Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

[333594]

2. Name of Operator

[373910]

9. API Well No. **30-025-50839**

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory **[33813]**

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface

At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Title		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Title	Office	

Application approval 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.
Conditions of approval, if any, are attached.

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.

NGMP Rec 12/12/2022

KZ
12/13/2022

SL

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 11/17/2022

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Approval Date: 11/17/2022

Additional Operator Remarks

Location of Well

0. SHL: SWSW / 285 FSL / 800 FWL / TWSP: 25S / RANGE: 35E / SECTION: 24 / LAT: 32.109395 / LONG: -103.327198 (TVD: 0 feet, MD: 0 feet)

PPP: SWSW / 622 FSL / 455 FWL / TWSP: 25S / RANGE: 35E / SECTION: 24 / LAT: 32.110319 / LONG: -103.328309 (TVD: 12373 feet, MD: 12716 feet)

BHL: SWSW / 150 FNL / 380 FWL / TWSP: 25S / RANGE: 35E / SECTION: 13 / LAT: 32.13722 / LONG: -103.328531 (TVD: 12373 feet, MD: 22503 feet)

BLM Point of Contact

Name: TENILLE ORTIZ

Title: Legal Instruments Examiner

Phone: (575) 234-2224

Email: tortiz@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further 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
30-025-50839	33813	JAL; WOLFCAMP, WEST

[4] Property Code	[5] Property Name	[6] Well Number
333594	LOE FEDERAL	801H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373910	FRANKLIN MOUNTAIN ENERGY LLC	3108.1

[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
M	24	25S	35E		285	SOUTH	800	WEST	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
D	13	25S	35E		150	NORTH	380	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			

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

[16]

● = SURFACE HOLE LOCATION
◇ = KICK OFF POINT/FIRST TAKE POINT/PPP
○ = LAST TAKE POINT/BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED
△ = SECTION CORNER RE-ESTABLISHED. (Not Set on Ground.)

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°06'33.82" (32.109395°)
LONGITUDE = 103°19'37.91" (103.327198°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°06'33.37" (32.109269°)
LONGITUDE = 103°19'36.25" (103.326735°)
STATE PLANE NAD 83 (N.M. EAST)
N: 404988.42' E: 852863.65'
STATE PLANE NAD 27 (N.M. EAST)
N: 404930.20' E: 811676.41'

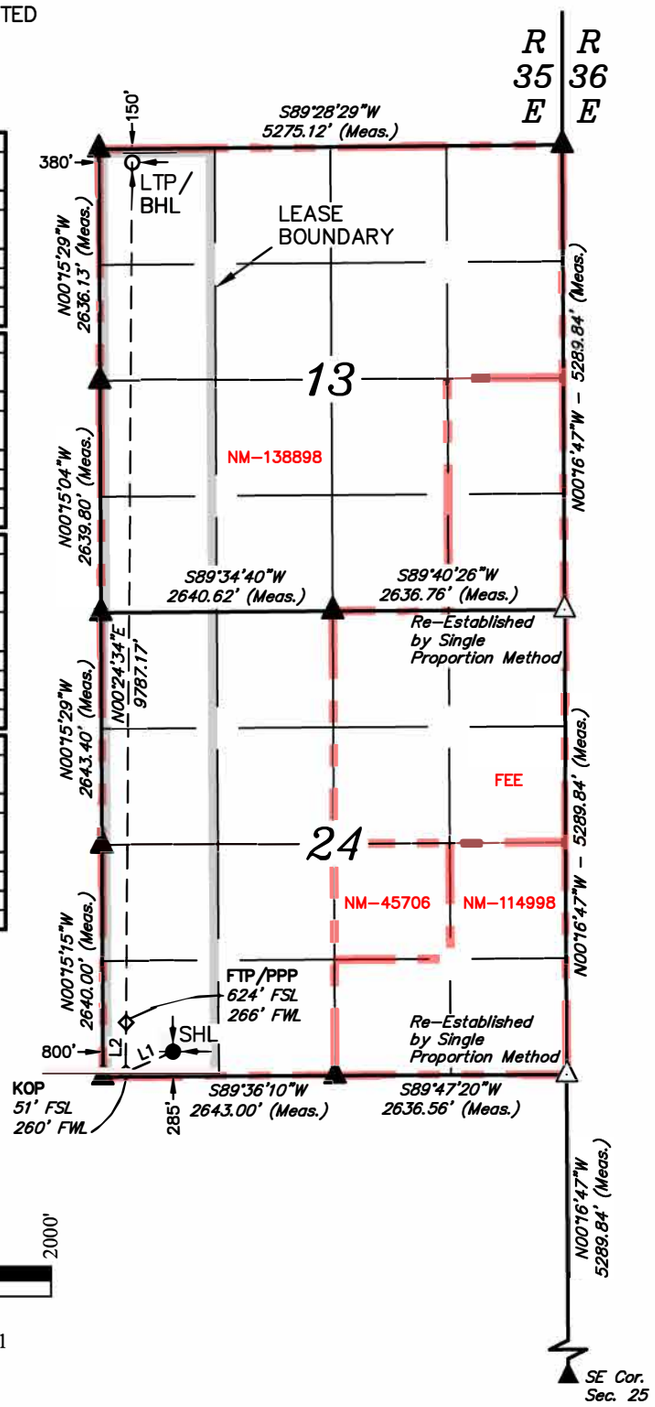
NAD 83 (KICK OFF POINT)
LATITUDE = 32°06'31.50" (32.108750°)
LONGITUDE = 103°19'44.19" (103.328942°)
NAD 27 (KICK OFF POINT)
LATITUDE = 32°06'31.04" (32.108623°)
LONGITUDE = 103°19'42.53" (103.328480°)
STATE PLANE NAD 83 (N.M. EAST)
N: 404748.42' E: 852325.65'
STATE PLANE NAD 27 (N.M. EAST)
N: 404690.21' E: 811138.41'

NAD 83 (FTP/PPP)
LATITUDE = 32°06'37.17" (32.110324°)
LONGITUDE = 103°19'44.11" (103.328920°)
NAD 27 (FTP/PPP)
LATITUDE = 32°06'36.71" (32.110197°)
LONGITUDE = 103°19'42.45" (103.328457°)
STATE PLANE NAD 83 (N.M. EAST)
N: 405321.37' E: 852327.35'
STATE PLANE NAD 27 (N.M. EAST)
N: 405263.15' E: 811140.13'

NAD 83 (LTP/BHL)
LATITUDE = 32°08'13.99" (32.137220°)
LONGITUDE = 103°19'42.71" (103.328531°)
NAD 27 (LTP/BHL)
LATITUDE = 32°08'13.54" (32.137093°)
LONGITUDE = 103°19'41.04" (103.328067°)
STATE PLANE NAD 83 (N.M. EAST)
N: 415107.08' E: 852356.40'
STATE PLANE NAD 27 (N.M. EAST)
N: 415048.58' E: 811169.57'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S66°11'52"W	589.19'
L2	N00°24'34"E	573.04'

NOTE:
- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearing is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)



2000' 1000' 0' 2000'

SCALE
DRAWN BY: C.C. 08-12-21
REV: 1 S.T.O. 12-30-21
(ADD LEASE INFO. & UPDATE WELL BORE)

[17] OPERATOR CERTIFICATION

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

Signature 1/12/2022 Date

Rachael Overbey
Printed Name

roverbey@fmellc.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

August 4, 2021
Date of Survey

Signature and Seal of Professional Surveyor:

PAUL BUCHELE NEW MEXICO 23782 PROFESSIONAL SURVEYOR 12-30-21

Certificate Number:

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: ___Franklin Mountain Energy, LLC_____ **OGRID:** ____373910_____ **Date:** __12/_12_/_2022

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
See Attached Well List						

IV. Central Delivery Point Name: _____Land of Enchantment (LOE) CTB: facility ID fAPP2125751858___ [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
See Attached Well List						

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☒ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

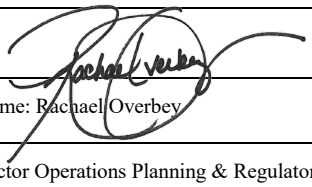
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Rachael Overbey
Title: Director Operations Planning & Regulatory
E-mail Address: roverbey@fmellc.com
Date: 12/12/2022
Phone: 720-414-7868

