629.00	-7,607.72	744.64	7,614.75	0.00	0.00	0.00	
16,300.00	90.00	179.43	8,629.00	-7,707.71	745.64	7,714.75	0.00	0.00	0.00	
16,400.00	90.00	179.43	8,629.00	-7,807.71	746.64	7,814.75	0.00	0.00	0.00	
16,500.00	90.00	179.43	8,629.00	-7,907.70	747.64	7,914.75	0.00	0.00	0.00	
16,600.00	90.00	179.43	8,629.00	-8,007.70	748.64	8,014.75	0.00	0.00	0.00	
16,700.00	90.00	179.43	8,629.00	-8,107.69	749.64	8,114.75	0.00	0.00	0.00	
16,800.00	90.00	179.43	8,629.00	-8,207.69	750.64	8,214.75	0.00	0.00	0.00	
16,900.00	90.00	179.43	8,629.00	-8,307.68	751.64	8,314.75	0.00	0.00	0.00	
17,000.00	90.00	179.43	8,629.00	-8,407.68	752.64	8,414.75	0.00	0.00	0.00	
17,100.00	90.00	179.43	8,629.00	-8,507.67	753.64	8,514.75	0.00	0.00	0.00	
17,200.00	90.00	179.43	8,629.00	-8,607.67	754.64	8,614.75	0.00	0.00	0.00	
17,300.00	90.00	179.43	8,629.00	-8,707.66	755.64	8,714.75	0.00	0.00	0.00	
17,400.00	90.00	179.43	8,629.00	-8,807.66	756.64	8,814.75	0.00	0.00	0.00	
17,500.00	90.00	179.43	8,629.00	-8,907.65	757.64	8,914.75	0.00	0.00	0.00	
17,600.00	90.00	179.43	8,629.00	-9,007.65	758.64	9,014.75	0.00	0.00	0.00	
17,700.00	90.00	179.43	8,629.00	-9,107.64	759.63	9,114.75	0.00	0.00	0.00	
17,800.00	90.00	179.43	8,629.00	-9,207.64	760.63	9,214.75	0.00	0.00	0.00	
17,900.00	90.00	179.43	8,629.00	-9,307.63	761.63	9,314.75	0.00	0.00	0.00	
18,000.00	90.00	179.43	8,629.00	-9,407.63	762.63	9,414.75	0.00	0.00	0.00	
18,100.00	90.00	179.43	8,629.00	-9,507.62	763.63	9,514.75	0.00	0.00	0.00	
18,200.00	90.00	179.43	8,629.00	-9,607.62	764.63	9,614.75	0.00	0.00	0.00	
18,300.00	90.00	179.43	8,629.00	-9,707.61	765.63	9,714.75	0.00	0.00	0.00	
18,400.00	90.00	179.43	8,629.00	-9,807.61	766.63	9,814.75	0.00	0.00	0.00	
18,500.00	90.00	179.43	8,629.00	-9,907.60	767.63	9,914.75	0.00	0.00	0.00	
18,600.00	90.00	179.43	8,629.00	-10,007.60	768.63	10,014.75	0.00	0.00	0.00	
18,700.00	90.00	179.43	8,629.00	-10,107.59	769.63	10,114.75	0.00	0.00	0.00	
18,720.18	90.00	179.43	8,629.00	-10,127.77	769.83	10,134.93	0.00	0.00	0.00	

Planning Report

Database:	EDM 5000.15 Multi User	Local Co-ordinate Reference:	Well PF Fed Com 104H - Slot 104H
Company:	FRANKLIN MOUNTAIN ENERGY	TVD Reference:	3031.00+30 @ 3061.00usft
Project:	Lea County, NM (NAD83)	MD Reference:	3031.00+30 @ 3061.00usft
Site:	PF Fed Com Pad	North Reference:	Grid
Well:	PF Fed Com 104H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

