

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		8. Well Name and No. HOLDER CB FED 7
2. Name of Operator COG OPERATING LLC		9. API Well No. 30-015-31892-00-S1
3a. Address 550 W TEXAS, STE 1300 FASKEN TOWER II MIDLAND, TX 79701		10. Field and Pool, or Exploratory LOCO HILLS
3b. Phone No. (include area code) Ph: 432-685-4332		11. County or Parish, and State EDDY COUNTY, NM
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 17 T17S R30E SWNW 1650FNL 330FWL		

## 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 checked="" 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 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 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.)

Deepening Program attached. COG respectfully request 1 year approval.

Deepening Procedure:

- 1.MIRU rig.
- 2.POOH w/ rods and tbg.
- 3.RIH and squeeze off existing Yeso perfs with 400 sxs cmt.
- 4.PU 4-3/4? bit and drill out squeeze and 4-3/4? hole from 4770? to 6100?.
- 5.POOH w/ bit and drillstring.
- 6.RIH w/ logs and log from TD to 4700?.
- 7.RIH w/ 4?, 11.3# casing. See section 11 for general centralizer program.
- 8.Cement casing from TD to 4661? w/ 115 sxs Class C cmt. Drop plug and open DV tool. Circ cmt off

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct.	
Electronic Submission #80518 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by KURT SIMMONS on 01/25/2010 (10KMS0548SE)	
Name (Printed/Typed) KANICIA CARRILLO	Title PREPARER
Signature (Electronic Submission)	Date 01/25/2010
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
APPROVED MAR 30 2010 BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE	
Approved By CHRISTOPHER WALLS	Title PETROLEUM ENGINEER Date 03/30/2010
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

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 \*\***

## Additional data for EC transaction #80518 that would not fit on the form

### 32. Additional remarks, continued

DV tool. Drop plug to close DV tool.

9.PU workstring and RIH and drill out DV tool. POOH and LD workstring.

10.RDMO rig.

#### Completion Procedure:

1.MIRU rig.

2.RIH/ w/ perforating guns and perforate Yeso from 5700 ? 5900 w/ 2 spf, 30 holes.

3.Acidez w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 5650?.

4.RIH w/ perforating guns and perforate Yeso from 5400? ? 5600?.

5.Acidez w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 5350?.

6.RIH w/ perforating guns and perforate Yeso from 5100? ? 5300?.

7.Acidez w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand.

8.RIH and drill out plug at 5350? and 5650?.

9.RIH and cut or back off 4? casing at 4661?. POOH w/ 4? casing. Leave 4? liner from 4661? to 6100? (TD).

10.RIH w/ tbg and locate end of tbg at 4500?.

11.RIH w/ rods and pump.

12.RDMO rig.

## CB HOLDER FED #7 DEEPENING PROGRAM

### 1. Estimated Tops of Important Geologic Markers

Yeso Group +/- 4250'

### 2. Estimated Depths of Anticipated Fresh Water, Oil, and Gas

Yeso Group +/- 4250'

This deepening originates in the Yeso and will finish at the base of the Yeso. The entire Yeso group is an oil and gas bearing interval.

### 3. Casing Program

Hole Size	Interval	OD Casing	Weight	Grade**	Jt./Condition	Burst/collapse/tension
4-3/4"	4770' – 6100'	4"	11.3#	L-80 or P-110	ULT-FJ/New	3.98/4.09/3.21 (L80) 5.47/5.23/4.25 (P110)

\*\* Due to casing shortages, either L-80 or P-110 will be run. The exact grade is unknown at time of requesting permit.

**NOTE: COG OPERATING LLC REQUESTS A VARIANCE TO THE 0.422" STAND OFF RULE BETWEEN CASING AND WELLBORE.**

### 4. Cement Program

4" Liner: Class C, 115 sxs, yield 1.37. 100' minimum tie back to production casing.

