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.: NMNM132081

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.: EL PASO FED COM [330669] 705H

2. Name of Operator: FRANKLIN MOUNTAIN ENERGY LLC [373910]

9. API Well No.: 30-025-48914

3a. Address: 44 COOK STREET SUITE 1000, DENVER, CO 80206

3b. Phone No. *(include area code)*: (720) 414-7868

10. Field and Pool, or Exploratory: UPR WOLFCAMP [98187]/WC-025 G-09

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

At surface: LOT 1 / 263 FNL / 685 FEL / LAT 32.16599 / LONG -103.314934

At proposed prod. zone: NENE / 150 FNL / 1226 FEL / LAT 32.195336 / LONG -103.316683

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 1/T25S/R35E/NMP

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

12. County or Parish: LEA

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 263 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 320.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 35 feet

19. Proposed Depth: 11552 feet / 22482 feet

20. BLM/BIA Bond No. in file: FED: NMB001761

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3334 feet

22. Approximate date work will start*: 06/01/2021

23. Estimated duration: 30 days

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
(Electronic Submission)	JENNIFER SUMMERS / Ph: (720) 414-7868	09/29/2020

Title: Field Technician

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575) 234-5959	04/09/2021

Title	Office
Assistant Field Manager Lands & Minerals	Carlsbad Field 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.

GCP Rec 04/26/2021

APPROVED WITH CONDITIONS

KZ
05/25/2021

SL

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/09/2021

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.

(Continued on page 3)

Approval Date: 04/09/2021

Additional Operator Remarks

Location of Well

0. SHL: LOT 1 / 263 FNL / 685 FEL / TWSP: 25S / RANGE: 35E / SECTION: 1 / LAT: 32.16599 / LONG: -103.314934 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 0 FSL / 1226 FEL / TWSP: 24S / RANGE: 35E / SECTION: 25 / LAT: 32.181236 / LONG: -103.316683 (TVD: 11701 feet, MD: 17300 feet)

PPP: SESE / 150 FSL / 1226 FEL / TWSP: 24S / RANGE: 35E / SECTION: 36 / LAT: 32.167128 / LONG: -103.316683 (TVD: 11847 feet, MD: 12215 feet)

PPP: SESE / 0 FSL / 1226 FEL / TWSP: 24S / RANGE: 35E / SECTION: 36 / LAT: 32.166716 / LONG: -103.316683 (TVD: 11838 feet, MD: 12100 feet)

BHL: NENE / 150 FNL / 1226 FEL / TWSP: 24S / RANGE: 35E / SECTION: 25 / LAT: 32.195336 / LONG: -103.316683 (TVD: 11552 feet, MD: 22482 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
30-025-48914	98187	WC-025 G-09 S253502D;UPR WOLFCAMP

[4] Property Code	[5] Property Name	[6] Well Number
330669	EL PASO FED COM	705H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373910	FRANKLIN MOUNTAIN ENERGY LLC	3334.5'

[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
1	1	25S	35E		263	NORTH	685	EAST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	25	24S	35E		150	NORTH	1226	EAST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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

[16] ● = SURFACE HOLE LOCATION
◇ = KICK OFF POINT/PPP
○ = BOTTOM HOLE LOCATION
▲ = SECTION CORNER LOCATED
△ = SECTION CORNER RE-EST. (Not Set on Ground.)

NAD 83 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'57.56" (32.165990°)
LONGITUDE = 103°18'53.76" (103.314934°)
NAD 27 (SURFACE HOLE LOCATION)
LATITUDE = 32°09'57.11" (32.165863°)
LONGITUDE = 103°18'52.09" (103.314470°)
STATE PLANE NAD 83 (N.M. EAST)
N: 425613.17' E: 856466.19'
STATE PLANE NAD 27 (N.M. EAST)
N: 425554.34' E: 815279.70'

NAD 83 (KICK OFF POINT)
LATITUDE = 32°09'55.83" (32.165508°)
LONGITUDE = 103°19'00.06" (103.316683°)
NAD 27 (KICK OFF POINT)
LATITUDE = 32°09'55.37" (32.165382°)
LONGITUDE = 103°18'58.38" (103.316218°)
STATE PLANE NAD 83 (N.M. EAST)
N: 425432.87' E: 855926.84'
STATE PLANE NAD 27 (N.M. EAST)
N: 425374.05' E: 814740.35'