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

NATURAL GAS MANAGEMENT PLAN

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

Well Name	API 14 Digit	ULSTR	Surface Location FTG	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
LOE Federal 101H	TBD	M-24-25S-35E	285 FSL 585 FWL	750 +/-	1100 +/-	500 +/-
LOE Federal 102H	TBD	M-24-25S-35E	285 FSL 610 FWL	750 +/-	1100 +/-	500 +/-
LOE Federal 501H	TBD	M-24-25S-35E	285 FSL 635 FWL	800 +/-	1100 +/-	500 +/-
LOE Federal 502H	TBD	M-24-25S-35E	285 FSL 660 FWL	800 +/-	1100 +/-	500 +/-
LOE Federal 801H **30-025-50839**	TBD	M-24-25S-35E	285 FSL 800 FWL	900 +/-	1100 +/-	500 +/-
LOE Federal 802H	TBD	M-24-25S-35E	285 FSL 825 FWL	900 +/-	1100 +/-	500 +/-
LOE Federal 803H	TBD	M-24-25S-35E	285 FSL 850 FWL	900 +/-	1100 +/-	500 +/-
LOE Fed Com 103H	TBD	P-24-25S-35E	250 FSL 672 FEL	750 +/-	1100 +/-	500 +/-
LOE Fed Com 104H	TBD	P-24-25S-35E	250 FSL 647 FEL	750 +/-	1100 +/-	500 +/-
LOE Fed Com 503H	TBD	P-24-25S-35E	250 FSL 622 FEL	800 +/-	1100 +/-	500 +/-
LOE Fed Com 504H	TBD	P-24-25S-35E	250 FSL 597 FEL	800 +/-	1100 +/-	500 +/-
LOE Fed Com 804H	TBD	P-24-25S-35E	250 FSL 897 FEL	900 +/-	1100 +/-	500 +/-
LOE Fed Com 805H	TBD	P-24-25S-35E	250 FSL 872 FEL	900 +/-	1100 +/-	500 +/-
LOE Fed Com 806H	TBD	P-24-25S-35E	250 FSL 847 FEL	900 +/-	1100 +/-	500 +/-

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API 14 Digit	Spud Date (Batch Drilling)	TD Reached Date	Completion Commencement Date	Initial Flowback Date	First Production Date
LOE Federal 101H	TBD	4/1/2023	7/22/2023	8/6/2023	8/16/2023	8/18/2023
LOE Federal 102H	TBD	4/1/2023	7/22/2023	8/6/2023	8/16/2023	8/18/2023
LOE Federal 501H	TBD	4/1/2023	7/22/2023	8/6/2023	8/16/2023	8/18/2023
LOE Federal 502H	TBD	4/1/2023	7/22/2023	8/6/2023	8/16/2023	8/18/2023
LOE Federal 801H **30-025-50839**	TBD	12/15/2022	4/6/2023	4/21/2023	5/1/2023	5/3/2023
LOE Federal 802H	TBD	12/15/2022	4/6/2023	4/21/2023	5/1/2023	5/3/2023
LOE Federal 803H	TBD	12/15/2022	4/6/2023	4/21/2023	5/1/2023	5/3/2023
LOE Fed Com 103H	TBD	4/15/2022	8/5/2022	8/20/2022	8/30/2022	9/1/2022
LOE Fed Com 104H	TBD	4/15/2022	8/5/2022	8/20/2022	8/30/2022	9/1/2022
LOE Fed Com 503H	TBD	4/15/2022	8/5/2022	8/20/2022	8/30/2022	9/1/2022
LOE Fed Com 504H	TBD	4/15/2022	8/5/2022	8/20/2022	8/30/2022	9/1/2022
LOE Fed Com 804H	TBD	12/20/2022	4/11/2023	4/26/2023	5/6/2023	5/8/2023
LOE Fed Com 805H	TBD	12/20/2022	4/11/2023	4/26/2023	5/6/2023	5/8/2023
LOE Fed Com 806H	TBD	12/20/2022	4/11/2023	4/26/2023	5/6/2023	5/8/2023

FRANKLIN MOUNTAIN ENERGY

Natural Gas Management Plan

Items VI-VIII

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

- Data from surrounding wells is used to generate type curves which provides the basis for expected gas rates during initial production, peak production and then the natural decline.
- Separation equipment will be sized to provide adequate separation for peak production.
- Facility design includes multiple stages of separation to minimize gas waste. Wells flow through a high pressure 2-phase separator to remove bulk gas, liquid from the 2-phase separator is sent to a 3-phase separator where additional gas is separated. Gas from the 2 Phase and 3 Phase separators are then sent through a gas scrubber before being route to treatment and/or sales. As production declines the 2-phase separator may be removed.
- Industry standard sizing calculations are used for gas-liquid separation and liquid-liquid separation.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F 19.15.27.8 NMAC.

- Drilling, completion and production setup is designed to minimize the waste of natural gas and to flare instead of vent.
- *Drilling Operations:*
  - Natural gas encountered will be flared instead of vented unless there is an equipment malfunction and/or to avoid risking safety or the environment.
  - Flares will be properly sized and placed at least 100’ from the nearest surface hole on the pad.
- *Completions/Recompletions Operations:*
  - Flowback operations will not commence until connected to a properly sized gas gathering system.
  - During initial flowback wells are routed to the separation equipment as soon as technically feasible to minimize gas waste.
  - During separation flowback wells are routed to the separation equipment to minimize gas waste.
  - Gas sales is maximized. Gas will be flared instead of vented during an emergency or malfunction to avoid posing a risk to operations or personnel safety.
  - Flares are properly sized with a continuous pilot.
- *Production Operations:*
  - Gas sales will be maximized. Gas will be flared instead of vented during an emergency or malfunction to avoid posing a risk to operations or personnel safety.
  - After a well is stabilized from liquid unloading, the well will be turned back into the collection system.
- *Performance Standards:*
  - The facility will be designed to handle peak production rates and pressures.
  - All tanks will have automatic gauging equipment.
  - Flares will be designed to ensure proper combustion and will have continuous pilots. Flares will be located 100’ from nearest surface hole on the pad and storage tanks.

FRANKLIN MOUNTAIN ENERGY

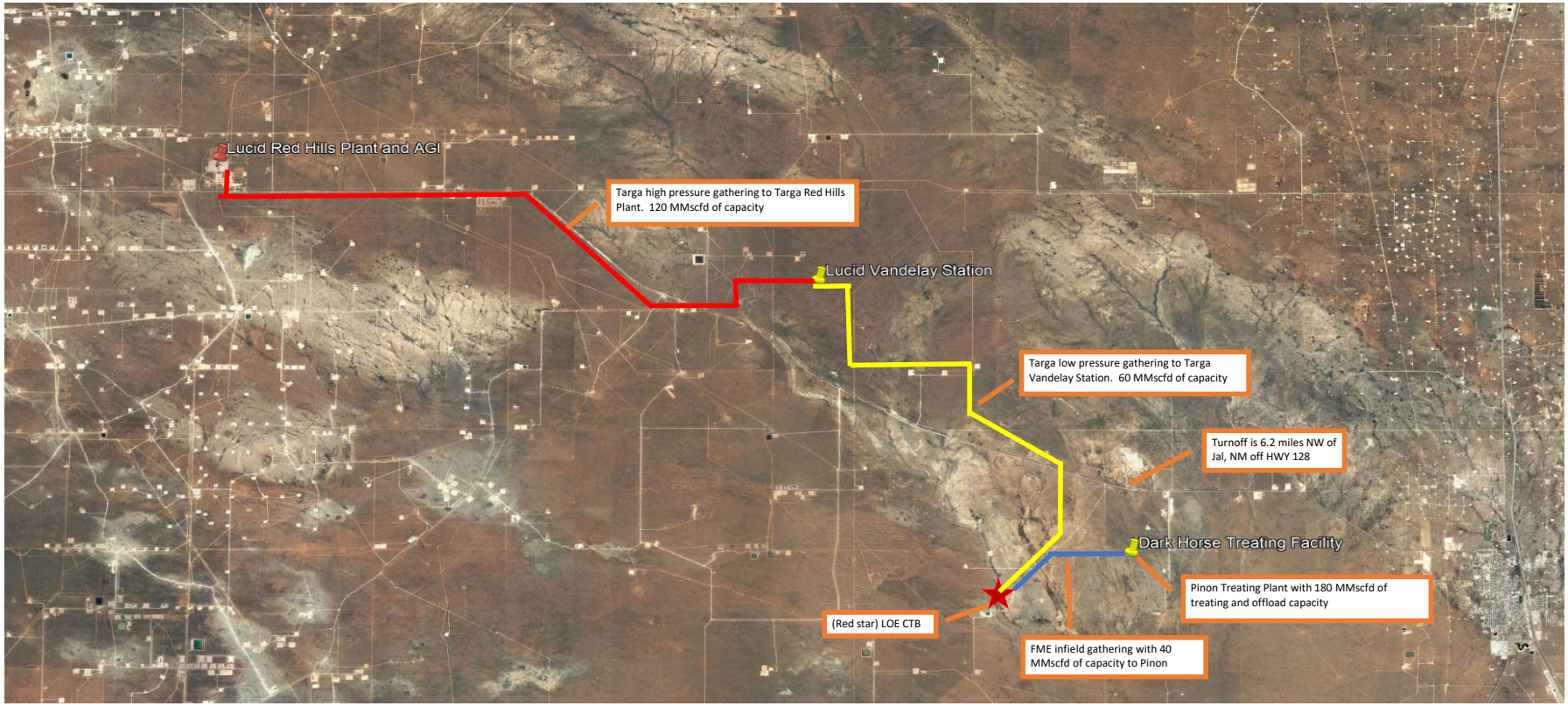
- Weekly AVOs will be performed, and any leaking thief hatches will be cleaned and properly re-sealed.