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
PF Fed Com 104H SHL - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	393,886.27	856,401.82	32.078790	-103.316111
PF Fed Com 104H BHL - plan hits target center - Point	0.00	0.00	8,629.00	-10,127.77	769.83	383,758.50	857,171.65	32.050933	-103.313934
PF Fed Com 104H LP p: - plan misses target center by 0.10usft at 9003.68usft MD (8629.00 TVD, -411.76 N, 672.72 E) - Point	0.00	0.00	8,629.00	-411.76	672.82	393,474.51	857,074.64	32.077640	-103.313951

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
30.00	30.00	Cenozoic Alluvium		0.00	179.43
1,034.00	1,034.00	Rustler		0.00	179.43
2,013.00	2,013.00	Salado		0.00	179.43
3,498.77	3,488.00	Base Salt		0.00	179.43
5,032.82	5,006.00	Lamar		0.00	179.43
5,139.94	5,112.00	Bell Canyon		0.00	179.43
6,074.71	6,037.00	Cherry Canyon		0.00	179.43
7,430.81	7,383.00	Brushy Canyon		0.00	179.43
8,556.43	8,463.00	Bone Spring Lime		0.00	179.43
8,626.24	8,509.00	Avalon		0.00	179.43



PF Fed Com 104H

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)	3,031'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,027'	1,034'			Carbonates
Salado	1,048'	2,013'			Salt, Carbonate & Clastics
Base Salt	-427'	3,488'			Shaley Carbonate & Shale
Lamar	-1,945'	5,006'			Carbonate & Clastics
Bell Canyon	-2,051'	5,112'			Sandstone - oil/gas/water
Cherry Canyon	-2,976'	6,037'			Sandstone - oil/gas/water
Brushy Canyon	-4,322'	7,383'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,402'	8,463'			Shale/Carbonates - oil/gas
Avalon	-5,448'	8,509'			Shale/Carbonates - oil/gas
HZ Target at Landing	-5,568'	8,629'			Sand/carb/shales - oil/gas/water
Chert Zone	-5,603'	8,664'			Chert/carbonate

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,112'	Oil
Brushy Canyon	7,383'	Oil
Avalon	8,509'	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 1,300' and circulating cement back to surface.

4. **Casing Program:**

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

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8"	54.5	J-55	2730	1130	853	BTC 909	1300	1.18	1.67	4.99	5.32
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	5050	1.80	1.79	3.03	3.45
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Liberty 558	9003	1.47	1.70	2.25	1.52
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606 TVD	18720 8629	1.32	1.66	1.37	1.14 2.03

7 5/8" casing will be set at 9,003' MD/8,629' TVD at 90° Inc. Stress calculations on 5 1/2" casing performed assuming 18,720' depth. Actual max vertical depth is 8,629'.



Cementing Program:

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

String Type	Hole Size	Casing Size	Setting Depth	Sacks	Type of cmt	Lead Yield ft ³ /sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Tail Yield ft ³ /sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1300	795	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal	1.747	9.06	0	334	Tail, 14.8 ppg, Class C, 1% CaCl ₂ , 0.125pps Celo-Flake	1.349	6.51	1000	100%
Int1	12.25	9.625	5050	1470	Lead, 12.8 ppg, Class C 5% Salt, 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal	1.79	9.74	0	154	Tail, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake	1.33	6.37	4750	100%
Int2	8.75	7.625	9003	211	Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	2.13	5.97	4050	94	NeoCem 14.8 ppg, Class C 0.25 pps Cello-Flake, 2% CaCl ₂	1.33	6.29	8003	50%
Prod	6.75	5.5	18720	800	Tail, 14.5 ppg, Gas Migration Control	1.34	6.22	8003						20%

5. Minimum Specifications for Pressure Control:

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

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

Before drilling out of the second intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig. The second intermediate casing will be tested to 2000 psi for 30 minutes prior to drillout.