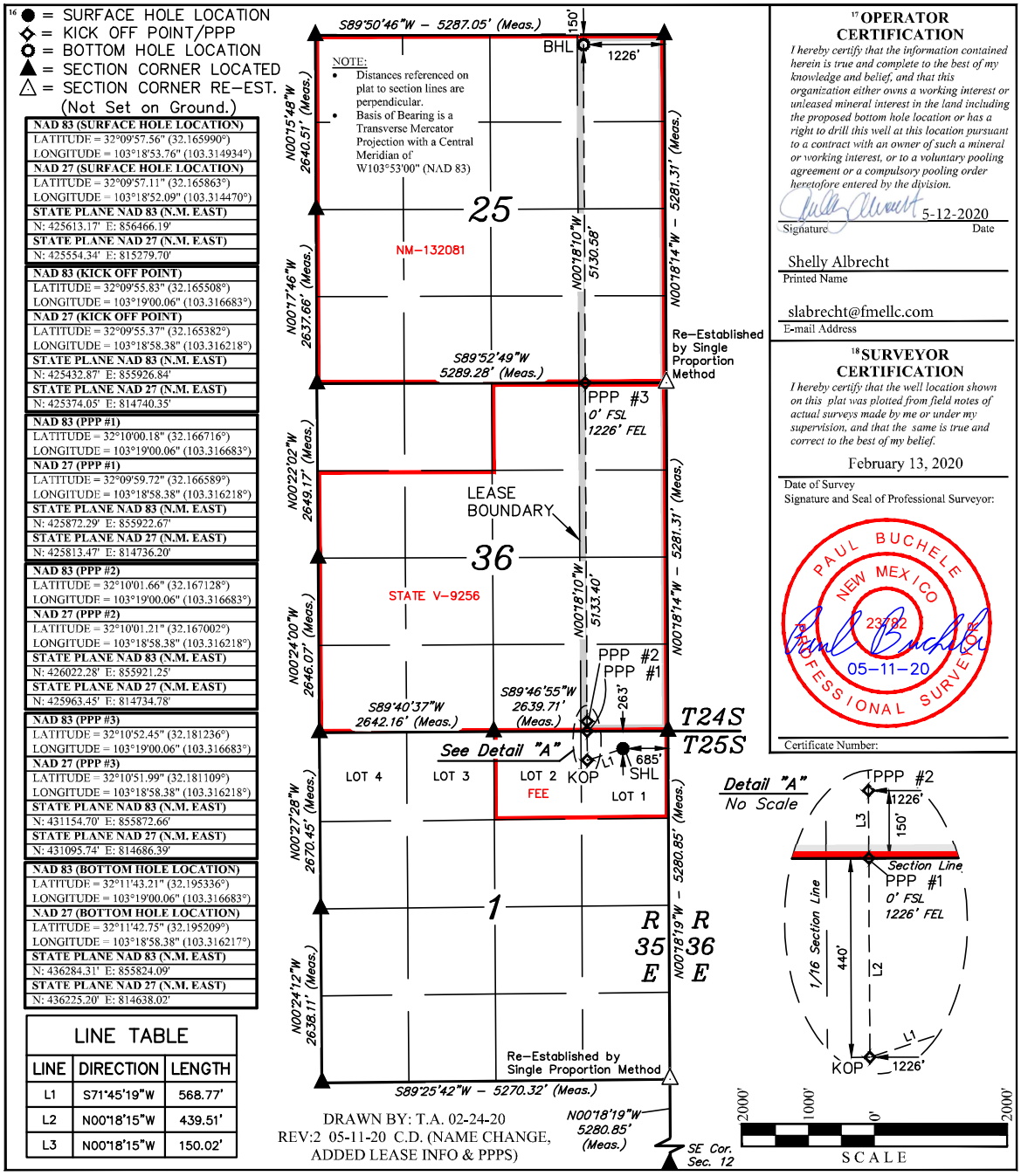
NAD 83 (PPP #1)
LATITUDE = 32°10'00.18" (32.166716°)
LONGITUDE = 103°19'00.06" (103.316683°)
NAD 27 (PPP #1)
LATITUDE = 32°09'59.72" (32.166589°)
LONGITUDE = 103°18'58.38" (103.316218°)
STATE PLANE NAD 83 (N.M. EAST)
N: 425872.29' E: 855922.67'
STATE PLANE NAD 27 (N.M. EAST)
N: 425813.47' E: 814736.20'

