

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Operator Copy

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MAY 07 2012

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

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MAY 07 2012
HOBBSD

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 checked="" type="checkbox"/> Other SWD-		6. If Indian, Allottee or Tribe Name
2. Name of Operator COG OPERATING LLC		7. If Unit or CA/Agreement, Name and/or No.
3a. Address 550 WEST TEXAS AVENUE SUITE 100 MIDLAND, TX 79701		8. Well Name and No. FEDERAL 18 4
3b. Phone No. (include area code) Ph: 432-686-3087		9. API Well No. 30-025-01671
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 18 T19S R33E Mer NMP 1980FNL 660FEL		10. Field and Pool, or Exploratory SWD; SEVEN RIVERS
		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	
	<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 recompleting 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 recompleting 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.)

I. Subject of Notice: COG Operating LLC's Federal 18 #4 Well.

II. Objective of Notice: Obtain approval for remedial cementing on the casing of this well.

III. Well Status: COG's Federal 18 #4 is awaiting approval of Sundry to begin remedial operations. Isolated hole in casing between 535' and 1609'.

IV. Procedure: Objective is to sqz hole between 535' and 1609'.

A. GIH and set CIBP on tubing @ 1800', dump bail 20' sand on top.

B. RU 5 ?? Cementing head on casing.

C. Mix and pump 250 sxs of Class C w/ 2% CaCl₂ to obtain final squeeze pressure of 500 psig or greater.Approval Subject to General Requirements
& Special Stipulations AttachedSEE ATTACHED FOR
CONDITIONS OF APPROVAL

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

Electronic Submission #137274 verified by the BLM Well Information System

-For COG OPERATING LLC, sent to the Hobbs

Committed to AFMSS for processing by KURT SIMMONS on 05/04/2012 ()

Name (Printed/Typed) CHASITY JACKSON

Title PREPARER

Signature (Electronic Submission)

Date 05/04/2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED

Approved By

Title

PETROLEUM ENGINEER

MAY - 4 2012 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

BUREAU OF LAND MANAGEMENT

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.

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

MAY 08 2012

Additional data for EC transaction #137274 that would not fit on the form

32. Additional remarks, continued

- D. SI for 24 hrs prior to drilling out cement.
- E. Drill out cement, GIH and tag CIBP.
- F. POOH and pickup packer. GIH w/ packer and tubing.
- G. Set packer at 450?, test casing to 500 psig for 1 hour.
- H. POOH w/ tubing and packer, put bit, and drill collars.
- I. GIH to top sand, circulate sand off CIBP, drill up CIBP.
- J. POOH w/ work string and bit.
- K. PU Disposal Packer and IPC 2 7/8? tubing, GIH and set packer at 3,244? or deeper.
- L. Unlatch from packer and circulate packer fluid.
- M. Latch back into packer and perform MIT test.
- N. Upon successful completion of MIT, return well to disposal.

**Federal 18 Well 4
COG Operating LLC
30-025-01671
May 4, 2012
Conditions of Approval**

Summary of Current Status:

- SWD well in 7 Rivers formation
- 8-5/8" x 5-1/2" casing program with open hole 3349' – 3450',
- Previously repaired hole in casing at approximately 1400'.

Sundry dated 5/4/2012:

Operator states intention to repair hole in casing between 535' and 1609'.

Conditions of Approval: Contingent on like approval by the state.

General Conditions of Approval: Well with a Packer

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
 - a) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
 - b) Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
 - c) At least 24 hours before the test: In Lea County email Andy Cortez andy.cortez@blm.gov, (phone 575-393-3612 or 575-631-5801). Note the contact notification method, time, & date in your subsequent report.
 - d) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
 - e) Use of tubing internal protection, tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
 - f) **Submit the original subsequent sundry with three copies to BLM Carlsbad.**

- 2) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
 - a) Approved injection pressure compliance is required.
 - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
 - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum.
 - i) Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 3) Other unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 4) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity.
- 5) The annulus is to be maintained full of packer fluid at atmospheric pressure. Installation of equipment that will display on site, continuous open to the air fluid level is required. A BLM inspector may request verification of this fluid level at any time.
- 6) **Submit a subsequent report (Sundry Form 3160-5)** describing the installation of packer fluid level monitoring equipment within 30 days of beginning injection.
- 7) The operator shall keep monthly records documenting that the casing annulus is fluid filled. A suggested format for these records is available from the BLM Carlsbad Field Office. Copies of those records shall be furnished at the request of a BLM authorized officer.
- 8) Loss of packer fluid above five barrels per month requires notification of the BLM authorized officer within 5 days.
- 9) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of Opsia. Notify the BLM's authorized officer (Paul R. Swartz paul.swartz@blm.gov phone 575-200-7902). If there is no response phone 575-361-2822.
- 10) Also submit to this office a (Sundry Form 3160-5) Notice of Intent (NOI) for planned well work involving a formation change, casing repair/replacement, and injection well fracture treatment for approval by BLM and NMOCD. Verbal approval for the plan may be given by a BLM authorized officer, with the NOI filed within five business days. Packer and tubing repair (normal maintenance procedures) do not require a NOI, but a subsequent sundry needs to be filed.
http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html (see CFR § 3162.3-2 43 & CFR § 3160.0-9 (c)(1)).
 - a) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of required equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in line tubing check valve below the packer or between the on/off tool and packer is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.