Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Hobbs

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.

5. Lease Serial No.
NMLC029509B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
JC FEDERAL 2

2. Name of Operator
COG OPERATING LLC

Contact: BRIAN MAIORINO
E-Mail: bmaiorino@concho.com

9. API Well No.
30-025-34772

3a. Address
ONE CONCHO CENTER 600 W. ILLINOIS AVE.
MIDLAND, TX 79701

3b. Phone No. (include area code)
Ph: 432-221-0467

10. Field and Pool, or Exploratory
MALJAMAR;YESO-WEST

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 22 T17S R32E SENW 2310FNL 2310FWL

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			
☒ Notice of Intent	☐ Acidize	☒ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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.)

HOBBS OCD

COG Operating LLC respectfully request to deepen the JC Federal #2

Please see attachment for deepening and completion procedures.

JUL 05 2013

RECEIVED

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #189172 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Hobbs

Name *(Printed/Typed)* BRIAN MAIORINO — Title AUTHORIZED REPRESENTATIVE

Signature (Electronic Submission) — Date 01/24/2013

APPROVED

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____ Title _____ Date JUL 2 2013

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
CARLSBAD FIELD OFFICE

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 ****

JUL 25 2013

JC Federal #2 Deepening Program

1. Estimated Tops of Important Geologic Markers

Yeso Group +/- 4500'

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

Yeso Group +/- 4500'

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"	5800' – 7100'	4"	11.3#	L-80	ULT-FJ/New	3.98/4.09/3.21 (L80) 5.47/5.23/4.25 (P110)

NOTE: COG OPERATING LLC REQUESTS A VARIANCE TO THE 0.422" STAND OFF RULE BETWEEN CASING AND WELLBORE due to internal diameter of 5-1/2" casing (ID – 4.892") restricts bit size to 4.75".

4. Cement Program

- 4" Liner: Class C, 115 sxs, : Weight – 14.8 lb/gal. Yield – 1.34 cu ft/sack. Additives – 0.5% LAP-1 + 0.6 % CFR-3 + 0.25 LBM D-AIR 5000 + 0.1% HR-601 + 0.125 LBM Poly-E-Flake, 100' minimum tie back to production casing.
- **NOTE: requesting 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 perforations 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."**

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.

See COA

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 5200'.

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, float collar, stabilizer sub.

Perf Interval Location – between perf intervals
After the first set of perforations, the Lower Blinebry, we will set 1 stabilizer sub.

Top of Liner Location
We will set on stabilizer sub 1 jt under the DV-tool.

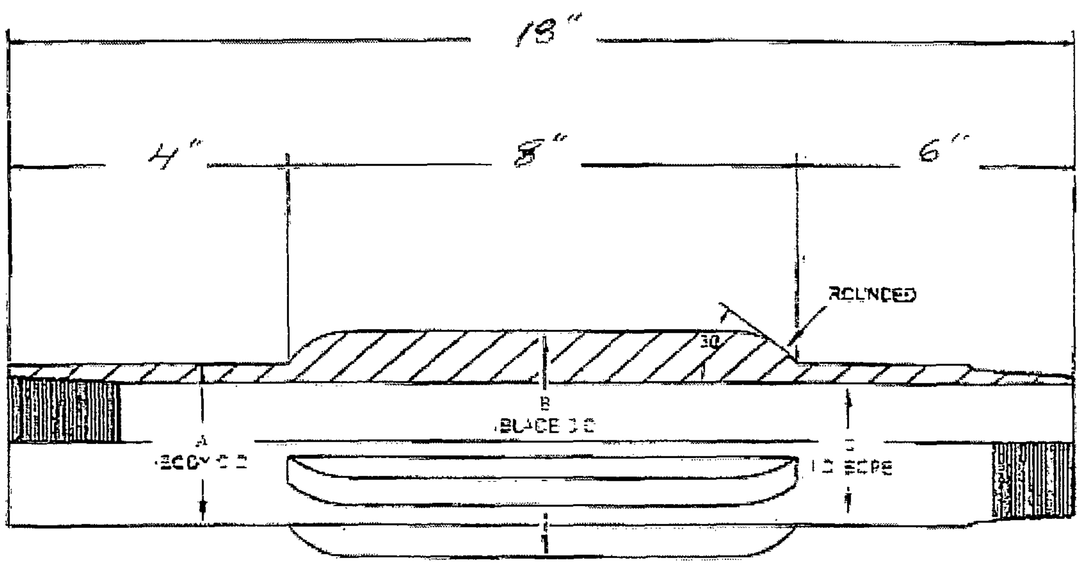
12. Summary Drilling and Completion Program

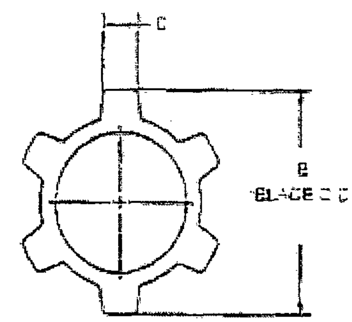
Deepening Procedure

1. MIRU rig.
2. LD production equipment
3. Sqz upper Yeso w/ +/-400sx of Class C neat.
4. Drill out squeeze. Test squeeze to 500 psi for 20 minutes using chart recorder.
5. PU 4-3/4" bit and drill 4-3/4" from 5900' to 7100'.
6. POOH w/ bit and drillstring.
7. RIH w/ logs and log from TD to 5200'.
8. RIH w/ 4", 11.3# casing. See next attachment for general centralizer program.
9. Cement casing from TD to 5800' w/ 115 sxs Class C cmt. Drop plug and open DV tool. Circ cmt off DV tool. Drop plug to close DV tool.
10. PU workstring and RIH and drill out DV tool. POOH and LD workstring.
11. RDMO rig.

Completion Procedure

1. MIRU rig.
2. RIH/ w/ perforating guns and perforate Yeso from 6650'- 6850' w/ 1 spf, 28 holes.
3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 6600'.
4. RIH w/ perforating guns and perforate Yeso from 6380'- 6580'.
5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 6300'.
6. RIH w/ perforating guns and perforate Yeso from 6100'- 6300'.
7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand.
8. RIH and drill out plugs at 6300' and 6600'.
9. RIH and cut or back off 4" casing at 5800'. POOH w/ 4" casing. Leave 4" liner from 5800' to 7100' (TD).
10. RIH w/ tbg and locate end of tbg at 5770'.
11. RIH w/ rods and pump.
12. RDMO rig.





RAY OIL TOOL CO.	
CENTRALIZED INTERCASING	
CLIENT	Concho Res
WELL NAME & NO	
CASING	4" FJ45 11.6#
MATERIAL	4 3/4 x 3/4 x 18" 4135
DRAWING BY	

SIZE	A	B	C	D	E	F	G	DRIFT
	±.010 .000	±.000 .010	±.000 .010					
4"x4 3/4 11.6#	4.050	4.750	3.347"	3/4"				3.303"

JC Federal 2
30-025-34772
COG Operating LLC
July 2, 2013
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.

JAM 070213