NAD 83 (PPP #2)
LATITUDE = 32°10'01.66" (32.167128°)
LONGITUDE = 103°19'00.06" (103.316683°)
NAD 27 (PPP #2)
LATITUDE = 32°10'01.21" (32.167002°)
LONGITUDE = 103°18'58.38" (103.316218°)
STATE PLANE NAD 83 (N.M. EAST)
N: 426022.28' E: 855921.25'
STATE PLANE NAD 27 (N.M. EAST)
N: 425963.45' E: 814734.78'

NAD 83 (PPP #3)
LATITUDE = 32°10'52.45" (32.181236°)
LONGITUDE = 103°19'00.06" (103.316683°)
NAD 27 (PPP #3)
LATITUDE = 32°10'51.99" (32.181109°)
LONGITUDE = 103°18'58.38" (103.316218°)
STATE PLANE NAD 83 (N.M. EAST)
N: 431154.70' E: 855872.66'
STATE PLANE NAD 27 (N.M. EAST)
N: 431095.74' E: 814686.39'

NAD 83 (BOTTOM HOLE LOCATION)
LATITUDE = 32°11'43.21" (32.195336°)
LONGITUDE = 103°19'00.06" (103.316683°)
NAD 27 (BOTTOM HOLE LOCATION)
LATITUDE = 32°11'42.75" (32.195209°)
LONGITUDE = 103°18'58.38" (103.316217°)
STATE PLANE NAD 83 (N.M. EAST)
N: 436284.31' E: 855824.09'
STATE PLANE NAD 27 (N.M. EAST)
N: 436225.20' E: 814638.02'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S71°45'19"W	568.77'
L2	N00°18'15"W	439.51'
L3	N00°18'15"W	150.02'



DRAWN BY: T.A. 02-24-20
REV:2 05-11-20 C.D. (NAME CHANGE, ADDED LEASE INFO & PPPS)

[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 5-12-2020 Date

Shelly Albrecht
Printed Name

slabrecht@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.

February 13, 2020
Date of Survey
Signature and Seal of Professional Surveyor:

PAUL BUCHELE NEW MEXICO 23782 PROFESSIONAL SURVEYOR 05-11-20

Certificate Number:

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

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

Submit Original to Appropriate District Office

GAS CAPTURE PLAN

Date: 1/29/2021

☒ Original Operator & OGRID No.: Franklin Mountain Energy, LLC 373910
☐ Amended - Reason for Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomplete to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
El Paso Fed Com 604H	TBD	Lot 1-1-25S-35E	263 FNL 650 FEL	1100 +/-	Flared	New well; expect to tie-in at IP
El Paso Fed Com 705H	TBD **30-025-48914**	Lot 1-1-25S-35E	263 FNL 685 FEL	1100 +/-	Flared	New well; expect to tie-in at IP
El Paso Fed Com 706H	TBD	Lot 1-1-25S-35E	263 FNL 615 FEL	1100 +/-	Flared	New well; expect to tie-in at IP
KC7 Fed Com 603H	TBD	Lot 1-1-25S-35E	264 FNL 720 FEL	1100 +/-	Flared	New well; expect to tie-in at IP

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to Lucid Energy and will be connected to Lucid Energy's gathering system located in Lea County, New Mexico. It will require 1,000' of pipeline to connect the facility to low/high pressure gathering system. Franklin Mountain Energy, LLC provides (periodically) to Lucid Energy a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, Franklin Mountain Energy, LLC and Lucid Energy have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Lucid Energy's Red Hills Processing Plant located in Sec.13, Twn. 24S, Rng. 33E, Lea County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to permanent central tank battery and gas will be sold or flared. Gas sales should start as soon as the wells start producing gas unless there are operational issues on Lucid Energy's system at that time. Based on current information, it is Franklin Mountain Energy's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
  - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
  - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
  - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