- *Measurement and Calibration:*
  - All volume that is flared and vented that is not measured will be estimated.
  - When metering is not practical due to low pressure/rate, all vented or flared volumes will be estimated.
  - Measurement will conform to industry standards. Measurement will not be bypassed except for purposes of inspection or calibration.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

- Venting will be minimized during active and planned maintenance.
- Systems and equipment requiring maintenance will be isolated and blown down to sales and then flare before any remaining gas is vented in an effort to minimize waste and venting.
- Downhole maintenance will use best management practices to minimize vent.

LOE NGMP Map
Dec 2022
- Capacities reflected are FME's understanding of 3rd party midstream system capacities



FRANKLIN MOUNTAIN ENERGY

LOE Federal 801H

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)	3,108'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,365'	773'			Carbonates
Salado	1,983'	1,155'			Salt, Carbonate & Clastics
Base Salt	505'	2,633'			Shaley Carbonate & Shale
Lamar	-1,851'	4,989'			Carbonate & Clastics
Bell Canyon	-1,996'	5,134'			Sandstone - oil/gas/water
Cherry Canyon	-2,886'	6,024'			Sandstone - oil/gas/water
Brushy Canyon	-4,132'	7,270'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,482'	8,620'			Shale/Carbonates - oil/gas
Avalon	-5,510'	8,648'			Shale/Carbonates - oil/gas
Chert Zone	-5,723'	8,861'			Carbonate/Chert
First Bone Spring Sand	-6,867'	10,005'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-7,009'	10,147'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-7,334'	10,472'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,876'	11,014'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,514'	11,652'			Sandstone - oil/gas/water
Wolfcamp	-8,817'	11,955'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,859'	11,997'			Overpressure Shale - Oil/Gas
Wolfcamp B	-9,123'	12,261'			Overpressure Shale - Oil/Gas
HZ Target	-9,235'	12,373'			Overpressure Shale - Oil/Gas
Wolfcamp C	-9386	12,524'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400’	Fresh Water
Delaware Sands	5,134’	Oil
Bone Spring	10,005’	Oil
Wolfcamp	11,955’	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
						BTC					
Surface 13 3/8"	54.5	J-55	2730	1130	853	909	1300	1.18	1.67	4.99	5.32
						BTC					
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	1042	5050	1.80	1.79	3.03	3.45
						Liberty					
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	558	11750	1.13	1.30	1.84	1.24
						Eagle					
Long string 5 1/2"	23	P-110	14520	14520	729	606	22503	1.32	1.38	1.18	0.98
						TVD	12373				1.58

7 5/8"casing will be set at 11,750'MD/11,733' TVD at 0°Inc. Stress calculations on 5 ½" casing performed assuming 22,503' depth. Actual max vertical depth is 12,373'.

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	Lead Type of cmt	Lead Yield ft3/sk	Lead Water gal/sk	Lead TOC ft	Tail Sacks	Tail Type of cmt	Tail Yield ft3/sk	Tail Water gal/sk	Tail TOC	Excess
Surf	17.5	13.375	1300	803	Extenda Cem, 12.8 ppg Class C, 3lb/sk Kol-Seal 0.125pps Poly-E-Flake	1.747	9.06	0	330	Tail, 14.8 ppg, Class C, 1% CaCl2, 0.125pps Celo-Flake	1.349	6.51	1000	100%
Int1	12.25	9.625	5050	1815	Lead, 12.8 ppg, Class C 5% Salt, 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal	1.45	6.9	0	154	Tail, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake	1.33	6.3	4750	100%
Int2	8.75	7.625	11750	190	Lite Fill, 9.5 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	5.1	27.2	4050	121	NeoCem 14.8 ppg, Class C 0.25 pps Cello-Flake, 2% CalCl2	1.33	6.31	10750	50%
Prod	6.75	5.5	22503	839	Tail, 14.5 ppg, Gas Migration Control	1.4	6.8	10750						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.

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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' – 11,750'	Brine	8.8-10.2	28-34	N/c
11,750' – 22,503' Lateral	Oil Base	11.0-12.5	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 11-12.5 ppg. In order to maintain hole stability, mud weights up to 13 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 12,373' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 8,364 psig (based on 13 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 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. 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.

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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 ½" casing due to the tight clearance with 6 3/4" hole and 5 ½" casing due to tight clearances.

LOE Federal 801H

total

FRANKLIN MOUNTAIN ENERGY

WELL DETAILS: LOE Federal 801H
Plan #2

RKB +30' @ 3138.00usft (Original Well Elev)

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	404988.42	852863.65	32.1093954	-103.3271978

