

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**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 NMNM025559
2. Name of Operator CIMAREX ENERGY COMPANY OF CO		6. If Indian, Allottee or Tribe Name
3a. Address 600 NORTH MARIENFELD STREET SUITE 600 MIDLAND, TX 79701		7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) Ph. 432.620.1938		8. Well Name and No IRWIN 13 FEDERAL 4
4. Location of Well (Footage, Sec, T, R, M., or Survey Description) Sec 13 T19S R30E SESE 1300FSL 480FEL		9. API Well No 30-015-38101-00-X1
		10. Field and Pool, or Exploratory HACKBERRY
		11. County or Parish, and State EDDY COUNTY, NM

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

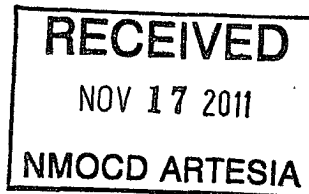
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input checked="" 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 type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including 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.)

Propose to eliminate 7" casing string, pilot hole and peak completion assembly and instead drill 8.75" hloe through the curve to TD per below procedure. All other aspects of APD remain the same.

After setting 13.375" to 500' and 9.625" to 4000' and cementing to surface as previously permitted drill 8.75" hole through the curve at KOP 7770' w 8.4 to 10# FW/Brine 30-32 vis and lateral w 8.4# 2% KCL vis 28-30 to 13068' MD 8699' TVD and set 5.5" 17# P-110 casing and cement to 3000' with lead 850 sx EconoCem H plus additives, 11.99 ppg, 2.44 cf/sx yld 50% excess. Tail 1590 sx Versacem plus additives, 14.5 ppg, 1.22 cf/sx yld 25% excess.

Note COA on APD to set 9 5/8" casing between 100' and 600' below base of salt needs to be taken off since this location is outside R-111P.

**Accepted for record
NMOCD****SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

14. Thereby certify that the foregoing is true and correct Electronic Submission #122931 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY OF CO, sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 11/15/2011 (12KMS0301SE)	
Name (Printed/Typed) ZENO FARRIS	Title MANAGER OPERATIONS ADMIN
Signature (Electronic Submission)	Date 11/10/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>CHRISTOPHER WALLS</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>11/16/2011</u>
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 <u>Carlsbad</u>

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CIMAREX ENERGY
LEASE NO.:	NM025559
WELL NAME & NO.:	4-IRWIN 13 FEDERAL
SURFACE HOLE FOOTAGE:	1300' FSL & 480' FEL
BOTTOM HOLE FOOTAGE:	330' FNL & 2310' FWL
LOCATION:	Section 13, T. 19 S., R 30 E., NMPM
COUNTY:	Eddy County, New Mexico

A. 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.

Secretary's Potash

Possible brine and water flows in the Artesia and Salado Groups.

Possible lost circulation in the Capitan Reef (if encountered) and the Artesia Group.

1. The 13-3/8 inch surface casing shall be set at approximately 500 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 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 9-5/8 inch intermediate casing is:
- ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to potash. Additional cement may be required as the excess calculates to be 1%.**
3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
- ☒ Cement should tie-back at least 1000 feet into previous casing string. Operator shall provide method of verification. **Additional cement may be required as the excess calculates to be 17%.**
4. 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.
5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed. Required due to proximity to measured ore.

CRW 111611