FRANKLIN MOUNTAIN ENERGY

El Paso Fed Com 705H

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)	3,335'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,286'	1,079'			Carbonates
Salado	2,168'	1,197'			Salt, Carbonate & Clastics
Base Salt	17'	3,348'			Shaley Carbonate & Shale
Lamar	-1,548'	4,913'			Carbonate & Clastics
Bell Canyon	-1,606'	4,971'			Sandstone - oil/gas/water
Cherry Canyon	-2,494'	5,859'			Sandstone - oil/gas/water
Brushy Canyon	-3,915'	7,280'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,190'	8,555'			Shale/Carbonates - oil/gas
Avalon	-5,287'	8,652'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,479'	9,844'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,609'	9,974'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-6,985'	10,350'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,533'	10,898'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,065'	11,430'			Sandstone - oil/gas/water
Wolfcamp	-8,382'	11,747'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,417'	11,782'			Overpressure Shale - Oil/Gas
HZ Target	-8,494'	11,859'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,609'	11,974'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400’	Fresh Water
Delaware Sands	4,913’	Oil
Bone Spring	9,844’	Oil
Wolfcamp	11,747’	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 casings strings will be run new. Safety factors calculated assuming the well is vertical.

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			
								Burst	Collapse	Tension	Coupling
Surface 13 3/8"	54.5	J-55	2730	1130	853	BTC 909	1300	1.18	1.67	4.99	5.32
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	BTC 1042	5400	1.72	1.67	2.90	3.30
Intermediate 7 5/8"	29.7	HCP-110	8280	7150	827	Stinger 564	11850	1.12	1.29	1.83	1.25
Long string 5 1/2"	23	P-110	14520	14520	729	Anaconda 656	22482	1.32	1.38	1.18	1.06

Preliminary plan is to set 7 5/8" string before entering Wolfcamp formation at 11,658'TVD/11,850'MD at 72° Inc due too potential overpressure. Safety factors calculated assuming the well is vertical.

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	Casing 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	795	Extenda Cem, 13.5 ppg Class C, 3lb/sk Kol-Seal 0.125pps Poly-E-Flake	1.747	9.06	0	334	HalCem TM, 14.8 ppg, Class C, 1% CaCl2, 0.125pps Celo-Flake	1.349	6.51	1000	100%
Int1	12.25	9.625	5400	1167	Neocem TM, 11.5 ppg, Class C 5% Salt, 0.125 pps Poly-E-Flake, 3lb/sk Kol-Seal	2.444	14.32	0	153	HalCem TM, 14.8 ppg, Class C, 0.1% HR 800 .125 pps Poly-E-Flake	1.334	6.42	5100	100%
Int2	8.75	7.625	11850	332	NeoCem, 11 ppg, Class C 3lb/sk Bridgemaker Gel, 5% Salt, 5pps LCM, 0.25pps Cello-Flake	2.798	17.15	4400	112	NeoCem 13.2 ppg, Class C 0.25 pps Cello-Flake, 2% CalCl2	1.44	7.29	10850	50%
Prod	6.75	5.5	22482	857	NeoCem, 13.5 ppg, Gas Migration Control	1.357	6.65	10850						20%

5. Minimum Specifications for Pressure Control:

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5,000-psi WP). Both units will be hydraulically operated, and the ram-type will
be equipped with blind rams on bottom and 4 ½" x 7" variable pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.
Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5,000/250 psig and the annular preventer to 5,000/250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the second intermediate casing, the ram-type BOP and accessory equipment will be tested to 10,000/250 psig and the annular preventer to 5,000/250 psig. The second intermediate casing will be tested to 2000 psi for 30 minutes prior to drillout.
Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

FRANKLIN MOUNTAIN ENERGY

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' – 11,850'	Brine	8.8-10.2	28-34	N/c
11,850' – 22,482' Lateral	Oil Base	10.0-11.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 10-11 ppg. In order to maintain hole stability, mud weights up to 12.5 ppg may be utilized.
An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.
Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

7. Auxiliary well control and monitoring equipment:

(A) A kelly cock will be kept in the drill string at all times.
(B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
(C) H2S monitoring and detection equipment will be utilized from surface casing point to TD.
(D) A wear bushing will be installed in the wellhead prior to drilling out of the surface casing.

8. Logging, testing and coring program:

GR–CCL-CNL Will be run in cased hole during completions phase of operations.
Open-hole logs are not planned for this well.