SECTION DETAILS

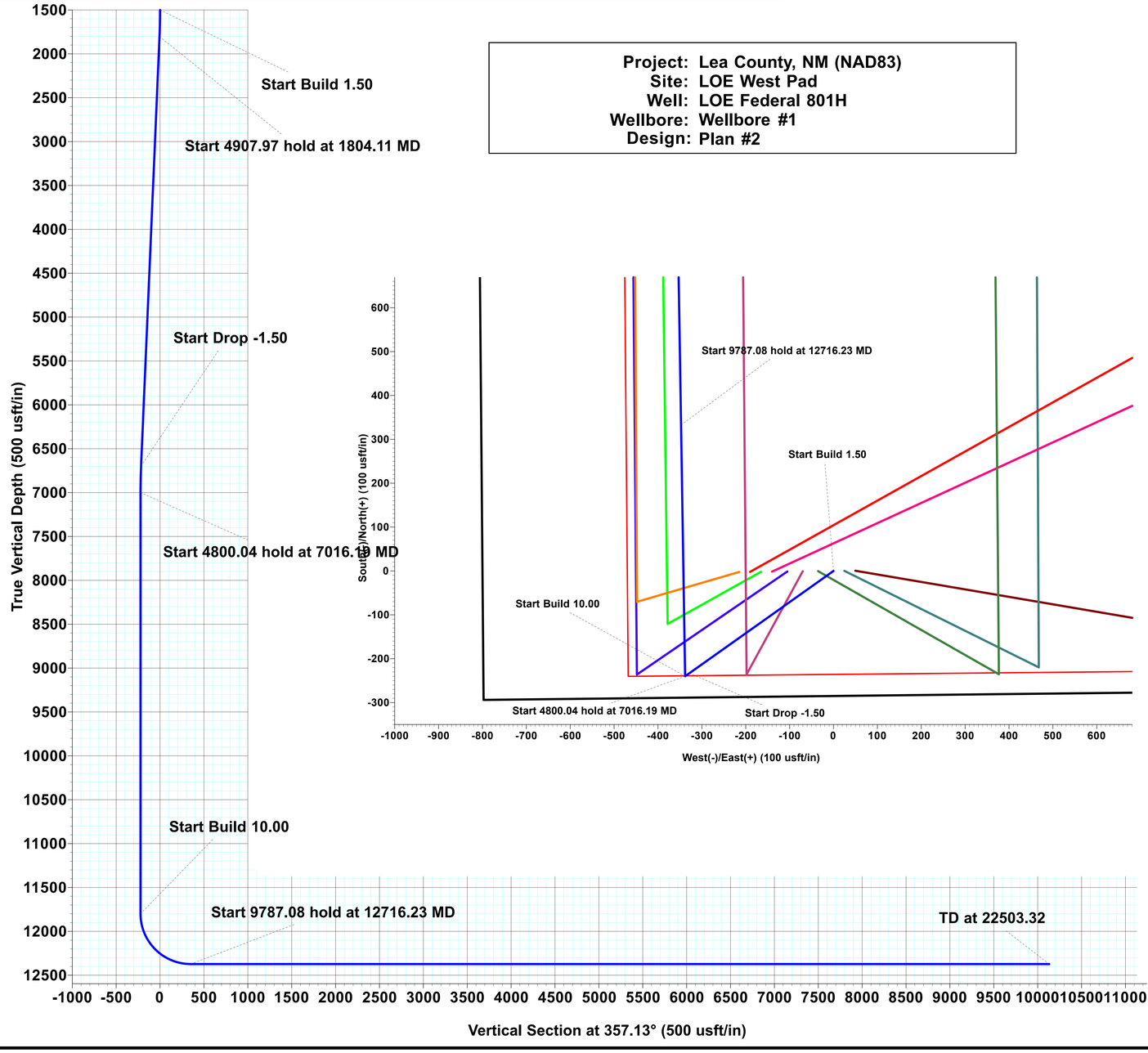
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	Start Build 1.50
1804.11	4.56	234.62	1803.79	-7.01	-9.87	1.50	234.62	-6.50	Start 4907.97 hold at 1804.11 MD
6712.08	4.56	234.62	6696.21	-232.99	-328.13	0.00	0.00	-216.27	Start Drop -1.50
7016.19	0.00	0.00	7000.00	-240.00	-338.00	1.50	180.00	-222.78	Start 4800.04 hold at 7016.19 MD
11816.23	0.00	0.00	11800.04	-240.00	-338.00	0.00	0.00	-222.78	Start Build 10.00
12716.23	90.00	359.06	12373.00	332.88	-347.36	10.00	359.06	349.86	Start 9787.08 hold at 12716.23 MD
22503.32	90.00	359.06	12373.00	10118.66	-507.25	0.00	0.0010131.37		TD at 22503.32

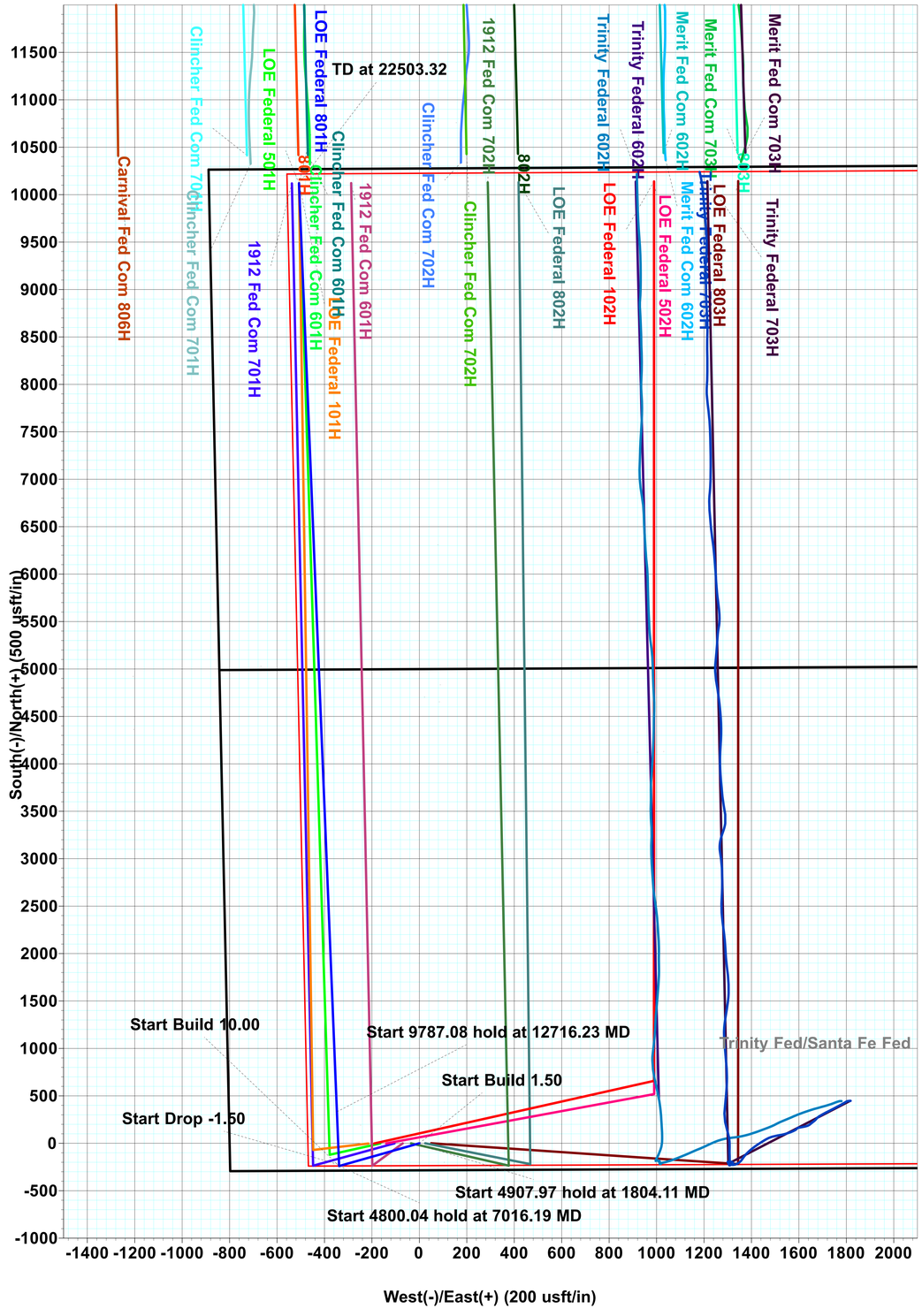
G T M

Azimuths to Grid North
True North: -0.53°
Magnetic North: 5.82°

Magnetic Field
Strength: 47478.6nT
Dip Angle: 59.67°
Date: 11/8/2021
Model: HDGM_FILE

Project: Lea County, NM (NAD83)
Site: LOE West Pad
Well: LOE Federal 801H
Wellbore: Wellbore #1
Design: Plan #2





FRANKLIN MOUNTAIN ENERGY

Franklin Mountain Energy

Lea County, NM (NAD83)
LOE West Pad
LOE Federal 801H

Wellbore #1

Plan: Plan #2

Standard Planning Report

28 July, 2022

total

FRANKLIN MOUNTAIN ENERGY

Planning Report

total

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well LOE Federal 801H
Company:	Franklin Mountain Energy	**TVD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Project:	Lea County, NM (NAD83)	**MD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Site:	LOE West Pad	**North Reference:**	Grid
Well:	LOE Federal 801H	**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 LOE West Pad

Site Position:		**Northing:**	404,987.32 usft	**Latitude:**	32.1093951
From:	Map	**Easting:**	852,758.67 usft	**Longitude:**	-103.3275368
Position Uncertainty:	0.00 usft	**Slot Radius:**	13-3/16 "		

Well LOE Federal 801H

Well Position	**+N/-S**	0.00 usft	**Northing:**	404,988.42 usft	**Latitude:**	32.1093954
	+E/-W	0.00 usft	**Easting:**	852,863.65 usft	**Longitude:**	-103.3271978
Position Uncertainty		0.00 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,108.00 usft
Grid Convergence:		0.53 °				

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	11/8/2021	6.35	59.67	47,478.60000000

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 (°)
	12,373.00	0.00	0.00	357.13

Plan Survey Tool Program **Date** 7/28/2022

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,503.32	Plan #2 (Wellbore #1)	OWSG (Rev2) MWD+IFR1 OWSG MWD + IFR1 + Mult	