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 – 1,300'	Fresh - Gel	8.6-8.8	28-34	N/c
1,300' – 9,003'	Brine	8.8-10.2	28-34	N/c
9,003' – 18,720' Lateral	Oil Base	10.0-12.0	58-68	3 - 6

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

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

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

7. Auxiliary well control and monitoring equipment:

(A) A kelly cock will be kept in the drill string at all times.

(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be 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 8,629' TVD (deepest point of the well) is 160F with an estimated maximum bottom-hole pressure (BHP) at the same point of 5,384 psig (based on 12 ppg MW). Hydrogen sulfate 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.

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

11. Anticipated starting date and duration of operations:

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

**12. Disposal/environmental concerns:**

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

13. Wellhead:

A multi-bowl wellhead system will be utilized.

After running the 13 3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 21 days, as per Onshore Order No. 2

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

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

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

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

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

A solid steel body pack-off will be utilized after running and cementing the intermediate casing strings. After installation of the first intermediate string the pack-off and lower flanges will be pressure tested to 5000 psi. After installation of the second intermediate string, the pack-off and upper flange will be pressure tested to 10,000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

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

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

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

FRANKLIN MOUNTAIN ENERGY



Geologic Prognosis

Well Name	PF Fed Com 104H
Operator	Franklin Mountain Energy, LLC
Project Area	PF Unit
Well Type	10,000' Leonard/Avalon Lateral
API	
Permit Number	
Rig	

State	NM	County	Lea						
SHL	Township	26S/35E	Section	1	545'	FWL	10'	FNL	
BHL	Township	26S/35E	Section	12	380'	FWL	150'	FSL	
Surface Latitude	NAD 83		32.07879						
Surface Longitude	NAD 83		103.31611						
Bottom Hole Latitude	NAD 83		32.050933						
Bottom Hole Longitude	NAD 83		103.313934						
Ground Level	3,031'	Rig KB	30'	KB	3,061'				

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,031'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,027'	1,034'			Carbonates
Salado	1,048'	2,013'			Salt, Carbonate & Clastics
Base Salt	-427'	3,488'			Shaley Carbonate & Shale
Lamar	-1,945'	5,006'			Carbonate & Clastics
Bell Canyon	-2,051'	5,112'			Sandstone - oil/gas/water
Cherry Canyon	-2,976'	6,037'			Sandstone - oil/gas/water
Brushy Canyon	-4,322'	7,383'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,402'	8,463'			Shale/Carbonates - oil/gas
Avalon	-5,448'	8,509'			Shale/Carbonates - oil/gas
HZ Target at Landing	-5,568'	8,629'			Sand/carb/shales - oil/gas/water
Chert Zone	-5,603'	8,664'			Chert/carbonate

Target interval is expected to have an average apparent dip of ~0.0 degrees down along the lateral based on Avalon structure

Target window tolerance is set at +/- 10'

Target Line: 8629' KBTVD @ 0' VS w/ 90.0° inc.

Offset Log: Talco Unit 001 (30025267470000)

Updated 3/22/22

FME Geologist		Ben Kessel		bkessel@fmellc.com	
		Office	720.414.7868	Cell	303.868.9946
FME Engineer					
Electric Logs					
			From		To
Open-Hole	n/a				
MWD/LWD	MWD GR			Int. 1 Csg. Point	TD
Mud Log:					
t drill out of surface casing					
Sampling:	10' samples in vertical and through curve, 30' samples in lateral				
Samples:	1 set dry samples at footage frequency noted above				
Mud Gas:	Continuous				
Daily Contact:	Email distribution of mud log/daily report at 7:30am and 4:30 pm CST				
Daily Mud Log Email Distribution List					
Final Mud Log Distribution					
	Ben Kessel (bkessel@fmellc.com)			email	
Cuttings/Samples Shipment Information					

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 122323

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 122323
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	PREVIOUS COA's APPLY	7/14/2022