Form 3160-5 (June 2015)

# **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED OMB NO. 1004-0137

|    | Expires: January 31, 2018 |
|----|---------------------------|
| i. | Lease Serial No.          |
|    | NMNM0392082A              |

| SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.  HOBBS OCI  |  |  |  |   | 5. Lease Serial No.<br>NMNM0392082A<br>6. If Indian, Allottee or   |   |
|--|--|--|--|---|--|---|
| SUBMIT IN T  | TRIPLICATE - Other ins   | tructions on p   | page 2   | 4 2017  | 7. If Unit or CA/Agreen  | nent, Name and/or No.   |
| Type of Well     Gas Well □ Oth  | ner  |  | MOA  | 1 4 2017  | 8. Well Name and No.<br>HALLERTAU 5 FEI  | DERAL 16H   |
| Name of Operator     CIMAREX ENERGY COMPAN   | Contact:   | TERRI STAT   | HEM REC  | EIVE  | 9. API Well No.<br>30-025-43887-00   | )-X1  |
| 3a. Address<br>202 S CHEYENNE AVE. SUIT<br>TULSA, OK 74103   | 3b. Phone No. Ph: 432-62   | (include area code)<br>0-1936  |  | 10. Field and Pool or Ex<br>WOLFCAMP                                | xploratory Area  |   |
| 4. Location of Well (Footage, Sec., T  | ., R., M., or Survey Description   | 1)   |  |   | 11. County or Parish, St   | tate  |
| Sec 5 T26S R32E SWSW 490<br>32.066250 N Lat, 103.704605  |  | /  |  |   | LEA COUNTY, N  | IM  |
| 12. CHECK THE AF   | PPROPRIATE BOX(ES)   | TO INDICA  | ΓE NATURE O  | F NOTICE,   | REPORT, OR OTH   | ER DATA   |
| TYPE OF SUBMISSION   |  |  | TYPE OF  | ACTION  |  |   |
| Notice of Intent   | ☐ Acidize  | ☐ Deep   | oen  | ☐ Product   | tion (Start/Resume)  | ☐ Water Shut-Off  |
| Notice of Intent   | ☐ Alter Casing   | ☐ Hyd:   | raulic Fracturing  | ☐ Reclam  | ation  | ☐ Well Integrity  |
| ☐ Subsequent Report  | ☐ Casing Repair  | □ New  | Construction   | □ Recom   | plete  | Other   |
| ☐ Final Abandonment Notice   | ☐ Change Plans   | ☐ Plug   | and Abandon  | ☐ Tempo   | rarily Abandon   | Change to Original A  |
|  | ☐ Convert to Injection   | Plug   | Back   | ■ Water I   | Disposal   | ,   |
| 13. Describe Proposed or Completed Operation If the proposal is to deepen directions. Attach the Bond under which the wor following completion of the involved testing has been completed. Final Attach the site is ready for following completed. Final Attach the site is ready for following the site is ready for followin | ally or recomplete horizontally, rk will be performed or provide a operations. If the operation repandonment Notices must be filinal inspection.  Illy request approval for a delow:  25-43911 25-43303 25-43304 25-43886  | give subsurface<br>the Bond No. on<br>esults in a multiple<br>led only after all i | locations and measu<br>file with BLM/BIA<br>e completion or reco<br>requirements, includ | red and true v. Required su Required su ing reclamation the propose | ertical depths of all pertine beequent reports must be f new interval, a Form 3160 in, have been completed and the defendance of the defen | nt markers and zones. iled within 30 days -4 must be filed once id the operator has |
| Please see the attached well of  |  | the BLM on 1   | 1/2/2017.  | (   | CONDITIONS   | S OF APPROV   |
| 14. I hereby certify that the foregoing is   | strue and correct. Electronic Submission #   | 393829 verifie   | d by the BLM Wel   | I Informatio  | n System   |   |
| Co   | For CIMAREX EN   | NERGY COMP   | NY OF CO, sent   | to the Hobb<br>11/06/2017   | s<br>(18ZS0023SE)  |   |
|  |  | g,   |  |   |  | CE  |
|  |  |  |  |   |  |   |
| Signature (Electronic S  |  | OB EEDERA  |  |   | ee .   |   |
|  | I IIIO SPACE FO  | UK FEDEKA  | LOKSIAIE   | OFFICE U  | 36   |   |
| _Approved By_ZOTA STEVENS _  | s not warrant or   | TitlePETROLE   | UM ENGIN   | EER   | Date 11/06/2017  |   |
| certify that the applicant holds legal or equivalent would entitle the applicant to condu  | egoing is true and correct.  Electronic Submission #393829 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY OF CO, sent to the Hobbs Committed to AFMSS for processing by ZOTA STEVENS on 11/06/2017 (18ZS0023SE)  RRI STATHEM Title MANAGER REGULATORY COMPLIANCE  ctronic Submission)  Date 11/02/2017  THIS SPACE FOR FEDERAL OR STATE OFFICE USE  TitlePETROLEUM ENGINEER  Date 11/06/2017  e attached. Approval of this notice does not warrant or rail or equitable title to those rights in the subject lease |  |  |   |  |   |