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,804.11	4.56	234.62	1,803.79	-7.01	-9.87	1.50	1.50	0.00	234.62	
6,712.08	4.56	234.62	6,696.21	-232.99	-328.13	0.00	0.00	0.00	0.00	
7,016.19	0.00	0.00	7,000.00	-240.00	-338.00	1.50	-1.50	0.00	180.00	
11,816.23	0.00	0.00	11,800.04	-240.00	-338.00	0.00	0.00	0.00	0.00	
12,716.23	90.00	359.06	12,373.00	332.88	-347.36	10.00	10.00	0.00	359.06	
22,503.32	90.00	359.06	12,373.00	10,118.66	-507.25	0.00	0.00	0.00	0.00	LOE Federal 801H

FRANKLIN MOUNTAIN ENERGY

Planning Report

total

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well LOE Federal 801H
Company:	Franklin Mountain Energy	**TVD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Project:	Lea County, NM (NAD83)	**MD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Site:	LOE West Pad	**North Reference:**	Grid
Well:	LOE Federal 801H	**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 (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00
Cenozoic Alluvium (surface)									
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
694.00	0.00	0.00	694.00	0.00	0.00	0.00	0.00	0.00	0.00
Possible Losses									
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
773.00	0.00	0.00	773.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
943.00	0.00	0.00	943.00	0.00	0.00	0.00	0.00	0.00	0.00
Capitan									
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,155.00	0.00	0.00	1,155.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
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
Start Build 1.50									
1,600.00	1.50	234.62	1,599.99	-0.76	-1.07	-0.70	1.50	1.50	0.00
1,700.00	3.00	234.62	1,699.91	-3.03	-4.27	-2.81	1.50	1.50	0.00
1,804.11	4.56	234.62	1,803.79	-7.01	-9.87	-6.50	1.50	1.50	0.00
Start 4907.97 hold at 1804.11 MD									
1,900.00	4.56	234.62	1,899.38	-11.42	-16.08	-10.60	0.00	0.00	0.00
2,000.00	4.56	234.62	1,999.06	-16.02	-22.57	-14.87	0.00	0.00	0.00
2,100.00	4.56	234.62	2,098.74	-20.63	-29.05	-19.15	0.00	0.00	0.00
2,200.00	4.56	234.62	2,198.42	-25.23	-35.54	-23.42	0.00	0.00	0.00
2,300.00	4.56	234.62	2,298.11	-29.84	-42.02	-27.70	0.00	0.00	0.00
2,400.00	4.56	234.62	2,397.79	-34.44	-48.51	-31.97	0.00	0.00	0.00
2,500.00	4.56	234.62	2,497.47	-39.05	-54.99	-36.25	0.00	0.00	0.00
2,600.00	4.56	234.62	2,597.16	-43.65	-61.48	-40.52	0.00	0.00	0.00
2,635.96	4.56	234.62	2,633.00	-45.31	-63.81	-42.06	0.00	0.00	0.00
Base Salt									
2,700.00	4.56	234.62	2,696.84	-48.26	-67.96	-44.79	0.00	0.00	0.00
2,800.00	4.56	234.62	2,796.52	-52.86	-74.45	-49.07	0.00	0.00	0.00
2,900.00	4.56	234.62	2,896.21	-57.47	-80.93	-53.34	0.00	0.00	0.00
3,000.00	4.56	234.62	2,995.89	-62.07	-87.42	-57.62	0.00	0.00	0.00
3,100.00	4.56	234.62	3,095.57	-66.67	-93.90	-61.89	0.00	0.00	0.00
3,200.00	4.56	234.62	3,195.26	-71.28	-100.39	-66.16	0.00	0.00	0.00
3,300.00	4.56	234.62	3,294.94	-75.88	-106.87	-70.44	0.00	0.00	0.00
3,400.00	4.56	234.62	3,394.62	-80.49	-113.35	-74.71	0.00	0.00	0.00
3,500.00	4.56	234.62	3,494.31	-85.09	-119.84	-78.99	0.00	0.00	0.00
3,600.00	4.56	234.62	3,593.99	-89.70	-126.32	-83.26	0.00	0.00	0.00
3,700.00	4.56	234.62	3,693.67	-94.30	-132.81	-87.53	0.00	0.00	0.00
3,800.00	4.56	234.62	3,793.36	-98.91	-139.29	-91.81	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY

Planning Report

total

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well LOE Federal 801H
Company:	Franklin Mountain Energy	**TVD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Project:	Lea County, NM (NAD83)	**MD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Site:	LOE West Pad	**North Reference:**	Grid
Well:	LOE Federal 801H	**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 (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,900.00	4.56	234.62	3,893.04	-103.51	-145.78	-96.08	0.00	0.00	0.00
4,000.00	4.56	234.62	3,992.72	-108.12	-152.26	-100.36	0.00	0.00	0.00
4,100.00	4.56	234.62	4,092.41	-112.72	-158.75	-104.63	0.00	0.00	0.00
4,200.00	4.56	234.62	4,192.09	-117.33	-165.23	-108.91	0.00	0.00	0.00
4,300.00	4.56	234.62	4,291.77	-121.93	-171.72	-113.18	0.00	0.00	0.00
4,400.00	4.56	234.62	4,391.46	-126.53	-178.20	-117.45	0.00	0.00	0.00
4,500.00	4.56	234.62	4,491.14	-131.14	-184.69	-121.73	0.00	0.00	0.00
4,600.00	4.56	234.62	4,590.82	-135.74	-191.17	-126.00	0.00	0.00	0.00
4,700.00	4.56	234.62	4,690.51	-140.35	-197.66	-130.28	0.00	0.00	0.00
4,800.00	4.56	234.62	4,790.19	-144.95	-204.14	-134.55	0.00	0.00	0.00
4,900.00	4.56	234.62	4,889.87	-149.56	-210.63	-138.82	0.00	0.00	0.00
4,999.44	4.56	234.62	4,989.00	-154.14	-217.07	-143.07	0.00	0.00	0.00
Lamar									
5,000.00	4.56	234.62	4,989.56	-154.16	-217.11	-143.10	0.00	0.00	0.00
5,100.00	4.56	234.62	5,089.24	-158.77	-223.60	-147.37	0.00	0.00	0.00
5,144.90	4.56	234.62	5,134.00	-160.83	-226.51	-149.29	0.00	0.00	0.00
Bell Canyon									
5,200.00	4.56	234.62	5,188.92	-163.37	-230.08	-151.65	0.00	0.00	0.00
5,300.00	4.56	234.62	5,288.61	-167.98	-236.56	-155.92	0.00	0.00	0.00
5,400.00	4.56	234.62	5,388.29	-172.58	-243.05	-160.19	0.00	0.00	0.00
5,500.00	4.56	234.62	5,487.97	-177.18	-249.53	-164.47	0.00	0.00	0.00
5,600.00	4.56	234.62	5,587.65	-181.79	-256.02	-168.74	0.00	0.00	0.00
5,700.00	4.56	234.62	5,687.34	-186.39	-262.50	-173.02	0.00	0.00	0.00
5,800.00	4.56	234.62	5,787.02	-191.00	-268.99	-177.29	0.00	0.00	0.00
5,900.00	4.56	234.62	5,886.70	-195.60	-275.47	-181.56	0.00	0.00	0.00
6,000.00	4.56	234.62	5,986.39	-200.21	-281.96	-185.84	0.00	0.00	0.00
6,037.73	4.56	234.62	6,024.00	-201.94	-284.40	-187.45	0.00	0.00	0.00
Cherry Canyon									
6,100.00	4.56	234.62	6,086.07	-204.81	-288.44	-190.11	0.00	0.00	0.00
6,200.00	4.56	234.62	6,185.75	-209.42	-294.93	-194.39	0.00	0.00	0.00
6,300.00	4.56	234.62	6,285.44	-214.02	-301.41	-198.66	0.00	0.00	0.00
6,400.00	4.56	234.62	6,385.12	-218.63	-307.90	-202.94	0.00	0.00	0.00
6,500.00	4.56	234.62	6,484.80	-223.23	-314.38	-207.21	0.00	0.00	0.00
6,600.00	4.56	234.62	6,584.49	-227.83	-320.87	-211.48	0.00	0.00	0.00
6,700.00	4.56	234.62	6,684.17	-232.44	-327.35	-215.76	0.00	0.00	0.00
6,712.08	4.56	234.62	6,696.21	-232.99	-328.13	-216.27	0.00	0.00	0.00
Start Drop -1.50									
6,800.00	3.24	234.62	6,783.93	-236.46	-333.01	-219.49	1.50	-1.50	0.00
6,900.00	1.74	234.62	6,883.83	-238.98	-336.56	-221.83	1.50	-1.50	0.00
7,000.00	0.24	234.62	6,983.81	-239.98	-337.97	-222.76	1.50	-1.50	0.00
7,016.19	0.00	0.00	7,000.00	-240.00	-338.00	-222.78	1.50	-1.50	0.00
Start 4800.04 hold at 7016.19 MD									
7,100.00	0.00	0.00	7,083.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,200.00	0.00	0.00	7,183.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,286.19	0.00	0.00	7,270.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Brushy Canyon									
7,300.00	0.00	0.00	7,283.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,400.00	0.00	0.00	7,383.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,500.00	0.00	0.00	7,483.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,600.00	0.00	0.00	7,583.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,700.00	0.00	0.00	7,683.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,800.00	0.00	0.00	7,783.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
7,900.00	0.00	0.00	7,883.81	-240.00	-338.00	-222.78	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY

