Form 3160-5
(November 1994)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
OCD-ARTESIA

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

RECEIVED
FEB 25 2010
NMOCD ARTESIA

5. Lease Serial No.
SHL NM-15007 BHL NM-119268

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
[X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.
Glycerin 10 Federal Com No. 2

2. Name of Operator
Cimarex Energy Co. of Colorado

9. API Well No.
30-015-36409

3a. Address
5215 N. O'Connor Blvd., Ste. 1500; Irving, TX 75039

3b. Phone No. *(include area code)*
972-401-3111

10. Field and Pool, or Exploratory Area
Abo Wildcat

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
SHL 2180 FNL & 330 FEL 10-16S-29E
BHL 1980 FNL & 330 FWL

11 County or Parish, State
Eddy County, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
[X] Notice of Intent	[ ] Acidize	[ ] Deepen	[ ] Production (Start/Resume)	[ ] Water Shut-Off
	[X] Alter Casing	[ ] Fracture Treat	[ ] Reclamation	[ ] Well Integrity
[ ] Subsequent Report	[ ] Casing Repair	[ ] New Construction	[ ] Recomplete	[X] Other Casing change w/
	[ ] Change Plans	[ ] Plug and Abandon	[ ] Temporarily Abandon	contingency plan
[ ] Final Abandonment Notice	[ ] Convert to Injection	[ ] Plug Back	[ ] Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, included estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Cimarex proposes to change its casing plans as shown on the attached page by omitting intermediate casing. A contingency plan is also included in case wellbore integrity cannot be maintained.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVED
FEB 23 2010
/s/ Myles Kristof
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct

Name *(Printed/Typed)*	Title
Natalie Krueger	Regulatory
Signature	Date
Natalie Krueger	January 25, 2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of Approval, if any, are attached. Approval of this notice 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.	Office	

Title 18 U.S.C. Section 1001, makes 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 reverse)

D. SD. 2-25-10

Revised Casing Plans
Glycerin 10 Federal Com No. 2
Cimarex Energy Co. of Colorado
Unit H, Section 10
T16S-R29E, Eddy County, NM

Proposed drilling Plan

Drill 8¾" hole to 6920' (pilot hole), set 7" casing and cement as shown below. Drill out of the bottom of the 7" casing with a 6⅛" bit and kick off lateral @ 7030.' Drill 6⅛" hole to MD 11146' and TVD 7140.' Install 4½" Peak Completion Liner.

Casing Program:

Hole Size	Depth			Casing OD		Weight	Thread	Collar	Grade
17½"	0'	to	450'	New	13⅜"	48#	8-R	STC	H-40
8¾"	0'	to	6920'	New	7"	26#	8-R	LTC	P-110
6⅛"	6820'	to	7334'	New	4½"	11.6#	8-R	BTC	P-110
6⅛"	7334'	to	11146'	New	4½"	11.6#	8-R	LTC	P-110

Cementing & Setting Depth:

Surface 460 sx Premium Plus + 2% $CaCl_2$.
TOC Surface

Production Lead: 610 sx EconoCem +3% salt + 5lbm/sk gilsonite 1.71 cf/sk
Tail: 365 sx HalCem 1.34 cf/sk
TOT @ 4500' TOC Surface'

Liner No cement needed. Peak completion assembly.

Intermediate Contingency:

If wellbore integrity cannot be maintained while drilling the 8¾" hole, it will be reamed out to 12¼" and new 9⅝" casing contingency string will be run as follows:

Hole Size	Depth			Casing OD		Weight	Thread	Collar	Grade
12¼"	0'	to	2700'	New	9⅝"	40#	8-R	LTC	J-55

Contingency Cementing Plan:

Lead: 415 sx Interfill C + 0.125# Poly-e-flake (wt 11.9, yld 2.45)
Tail: 215 sx Premium Plus + 1% $CaCl_2$ (wt 14.8, yld 1.34)
TOC Surface

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Cimarex Energy Co of Colorado
LEASE NO.:	NMNM119268
WELL NAME & NO.:	Glycerin 10 Federal Com No 2
SURFACE HOLE FOOTAGE:	2180' FNL & 330' FEL
BOTTOM HOLE FOOTAGE	1980' FNL & 330' FWL
LOCATION:	Section 10, T. 16 S., R 29 E., NMPM
COUNTY:	Eddy County, New Mexico

A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

a. Spudding well
b. Setting and/or Cementing of all casing strings
c. BOPE tests

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

1. **Hydrogen Sulfide has been reported as a hazard, but no measurements have been recorded. It is recommended that monitoring equipment be onsite for potential Hydrogen Sulfide. If Hydrogen Sulfide is encountered, please report measurements and formations to the BLM.**

2. 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.

3. 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.

4. **The record of the drilling rate along with the CAL/GR/N well log run from TD to surface will 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.**

B. CASING

Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

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

Possible Lost circulation in the Grayburg, San Andres Formations
Possible high pressure gas burst from the Wolfcamp Formation – applicable to pilot hole.

1. The **13 3/8** inch surface casing shall be set at **approximately 400 feet (a minimum of 25 feet 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 a 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 is to include the lead cement slurry.

    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 **7** inch intermediate casing is:

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

Formation below the 7" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

3. Cement not required on the **4-1/2"** liner. **Packer system being used. 100' tie back approved.**

Contingency Casing

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

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

Formation below the 9-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

5. 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.

C. PRESSURE CONTROL

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

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

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7"** production casing shoe shall be **5000 (5M)** psi. **5M 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. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. Casing cut-off and BOP installation will not be initiated until the cement has had 4-6 hours of setup time in a water basin and 12 hours in the potash areas. This time will start after the cement plug is bumped. Testing the BOP/BOPE against a plug can commence after meeting the above conditions plus the BOP installation time.

    b. The tests shall be done by an independent service company utilizing a test plug.

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

    d. 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.**

    e. 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.

    f. 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. Applicable to pilot hole.

    g. **Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.**

D. DRILLING MUD – Applicable to pilot hole

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.

E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

MAK 022310