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

The estimated bottom-hole temperature at 11,847' TVD (deepest point of the well) is 195F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,594 psig (based on 12.5 ppg MW). Hydrogen sulfate may be present in the area. All necessary precautions will be taken before drilling operations commence. See Hydrogen Sulfide Plan below:

10. Hydrogen Sulfide Plan:

A. All personnel shall receive proper awareness H2S training.
B. Briefing Area: two perpendicular areas will be designated by signs and readily accessible.
C. Required Emergency Equipment
    a. Well Control Equipment
        i. Flare line 150' from wellhead to be ignited by auto ignition sparking system.
        ii. Choke manifold with a remotely operated hydraulic choke.
        iii. Mud/gas separator
    b. Protective equipment for essential personnel
        i. Breathing Apparatus
            1. Rescue packs (SCBA) – 1 unit shall be placed at each briefing area, 2 shall be stored in a safety trailer on site.
            2. Work/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.

FRANKLIN MOUNTAIN ENERGY

12. Disposal/environmental concerns:

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

13. Wellhead:

A multi-bowl wellhead system will be utilized.
After running the 13 3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 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 Cameron 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.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Franklin Mountain Energy LLC**
LEASE NO.:	**NMNM132081**
LOCATION:	Section 1, T.25 S., R.35 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	El Paso Fed Com 604H
SURFACE HOLE FOOTAGE:	263'/N & 650'/E
BOTTOM HOLE FOOTAGE	150'/N & 650'/E

WELL NAME & NO.:	El Paso Fed Com 705H
SURFACE HOLE FOOTAGE:	263'/N & 685'/E
BOTTOM HOLE FOOTAGE	150'/N & 1226'/E

WELL NAME & NO.:	El Paso Fed Com 706H
SURFACE HOLE FOOTAGE:	263'/N & 615'/E
BOTTOM HOLE FOOTAGE	150'/N & 350'/E

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
Other	☑ 4 String Area	☑ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit

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: 04/09/2021

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1335 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt) 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 shall be set at approximately **5400 feet** is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.**

❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.

- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to 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 **50 feet** on top of Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. If cement does not circulate see B.1.a, c-d above.
     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

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 **5000 (5M)** psi.

b. 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:

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 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.

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.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

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) 393-3612

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.

Approval Date: 04/09/2021

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

 Approval Date: 04/09/2021

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.

FRANKLIN MOUNTAIN ENERGY

Geologic Prognosis

Well Name	**El Paso Fed Com 705H**
Operator	Franklin Mountain Energy, LLC
Project Area	FMM Unit
Well Type	10,000' Upper Wolfcamp Lateral
API	
Permit Number	
Rig	

State	NM	**County**	Lea						
SHL	**Township**	25S/35E	**Section**	1	685'	FEL	263'	FNL	
BHL	**Township**	24S/35E	**Section**	25	1,226'	FEL	150'	FNL	
Surface Latitude			**NAD 83**	32.16599					
Surface Longitude			**NAD 83**	103.314934					
Bottom Hole Lattitude			**NAD 83**	32.195336					
Bottom Hole Longitude			**NAD 83**	103.316683					
Ground Level			3,335'	**Rig KB**	30'	**KB**	3,365'		

Formations	PROG SS	PROG TVD	Picked TVD	delta	Potential/Issues
Cenozoic Alluvium (surface)	3,335'	30'	30'	0	Sand/Gravels/unconsolidated
Rustler	2,286'	1,079'			Carbonates
Salado	2,168'	1,197'			Salt, Carbonate & Clastics
Base Salt	17'	3,348'			Shaley Carbonate & Shale
Lamar	-1,548'	4,913'			Carbonate & Clastics
Bell Canyon	-1,606'	4,971'			Sandstone - oil/gas/water
Cherry Canyon	-2,494'	5,859'			Sandstone - oil/gas/water
Brushy Canyon	-3,915'	7,280'			Sand/carb/shales - oil/gas/water
Bone Spring Lime	-5,190'	8,555'			Shale/Carbonates - oil/gas
Avalon	-5,287'	8,652'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-6,479'	9,844'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,609'	9,974'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-6,985'	10,350'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-7,533'	10,898'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-8,065'	11,430'			Sandstone - oil/gas/water
Wolfcamp	-8,382'	11,747'			Overpressure shale/sand- Oil/Gas
Wolfcamp A	-8,417'	11,782'			Overpressure Shale - Oil/Gas
HZ Target	-8,494'	11,859'			Overpressure Shale - Oil/Gas
Wolfcamp B	-8,609'	11,974'			Overpressure Shale - Oil/Gas

