

Well Name: FORGE FED COM	Well Location: T25S / R35E / SEC 35 / TR O /	County or Parish/State:
Well Number: 653H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM112943	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002551426	Well Status: Approved Application for Permit to Drill	Operator: FRANKLIN MOUNTAIN ENERGY LLC

Notice of Intent

Sundry ID: 2769654

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 01/12/2024	Time Sundry Submitted: 01:42
Date proposed operation will begin: 01/15/2024	

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. Name Change: FME requests approval to change the well name/number from Forge Fed Com 804H to FORGE FED COM 653H. Target Change: FME requests approval to change the formation target for this well from 12,617' TVD (98117 - WC-025 G-09 S263504N; WOLFCAMP) to 11,597' TVD (97088 - WC-025 G-08 S253534O; BONE SPRING). BHL Change: FME requests approval to change the BHL for this well from 150' FNL 2050' FEL Sec 26 25S 35E to 150' FNL 2300' FEL Sec 26 25S 35E. SHL remains the same: 55 FSL 1838 FEL Sec 35 T25S R35E Please see attached directional plan, revised 14-point plan, geo prog and C-102.

NOI Attachments

Procedure Description

- Pad4_A07_Forge_Fed_Com_653H_Plan_04_20240112134230.pdf
- Forge_Fed_Com_653H_14PP_20240112134230.pdf
- Forge_653H_GEOPROG_prelim_20240112134230.pdf
- C_102_Forge_Fed_Com_653H_20240112133931.pdf

Well Name: FORGE FED COM	Well Location: T25S / R35E / SEC 35 / TR O /	County or Parish/State:
Well Number: 653H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM112943	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002551426	Well Status: Approved Application for Permit to Drill	Operator: FRANKLIN MOUNTAIN ENERGY LLC

Conditions of Approval

Specialist Review

35_25_35_O_Sundry_ID_2769654_Forge_Fed_Com_653H_20240119105914.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: JAN 12, 2024 01:42 PM
Name: FRANKLIN MOUNTAIN ENERGY LLC	
Title: Director – Operations Planning and Regulatory	
Street Address: 44 COOK STREET, SUITE 1000	
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: LONG VO	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5759885402	BLM POC Email Address: LVO@BLM.GOV
Disposition: Approved	Disposition Date: 01/19/2024
Signature: Long Vo	

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No.
1. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: TR O / 55 FSL / 1838 FEL / TWSP: 25S / RANGE: 35E / SECTION: 35 / LAT: 32.07972 / LONG: -103.335718 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 0 FSL / 2052 FEL / TWSP: 25S / RANGE: 35E / SECTION: 26 / LAT: 32.101196 / LONG: -103.335938 (TVD: 0 feet, MD: 0 feet)

PPP: TR O / 720 FSL / 2049 FEL / TWSP: 25S / RANGE: 35E / SECTION: 35 / LAT: 32.081548 / LONG: -103.3364 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 0 FSL / 2061 FEL / TWSP: 25S / RANGE: 35E / SECTION: 26 / LAT: 32.094078 / LONG: -103.3364 (TVD: 0 feet, MD: 0 feet)

BHL: TR B / 150 FNL / 2050 FEL / TWSP: 25S / RANGE: 35E / SECTION: 26 / LAT: 32.108186 / LONG: -103.3364 (TVD: 12617 feet, MD: 22645 feet)

CONFIDENTIAL



Franklin Mountain Energy LLC

Lea County, NM(N83-NME3001)
Tatanka North_Pad 4 (Forge Core)
(A07) Forge Fed Com 653H

653H

Plan: Plan 04

Standard Planning Report

15 December, 2023



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (A07) Forge Fed Com 653H
Company:	Franklin Mountain Energy LLC	TVD Reference:	3117+30 @ 3147.00usft
Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

Project	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	Tatanka North_Pad 4 (Forge Core)				
Site Position:		Northing:	394,166.69 usft	Latitude:	32.07972009
From:	Map	Easting:	850,175.22 usft	Longitude:	-103.33620264
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "		

Well	(A07) Forge Fed Com 653H					
Well Position	+N/-S	0.00 usft	Northing:	394,168.14 usft	Latitude:	32.07972026
	+E/-W	0.00 usft	Easting:	850,325.19 usft	Longitude:	-103.33571846
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	3,117.00 usft
Grid Convergence:		0.53 °				

Wellbore	653H				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	12/13/2023	6.13	59.72	47,173.64143166

Design	Plan 04				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	1,067.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	359.48	

Plan Survey Tool Program	Date	12/15/2023			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	30.00	1,067.00	Survey #1_SurfaceMWD (653H)	OWSG MWD Rev 5	
				OWSG MWD - Standard	
2	1,067.00	21,620.94	Plan 04 (653H)	MWD+IFR1+MS	
				OWSG MWD + IFR1 + Multi-St	



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Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

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
1,067.00	0.70	69.80	1,066.95	-0.09	-1.98	0.00	0.00	0.00	0.00	
1,117.00	0.70	69.80	1,116.94	0.12	-1.41	0.00	0.00	0.00	0.00	
1,187.00	0.00	0.00	1,186.94	0.27	-1.00	1.00	-1.00	0.00	180.00	
1,500.06	0.00	0.00	1,500.00	0.27	-1.00	0.00	0.00	0.00	0.00	
2,006.73	7.60	340.00	2,005.18	31.80	-12.48	1.50	1.50	0.00	340.00	
2,206.73	7.60	340.00	2,203.43	56.66	-21.53	0.00	0.00	0.00	0.00	
2,717.29	4.88	267.90	2,711.58	87.64	-54.83	1.50	-0.53	-14.12	-142.58	
6,531.99	4.88	267.90	6,512.44	75.76	-379.23	0.00	0.00	0.00	0.00	
7,020.14	0.00	0.00	7,000.00	75.00	-400.00	1.00	-1.00	0.00	180.00	
11,014.18	0.00	0.00	10,994.04	75.00	-400.00	0.00	0.00	0.00	0.00	
11,914.18	90.00	354.25	11,567.00	645.07	-457.40	10.00	10.00	0.00	354.25	
12,175.74	90.00	359.48	11,567.00	906.15	-471.70	2.00	0.00	2.00	90.00	
21,620.94	90.00	359.48	11,567.00	10,350.96	-557.22	0.00	0.00	0.00	0.00	02-PBHL(FFC-653H)



Planning Report

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Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