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)
\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED





# Cimarex 10M Well Control Plan

Version 1.0

# **BOPE Preventer Utilization**

The table below displays all BHA components, drill pipe, casing, or open hole that could be present during a required shut in and the associated preventer component that would provide a barrier to flow. It is specific to the hole section that requires a 10M system. The mud system being utilized in the hole will always assumed to be the first barrier to flow. The below table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

| <b>Drill String Element</b>                | OD             | Preventer  | RWP |
|--|----------------|--|-----|
| 4" Drillpipe                               | 4"             | Lower Ram 3 1/2" - 5 ½" VBR* Upper Ram 3 1/2" - 5 ½" VBR*    | 10M |
| 4.5" Drillpipe                             | 4.5"           | Lower Ram 3 1/2" - 5 ½" VBR*<br>Upper Ram 3 1/2" - 5 ½" VBR* | 10M |
| 4" HWDP Drillpipe                          | 4"             | Lower Ram 3 1/2" - 5 ½" VBR* Upper Ram 3 1/2" - 5 ½" VBR*    | 10M |
| 4.5" HWDP Drillpipe                        | 4.5"           | Lower Ram 3 1/2" - 5 ½" VBR*<br>Upper Ram 3 1/2" - 5 ½" VBR* | 10M |
| Drill Collars (including non-<br>magnetic) | 4.75-<br>5.25" | Lower Ram 3 1/2" - 5 ½" VBR* Upper Ram 3 1/2" - 5 ½" VBR*    | 10M |
| Production Casing                          | 5.5"           | Lower Ram 3 1/2" - 5 ½" VBR*<br>Upper Ram 3 1/2" - 5 ½" VBR* | 10M |
| Production Casing                          | 5"             | Lower Ram 3 1/2" - 5 ½" VBR* Upper Ram 3 1/2" - 5 ½" VBR*    | 10M |
| Production Casing                          | 4.5"           | Lower Ram 3 1/2" - 5 ½" VBR*<br>Upper Ram 3 1/2" - 5 ½" VBR* | 10M |
| ALL  | 0-13 5/8"      | Annular  | 5M  |
| Open Hole                                  |                | Blind Rams   | 10M |

\*VBR - Variable Bore Ram

## Well Control Procedures

Proper well control response is highly specific to current well conditions and must be adapted based on environment as needed. The procedures below are given in "common" operating conditions to cover the basic and most necessary operations required during the wellbore construction. These include drilling ahead, tripping pipe, tripping BHA, running casing, and pipe out of the hole/open hole. In some of the procedures below, there will be a switch of control from the lesser RWP annular to the appropriate 10M RWP ram. The pressure at which this is done is variable based on overall well conditions that must be evaluated situationally. The pressure that control is switched may be equal to or less than the RWP but at no time will the pressure on the annular preventer exceed the RWP of the annular. The annular will be tested to 5,000 psi. This will be the RWP of the annular preventer.