Planning Report

total

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well LOE Federal 801H
Company:	Franklin Mountain Energy	**TVD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Project:	Lea County, NM (NAD83)	**MD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Site:	LOE West Pad	**North Reference:**	Grid
Well:	LOE Federal 801H	**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 (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,000.00	0.00	0.00	7,983.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,100.00	0.00	0.00	8,083.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,200.00	0.00	0.00	8,183.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,300.00	0.00	0.00	8,283.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,400.00	0.00	0.00	8,383.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,500.00	0.00	0.00	8,483.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,600.00	0.00	0.00	8,583.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,636.19	0.00	0.00	8,620.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Bone Spring Lime									
8,664.19	0.00	0.00	8,648.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Avalon									
8,700.00	0.00	0.00	8,683.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,800.00	0.00	0.00	8,783.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
8,877.19	0.00	0.00	8,861.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Chert Zone									
8,900.00	0.00	0.00	8,883.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,000.00	0.00	0.00	8,983.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,100.00	0.00	0.00	9,083.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,200.00	0.00	0.00	9,183.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,300.00	0.00	0.00	9,283.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,400.00	0.00	0.00	9,383.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,500.00	0.00	0.00	9,483.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,600.00	0.00	0.00	9,583.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,700.00	0.00	0.00	9,683.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,800.00	0.00	0.00	9,783.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
9,900.00	0.00	0.00	9,883.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,000.00	0.00	0.00	9,983.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,021.19	0.00	0.00	10,005.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
First Bone Spring Sand									
10,100.00	0.00	0.00	10,083.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,163.19	0.00	0.00	10,147.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Second Bone Spring Carbonates									
10,200.00	0.00	0.00	10,183.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,300.00	0.00	0.00	10,283.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,400.00	0.00	0.00	10,383.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,488.19	0.00	0.00	10,472.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Second Bone Spring Sand									
10,500.00	0.00	0.00	10,483.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,600.00	0.00	0.00	10,583.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,700.00	0.00	0.00	10,683.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,800.00	0.00	0.00	10,783.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
10,900.00	0.00	0.00	10,883.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,000.00	0.00	0.00	10,983.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,030.19	0.00	0.00	11,014.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Third Bone Spring Carbonates									
11,100.00	0.00	0.00	11,083.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,200.00	0.00	0.00	11,183.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,300.00	0.00	0.00	11,283.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,400.00	0.00	0.00	11,383.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,500.00	0.00	0.00	11,483.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,600.00	0.00	0.00	11,583.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,668.19	0.00	0.00	11,652.00	-240.00	-338.00	-222.78	0.00	0.00	0.00
Third Bone Spring Sand									

FRANKLIN MOUNTAIN ENERGY

Planning Report

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11,700.00	0.00	0.00	11,683.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,800.00	0.00	0.00	11,783.81	-240.00	-338.00	-222.78	0.00	0.00	0.00
11,816.23	0.00	0.00	11,800.04	-240.00	-338.00	-222.78	0.00	0.00	0.00
Start Build 10.00									
11,850.00	3.38	359.06	11,833.79	-239.01	-338.02	-221.78	10.00	10.00	0.00
11,900.00	8.38	359.06	11,883.51	-233.89	-338.10	-216.67	10.00	10.00	0.00
11,950.00	13.38	359.06	11,932.60	-224.46	-338.25	-207.24	10.00	10.00	0.00
11,973.14	15.69	359.06	11,955.00	-218.65	-338.35	-201.44	10.00	10.00	0.00
Wolfcamp									
12,000.00	18.38	359.06	11,980.68	-210.79	-338.48	-193.57	10.00	10.00	0.00
12,017.29	20.11	359.06	11,997.00	-205.09	-338.57	-187.88	10.00	10.00	0.00
Wolfcamp A									
12,050.00	23.38	359.06	12,027.38	-192.98	-338.77	-175.77	10.00	10.00	0.00
12,100.00	28.38	359.06	12,072.35	-171.16	-339.12	-153.97	10.00	10.00	0.00
12,150.00	33.38	359.06	12,115.25	-145.51	-339.54	-128.33	10.00	10.00	0.00
12,200.00	38.38	359.06	12,155.75	-116.23	-340.02	-99.06	10.00	10.00	0.00
12,250.00	43.38	359.06	12,193.55	-83.52	-340.56	-66.36	10.00	10.00	0.00
12,300.00	48.38	359.06	12,228.35	-47.64	-341.14	-30.50	10.00	10.00	0.00
12,350.00	53.38	359.06	12,259.88	-8.87	-341.78	8.25	10.00	10.00	0.00
12,351.87	53.56	359.06	12,261.00	-7.37	-341.80	9.76	10.00	10.00	0.00
Wolfcamp B									
12,400.00	58.38	359.06	12,287.92	32.50	-342.45	49.61	10.00	10.00	0.00
12,450.00	63.38	359.06	12,312.25	76.16	-343.17	93.25	10.00	10.00	0.00
12,500.00	68.38	359.06	12,332.68	121.77	-343.91	138.84	10.00	10.00	0.00
12,550.00	73.38	359.06	12,349.05	168.99	-344.68	186.04	10.00	10.00	0.00
12,600.00	78.38	359.06	12,361.25	217.46	-345.47	234.49	10.00	10.00	0.00
12,650.00	83.38	359.06	12,369.18	266.81	-346.28	283.81	10.00	10.00	0.00
12,700.00	88.38	359.06	12,372.77	316.65	-347.10	333.64	10.00	10.00	0.00
12,716.23	90.00	359.06	12,373.00	332.88	-347.36	349.85	10.00	10.00	0.00
Start 9787.08 hold at 12716.23 MD - HZ Target									
12,800.00	90.00	359.06	12,373.00	416.64	-348.73	433.58	0.00	0.00	0.00
12,900.00	90.00	359.06	12,373.00	516.63	-350.36	533.52	0.00	0.00	0.00
13,000.00	90.00	359.06	12,373.00	616.61	-352.00	633.46	0.00	0.00	0.00
13,100.00	90.00	359.06	12,373.00	716.60	-353.63	733.41	0.00	0.00	0.00
13,200.00	90.00	359.06	12,373.00	816.59	-355.26	833.35	0.00	0.00	0.00
13,300.00	90.00	359.06	12,373.00	916.57	-356.90	933.29	0.00	0.00	0.00
13,400.00	90.00	359.06	12,373.00	1,016.56	-358.53	1,033.23	0.00	0.00	0.00
13,500.00	90.00	359.06	12,373.00	1,116.55	-360.16	1,133.18	0.00	0.00	0.00
13,600.00	90.00	359.06	12,373.00	1,216.53	-361.80	1,233.12	0.00	0.00	0.00
13,700.00	90.00	359.06	12,373.00	1,316.52	-363.43	1,333.06	0.00	0.00	0.00
13,800.00	90.00	359.06	12,373.00	1,416.51	-365.07	1,433.01	0.00	0.00	0.00
13,900.00	90.00	359.06	12,373.00	1,516.49	-366.70	1,532.95	0.00	0.00	0.00
14,000.00	90.00	359.06	12,373.00	1,616.48	-368.33	1,632.89	0.00	0.00	0.00
14,100.00	90.00	359.06	12,373.00	1,716.47	-369.97	1,732.84	0.00	0.00	0.00
14,200.00	90.00	359.06	12,373.00	1,816.45	-371.60	1,832.78	0.00	0.00	0.00
14,300.00	90.00	359.06	12,373.00	1,916.44	-373.23	1,932.72	0.00	0.00	0.00
14,400.00	90.00	359.06	12,373.00	2,016.43	-374.87	2,032.66	0.00	0.00	0.00
14,500.00	90.00	359.06	12,373.00	2,116.41	-376.50	2,132.61	0.00	0.00	0.00
14,600.00	90.00	359.06	12,373.00	2,216.40	-378.14	2,232.55	0.00	0.00	0.00
14,700.00	90.00	359.06	12,373.00	2,316.39	-379.77	2,332.49	0.00	0.00	0.00
14,800.00	90.00	359.06	12,373.00	2,416.37	-381.40	2,432.44	0.00	0.00	0.00
14,900.00	90.00	359.06	12,373.00	2,516.36	-383.04	2,532.38	0.00	0.00	0.00
15,000.00	90.00	359.06	12,373.00	2,616.35	-384.67	2,632.32	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY

