

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

OCD-ARTESIA

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. LC-037777-A, LC-058594-A
2. Name of Operator Cimarex Energy Co. of Colorado <i>162683</i>		6. If Indian, Allottee or Tribe Name
3a. Address 600 N. Marienfeld St., Ste. 600; Midland, TX 79701	3b. Phone No. (include area code) 432-571-7800	7. If Unit or CA/Agreement, Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL 1980 FSL & 330 FWL 33-16S-29E BHL 1980 FSL & 330 FEL		8. Well Name and No. Sword 33 Federal Com No. 1
		9. API Well No. 30-015-36550
		10. Field and Pool, or Exploratory Area Pavo Mesa; Abo
		11. County or Parish, State Eddy County, NM

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

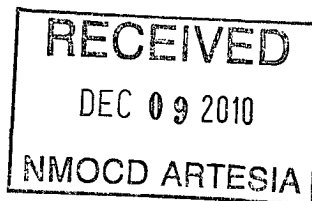
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Switch to vertical</u>
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Paddock test, change well</u> *
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>name</u>

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 recompleat 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 recompleat 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 drill the well above as a vertical Paddock instead of a horizontal Abo. Please see changes below.

Permitted Location
SHL 1980 FSL & 330 FWL
BHL 1980 FSL & 330 FEL
33-16S-29E
Eddy County, NM

Proposed Location
1980 FSL & 330 FWL
33-16S-29E
Eddy County, NM



Revised drilling plan is attached.

Cimarex also proposes to change the well name to the *Sword 33 Federal No. 1 (take "Com" out of the name).*

New Prop Code 385666

**SUBJECT TO LIKE
APPROVAL BY STATE**

Please see attached revised C-102.

14. I hereby certify that the foregoing is true and correct	
Name (Printed/Typed) Natalie Krueger	Title Regulatory
Signature <i>Natalie Krueger</i>	Date March 18, 2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by <i>James A. Amos</i>	Title FIELD MANAGER	Date DEC 6 2010
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 CARLSBAD FIELD 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.

Mud, Casing, Cementing, and BOP
Sword 33 Federal No. 1
Cimarex Energy Co. of Colorado
Unit L, Section 33
T16S-R29E, Eddy County, NM

In response to questions asked under Section II B of Bulletin NTL-6, the following information is provided for your consideration:

Location: 1980 FSL & 330 FWL

Elevation above sea level: 3599' GR

Proposed drilling depth: 6000'

Proposed Mud Circulating System:

Depth			Mud Wt	Visc	Fluid Loss	Type Mud
0'	to	450'	8.4 - 8.6	28	NC	FW
0'	to	1100'	10.0	30-32	NC	Brine water
0'	to	6000'	8.4 - 9.5	30-32	NC	FW, brine

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs.

Sword 33 Federal No. 1

Cimarex Energy Co. of Colorado

Unit L, Section 33

T16S-R29E, Eddy County, NM

Casing & Cementing Plan:

String	Hole Size	Depth			Casing OD		Weight	Collar	Grade
Surface	16"	0'	to	450'	New	11¾"	42#	STC	H-40
Intermediate	11"	0'	to	1100'	New	8⅝"	24#	STC	J-55
Production	7⅞"	0'	to	6000'	New	5½"	15.5#	LTC	J-55

Cementing Plan:**Surface** 530 sx Class H + 2% CaCl₂ (wt 14.8, yld 1.34)**TOC Surface****Intermediate** Lead: 300 sx Class C Lite + 6# Salt + 1/4# CF (wt 12.7, yld 1.99)Tail: 200 sx Class C + 2% CaCl₂ (wt 14.8, yld 1.34)**TOC Surface****Production** Lead: 550 sx Class H Lite + 6# Salt + 1/4# CF (wt 12.7, yld 1.92)Tail: 200 sx Class H + 2% CaCl₂ (wt 13, yld 1.68)**TOC 900'**

Fresh water zones will be protected by setting 11¾" casing at 450' and cementing to surface. Hydrocarbon zones will be protected by setting 8⅝" casing at 1100' and cementing to surface, and by setting 5½" casing at 6000' and cementing to 900.'

Collapse Factor Burst Factor Tension Factor

1.125

1.125

1.6

Pressure control Equipment:

An 11¾" 3000 PSI working pressure B.O.P. consisting of a one set of blind rams and one set of pipe rams and a 3000 psi annular-type preventor. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. Test BOP equipment and choke manifold to 250 psi low and 3000 psi high and annular BOP to 250 psi low and 1500 psi high by an independent service company.

BOP unit will be hydraulically operated. Below intermediate casing shoe, BOP will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling. From the base of the surface pipe through the running of production casing, the well will be equipped with a 3000 psi BOP system.

BOPS will be tested by an independent service company to 250 psi low and 3000 psi high. Hydril will be tested to 250 psi low and 1500 psi high.