Target interval is expected to have an average apparent dip of ~1.7 degrees up along the lateral based on the Wolfcamp A structure

Target window tolerance is set at +/- 10'

Target Line: 11860' KBTVD @ 0' VS w/ 91.65° inc.
Offset Log: Proxy WCA 001H (30025439220100)

FME Geologist	Ben Kessel		bkessel@fmellc.com	
	Office	720-414-7868	Cell	303.868.9946
FME Engineer				

Electric Logs		From	To
Open-Hole			
	n/a		
MWD/LWD			
	MWD GR	Int. 1 Csg. Point	TD

Mud Log:

Start logging at drill out of surface casing

Sampling:	10' samples in vertical and through curve, 30' samples in lateral
Samples:	1 set dry samples at footage frequency noted above
Mud Gas:	Continuous
Daily Contact:	Email distribution of mud log/daily report at 7:30am and 4:30 pm CST

Daily Mud Log Email Distribution List

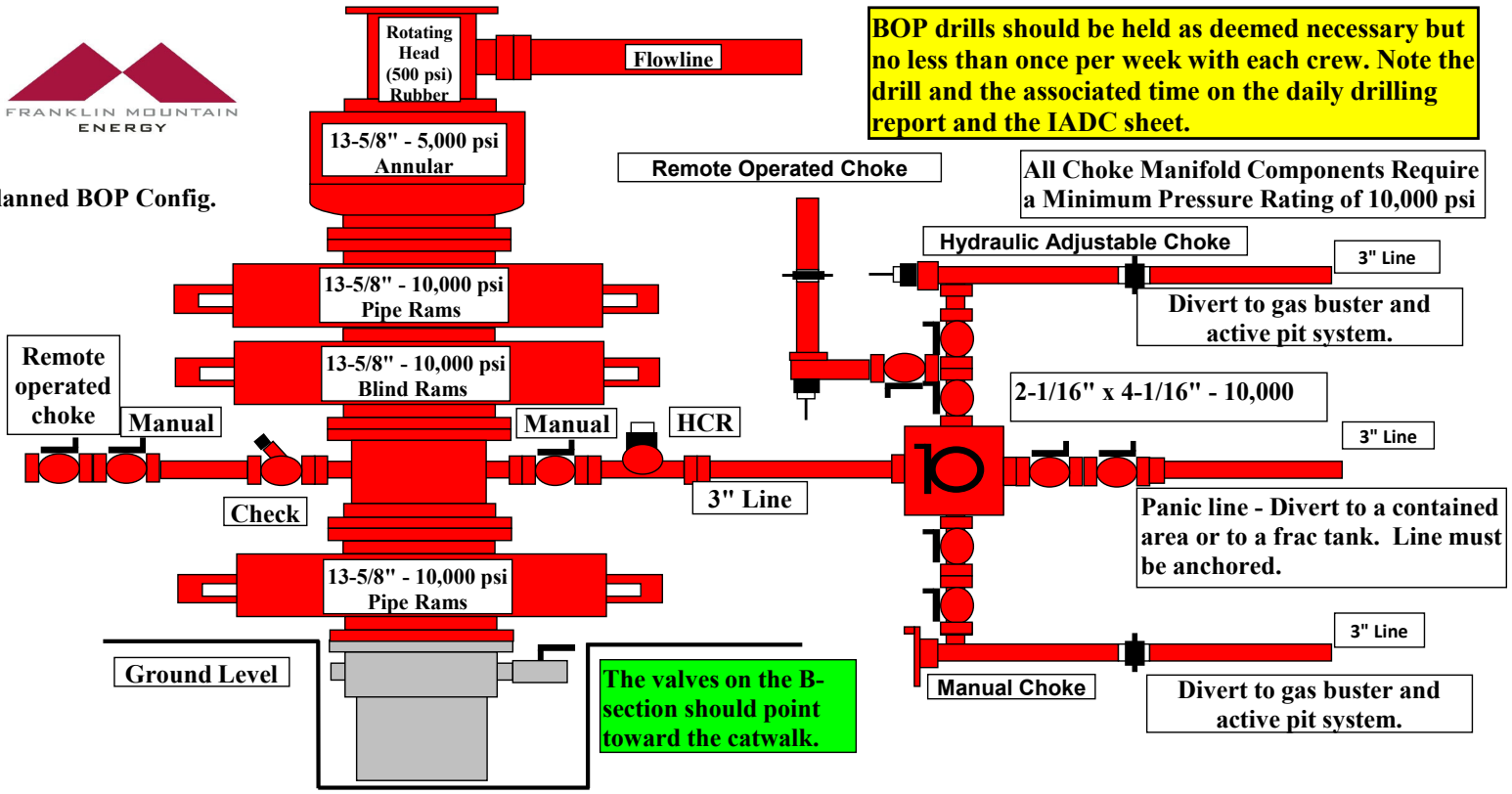
Final Mud Log Distribution

	Ben Kessel (bkessel@fmellc.com)	email	

Cuttings/Samples Shipment Information

FRANKLIN MOUNTAIN ENERGY

Planned BOP Config.



Note - Actual BOP configuration subject to change given wellsite requirements.
Lower BOP outlet can be used in place of mud cross if necessary.
Choke manifold configuration may vary but must have 1 manual and 1 adjustable choke with at least a 10,000 psi rating.

BOP Description:

Use contractor's 13-5/8", 10K double BOP (drill pipe rams on top and blind rams on bottom), single 13-5/8", 10K pipe rams beneath the double and 13-5/8", 5K annular. RU 10K psi choke manifold equipped with one manual adjustable choke and one hydraulically adjustable choke. Kill line and choke line should be located below blind ram chamber. Install two (2) full opening gate valves and a check valve on the kill line with the gate valve nearest to the wellhead. The choke line shall be equipped with a manual full opening gate valve and an HCR valve. The manual valve should be open and the HCR valve should be closed during drilling operations. Chokes should be closed at all times as well. All lines should be flushed on a regular basis to avoid blockage (barite plugging). The pressure rating of the choke and kill lines and all valves should be equal to or greater than the BOP rams. RU contractor's accumulator system.

