Receined by OFP: 767674023 8:18:58 A	State of New Mexico	Form C-103 ¹ of 7
Office District I – (575) 393-6161	Energy, Minerals and Natural Resources	Revised July 18, 2013
1625 N. French Dr., Hobbs, NM 88240		WELL API NO.
<u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISION	30-025-51111 5. Indicate Type of Lease
District III – (505) 334-6178	1220 South St. Francis Dr.	STATE FEE
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> – (505) 476-3460	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM 87505		
	S AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOSAL	S TO DRILL OR TO DEEPEN OR PLUG BACK TO A	Treble State Com
PROPOSALS.)	ION FOR PERMIT" (FORM C-101) FOR SUCH	8. Well Number 801H
1. Type of Well: Oil Well Ga	s Well Other	
2. Name of Operator Franklin Mountain Energy 3, LLC		9. OGRID Number 331595
3. Address of Operator		10. Pool name or Wildcat
44 Cook Street, Suite 1000, Denver, C	O 80206	[96989] KLEIN RANCH; WOLFCAMP
4. Well Location		
Unit Letter M :	265 feet from the S line and	720 feet from the W line
Section ${34}$	Township 19S Range	35E NMPM County Lea
1	1. Elevation (Show whether DR, RKB, RT, GR, e	etc.)
3	691	
12. Check App	propriate Box to Indicate Nature of Notice	ce, Report or Other Data
NOTICE OF INTE	NTION TO:	JBSEQUENT REPORT OF:
	PLUG AND ABANDON REMEDIAL W	
TEMPORARILY ABANDON 🔲 (CHANGE PLANS 🛛 COMMENCE I	DRILLING OPNS.□ P AND A □
PULL OR ALTER CASING N	MULTIPLE COMPL	ENT JOB
DOWNHOLE COMMINGLE		
CLOSED-LOOP SYSTEM		
OTHER:	OTHER:	and give pertinent dates, including estimated date
	. SEE RULE 19.15.7.14 NMAC. For Multiple	
proposed completion or recom		
Franklin Mountain Energy 3, LLC (FM drilling plan for the above referenced w	E3), Operator, respectfully requests approval to	make the following changes to the proposed
	en: '' and run 2 stage cement job in order to isolate tl	he Delaware Mountain group while drilling this
WCB well.	and run 2 stage coment job in order to isolate a	the Delaware Woaham group with drining this
Please see attached revised 14-point pla	n for details.	
Saud Data: 7/22/2023	Di Di Di	
Spud Date: //22/2023	Rig Release Date:	
I 1 1	ove is true and complete to the best of my knowle	- J J L-1:-£
I hereby certify that the information abo	ove is true and complete to the best of my knowle	edge and belief.
SIGNATURE Jacker Verley	TITLE_Dir. Ops Planning & R	RegulatoryDATE7/26/2023
	г ч н	DUONE 202 570 4057
Type or print name Rachael Overbe	y E-mail address:roverbey@	gfmellc.com PHONE:303-570-4057
ror state osy omy		
APPROVED BY:	TITLE	DATE
Conditions of Approval (if any):		



Treble State Com 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)		3,718'	3,718'	0	Sand/Gravels/unconsolidated
Rustler	1,856'	1,862'			Carbonates
Salado	1,600'	2,118'			Salt, Carbonate & Clastics
Base Salt	510'	3,208'			Shaley Carbonate & Shale
Yates	134'	3,584'			Anhydrite/shale
Seven Rivers	-369'	4,087'			Interbedded shale/carbonate
Queen	-918'	4,636'			Sandstone & dolomite & anhydrite
Cherry Canyon	-2,068'	5,786'			Sandstone - oil/gas/water
Bone Spring Lime	-4,212'	7,930'			Shale/Carbonates - oil/gas
First Bone Spring Sand	-5,741'	9,459'			Sandstone - oil/gas/water
Second Bone Spring Carbonates	-6,035'	9,752'			Shale/Carbonates - oil/gas
Second Bone Spring Sand	-6,288'	10,006'			Sandstone - oil/gas/water
Third Bone Spring Carbonates	-6,939'	10,657'			Shale/Carbonates - oil/gas
Third Bone Spring Sand	-7,168'	10,886'			Sandstone - oil/gas/water
Wolfcamp	-7,303'	11,021'		Ī	Overpressure shale/sand- Oil/Gas
Wolfcamp B	-7,579'	11,297'			Overpressure Shale - Oil/Gas
HZ Target	-8,056'	11,774'			Overpressure Shale - Oil/Gas
Base Wolfcamp	-8,287'	12,005'			Overpressure Shale - Oil/Gas

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

Upper Permian Sands	0- 400'	Fresh Water
Delaware Sands	5,786'	Oil
1 st Bone Spring Sand	9,459'	Oil
2 nd Bone Spring Sand	10,006'	Oil
3 rd Bone Spring Sand	10,886'	Oil
Wolfcamp	11,021'	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 1,900'and circulating cement back to surface.