Planning Report

total

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well LOE Federal 801H
Company:	Franklin Mountain Energy	**TVD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Project:	Lea County, NM (NAD83)	**MD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Site:	LOE West Pad	**North Reference:**	Grid
Well:	LOE Federal 801H	**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 (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,100.00	90.00	359.06	12,373.00	2,716.33	-386.30	2,732.27	0.00	0.00	0.00
15,200.00	90.00	359.06	12,373.00	2,816.32	-387.94	2,832.21	0.00	0.00	0.00
15,300.00	90.00	359.06	12,373.00	2,916.31	-389.57	2,932.15	0.00	0.00	0.00
15,400.00	90.00	359.06	12,373.00	3,016.29	-391.20	3,032.10	0.00	0.00	0.00
15,500.00	90.00	359.06	12,373.00	3,116.28	-392.84	3,132.04	0.00	0.00	0.00
15,600.00	90.00	359.06	12,373.00	3,216.27	-394.47	3,231.98	0.00	0.00	0.00
15,700.00	90.00	359.06	12,373.00	3,316.25	-396.11	3,331.92	0.00	0.00	0.00
15,800.00	90.00	359.06	12,373.00	3,416.24	-397.74	3,431.87	0.00	0.00	0.00
15,900.00	90.00	359.06	12,373.00	3,516.22	-399.37	3,531.81	0.00	0.00	0.00
16,000.00	90.00	359.06	12,373.00	3,616.21	-401.01	3,631.75	0.00	0.00	0.00
16,100.00	90.00	359.06	12,373.00	3,716.20	-402.64	3,731.70	0.00	0.00	0.00
16,200.00	90.00	359.06	12,373.00	3,816.18	-404.27	3,831.64	0.00	0.00	0.00
16,300.00	90.00	359.06	12,373.00	3,916.17	-405.91	3,931.58	0.00	0.00	0.00
16,400.00	90.00	359.06	12,373.00	4,016.16	-407.54	4,031.53	0.00	0.00	0.00
16,500.00	90.00	359.06	12,373.00	4,116.14	-409.17	4,131.47	0.00	0.00	0.00
16,600.00	90.00	359.06	12,373.00	4,216.13	-410.81	4,231.41	0.00	0.00	0.00
16,700.00	90.00	359.06	12,373.00	4,316.12	-412.44	4,331.36	0.00	0.00	0.00
16,800.00	90.00	359.06	12,373.00	4,416.10	-414.08	4,431.30	0.00	0.00	0.00
16,900.00	90.00	359.06	12,373.00	4,516.09	-415.71	4,531.24	0.00	0.00	0.00
17,000.00	90.00	359.06	12,373.00	4,616.08	-417.34	4,631.18	0.00	0.00	0.00
17,100.00	90.00	359.06	12,373.00	4,716.06	-418.98	4,731.13	0.00	0.00	0.00
17,200.00	90.00	359.06	12,373.00	4,816.05	-420.61	4,831.07	0.00	0.00	0.00
17,300.00	90.00	359.06	12,373.00	4,916.04	-422.24	4,931.01	0.00	0.00	0.00
17,400.00	90.00	359.06	12,373.00	5,016.02	-423.88	5,030.96	0.00	0.00	0.00
17,500.00	90.00	359.06	12,373.00	5,116.01	-425.51	5,130.90	0.00	0.00	0.00
17,600.00	90.00	359.06	12,373.00	5,216.00	-427.15	5,230.84	0.00	0.00	0.00
17,700.00	90.00	359.06	12,373.00	5,315.98	-428.78	5,330.79	0.00	0.00	0.00
17,800.00	90.00	359.06	12,373.00	5,415.97	-430.41	5,430.73	0.00	0.00	0.00
17,900.00	90.00	359.06	12,373.00	5,515.96	-432.05	5,530.67	0.00	0.00	0.00
18,000.00	90.00	359.06	12,373.00	5,615.94	-433.68	5,630.61	0.00	0.00	0.00
18,100.00	90.00	359.06	12,373.00	5,715.93	-435.31	5,730.56	0.00	0.00	0.00
18,200.00	90.00	359.06	12,373.00	5,815.92	-436.95	5,830.50	0.00	0.00	0.00
18,300.00	90.00	359.06	12,373.00	5,915.90	-438.58	5,930.44	0.00	0.00	0.00
18,400.00	90.00	359.06	12,373.00	6,015.89	-440.21	6,030.39	0.00	0.00	0.00
18,500.00	90.00	359.06	12,373.00	6,115.88	-441.85	6,130.33	0.00	0.00	0.00
18,600.00	90.00	359.06	12,373.00	6,215.86	-443.48	6,230.27	0.00	0.00	0.00
18,700.00	90.00	359.06	12,373.00	6,315.85	-445.12	6,330.22	0.00	0.00	0.00
18,800.00	90.00	359.06	12,373.00	6,415.84	-446.75	6,430.16	0.00	0.00	0.00
18,900.00	90.00	359.06	12,373.00	6,515.82	-448.38	6,530.10	0.00	0.00	0.00
19,000.00	90.00	359.06	12,373.00	6,615.81	-450.02	6,630.05	0.00	0.00	0.00
19,100.00	90.00	359.06	12,373.00	6,715.80	-451.65	6,729.99	0.00	0.00	0.00
19,200.00	90.00	359.06	12,373.00	6,815.78	-453.28	6,829.93	0.00	0.00	0.00
19,300.00	90.00	359.06	12,373.00	6,915.77	-454.92	6,929.87	0.00	0.00	0.00
19,400.00	90.00	359.06	12,373.00	7,015.76	-456.55	7,029.82	0.00	0.00	0.00
19,500.00	90.00	359.06	12,373.00	7,115.74	-458.19	7,129.76	0.00	0.00	0.00
19,600.00	90.00	359.06	12,373.00	7,215.73	-459.82	7,229.70	0.00	0.00	0.00
19,700.00	90.00	359.06	12,373.00	7,315.72	-461.45	7,329.65	0.00	0.00	0.00
19,800.00	90.00	359.06	12,373.00	7,415.70	-463.09	7,429.59	0.00	0.00	0.00
19,900.00	90.00	359.06	12,373.00	7,515.69	-464.72	7,529.53	0.00	0.00	0.00
20,000.00	90.00	359.06	12,373.00	7,615.68	-466.35	7,629.48	0.00	0.00	0.00
20,100.00	90.00	359.06	12,373.00	7,715.66	-467.99	7,729.42	0.00	0.00	0.00
20,200.00	90.00	359.06	12,373.00	7,815.65	-469.62	7,829.36	0.00	0.00	0.00
20,300.00	90.00	359.06	12,373.00	7,915.64	-471.25	7,929.30	0.00	0.00	0.00
20,400.00	90.00	359.06	12,373.00	8,015.62	-472.89	8,029.25	0.00	0.00	0.00