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
146.00	0.18	237.50	146.00	-0.10	-0.15	-0.10	0.16	0.16	0.00
231.00	0.40	322.60	231.00	0.07	-0.45	0.07	0.50	0.26	100.12
314.00	0.88	309.00	313.99	0.70	-1.12	0.71	0.60	0.58	-16.39
402.00	1.36	276.90	401.98	1.25	-2.68	1.27	0.88	0.55	-36.48
495.00	0.57	150.80	494.97	0.98	-3.55	1.01	1.89	-0.85	-135.59
589.00	0.04	217.20	588.97	0.54	-3.34	0.57	0.59	-0.56	70.64
684.00	0.31	332.20	683.97	0.74	-3.48	0.78	0.35	0.28	121.05
779.00	0.79	230.60	778.96	0.56	-4.11	0.59	0.95	0.51	-106.95
873.00	0.53	60.90	872.96	0.36	-4.23	0.39	1.40	-0.28	-180.53
967.00	0.92	123.70	966.96	0.15	-3.22	0.18	0.88	0.41	66.81
1,067.00	0.70	69.80	1,066.95	-0.09	-1.98	-0.07	0.76	-0.22	-53.90
1,100.00	0.70	69.80	1,099.94	0.05	-1.60	0.07	0.00	0.00	0.00
1,117.00	0.70	69.80	1,116.94	0.12	-1.41	0.14	0.00	0.00	0.00
1,187.00	0.00	0.00	1,186.94	0.27	-1.00	0.28	1.00	-1.00	0.00
1,200.00	0.00	0.00	1,199.94	0.27	-1.00	0.28	0.00	0.00	0.00
1,300.00	0.00	0.00	1,299.94	0.27	-1.00	0.28	0.00	0.00	0.00
1,400.00	0.00	0.00	1,399.94	0.27	-1.00	0.28	0.00	0.00	0.00
1,500.06	0.00	0.00	1,500.00	0.27	-1.00	0.28	0.00	0.00	0.00
1,600.00	1.50	340.00	1,599.93	1.50	-1.45	1.51	1.50	1.50	0.00
1,691.14	2.87	340.00	1,691.00	4.76	-2.64	4.79	1.50	1.50	0.00
Salado									
1,700.00	3.00	340.00	1,699.85	5.19	-2.79	5.21	1.50	1.50	0.00
1,800.00	4.50	340.00	1,799.63	11.33	-5.03	11.38	1.50	1.50	0.00
1,900.00	6.00	340.00	1,899.21	19.93	-8.16	20.00	1.50	1.50	0.00
2,006.73	7.60	340.00	2,005.18	31.80	-12.48	31.91	1.50	1.50	0.00
2,100.00	7.60	340.00	2,097.64	43.39	-16.70	43.54	0.00	0.00	0.00
2,206.73	7.60	340.00	2,203.43	56.66	-21.53	56.85	0.00	0.00	0.00
2,300.00	6.54	332.52	2,295.99	67.17	-26.09	67.40	1.50	-1.13	-8.02
2,400.00	5.58	321.58	2,395.43	76.04	-31.74	76.32	1.50	-0.96	-10.94
2,500.00	4.90	306.90	2,495.02	82.41	-38.18	82.75	1.50	-0.69	-14.68
2,600.00	4.61	289.04	2,594.68	86.28	-45.39	86.69	1.50	-0.28	-17.85
2,700.00	4.80	270.83	2,694.35	87.65	-53.37	88.13	1.50	0.19	-18.21
2,717.29	4.88	267.90	2,711.58	87.64	-54.83	88.13	1.50	0.46	-16.93
2,800.00	4.88	267.90	2,793.99	87.38	-61.87	87.94	0.00	0.00	0.00
2,900.00	4.88	267.90	2,893.63	87.07	-70.37	87.70	0.00	0.00	0.00
3,000.00	4.88	267.90	2,993.26	86.76	-78.88	87.47	0.00	0.00	0.00
3,100.00	4.88	267.90	3,092.90	86.45	-87.38	87.23	0.00	0.00	0.00
3,200.00	4.88	267.90	3,192.54	86.13	-95.88	87.00	0.00	0.00	0.00
3,300.00	4.88	267.90	3,292.17	85.82	-104.39	86.77	0.00	0.00	0.00
3,400.00	4.88	267.90	3,391.81	85.51	-112.89	86.53	0.00	0.00	0.00
3,500.00	4.88	267.90	3,491.45	85.20	-121.39	86.30	0.00	0.00	0.00
3,600.00	4.88	267.90	3,591.09	84.89	-129.90	86.06	0.00	0.00	0.00
3,700.00	4.88	267.90	3,690.72	84.58	-138.40	85.83	0.00	0.00	0.00
3,800.00	4.88	267.90	3,790.36	84.27	-146.91	85.60	0.00	0.00	0.00
3,900.00	4.88	267.90	3,890.00	83.95	-155.41	85.36	0.00	0.00	0.00
4,000.00	4.88	267.90	3,989.64	83.64	-163.91	85.13	0.00	0.00	0.00
4,100.00	4.88	267.90	4,089.27	83.33	-172.42	84.89	0.00	0.00	0.00
4,200.00	4.88	267.90	4,188.91	83.02	-180.92	84.66	0.00	0.00	0.00
4,300.00	4.88	267.90	4,288.55	82.71	-189.43	84.43	0.00	0.00	0.00
4,400.00	4.88	267.90	4,388.18	82.40	-197.93	84.19	0.00	0.00	0.00
4,500.00	4.88	267.90	4,487.82	82.09	-206.43	83.96	0.00	0.00	0.00
4,541.33	4.88	267.90	4,529.00	81.96	-209.95	83.86	0.00	0.00	0.00



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (A07) Forge Fed Com 653H
Company:	Franklin Mountain Energy LLC	TVD Reference:	3117+30 @ 3147.00usft
Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