#### Shutting In While Drilling

- 1. Sound alarm to alert crew
- 2. Space out drill string
- 3. Shut down pumps
- 4. Shut in uppermost BOPE preventer (typically the annular preventer) and open HCR.
- 5. Verify well is shut-in and flow has stopped
- 6. Notify supervisory personnel
- 7. Record data (SIDP, SICP, Pit Gain, and Time)
- 8. Hold pre-job safety meeting and discuss kill procedure

9. If pressure is anticipated to climb to the RWP of the annular preventer during kill procedure, swap control of the well to the upper pipe ram

#### Shutting In While Tripping

- 1. Sound alarm and alert crew
- 2. Install open, full open safety valve and close valve
- 3. Shut in uppermost BOPE preventer (typically the annular preventer) and open HCR.
- 4. Verify well is shut-in and flow has stopped
- 5. Notify supervisory personnel
- 6. Record data (SIDP, SICP, Pit Gain, and Time)
- 7. Hold pre-job safety meeting and discuss kill procedure
- 8. If pressure is anticipated to climb to the RWP of the annular preventer during kill procedure, swap control of the well to the upper pipe ram

#### Shutting In While Running Casing

- 1. Sound alarm and alert crew
- 2. Install circulating swedge. Close high pressure, low torque valves.
- 3. Shut in uppermost BOPE preventer (typically the annular preventer) and open HCR.
- 4. Verify well is shut-in and flow has stopped
- 5. Notify supervisory personnel
- 6. Record data (SIDP, SICP, Pit Gain, and Time)
- 7. Hold Pre-job safety meeting and discuss kill procedure
- 8. If pressure is anticipated to climb to the RWP of the annular preventer during kill procedure, swap control of the well to the upper pipe ram

### Shutting in while out of hole

- Sound alarm
- 2. Shut-in well: close blind rams
- 3. Verify well is shut-in and monitor pressures
- 4. Notify supervisory personnel
- 5. Record data (SIDP, SICP, Pit Gain, and Time)
- 6. Hold Pre-job safety meeting and discuss kill procedure

#### Shutting in prior to pulling BHA through stack

- Prior to pulling last joint of drill pipe thru the stack space out and check flow. If flowing see steps below.
- 2. Sound alarm and alert crew
- 3. Install open, full open safety valve and close valve
- 4. Shut in upper pipe ram and open HCR.

- 5. Verify well is shut-in and flow has stopped
- 6. Notify supervisory personnel
- 7. Record data (SIDP, SICP, Pit Gain, and Time)
- 8. Hold pre-job safety meeting and discuss kill procedure

#### Shutting in while BHA is in the stack and ram preventer and combo immediately available

- 1. Sound alarm and alert crew
- 2. Stab Crossover and install open, full open safety valve and close valve
- 3. Space out drill string with upset just beneath the compatible pipe ram.
- 4. Shut in upper compatible pipe ram and open HCR.
- 5. Verify well is shut-in and flow has stopped
- 6. Notify supervisory personnel
- 7. Record data (SIDP, SICP, Pit Gain, and Time)
- 8. Hold pre-job safety meeting and discuss kill procedure

#### Shutting in while BHA is in the stack and no ram preventer or combo immediately available

- 1. Sound alarm and alert crew
- 2. If possible pick up high enough, to pull string clear and follow "Open Hole" scenario
- 3. If not possible to pick up high enough:
  - 1. Stab Crossover, make up one joint/stand of drill pipe, and install open, full open safety valve and close valve
- 4. Space out drill string with upset just beneath the compatible pipe ram.
- 5. Shut in upper compatible pipe ram and open HCR.
- 6. Verify well is shut-in and flow has stopped
- 7. Notify supervisory personnel
- Record data (SIDP, SICP, Pit Gain, and Time)
- 9. Hold pre-job safety meeting and discuss kill procedure