**NOTE: COG OPERATING LLC REQUESTS A VARIANCE TO THE LINER TOP FLUID ENTRY OR PRESSURE TEST BECAUSE THE DEEPENED WELL WILL BE COMPLETED IN THE SAME ZONE AS THE CURRENT PERFS AND THE ENTIRE INTERVAL IS RECOGNIZED BY THE OCD AS ONE INTERVAL (YESO). AS PER ONSHORE ORDER NO. 2 SECT III: REQUIREMENTS, PART B. CASING AND CEMENTING REQUIREMENTS, SUBPART b. "NO TEST SHALL BE REQUIRED FOR LINERS THAT DO NOT INCORPORATE OR NEED A SEAL MECHANISM." COG BELIEVES WE MEET THE CRITERIA TO NOT BE REQUIRED TESTING THE LINER TOP BECAUSE THERE IS NO NEED FOR A SEAL MECHANISM.**

**NOTE: COG OPERATING LLC REQUESTS A VARIANCE TO THE 200' MINIMUM TIE BACK TO THE PRODUCTION CASING BECAUSE THE LOWEST PERFORATION IS AT 4611'. THE 100' WILL ALLOW US TO NOT COVER EXISTING PERFORATIONS.**

### 5. Minimum Specifications for Pressure Control

The BOP equipment will be a 3000 psi double ram type manually operated preventer. This equipment will be nipple up to a 7-1/16" 3K flange. The pipe rams are located above blind rams. There is no choke or kill manifold. The BOP is tested to 500 psi prior to drilling new formation. Access to the annulus will be through the valves on the 5-1/2" casing head.

### 6. Types and Characteristics of the Proposed Mud System

This well will drilled from end of the existing 5-1/2" casing to TD with 2% KCl.

### 7. Auxillary Well Control and Monitoring Equipment

- A. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

### 8. Logging, Testing, and Coring Program

- A. The electric logging program will consist of GR-Dual Laterolog, Spectral Density, Dual Spaced Neutron, CSNG Log and will be run from TD to 5-1/2" production casing shoe.
- B. No drill stem tests.
- C. No conventional coring anticipated.
- D. Further testing procedures will be determined after the 4" liner has been cemented at TD, based on drill shows and log evaluation.

#### **9. Abnormal Conditions, Pressure, Temperatures, and Potential Hazards**

No abnormal pressures or temperatures are anticipated. The estimated bottomhole temperature at TD is 110 degrees and the estimated maximum bottomhole pressure is 2300 psig. The drilling starts in the Yeso and ends in the Yeso. The section of Yeso being drilled has very low permeability (less than 1 md).

#### **10. Anticipated Starting Date and Duration of Operations**

There will be no road or location work required as this is an existing well location. Once commenced, drilling operations should be finished in approximately 14 days. If the well is productive, an additional 30 days will be required for completion and testing before a decision is made.

#### **11. Centralizer Program**

Fixed blade stabilizer subs will be utilized in the casing string to insure adequate isolation and seal throughout the wellbore. These stabilizer subs are positive fixed blade type. These subs will actually be screwed into the casing string. A diagram of the fixed blade stabilizer sub is located at the end of this program.

The standard location of the stabilizers will be the following:

##### *Shoe Location*

Guide shoe, 1 jt casing, stabilizer sub, float collar, 1 jt casing, stabilizer sub