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)
Base Salt									
4,600.00	4.88	267.90	4,587.46	81.78	-214.94	83.72	0.00	0.00	0.00
4,700.00	4.88	267.90	4,687.10	81.46	-223.44	83.49	0.00	0.00	0.00
4,800.00	4.88	267.90	4,786.73	81.15	-231.95	83.25	0.00	0.00	0.00
4,900.00	4.88	267.90	4,886.37	80.84	-240.45	83.02	0.00	0.00	0.00
5,000.00	4.88	267.90	4,986.01	80.53	-248.95	82.79	0.00	0.00	0.00
5,100.00	4.88	267.90	5,085.65	80.22	-257.46	82.55	0.00	0.00	0.00
5,198.71	4.88	267.90	5,184.00	79.91	-265.85	82.32	0.00	0.00	0.00
Bell Canyon									
5,200.00	4.88	267.90	5,185.28	79.91	-265.96	82.32	0.00	0.00	0.00
5,223.80	4.88	267.90	5,209.00	79.83	-267.99	82.26	0.00	0.00	0.00
Lamar									
5,300.00	4.88	267.90	5,284.92	79.60	-274.46	82.08	0.00	0.00	0.00
5,400.00	4.88	267.90	5,384.56	79.28	-282.97	81.85	0.00	0.00	0.00
5,500.00	4.88	267.90	5,484.19	78.97	-291.47	81.62	0.00	0.00	0.00
5,600.00	4.88	267.90	5,583.83	78.66	-299.98	81.38	0.00	0.00	0.00
5,700.00	4.88	267.90	5,683.47	78.35	-308.48	81.15	0.00	0.00	0.00
5,800.00	4.88	267.90	5,783.11	78.04	-316.98	80.91	0.00	0.00	0.00
5,900.00	4.88	267.90	5,882.74	77.73	-325.49	80.68	0.00	0.00	0.00
6,000.00	4.88	267.90	5,982.38	77.42	-333.99	80.44	0.00	0.00	0.00
6,089.95	4.88	267.90	6,072.00	77.14	-341.64	80.23	0.00	0.00	0.00
Cherry Canyon									
6,100.00	4.88	267.90	6,082.02	77.11	-342.50	80.21	0.00	0.00	0.00
6,200.00	4.88	267.90	6,181.66	76.79	-351.00	79.98	0.00	0.00	0.00
6,300.00	4.88	267.90	6,281.29	76.48	-359.50	79.74	0.00	0.00	0.00
6,400.00	4.88	267.90	6,380.93	76.17	-368.01	79.51	0.00	0.00	0.00
6,500.00	4.88	267.90	6,480.57	75.86	-376.51	79.27	0.00	0.00	0.00
6,531.99	4.88	267.90	6,512.44	75.76	-379.23	79.20	0.00	0.00	0.00
6,600.00	4.20	267.90	6,580.24	75.56	-384.61	79.05	1.00	-1.00	0.00
6,700.00	3.20	267.90	6,680.03	75.33	-391.06	78.87	1.00	-1.00	0.00
6,800.00	2.20	267.90	6,779.91	75.15	-395.77	78.74	1.00	-1.00	0.00
6,900.00	1.20	267.90	6,879.87	75.05	-398.74	78.66	1.00	-1.00	0.00
7,000.00	0.20	267.90	6,979.86	75.00	-399.96	78.63	1.00	-1.00	0.00
7,020.14	0.00	0.00	7,000.00	75.00	-400.00	78.63	1.00	-1.00	0.00
7,100.00	0.00	0.00	7,079.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,200.00	0.00	0.00	7,179.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,300.00	0.00	0.00	7,279.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,400.00	0.00	0.00	7,379.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,500.00	0.00	0.00	7,479.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,600.00	0.00	0.00	7,579.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,614.14	0.00	0.00	7,594.00	75.00	-400.00	78.63	0.00	0.00	0.00
Brushy Canyon									
7,700.00	0.00	0.00	7,679.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,800.00	0.00	0.00	7,779.86	75.00	-400.00	78.63	0.00	0.00	0.00
7,900.00	0.00	0.00	7,879.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,000.00	0.00	0.00	7,979.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,100.00	0.00	0.00	8,079.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,200.00	0.00	0.00	8,179.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,300.00	0.00	0.00	8,279.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,400.00	0.00	0.00	8,379.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,500.00	0.00	0.00	8,479.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,600.00	0.00	0.00	8,579.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,700.00	0.00	0.00	8,679.86	75.00	-400.00	78.63	0.00	0.00	0.00



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (A07) Forge Fed Com 653H
Company:	Franklin Mountain Energy LLC	TVD Reference:	3117+30 @ 3147.00usft
Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

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)
8,800.00	0.00	0.00	8,779.86	75.00	-400.00	78.63	0.00	0.00	0.00
8,900.00	0.00	0.00	8,879.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,000.00	0.00	0.00	8,979.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,014.14	0.00	0.00	8,994.00	75.00	-400.00	78.63	0.00	0.00	0.00
Bone Spring Lime									
9,100.00	0.00	0.00	9,079.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,200.00	0.00	0.00	9,179.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,226.14	0.00	0.00	9,206.00	75.00	-400.00	78.63	0.00	0.00	0.00
Avalon									
9,300.00	0.00	0.00	9,279.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,400.00	0.00	0.00	9,379.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,500.00	0.00	0.00	9,479.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,600.00	0.00	0.00	9,579.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,700.00	0.00	0.00	9,679.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,800.00	0.00	0.00	9,779.86	75.00	-400.00	78.63	0.00	0.00	0.00
9,900.00	0.00	0.00	9,879.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,000.00	0.00	0.00	9,979.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,100.00	0.00	0.00	10,079.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,200.00	0.00	0.00	10,179.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,284.14	0.00	0.00	10,264.00	75.00	-400.00	78.63	0.00	0.00	0.00
First Bone Spring Sand									
10,300.00	0.00	0.00	10,279.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,400.00	0.00	0.00	10,379.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,482.14	0.00	0.00	10,462.00	75.00	-400.00	78.63	0.00	0.00	0.00
Second Bone Spring Carbonates									
10,500.00	0.00	0.00	10,479.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,600.00	0.00	0.00	10,579.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,663.14	0.00	0.00	10,643.00	75.00	-400.00	78.63	0.00	0.00	0.00
Second Bone Spring Sand									
10,700.00	0.00	0.00	10,679.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,800.00	0.00	0.00	10,779.86	75.00	-400.00	78.63	0.00	0.00	0.00
10,900.00	0.00	0.00	10,879.86	75.00	-400.00	78.63	0.00	0.00	0.00
11,000.00	0.00	0.00	10,979.86	75.00	-400.00	78.63	0.00	0.00	0.00
11,014.18	0.00	0.00	10,994.04	75.00	-400.00	78.63	0.00	0.00	0.00
KOP: 11014.18' MD/ 78.63' VS/10994.04' TVD									
11,050.00	3.58	354.25	11,029.84	76.11	-400.11	79.74	10.00	10.00	0.00
11,100.00	8.58	354.25	11,079.54	81.38	-400.64	85.02	10.00	10.00	0.00
11,150.00	13.58	354.25	11,128.59	90.94	-401.61	94.58	10.00	10.00	0.00
11,200.00	18.58	354.25	11,176.62	104.72	-402.99	108.37	10.00	10.00	0.00
11,250.00	23.58	354.25	11,223.26	122.61	-404.79	126.28	10.00	10.00	0.00
11,300.00	28.58	354.25	11,268.15	144.47	-407.00	148.16	10.00	10.00	0.00
11,350.00	33.58	354.25	11,310.96	170.15	-409.58	173.86	10.00	10.00	0.00
11,356.07	34.19	354.25	11,316.00	173.52	-409.92	177.23	10.00	10.00	0.00
Third Bone Spring Carbonates									
11,400.00	38.58	354.25	11,351.36	199.44	-412.53	203.17	10.00	10.00	0.00
11,450.00	43.58	354.25	11,389.03	232.12	-415.82	235.88	10.00	10.00	0.00
11,460.25	44.61	354.25	11,396.39	239.21	-416.54	242.99	10.00	10.00	0.00
01-T98(FFC-653H)									
11,500.00	48.58	354.25	11,423.70	267.94	-419.43	271.74	10.00	10.00	0.00
11,550.00	53.58	354.25	11,455.10	306.64	-423.32	310.47	10.00	10.00	0.00
11,600.00	58.58	354.25	11,483.00	347.91	-427.48	351.77	10.00	10.00	0.00
11,650.00	63.58	354.25	11,507.17	391.44	-431.86	395.34	10.00	10.00	0.00
11,700.00	68.58	354.25	11,527.43	436.90	-436.44	440.84	10.00	10.00	0.00