FRANKLIN MOUNTAIN ENERGY

Planning Report

Database:	EDM 5000.1 Single User Db	**Local Co-ordinate Reference:**	Well LOE Federal 801H
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Project:	Lea County, NM (NAD83)	**MD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Site:	LOE West Pad	**North Reference:**	Grid
Well:	LOE Federal 801H	**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 (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,500.00	90.00	359.06	12,373.00	8,115.61	-474.52	8,129.19	0.00	0.00	0.00
20,600.00	90.00	359.06	12,373.00	8,215.60	-476.16	8,229.13	0.00	0.00	0.00
20,700.00	90.00	359.06	12,373.00	8,315.58	-477.79	8,329.08	0.00	0.00	0.00
20,800.00	90.00	359.06	12,373.00	8,415.57	-479.42	8,429.02	0.00	0.00	0.00
20,900.00	90.00	359.06	12,373.00	8,515.56	-481.06	8,528.96	0.00	0.00	0.00
21,000.00	90.00	359.06	12,373.00	8,615.54	-482.69	8,628.91	0.00	0.00	0.00
21,100.00	90.00	359.06	12,373.00	8,715.53	-484.32	8,728.85	0.00	0.00	0.00
21,200.00	90.00	359.06	12,373.00	8,815.52	-485.96	8,828.79	0.00	0.00	0.00
21,300.00	90.00	359.06	12,373.00	8,915.50	-487.59	8,928.74	0.00	0.00	0.00
21,400.00	90.00	359.06	12,373.00	9,015.49	-489.23	9,028.68	0.00	0.00	0.00
21,500.00	90.00	359.06	12,373.00	9,115.48	-490.86	9,128.62	0.00	0.00	0.00
21,600.00	90.00	359.06	12,373.00	9,215.46	-492.49	9,228.56	0.00	0.00	0.00
21,700.00	90.00	359.06	12,373.00	9,315.45	-494.13	9,328.51	0.00	0.00	0.00
21,800.00	90.00	359.06	12,373.00	9,415.44	-495.76	9,428.45	0.00	0.00	0.00
21,900.00	90.00	359.06	12,373.00	9,515.42	-497.39	9,528.39	0.00	0.00	0.00
22,000.00	90.00	359.06	12,373.00	9,615.41	-499.03	9,628.34	0.00	0.00	0.00
22,100.00	90.00	359.06	12,373.00	9,715.40	-500.66	9,728.28	0.00	0.00	0.00
22,200.00	90.00	359.06	12,373.00	9,815.38	-502.29	9,828.22	0.00	0.00	0.00
22,300.00	90.00	359.06	12,373.00	9,915.37	-503.93	9,928.17	0.00	0.00	0.00
22,400.00	90.00	359.06	12,373.00	10,015.36	-505.56	10,028.11	0.00	0.00	0.00
22,503.32	90.00	359.06	12,373.00	10,118.66	-507.25	10,131.37	0.00	0.00	0.00
TD at 22503.32									

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
LOE Federal 801H - F - plan hits target center - Point	0.00	0.01	12,373.00	10,118.66	-507.25	415,107.08	852,356.40	32.1372199	-103.3285311

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
22,533.10		20" Casing	20	24

FRANKLIN MOUNTAIN ENERGY

Planning Report

total

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Project:	Lea County, NM (NAD83)	**MD Reference:**	RKB +30' @ 3138.00usft (Original Well Elev)
Site:	LOE West Pad	**North Reference:**	Grid
Well:	LOE Federal 801H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #2		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
30.00	30.00	Cenozoic Alluvium (surface)			
694.00	694.00	Possible Losses			
773.00	773.00	Rustler			
943.00	943.00	Capitan			
1,155.00	1,155.00	Salado			
2,635.96	2,633.00	Base Salt			
4,999.44	4,989.00	Lamar			
5,144.90	5,134.00	Bell Canyon			
6,037.73	6,024.00	Cherry Canyon			
7,286.19	7,270.00	Brushy Canyon			
8,636.19	8,620.00	Bone Spring Lime			
8,664.19	8,648.00	Avalon			
8,877.19	8,861.00	*Chert Zone*			
10,021.19	10,005.00	First Bone Spring Sand			
10,163.19	10,147.00	Second Bone Spring Carbonates			
10,488.19	10,472.00	Second Bone Spring Sand			
11,030.19	11,014.00	Third Bone Spring Carbonates			
11,668.19	11,652.00	Third Bone Spring Sand			
11,973.14	11,955.00	Wolfcamp			
12,017.29	11,997.00	Wolfcamp A			
12,351.87	12,261.00	Wolfcamp B			
12,716.23	12,373.00	HZ Target			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
1,500.00	1,500.00	0.00	0.00	Start Build 1.50
1,804.11	1,803.79	-7.01	-9.87	Start 4907.97 hold at 1804.11 MD
6,712.08	6,696.21	-232.99	-328.13	Start Drop -1.50
7,016.19	7,000.00	-240.00	-338.00	Start 4800.04 hold at 7016.19 MD
11,816.23	11,800.04	-240.00	-338.00	Start Build 10.00
12,716.23	12,373.00	332.88	-347.36	Start 9787.08 hold at 12716.23 MD
22,503.32	12,373.00	10,118.66	-507.25	TD at 22503.32

PECOS DISTRICT
SURFACE USE
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Franklin Mountain Energy Company LLC
LEASE NO.:	NMNM114998, NMNM138898, NMNM01228, NMNM0001228A
COUNTY:	Lea

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

Approval Date: 11/17/2022

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Watershed:

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

VRM IV:

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, Carlsbad Canyon from the BLM Standard Environmental Color Chart (CC-001: June 2008).

Short-term mitigation measures include painting all above-ground structures that are not subject to safety requirements (including meter housing) Carlsbad Canyon, which is a flat non-reflective paint color listed in the BLM Standard Environmental Color Chart (CC-001: June 2013). Long-term mitigation measures include the removal of wells and associated infrastructure following abandonment (end of cost-effective production). Previously impacted areas will be reclaimed by removing structures and caliche pads, returning disturbed areas to natural grade, and revegetating with an approved BLM seed mixture; thereby eliminating visual impacts.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. EXCLOSURE FENCING (CELLARS & PITS)

Exclosure Fencing
The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

VII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Exclosure Netting (Open-top Tanks)
Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or

livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

Chemical and Fuel Secondary Containment and Exclosure Screening
The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

Open-Vent Exhaust Stack Exclosures
The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone*.) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

Containment Structures
Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, **Carlsbad Canyon** from the BLM Standard Environmental Color Chart (CC-001: June 2008).

VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover

operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 3, for Shallow Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass (*Setaria macrostachya*)	1.0
Green Sprangletop (*Leptochloa dubia*)	2.0
Sideoats Grama (*Bouteloua curtipendula)*	5.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Franklin Mountain Energy LLC**
LEASE NO.:	**NMNM138898**
LOCATION:	Section 24, T.25 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	**LOE Federal 801H**
SURFACE HOLE FOOTAGE:	285'/S & 800'/W
BOTTOM HOLE FOOTAGE	150'/N & 380'/W
ATS/API ID:	**ATS-22-645**
Sundry ID:	**N/A**

WELL NAME & NO.:	**LOE Federal 802H**
SURFACE HOLE FOOTAGE:	285'/S & 825'/W
BOTTOM HOLE FOOTAGE	150'/N & 1306'/W
ATS/API ID:	**ATS-22-646**
Sundry ID:	**N/A**

COA

H2S	○ Yes	◉ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	◉ None	○ Flex Hose	○ Other
Wellhead	○ Conventional	○ Multibowl	◉ Both
Wellhead Variance	○ Diverter		
Other	☑ 4 String	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Cement Squeeze	☐ EchoMeter	
Special Requirements	☐ Water Disposal	☐ COM	☐ Unit
Special Requirements Variance	☐ Break Testing	☐ Offline Cementing	

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

Approval Date: 11/17/2022

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **950 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    Option 1 (Single Stage):

    - Cement to surface. If cement does not circulate see B.1.a, c-d above.

    Option 2:

    Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

    a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.

    b. Second stage above DV tool:

    - Cement to surface. If cement does not circulate, contact the appropriate BLM office.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:

    - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** intermediate casing shoe shall be **5000 (5M)** psi.

c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7-5/8** inch intermediate casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

Option 2:

a. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

 Approval Date: 11/17/2022

c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not

hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

LVO 9/8/2022

Approval Date: 11/17/2022

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 166236

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 166236
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
pkautz	Will require a File As Drilled C-102 and a Directional Survey with the C-104	12/13/2022
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	12/13/2022
pkautz	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	12/13/2022
pkautz	Cement is required to circulate on both surface and intermediate1 strings of casing	12/13/2022