##### *Perf Interval Location – between perf intervals*

Stabilizer sub, 1 jt casing, stabilizer sub

##### *Top of Liner Location*

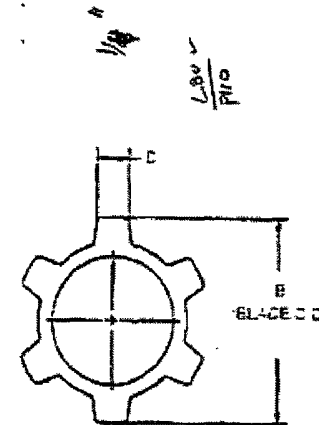
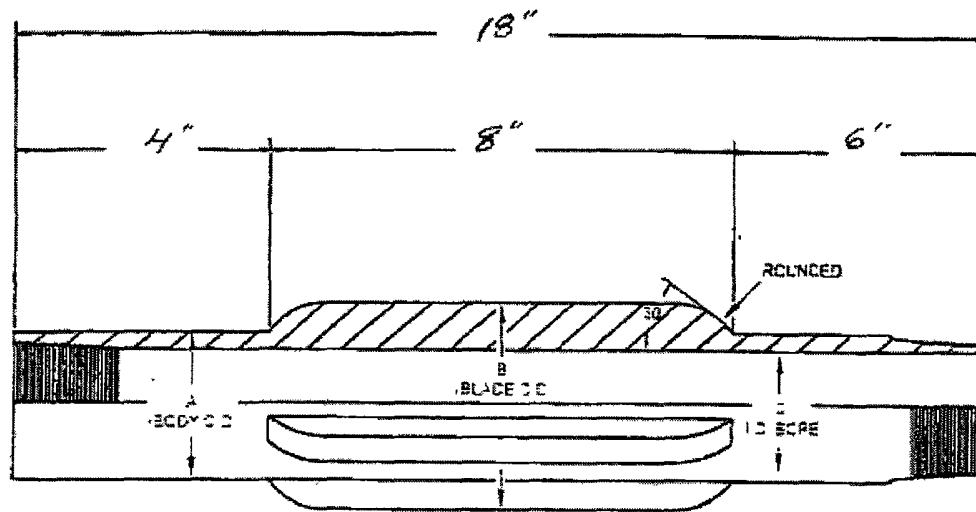
DV tool, 1 jt casing, stabilizer sub, 1 jt casing, stabilizer sub

#### **12. Summary Drilling and Completion Program**


##### **Deepening Procedure**

1. MIRU rig.
2. POOH w/ rods and tbg.
3. RIH and squeeze off existing Yeso perfs with 400 sxs cmt.
4. PU 4-3/4" bit and drill out squeeze and 4-3/4" hole from 4770' to 6100'.
5. POOH w/ bit and drillstring.
6. RIH w/ logs and log from TD to 4700'.
7. RIH w/ 4", 11.3# casing. See section 11 for general centralizer program.
8. Cement casing from TD to 4661' w/ 115 sxs Class C cmt. Drop plug and open DV tool. Circ cmt off DV tool. Drop plug to close DV tool.
9. PU workstring and RIH and drill out DV tool. POOH and LD workstring.

Centralizer Diagram



SIZE	A	B	C	D	E	F	G	DRIFT
4" x 4 3/4" 11.6"	4.050	4.750	3.347"	2 1/4"				3.303"

 <b>RAY OIL TOOL CO.</b> <small>STAND OFF 3</small>	
CENTRALIZED INTERCASING	
CLIENT	Concho Res
WELL NAME & NO	
CASING	4" P115 11.6"
MATERIAL	4 3/4 x 3 1/4 x 18" Q115
<small>7/23/2008 147</small>	

Holder CB Federal 7  
COG Operating LLC  
30-015-31892  
March 29, 2010  
Conditions of Approval

1. Work to be complete within 180 days.
2. Surface disturbance beyond the existing pad requires prior approval.
3. Closed loop system to be used.
4. H2S monitoring equipment should be onsite for personnel protection from surrounding oil operations. Operator should not encounter H2S while deepening.
5. BOP to be tested to **1000 psi** based on BHP expected.
6. Variance for stand-off of less than 0.422" is approved due to NMOCD classifying the formations in this area as the Yeso group.
7. Variance approved for a minimum tie back of 100'. When plugged, cement plug will be required across this tie back and across squeezed perforations.
8. Variance for not testing seal also approved based on NMOCD classification of formations in this area as the Yeso group.
9. If cement does not circulate to DV tool, the appropriate BLM office is to be notified.
10. Test casing as per Onshore Order 2.III.B.1.h.
11. Subsequent sundry detailing work and current well test data are to be submitted when work is complete.

**CRW 032910**