Planning Report



Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (A07) Forge Fed Com 653H
Company:	Franklin Mountain Energy LLC	TVD Reference:	3117+30 @ 3147.00usft
Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

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)
11,750.00	73.58	354.25	11,543.64	483.95	-441.18	487.93	10.00	10.00	0.00
11,800.00	78.58	354.25	11,555.66	532.22	-446.04	536.25	10.00	10.00	0.00
11,850.00	83.58	354.25	11,563.41	581.35	-450.99	585.42	10.00	10.00	0.00
11,900.00	88.58	354.25	11,566.82	630.97	-455.98	635.08	10.00	10.00	0.00
11,914.18	90.00	354.25	11,567.00	645.08	-457.40	649.20	10.00	10.00	0.00
EOC: 11914.18' MD/ 649.20' VS/11567.00' TVD									
12,000.00	90.00	355.97	11,567.00	730.58	-464.72	734.77	2.00	0.00	2.00
12,100.00	90.00	357.97	11,567.00	830.43	-470.01	834.67	2.00	0.00	2.00
12,175.74	90.00	359.48	11,567.00	906.15	-471.70	910.40	2.00	0.00	2.00
12,200.00	90.00	359.48	11,567.00	930.41	-471.92	934.66	0.00	0.00	0.00
12,300.00	90.00	359.48	11,567.00	1,030.41	-472.83	1,034.66	0.00	0.00	0.00
12,400.00	90.00	359.48	11,567.00	1,130.40	-473.73	1,134.66	0.00	0.00	0.00
12,500.00	90.00	359.48	11,567.00	1,230.40	-474.64	1,234.66	0.00	0.00	0.00
12,600.00	90.00	359.48	11,567.00	1,330.40	-475.54	1,334.66	0.00	0.00	0.00
12,700.00	90.00	359.48	11,567.00	1,430.39	-476.45	1,434.66	0.00	0.00	0.00
12,800.00	90.00	359.48	11,567.00	1,530.39	-477.35	1,534.66	0.00	0.00	0.00
12,900.00	90.00	359.48	11,567.00	1,630.38	-478.26	1,634.66	0.00	0.00	0.00
13,000.00	90.00	359.48	11,567.00	1,730.38	-479.16	1,734.66	0.00	0.00	0.00
13,100.00	90.00	359.48	11,567.00	1,830.38	-480.07	1,834.66	0.00	0.00	0.00
13,200.00	90.00	359.48	11,567.00	1,930.37	-480.97	1,934.66	0.00	0.00	0.00
13,300.00	90.00	359.48	11,567.00	2,030.37	-481.88	2,034.66	0.00	0.00	0.00
13,400.00	90.00	359.48	11,567.00	2,130.36	-482.79	2,134.66	0.00	0.00	0.00
13,500.00	90.00	359.48	11,567.00	2,230.36	-483.69	2,234.66	0.00	0.00	0.00
13,600.00	90.00	359.48	11,567.00	2,330.36	-484.60	2,334.66	0.00	0.00	0.00
13,700.00	90.00	359.48	11,567.00	2,430.35	-485.50	2,434.66	0.00	0.00	0.00
13,800.00	90.00	359.48	11,567.00	2,530.35	-486.41	2,534.66	0.00	0.00	0.00
13,900.00	90.00	359.48	11,567.00	2,630.34	-487.31	2,634.66	0.00	0.00	0.00
14,000.00	90.00	359.48	11,567.00	2,730.34	-488.22	2,734.66	0.00	0.00	0.00
14,100.00	90.00	359.48	11,567.00	2,830.33	-489.12	2,834.66	0.00	0.00	0.00
14,200.00	90.00	359.48	11,567.00	2,930.33	-490.03	2,934.66	0.00	0.00	0.00
14,300.00	90.00	359.48	11,567.00	3,030.33	-490.93	3,034.66	0.00	0.00	0.00
14,400.00	90.00	359.48	11,567.00	3,130.32	-491.84	3,134.66	0.00	0.00	0.00
14,500.00	90.00	359.48	11,567.00	3,230.32	-492.75	3,234.66	0.00	0.00	0.00
14,600.00	90.00	359.48	11,567.00	3,330.31	-493.65	3,334.66	0.00	0.00	0.00
14,700.00	90.00	359.48	11,567.00	3,430.31	-494.56	3,434.66	0.00	0.00	0.00
14,800.00	90.00	359.48	11,567.00	3,530.31	-495.46	3,534.66	0.00	0.00	0.00
14,900.00	90.00	359.48	11,567.00	3,630.30	-496.37	3,634.66	0.00	0.00	0.00
15,000.00	90.00	359.48	11,567.00	3,730.30	-497.27	3,734.66	0.00	0.00	0.00
15,100.00	90.00	359.48	11,567.00	3,830.29	-498.18	3,834.66	0.00	0.00	0.00
15,200.00	90.00	359.48	11,567.00	3,930.29	-499.08	3,934.66	0.00	0.00	0.00
15,300.00	90.00	359.48	11,567.00	4,030.29	-499.99	4,034.66	0.00	0.00	0.00
15,400.00	90.00	359.48	11,567.00	4,130.28	-500.89	4,134.66	0.00	0.00	0.00
15,500.00	90.00	359.48	11,567.00	4,230.28	-501.80	4,234.66	0.00	0.00	0.00
15,600.00	90.00	359.48	11,567.00	4,330.27	-502.71	4,334.66	0.00	0.00	0.00
15,700.00	90.00	359.48	11,567.00	4,430.27	-503.61	4,434.66	0.00	0.00	0.00
15,800.00	90.00	359.48	11,567.00	4,530.27	-504.52	4,534.66	0.00	0.00	0.00
15,900.00	90.00	359.48	11,567.00	4,630.26	-505.42	4,634.66	0.00	0.00	0.00
16,000.00	90.00	359.48	11,567.00	4,730.26	-506.33	4,734.66	0.00	0.00	0.00
16,100.00	90.00	359.48	11,567.00	4,830.25	-507.23	4,834.66	0.00	0.00	0.00
16,200.00	90.00	359.48	11,567.00	4,930.25	-508.14	4,934.66	0.00	0.00	0.00
16,300.00	90.00	359.48	11,567.00	5,030.24	-509.04	5,034.66	0.00	0.00	0.00
16,400.00	90.00	359.48	11,567.00	5,130.24	-509.95	5,134.66	0.00	0.00	0.00
16,500.00	90.00	359.48	11,567.00	5,230.24	-510.85	5,234.66	0.00	0.00	0.00
16,600.00	90.00	359.48	11,567.00	5,330.23	-511.76	5,334.66	0.00	0.00	0.00



