OCD Hobbs

HOBBS OCD
JUN 17 2016
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ATS-16-547

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

5. Lease Serial No.
SHL\BHL: NMNM0392082A

6. If Indian, Allotee or Tribe Name

APPLICATION FOR PERMIT TO DRILL OR REENTER

UNORTHODOX LOCATION

1a. Type of Work	☒ DRILL	☐ REENTER		7. If Unit or CA Agreement, Name and No.
1b. Type of Well	☐ Oil Well	☒ Gas Well	☐ Other	8. Lease Name and Well No. Hallertau 5 Federal #9H (316738)
1c. Type of Completion	☒ Hydraulic Fracturing	☒ Single Zone	☐ Multiple Zone	

2. Name of Operator
Cimarex Energy Co. (215099)

9. API Well No.
30-025-43303

3a. Address
202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74103

3b. Phone No. *(include area code)*
918-585-1100

10. Field and Pool, or Exploratory
WC-025 G-08 S263205N; WC (98065)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At Surface 318 FSL & 1762 FWL
At proposed prod. Zone 330 FNL & 1005 FWL *Wolfcamp*

11. Sec., T. R. M. or Blk. and Survey or Area
5, 26S, 32E

14. Distance in miles and direction from nearest town or post office*
Jal, New Mexico is +/- 29.9 miles easterly

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) 318'	16. No of acres in lease NMNM0392082A=1400.49 acres	17. Spacing Unit dedicated to this well 200.00	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 20' to the # 10 well	19. Proposed Depth Pilot Hole TD: N/A 16,816 MD 12,090 TVD	20. BLM/BIA Bond No. in file NMB001187; NMB001188	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3273 GR	22. Approximate date work will start* 2/15/16	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 shall 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 required by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Aricka Easterling	Aricka Easterling	1/13/16

Title: Regulatory Compliance

Approved By *(Signature)* James A. Amos	Name *(Printed/Typed)*	Date JUN 14 2016
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable title to ase which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Secti e to any department or agency of the United States any false, fictitious or fraudulent statements or re

See attached NMOCD Conditions of Approval

Carlsbad Controlled Water Ba

KZ 06/17/16

SEE ATTACHED FOR CONDITIONS OF APPROVAL

KZ

Approval Subject to General Requirements & Special Stipulations Attached

(Continued on page 2)

*(Instructions on page 2)

1. Geological Formations

TVD of target 12,090
MD at TD 16,816

Pilot Hole TD N/A
Deepest expected fresh water

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone	Hazards
Quaternary Fill	0	N/A	
OSE Groundwater	250	N/A	
Rustler	1025	N/A	
Salt	1035	N/A	
Castille	2700	N/A	
Base Last Salt	4220	N/A	
Lamar	4435	N/A	
Delaware Group	4475	N/A	
Bone Spring	8520	Hydrocarbons	
Wolfcamp	11720	Hydrocarbons	
Wolfcamp X ss	11755	Hydrocarbons	
Wolfcamp Y ss	11870	Hydrocarbons	
Wolfcamp A-1 Shale	11895	Hydrocarbons	

2. Casing Program

Hole Size	Casing Depth From	Casing Depth To	Casing Size	Weight (lb/ft)	Grade	Conn.	SF Collapse	SF Burst	SF Tension
17 1/2	0	~~975~~ 1210'	13-3/8"	48.00	H-40/J-55 Hybrid	ST&C	1.66	3.88	6.88
12 1/4	0	4455	9-5/8"	40.00	J-55	BT&C	1.20	1.67	3.54
8 3/4	0	10800	7"	32.00	L-80	LT&C	1.66	1.75	1.74
8 3/4	10800	12618	7"	32.00	L-80	BT&C	1.49	1.46	18.05
6	10800	16816	4-1/2"	13.50	P-110	BT&C	1.42	1.65	24.23
					BLM Minimum Safety Factor		1.125	1	1.6 Dry 1.8 Wet

See COA

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	N
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	N
Is well within the designated 4 string boundary.	N
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3rd string cement tied back 500' into previous casing?	N
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	N
Is 2nd string set 100' to 600' below the base of salt?	N
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	N
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	N
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	N

See COA

3. Cementing Program - See COA - (additional cement might be required.)

Casing	# Sks	Wt. lb/gal	Yld ft3/sack	H2O gal/sk	500# Comp. Strength (hours)	Slurry Description
Surface	409	13.50	1.72	9.15	15.5	Lead: Class C + Bentonite
	195	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Intermediate	843	12.90	1.88	9.65	12	Lead: 35:65 (Poz:C) + Salt + Bentonite
	260	14.80	1.34	6.32	9.5	Tail: Class C + LCM
Production	521	10.80	2.35	9.60	17:43	Lead: Tuned Light I Class H
	232	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS
Completion System	312	14.20	1.30	5.86	14:30	Tail: 50:50 (Poz:H) + Salt + Bentonite + Fluid Loss + Dispersant + SMS

Casing String	TOC	% Excess
Surface	0	42
Intermediate	0	44
Production	4255	22
Completion System	12518	10

4. Pressure Control Equipment - See COA

	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.

BOP installed and tested before drilling which hole?	Size	Min Required WP	Type		Tested To
12 1/4	13 5/8	2M	Annular	X	50% of working pressure
			Blind Ram	X	2M
			Pipe Ram		
			Double Ram	X	
			Other		
8 3/4	13 5/8	10M	Annular	X	50% of working pressure
			Blind Ram	X	10M
			Pipe Ram		
			Double Ram	X	
			Other		
6	13 5/8	10M	Annular	X	50% of working pressure
			Blind Ram	X	10M
			Pipe Ram		
			Double Ram	X	
			Other		

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

X	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or 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. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.	
X	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.	
	N	Are anchors required by manufacturer?

See COA

5. Mud Program

See COA

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0' to 975' 1210'	FW Spud Mud	8.30 - 8.80	28	N/C
975' to 4455' 1210'	Brine Water	9.70 - 10.20	30-32	N/C
4455' to 12618'	FW/Cut Brine	8.70 - 9.20	30-32	N/C
12618' to 16816'	Oil Based Mud	11.50 - 12.00	50-70	N/C

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

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures See COA

	Logging, Coring and Testing
X	Will run GR/CNL fromTD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test?
	Coring?

Additional Logs Planned	Interval

7. Drilling Conditions

Condition	
BH Pressure at deepest TVD	5783 psi
Abnormal Temperature	No

-abnormal pressure might be encountered - See COA

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

See COA

X	H2S is present
X	H2S plan is attached

8. Other Facets of Operation

Operator Certification Statement
Hallertau 5 Federal #9H
Cimarex Energy Co.
UL: N, Sec. 5, 26S, 32E
Lea Co., NM

Operator's Representative
Cimarex Energy Co. of Colorado
600 N. Marienfeld St., Ste. 600
Midland, TX 79701
Office Phone: (432) 571-7800

CERTIFICATION: I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I am responsible under the terms and conditions of the lease to conduct lease operations in conjunction with the application. Bond coverage pursuant to 43, 25 or 36 CFR for lease activities is being provided by Cimarex Energy Co. under their (Lease, Statewide, Nationwide, Unit or Permit) Bond, BLM/BIA/FS Bond No. NMB001187; NMB001188.

Executed this 13 day of January, 2016

NAME: Aricka Easterling
Aricka Easterling
TITLE: Regulatory Compliance
ADDRESS: 202 S. Cheyenne Ave., Ste 1000, Tulsa, OK 74103
TELEPHONE: 918-585-1100
EMAIL: AEasterling@cimarex.com
Field Representative: Same as above