

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM 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. NMNM84729
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: 432-620-1936		8. Well Name and No. CUERVO FEDERAL 20H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 14 T23S R32E NENE 330FNL 375FEL		9. API Well No. 30-025-40559-00-X1
		10. Field and Pool, or Exploratory DIAMONDTAIL
		11. County or Parish, and State LEA 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
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original APD
	<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.)

Cimarex Energy Co. respectfully request approval to perform a remedial cement job according to the following procedure:

Remedial annulus cmt - 5-1/2" & 9-5/8" casing. 5-1/2" TOC @ 6080'(log submitted).

1. MIRU
2. Pump 40 bbls fresh water.
3. Mix & pump 380 sx Class C cmt. Mix cmt @ 12.8 ppg, yld: 2.02 cf.
4. Displace cmt w/ fresh water
5. WOC 48 hrs.
6. Run CBL to verify TOC @ 3800'.

CBL & Tracer logs sent to W. Ingram.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct	
Electronic Submission #153221 verified by the BLM Well Information System For CIMAREX ENERGY COMPANY OF CO, sent to the Hobbs Committed to AFMSS for processing by WESLEY INGRAM on 10/04/2012 (13WWI0060SE)	
Name (Printed/Typed) TERRI STATHEM	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 10/04/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By WESLEY INGRAM	Title PETROLEUM ENGINEER	Date 10/04/2012
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 Hobbs

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 ****

OCT 11 2012

Additional data for EC transaction #153221 that would not fit on the form

32. Additional remarks, continued

TOC was not raised to the designed top of 3,800'. The radial bond log indicates a TOC of approximately 6080'. A 5-1/2" x 9-5/8" annulus pressure test was also conducted on the well. The annulus failed to test and an injection rate of 3.8 bpm at 980 psi was established. Since an adequate injection rate was established, recommend remedial cement be pumped down the 5-1/2" x 9-5/8" annulus. Cement volume sufficient to cover the recorded TOC (6080') to the original designed TOC (3800') plus 50% open hole excess.

Proposed cement for the backside squeeze sent via email to W. Ingram. The maximum allowable pressure on the 5-1/2" x 9-5/8" will be 2,153 psi. This assumes a full column of fluid inside the 5-1/2", a full column of 12.8 ppg fluid in the 5-1/2" x 9-5/8" annulus, and a burst SF of 1.2 on the 9-5/8".

The resultant safety factor on the 5-1/2" casing is 2.10. Hold 500 psi on the 5-1/2" and monitor during the squeeze.

After the squeeze, WOC 48 hours and run CBL and pressure test the 5-1/2" x 9-5/8" annulus.

PAR FIVE

ENERGY SERVICES LLC

Service Order for Job: J00002251

Call Out Sheet Number: **CALL 600024570**

Date of Job: 03-Oct-2012

District: Artesia

Time Well Ready: 7 28 am

Ready to Pump: 7 28 am

Customer: Cimarex

DV Tool:

Well TVD:

Job Stage Number: 1

Treat Down: Squeeze

Head & Manifold

Hole Size: 8.75

Well MD: 6080

Well TVD:

BHST:

BHP:

BHCT:

Max Allowed Pressure:

New Well: Old Well

Well #: Cuervo Fed 20H

County: Lea

State: New Mexico

Legal Location: 99 999 999

Field:

Description: Squeeze

API#:

Salesman: Kurt Crowe

Contact Person/Companyman: Barry Wray

Contact Number: 580-225-3485

Email:

Rig Contractor: Pulling Unit

Rig Number:

Rig Phone:

Max Allowed Ann Pressure: 1000

Casing/Tubing

String Type	Depth	Size	Weight	Grade	Thread
Squeeze		2			

Job Type

Squeeze

Service Supervisor:

Sks/Gals.

Cement Type/Additives

Tractor

Trailer

Equipment Operators

247.00 Sack	Class C. per cu. ft. (94lb/cu ft)
133.00 Sack	PF132 LITEPOZ. per cu. ft. (79lb/cu ft)
1,733.00 Pound	PF-044 Granulated Salt, per lb (70lb/cu ft)
2,024.00 Pound	PF20 Bentonite Extender. per lb (60lb/cu ft)
675.00 Pound	PF001 Calcium Chloride, per lb (50lb/cu ft)
95.00 Pound	PF46 Antifoam Agent, per lb
48.00 Pound	PF29 Cellophane Flakes, per lb

Cement Recipe

380sks 35/65 P/C+5%PF44+6%PF20+2%PF1+0.125#/skPF29+0.25#/skPF46

Den 12.8 Yield 2.02 H2O 10.94

C - 61.1

Poz - 27.65

PF44 - 4.56

PF20 - 5.325

PF1 - 1.775

PF29 - 0.125

PF46 - 0.25

2" Regular and valve

We be pumping cement down the backside.

Description	Quantity	Unit Price	Extended Price	Disc %	Net Amount
DOT Conformance Charge, per unit*	3.00	\$325.00	\$975.00	20%	\$780.00
Fuel Used On Location*	3.00	\$425.00	\$1,275.00	20%	\$1,020.00
Mileage Charge, all other equipment per mile*	160.00	\$6.00	\$960.00	20%	\$768.00
Cars, pickups, monitoring vehicles round trip*	160.00	\$4.00	\$640.00	20%	\$512.00
PF-999 - Sugar*	200.00	\$4.00	\$800.00	20%	\$640.00
Liner/Squeeze - 6001' - 7000'	1.00	\$5,600.00	\$5,600.00	20%	\$4,480.00

**Cuervo Federal 20H
30-025-40559
Cimarex Energy Co. of Colorado
October 4, 2012
Conditions of Approval**

- 1. Operator is pumping Poz C cement pursuant to an earlier e-mail.**
- 2. Operator shall have sufficient personnel onsite to monitor the pressures and verify that the cement being pumped is 12.8 ppg.**
- 3. Operator shall submit subsequent sundry detailing work completed. A copy of the CBL and cement report shall be submitted.**

WWI 100412