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (A07) Forge Fed Com 653H
Company:	Franklin Mountain Energy LLC	TVD Reference:	3117+30 @ 3147.00usft
Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

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)	
16,700.00	90.00	359.48	11,567.00	5,430.23	-512.67	5,434.66	0.00	0.00	0.00	
16,800.00	90.00	359.48	11,567.00	5,530.22	-513.57	5,534.66	0.00	0.00	0.00	
16,900.00	90.00	359.48	11,567.00	5,630.22	-514.48	5,634.66	0.00	0.00	0.00	
17,000.00	90.00	359.48	11,567.00	5,730.22	-515.38	5,734.66	0.00	0.00	0.00	
17,100.00	90.00	359.48	11,567.00	5,830.21	-516.29	5,834.66	0.00	0.00	0.00	
17,200.00	90.00	359.48	11,567.00	5,930.21	-517.19	5,934.66	0.00	0.00	0.00	
17,300.00	90.00	359.48	11,567.00	6,030.20	-518.10	6,034.66	0.00	0.00	0.00	
17,400.00	90.00	359.48	11,567.00	6,130.20	-519.00	6,134.66	0.00	0.00	0.00	
17,500.00	90.00	359.48	11,567.00	6,230.20	-519.91	6,234.66	0.00	0.00	0.00	
17,600.00	90.00	359.48	11,567.00	6,330.19	-520.81	6,334.66	0.00	0.00	0.00	
17,700.00	90.00	359.48	11,567.00	6,430.19	-521.72	6,434.66	0.00	0.00	0.00	
17,800.00	90.00	359.48	11,567.00	6,530.18	-522.63	6,534.66	0.00	0.00	0.00	
17,900.00	90.00	359.48	11,567.00	6,630.18	-523.53	6,634.66	0.00	0.00	0.00	
18,000.00	90.00	359.48	11,567.00	6,730.18	-524.44	6,734.66	0.00	0.00	0.00	
18,100.00	90.00	359.48	11,567.00	6,830.17	-525.34	6,834.66	0.00	0.00	0.00	
18,200.00	90.00	359.48	11,567.00	6,930.17	-526.25	6,934.66	0.00	0.00	0.00	
18,300.00	90.00	359.48	11,567.00	7,030.16	-527.15	7,034.66	0.00	0.00	0.00	
18,400.00	90.00	359.48	11,567.00	7,130.16	-528.06	7,134.66	0.00	0.00	0.00	
18,500.00	90.00	359.48	11,567.00	7,230.15	-528.96	7,234.66	0.00	0.00	0.00	
18,600.00	90.00	359.48	11,567.00	7,330.15	-529.87	7,334.66	0.00	0.00	0.00	
18,700.00	90.00	359.48	11,567.00	7,430.15	-530.77	7,434.66	0.00	0.00	0.00	
18,800.00	90.00	359.48	11,567.00	7,530.14	-531.68	7,534.66	0.00	0.00	0.00	
18,900.00	90.00	359.48	11,567.00	7,630.14	-532.59	7,634.66	0.00	0.00	0.00	
19,000.00	90.00	359.48	11,567.00	7,730.13	-533.49	7,734.66	0.00	0.00	0.00	
19,100.00	90.00	359.48	11,567.00	7,830.13	-534.40	7,834.66	0.00	0.00	0.00	
19,200.00	90.00	359.48	11,567.00	7,930.13	-535.30	7,934.66	0.00	0.00	0.00	
19,300.00	90.00	359.48	11,567.00	8,030.12	-536.21	8,034.66	0.00	0.00	0.00	
19,400.00	90.00	359.48	11,567.00	8,130.12	-537.11	8,134.66	0.00	0.00	0.00	
19,500.00	90.00	359.48	11,567.00	8,230.11	-538.02	8,234.66	0.00	0.00	0.00	
19,600.00	90.00	359.48	11,567.00	8,330.11	-538.92	8,334.66	0.00	0.00	0.00	
19,700.00	90.00	359.48	11,567.00	8,430.11	-539.83	8,434.66	0.00	0.00	0.00	
19,800.00	90.00	359.48	11,567.00	8,530.10	-540.73	8,534.66	0.00	0.00	0.00	
19,900.00	90.00	359.48	11,567.00	8,630.10	-541.64	8,634.66	0.00	0.00	0.00	
20,000.00	90.00	359.48	11,567.00	8,730.09	-542.55	8,734.66	0.00	0.00	0.00	
20,100.00	90.00	359.48	11,567.00	8,830.09	-543.45	8,834.66	0.00	0.00	0.00	
20,200.00	90.00	359.48	11,567.00	8,930.08	-544.36	8,934.66	0.00	0.00	0.00	
20,300.00	90.00	359.48	11,567.00	9,030.08	-545.26	9,034.66	0.00	0.00	0.00	
20,400.00	90.00	359.48	11,567.00	9,130.08	-546.17	9,134.66	0.00	0.00	0.00	
20,500.00	90.00	359.48	11,567.00	9,230.07	-547.07	9,234.66	0.00	0.00	0.00	
20,600.00	90.00	359.48	11,567.00	9,330.07	-547.98	9,334.66	0.00	0.00	0.00	
20,700.00	90.00	359.48	11,567.00	9,430.06	-548.88	9,434.66	0.00	0.00	0.00	
20,800.00	90.00	359.48	11,567.00	9,530.06	-549.79	9,534.66	0.00	0.00	0.00	
20,900.00	90.00	359.48	11,567.00	9,630.06	-550.69	9,634.66	0.00	0.00	0.00	
21,000.00	90.00	359.48	11,567.00	9,730.05	-551.60	9,734.66	0.00	0.00	0.00	
21,100.00	90.00	359.48	11,567.00	9,830.05	-552.51	9,834.66	0.00	0.00	0.00	
21,200.00	90.00	359.48	11,567.00	9,930.04	-553.41	9,934.66	0.00	0.00	0.00	
21,300.00	90.00	359.48	11,567.00	10,030.04	-554.32	10,034.66	0.00	0.00	0.00	
21,400.00	90.00	359.48	11,567.00	10,130.04	-555.22	10,134.66	0.00	0.00	0.00	
21,500.00	90.00	359.48	11,567.00	10,230.03	-556.13	10,234.66	0.00	0.00	0.00	
21,600.00	90.00	359.48	11,567.00	10,330.03	-557.03	10,334.66	0.00	0.00	0.00	
21,620.94	90.00	359.48	11,567.00	10,350.96	-557.22	10,355.59	0.00	0.00	0.00	
TD: 21620.94' MD/ 10355.60' VS/11567.00' TVD - 02-PBHL(FFC-653H)										