4. Casing Program:

All casing strings will be run new.

Casing string	Weight	Grade	Burst	Collapse	Tension	Conn	Length	API design factor			tor
								Burst	Collapse	Tension	Coupling
						BTC					
Surface 13 3/8"	54.5	J-55	2730	1130	853	909	1,900	1.02	1.14	4.19	4.47
						BTC					
Intermediate 9 5/8"	40	HCL-80	7430	4230	916	1042	8,973	1.21	1.01	2.00	2.27
						CDC-HTQ					
Production 7"	32	HCP-110	12460	10760	1025	1053	11,200	1.78	2.05	2.24	2.30
						CDC-HTQ					
Long string 5 1/2"	20	HCP-110	12640	12200	641	667	10,687	1.15	2.44	2.04	2.13
							11,774				1.99



Tapered production string will be ran with a X-over installed at the KOP of 11,200'.

Cementing Program:

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

String	Hole	Cas	sing		Lead					Tail			Excess	
Туре	Size	Size	Setting Depth	Sacks	Type of cmt	Yield ft3/sk	Water gal/sk	TOC ft	Sacks	Type of cmt	Yield ft3/sk	Water gal/sk	тос	
Surf	17.5	13.375	1900	1016	85:15 Compass Poz, 12.8 ppg Class C, 5%Gel,3#/sk Kol Seal, 4.64#/sk Salt	2.05	11.12	0	441	Tail, 14.8 ppg, 100% Class C, 1%CaCl2, 0.1%	1.34	6.35	1500	100%
Int St 1	12.25	9.625	8973	1010	Lead, 11.3 ppg, HSLD 82 10% Gel, 4%STE, 2#/sk, Gyp Seal	2.80	16.64	4000	220	Econolite Tail, 15 ppg, 100% Class C, 0.08% C-51	1.31	6.13	8500	100%
Int St 2	12.25	9.625	4000	760	Lead, 11.3 ppg, HSLD 82 10% Gel, 4%STE, 2#/sk, Gyp Seal	3.21	19.69	0		Econolite Tail, 14.8 ppg, 100% Class C,	1.33	6.33	3700	100%
Prod	8.75	7	0- 11200	168	HSLD 9420, 10.5 ppg, Class C, 1#/sk Salt, 4% STE 1% C-45	3.99	25.51	3000	298					100%
Prod	8.75	5.5	11,200- 21,887						1016	HSLD 80, 13.ppg , 32#/sk Salt, 4% STE, 1#/sk Gyp Seal	1.52	7.59	10687	50%

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 $4 \frac{1}{2}$ " 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 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.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

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



6. Types and characteristics of the proposed mud system:

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal. The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Туре	Weight (ppg)	Viscosity	Water Loss
0 – 1,900'	Fresh - Gel	8.6-8.8	28-34	N/c
1,900' - 8,973	Brine	8.8-10.2	28-34	N/c
8,973' – 21,887' Lateral	Oil Base	9.0-12.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 9-12 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:

 $\label{eq:GR-CCL-CNL} \textbf{Will} \ be \ run \ in \ cased \ hole \ during \ completions \ phase \ of \ operations.$

Open-hole logs are not planned for this well.

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

The estimated bottom-hole temperature at 11,774′ TVD (deepest point of the well) is 165F with an estimated maximum bottom-hole pressure (BHP) at the same point of 7,653 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
 - 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
 - All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H2S service at the anticipated operating pressures to prevent sour sulfide stress cracking.
- g. Communication
 - i. Communication will be via cell phones and walkie talkies on location.

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



11. Anticipated starting date and duration of operations:

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

12. Disposal/environmental concerns:

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

13. Wellhead:

A multi-bowl wellhead system will be utilized.

After running the 13 3/8" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of 10,000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5,000 psi pressure test. This pressure test will be repeated at least every 21 days.

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

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

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

Both the surface and intermediate casing strings will be tested as per NMOCD Rules to the one-third of manufacture's rated yield pressure, no less than 600 psi, but not greater than 1,500 psi.

14. Additional variance requests

A. Casing.

1. Variance is requested to wave/reduce the centralizer requirements for the 7" and 5 ½" production casing due to the tight clearance with 8 3/4" hole and 7" casing due to tight clearances.

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

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 244384

CONDITIONS

Operator:	OGRID:
Franklin Mountain Energy 3, LLC	331595
44 Cook Street	Action Number:
Denver, CO 80206	244384
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By		Condition Date
pkautz	Previous COA's apply	7/26/2023