Test the accumulator system noting the initial pressure, final pressure and the amount of time required to close the various BOP components. Prior to drilling out, pressure test the casing and BOP equipment, using test plug, as follows and record test information on the daily report. Ensure casing head valves are open while testing BOPs. Test BOPs, choke manifold and lines, HCR, standpipe, mud line and all safety valves to 5,000 psig (high) and 250 psig (low) for 5 min. Test the annular to 5,000 psig (high) and 250 (low) for 5 minutes.

Drillpipe safety valves (TIW) should be full opening and have a rated working pressure of at least 5,000 psi. Safety valves for each size of drillpipe in use with the proper connection should be available on the rig floor in front of the drawworks at all times in the open position. Safety valves with the proper crossover should also be available if drill collars have a different connection than the drillpipe. IThe appropriate wrench for all manually operated valves should be marked and readily available on the rig floor at all times.

Ensurepressure guage on choke manifold is operational. All BOP connections subjected to well pressurewill be flanged, welded or clamped. All choke lines will be straight, turns will have tee blocks or targeted and shall be anchored.

Well Control Procedure

BOP & related components will be tested to required BLM specifications. Should a well-control situation arise, a contingency plan will be implemented. The plan is as follows.

Preparation:

- Sufficient kill mud volume will be prepared in the pre-mix tank prior to testing BOP components.
- Kill mud weight will be adequate to combat Maximum Anticipated Surface Pressure
- Choke manifold system is operable set up according to the BLM requirements and connected to the kill mud storage

Execution:

During any well control issues if the annular preventer should become inoperable or a wash out occurs

- well control will continue using the upper pipe rams in place of the annular preventer.
    - Close pipe rams
    - Pump kill mud to neutralize the well control situation
- Constantly monitor situation using choke manifold
- Use Kill lines of manifold if necessary

This additional well control procedure, as required by the BLM, is applicable to testing Annular Preventor to 100% of the rating.

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

CONDITIONS

Action 25492

CONDITIONS

Operator: Franklin Mountain Energy LLC 44 Cook Street Denver, CO 80206	OGRID: 373910
	Action Number: 25492
	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	5/26/2021
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	5/26/2021