Planning Report

Database:	TZ USA 17.2	Local Co-ordinate Reference:	Well (A07) Forge Fed Com 653H
Company:	Franklin Mountain Energy LLC	TVD Reference:	3117+30 @ 3147.00usft
Project:	Lea County, NM(N83-NME3001)	MD Reference:	3117+30 @ 3147.00usft
Site:	Tatanka North_Pad 4 (Forge Core)	North Reference:	Grid
Well:	(A07) Forge Fed Com 653H	Survey Calculation Method:	Minimum Curvature
Wellbore:	653H		
Design:	Plan 04		

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)		
02-PBHL(FFC-653H)	0.00	0.00	11,567.00	10,350.96	-557.22	404,519.10	849,767.97	32.10818451	-103.33720861
- plan hits target center									
- Point									
01-T98(FFC-653H)	0.00	0.00	11,597.00	40.41	-462.84	394,208.55	849,862.35	32.07984309	-103.33721140
- plan misses target center by 286.20usft at 11460.25usft MD (11396.39 TVD, 239.21 N, -416.54 E)									
- Point									

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
30.00	30.00	Cenozoic Alluvium (surface)			
813.04	813.00	Rustler			
1,691.14	1,691.00	Salado			
4,541.33	4,529.00	Base Salt			
5,198.71	5,184.00	Bell Canyon			
5,223.80	5,209.00	Lamar			
6,089.95	6,072.00	Cherry Canyon			
7,614.14	7,594.00	Brushy Canyon			
9,014.14	8,994.00	Bone Spring Lime			
9,226.14	9,206.00	Avalon			
10,284.14	10,264.00	First Bone Spring Sand			
10,482.14	10,462.00	Second Bone Spring Carbonates			
10,663.14	10,643.00	Second Bone Spring Sand			
11,356.07	11,316.00	Third Bone Spring Carbonates			

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
11,014.18	10,994.04	75.00	-400.00	KOP: 11014.18' MD/ 78.63' VS/10994.04' TVD
11,914.18	11,567.00	645.08	-457.40	EOC: 11914.18' MD/ 649.20' VS/11567.00' TVD
21,620.94	11,567.00	10,350.96	-557.22	TD: 21620.94' MD/ 10355.60' VS/11567.00' TVD



Forge Fed Com 653H

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)	3,117'	30'	30'	0	Sand/Gravels/Unconsolidated
Rustler	2,334	813'			Carbonates
Salado	1,456	1,691'			Salt, Carbonate & Clastics
Base Salt	-1,383	4,529'			Shaley Carbonate & Shale
Lamar	-2,062	5,209'			Carbonate & Clastics
Bell Canyon	-2,038	5,184'			Sandstone - oil/gas/water
Cherry Canyon	-2,925	6,072'			Sandstone - oil/gas/water
Brushy Canyon	-4,447	7,594'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,847	8,994'			Shale/Carbonates - oil/gas
Avalon Carb	-6,060	9,206'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-7,118	10,264'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-7,316	10,462'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,497	10,643'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-8,169	11,316'			Shale/Carbonates - oil/gas
HZ Target	-8,450	11,597'			Shale/Sandstone/Carbonates - oil/gas
Third Bone Spring Sand	-8,763	11,909'			Sandstone - oil/gas/water

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

Upper Permian Sands	0-400'	Fresh Water
Delaware Sands	5,184'	Oil
Avalon	9,206'	Oil
Bone Spring	10,264'	Oil
Wolfcamp	'	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 13.375 casing at 1,094' 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	1,094	1.25	1.99	5.34	5.69
Intermediate 7 5/8"	29.7	P-110	9470	5340	940	BTC 960	10,914	1.32	1.05	2.22	2.26
Long string 5 1/2"	23	P-110	14520	14520	729	Eagle 606	21,620 11,567	1.32	1.44	1.22	1.01 1.66

Stress calculations on 5.5 casing performed assuming 21,620' depth. Actual max vertical depth is 11,567'.

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		Lead					Tail					
		Size	Setting Depth	Sacks	Type of cmt	Yield ft ³ /sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Yield ft ³ /sk	Water gal/sk	TOC	Excess
Surf	17.5	13.375	1,094	631	Extenda Cem, 13.5 ppg Class C, 3lb/sk Kol-Seal 0.125pps Poly-E-Flake	1.747	9.06	0	335	Tail, 14.8 ppg, Class C, 1% CaCl ₂ , 0.125pps Celo-Flake	1.349	6.51	794	100%
Int1	9.88	7.625	10,914	579	Lead, Lite Fill, 9.5 ppg, Class C 3 lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25 Integraseal	5.1	6.9	0	71	Tail, IntegraCem 14.8 ppg, Class H .15% ASA 301; P50H; 0.5% FL-66; 0.25% R-21	1.33	6.3	9,520	30%
Prod	6.75	5.5	21,620						819	Tail, 13.5 ppg, Class HSLD 82H; 0.4% CFL-2; 4% STE; 0.07% CSA-1000; .29#/sk Salt; .29#/sk Gypseal	1.43	6.87	9,914	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 for 30 minutes to 0.22 psi/ft or 1500 psi, whichever is greater, but not to exceed 70% of Internal yield.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig. The intermediate casing will be for 30 minutes to 0.22 psi/ft or 1500 psi, whichever is greater, but not to exceed 70% of Internal yield prior to drill-out.

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 – 1,094'	Fresh - Gel	8.6-8.8	28-34	N/c
1,094' – 11,014'	Brine	8.8-10.2	28-34	N/c
11,014' – 21,620' Lateral	Brine or OBM	10.0-12.0	58-68	3 – 6

The highest mud weight needed to balance formation is expected to be 10-12 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 11,567' TVD (deepest point of the well) is 185°F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,218 psig (based on 12 ppg MW).

Hydrogen sulfide may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

- A. All personnel shall receive proper awareness H₂S training.
- B. Briefing Area: Two perpendicular areas will be designated by signs and readily accessible.
- C. Required Emergency Equipment
 - a. Well Control Equipment
 - i. Flare line 100' 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
 - i. The Mud program will be designed to minimize the volume of H2S circulated to surface.
 - ii. 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. The 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 be 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, 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 5,000 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 1,500 psi, whichever is greater.

14. Additional variance requests

- A. Casing.
 - a. Variance is requested to waive the centralizer requirements for the 7-5/8" casing due to the tight clearance with 9-7/8" hole and 7-5/8" casing.
 - b. Variance is requested to waive the centralizer requirements for the 5-1/2" casing due to the tight clearance with 6-3/4" hole and 5-1/2" casing.

Geologic Prognosis



Well Name	Forge 653H
Operator	Franklin Mountain Energy 3, LLC
Project Area	Forge Unit
Well Type	10,000' Third Bone Spring Lateral
API	
Rig	

State	NM	County	Lea						
SHL	Township	25S/35E	Section	35	1,838'	FEL	55'	FSL	
BHL	Township	25S/35E	Section	26	2,300'	FEL	130'	FNL	
Surface Latitude	NAD 83	32.07972							
Surface Longitude	NAD 83	103.335718							
Bottom Hole Latitude	NAD 83	NEED SURVEYED BHL LAT							
Bottom Hole Longitude	NAD 83	NEED SURVEYED BHL LONG							
Ground Level	3,117'	Rig KB	30'	KB	3,147'				

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,117'	30'	30'	0	Sand/Gravels/Unconsolidated
Rustler	2,334	813'			Carbonates
Salado	1,456	1,691'			Salt, Carbonate & Clastics
Base Salt	-1,383	4,529'			Shaley Carbonate & Shale
Lamar	-2,062	5,209'			Carbonate & Clastics
Bell Canyon	-2,038	5,184'			Sandstone - oil/gas/water
Cherry Canyon	-2,925	6,072'			Sandstone - oil/gas/water
Brushy Canyon	-4,447	7,594'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,847	8,994'			Shale/Carbonates - oil/gas
Avalon Carb	-6,060	9,206'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-7,118	10,264'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-7,316	10,462'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,497	10,643'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-8,169	11,316'			Shale/Carbonates - oil/gas
HZ Target	-8,450	11,597'			Shale/Sandstone/Carbonates - oil/gas
Third Bone Spring Sand	-8,763	11,909'			Sandstone - oil/gas/water

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

Target window tolerance is set at +/- 15'

Target Line: 11,597' KBTVD @ 0' VS w/ 90.0° inc.
 Offset Log: Tatanka Fed Com 804H (30025498840000)
 Updated 12/14/2023

FME Geologist	Ben Metz	bmetz@fmeinc.com
Office	303.513.8590	Cell 303.513.8590

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	
	Jenna Tavares (jtavares@fmellc.com)				email	
	Ben Metz (bmetz@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 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
	FORGE FED COM		653H
⁷ OGRID No.	⁸ Operator Name		⁹ Elevation
373910	FRANKLIN MOUNTAIN ENERGY LLC		3119.2'

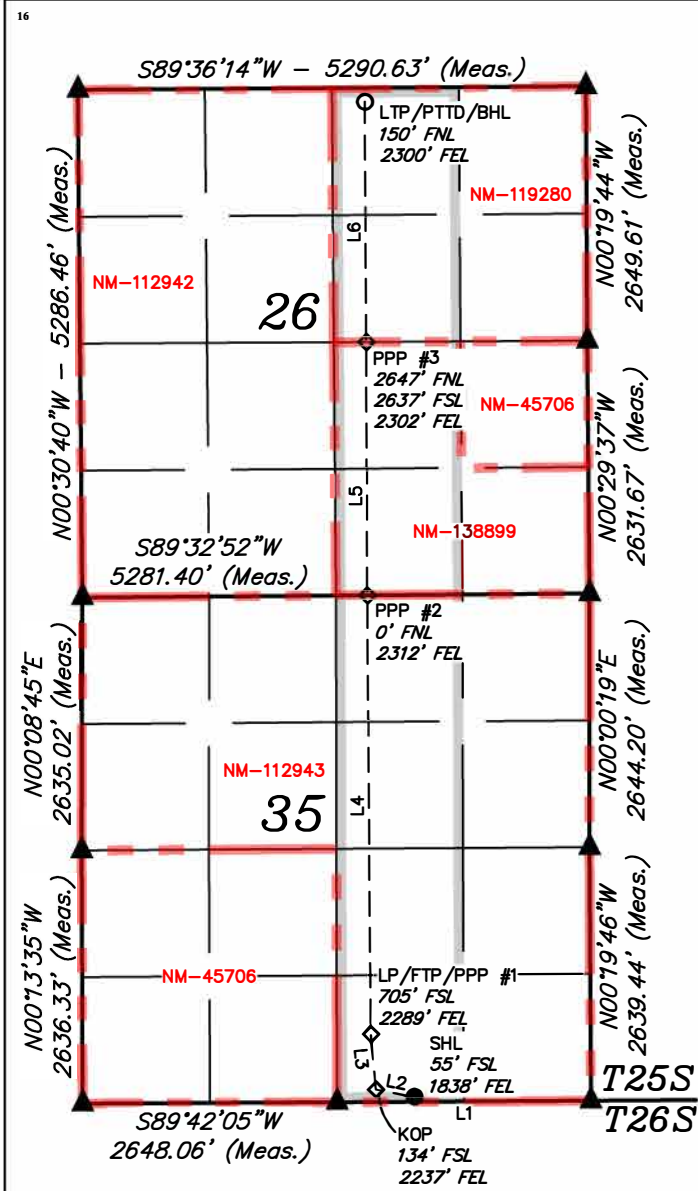
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	35	25S	35E		55	SOUTH	1838	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
B	26	25S	35E		150	NORTH	2300	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.



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°39'43"W	2644.48'
L2	N79°08'31"W	407.03'
L3	N05°30'38"W	573.04'
L4	N00°25'45"W	4574.31'
L5	N00°16'47"W	2636.72'
L6	N00°16'19"W	2496.83'

NAD 83 (SURFACE HOLE LOCATION) LATITUDE = 32°04'46.99" (32.079720°) LONGITUDE = -103°20'08.59" (-103.335718°) NAD 27 (SURFACE HOLE LOCATION) LATITUDE = 32°04'46.54" (32.079593°) LONGITUDE = -103°20'06.93" (-103.335257°) STATE PLANE NAD 83 (N.M. EAST) N: 394168.14' E: 850325.19' STATE PLANE NAD 27 (N.M. EAST) N: 394110.24' E: 809137.56'
NAD 83 (KICK OFF POINT) LATITUDE = 32°04'47.77" (32.079937°) LONGITUDE = -103°20'13.23" (-103.337008°) NAD 27 (KICK OFF POINT) LATITUDE = 32°04'47.31" (32.079810°) LONGITUDE = -103°20'11.57" (-103.336546°) STATE PLANE NAD 83 (N.M. EAST) N: 394243.14' E: 849925.19' STATE PLANE NAD 27 (N.M. EAST) N: 394185.24' E: 808737.57'
NAD 83 (LP/FTP/PPP #1) LATITUDE = 32°04'53.42" (32.081505°) LONGITUDE = -103°20'13.83" (-103.337176°) NAD 27 (LP/FTP/PPP #1) LATITUDE = 32°04'52.96" (32.081378°) LONGITUDE = -103°20'12.17" (-103.336715°) STATE PLANE NAD 83 (N.M. EAST) N: 394813.21' E: 849867.79' STATE PLANE NAD 27 (N.M. EAST) N: 394755.29' E: 808680.19'
NAD 83 (PPP #2) LATITUDE = 32°05'38.67" (32.094076°) LONGITUDE = -103°20'13.96" (-103.337212°) NAD 27 (PPP #2) LATITUDE = 32°05'38.22" (32.093949°) LONGITUDE = -103°20'12.30" (-103.336750°) STATE PLANE NAD 83 (N.M. EAST) N: 399386.54' E: 849814.45' STATE PLANE NAD 27 (N.M. EAST) N: 399328.50' E: 808627.03'
NAD 83 (PPP #3) LATITUDE = 32°06'04.76" (32.101323°) LONGITUDE = -103°20'13.96" (-103.337210°) NAD 27 (PPP #3) LATITUDE = 32°06'04.31" (32.101196°) LONGITUDE = -103°20'12.29" (-103.336748°) STATE PLANE NAD 83 (N.M. EAST) N: 402022.76' E: 849790.57' STATE PLANE NAD 27 (N.M. EAST) N: 401964.65' E: 808603.26'
NAD 83 (LTP/PTTD/BHL) LATITUDE = 32°06'29.46" (32.108185°) LONGITUDE = -103°20'13.95" (-103.337208°) NAD 27 (LTP/PTTD/BHL) LATITUDE = 32°06'29.01" (32.108058°) LONGITUDE = -103°20'12.28" (-103.336745°) STATE PLANE NAD 83 (N.M. EAST) N: 404519.13' E: 849768.30' STATE PLANE NAD 27 (N.M. EAST) N: 404460.95' E: 808581.09'

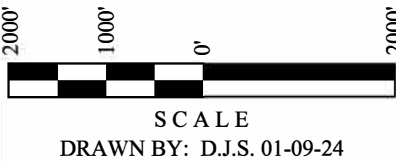
¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to 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: 1/9/2024
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 19, 2021
Date of Survey
Signature and Seal of Professional Surveyor:



Certificate Number:

- = SURFACE HOLE LOCATION
- ◇ = KOP/LANDING POINT/ FIRST TAKE POINT/PPP
- = LAST TAKE POINT/PTTD/ BOTTOM HOLE LOCATION
- ▲ = SECTION CORNER LOCATED
- = DRILLING SPACING UNIT
- = LEASE LINES



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)

35-25-35-O Sundry ID 2769654 Forge Fed Com 653H

Forge Fed Com 653H

13 3/8	surface csg in a		17 1/2	inch hole.		Design Factors				Surface		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50		j 55	btc	14.23	2.25	1.02	1,100	6	1.74	4.33	59,950
"B"				btc				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,431				Tail Cmt	does not	circ to sfc.	Totals:	1,100				59,950
Comparison of Proposed to Minimum Required Cement Volumes												
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
17 1/2	0.6946	1130	1841	764	141	8.80	1565	2M				1.56
She plot (pipe racks 3 or 4) as per O.D. 1.30 D 4 L not found.												

9 5/8		casing inside the		13 3/8		Design Factors					Int 1			
Segment	#/ft	Grade		Coupling		Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	40.00			hcl 80		btc	4.54	1.58	0.91	5,050	2	1.56	2.70	202,000
"B"													0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500									Totals:		5,050			202,000
The cement volume(s) are intended to achieve a top of									0	ft from surface or a		1100	overlap.	
Hole Size	Annular Volume	1 Stage Cmt Sx		1 Stage CuFt Cmt		Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg	
12 1/4	0.3132	1970		2838		1636	73	10.20	3684	5M			0.81	
D V Tool(s):									sum of sx		Σ CuFt			Σ%excess
t by stage % :									#VALUE!		#VALUE!			
Class 'H' tail cmt yld > 1.20														
Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.14, b, c, d All > 0.70, OK.														

7 5/8	casing inside the		9 5/8	A Buoyant	Design Factors				Int 2		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@S	a-B	a-C	Weight
"A"	29.70		p 110	uss liberty fjm	1.85	1.06	11,950	2	1.86	1.82	354,915
"B"							0				0
"C"							0				0
"D"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,434							Totals:	11,950			354,915
The cement volume(s) are intended to achieve a top of					4850	ft from surface or a		200			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
8 3/4	0.1005	317	1161	715	62	10.20	5089	10M			0.56
Class 'C' tail cmt yld > 1.35											
MASP is within 10% of 5000psig, need exrta equip?											

5 1/2		casing inside the		7 5/8		Design Factors				Prod 1			
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	23.00			p 110	uss eagle sfh	2.09	1.85	1.85	22,645	2	2.85	2.86	520,835
"B"									0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,776								Totals:		22,645			520,835
The cement volume(s) are intended to achieve a top of						11750	ft from surface or a		200			overlap.	
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg	
6 3/4	0.0835	835	1169	910	28	12.00						0.46	
Class 'H' tail cmt yld > 1.20				Capitan Reef est top XXXX.				MASP is within 10% of 5000psig, need exrta equip?					

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1625 N. French Dr., Hobbs, NM 88240
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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 305979

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street, Suite 1000 Denver, CO 80206	OGRID: 373910
	Action Number: 305979
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	2/16/2024