Form 3160-5 (August 2007)

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UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED OMB NO. 1004-0135

13-1422

BUREAU OF LAND MANAGEMENT SUNDRY NOTICES AND REPORTS ON WELLS	5. Lease Serial No. NMLC049998A
Do not use this form for proposals to drill or to re-enter an bandoned well. Use form 3160-3 (APD) for such proposals.	6. If Indian, Allottee or Tribe Name
SUBMIT IN TRIPLICATE - Other instructions on reverse side.	7. If Unit or CA/Agreement, Name and/

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SUBMIT IN TRI	PLICATE - Other instruct	ions on reverse side.		7. If Unit or CA/Agre	ement, Name and/or No.
Type of Well	ner			8. Well Name and No FOSTER EDDY	
Name of Operator COG OPERATING LLC	Contact: F E-Mail: rodom@cor	ROBYN ODOM achoresources.com		9. API Well No. 30-015-39131-0	00-X1
3a. Address ONE CONCHO CENTER 600 MIDLAND, TX 79701) W ILLINOIS AVENUE	3b. Phone No. (include area code Ph: 432-685-4385)	10. Field and Pool, or CEDAR LAKE	Exploratory
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description)			11. County or Parish,	and State
Sec 17 T17S R31E SWNE Lo	t G 2175FNL 2290FEL			EDDY COUNT	Y, NM
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE NATURE OF	NOTICE, R	EPORT, OR OTHE	ER DATA
TYPE OF SUBMISSION		ТҮРЕ О	F ACTION		
Notice of Intent ■ Notice of Intent Notice of Inten	☐ Acidize☐ Alter Casing	☐ Deepen ☐ Fracture Treat	☐ Product	ion (Start/Resume)	☐ Water Shut-Off ☐ Well Integrity
☐ Subsequent Report	□ Casing Repair	■ New Construction	Recom	olete	Other
☐ Final Abandonment Notice	☐ Change Plans	□ Plug and Abandon	Temporarily Abandon Change to Original A		
	☐ Convert to Injection	Plug Back	■ Water I	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.)

COG Operating LLC respectfully requests permission for a two year extension to this APD scheduled to expire 5/26/2013.

11/21/208	NOV 2 1 2013	APPROVED FOR 24 MONTH PERIOD ENDING 5-25-15
2mt /EN 11113/13 6/2	NMOCD ARTESIA	
14. I hereby certify that the foregoing is true and correct.	10013-JAVI	- has l'offs drafted.
Electronic Sub	mission #207102 verified by the BLI	M Well Information System

For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JOHNNY DICKERSON on 05/10/2013 (13JLD0786SE)

Name(Printed/Typed) ROBYN ODOM Title PERSON RESPONSIBLE Signature Date 05/10/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Stiple J Poly	Title	NO Pate 7 Q	2013
			EU10
Conditions of approval, if any, are attached. Approval of this notice does not warrant or			

Office

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.

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.

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME: COG OPERATING LLC

LEASE NO.: | NMLC049998A

WELL NAME & NO.: FOSTER EDDY -30 SURFACE HOLE FOOTAGE: 2175' FNL & 2290' FEL

BOTTOM HOLE FOOTAGE

LOCATION: | SEC.17-T17S-R31E

COUNTY: | EDDY County, New Mexico

The Pecos District Conditions of Approval (COA) that were approved with the APD on 05/26/2011 apply to this APD extension. The following conditions apply to the APD extension as well.

⊠ Drilling

Cement Requirements
H₂S Requirements
Logging Requirements
Waste Material and Fluids

I. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

⊠ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

- 1. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the Grayburg formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out 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. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. 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.

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

Possible lost circulation in the Grayburg and San Andres formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 350 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 8-5/8 inch intermediate casing is:
	As proposed. If cement does not circulate see B.1.a, c-d above.
pro sho	erator has proposed DV tool at depth of 500', but will adjust cement portionately if moved. DV tool shall be set a minimum of 50' below previous e and a minimum of 200' above current shoe. Operator shall submit sundry if tool depth cannot be set in this range.
	a. First stage to DV tool:
	Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
	b. Second stage above DV tool:
	□ Cement to surface. If cement does not circulate, contact the appropriate BLM office.
3.	The minimum required fill of cement behind the 5-1/2 inch production casing is:
	As proposed. Operator shall provide method of verification.
pro sho	erator has proposed DV tool at depth of 3000', but will adjust cement portionately if moved. DV tool shall be set a minimum of 50' below previous e and a minimum of 200' above current shoe. Operator shall submit sundry if tool depth cannot be set in this range.
	a. First stage to DV tool:
	□ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve tie-back on the next stage. Additional cement may be required as the excess cement calculates to 19%.
	b. Second stage above DV tool:
	☐ Cement as proposed. Operator shall provide method of verification.
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.

C. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17. Operator approved for either 13-5/8" or 11" BOP stack.
- 2. Proposed blowout preventer (BOP) and related equipment (BOPE) meets minimum requirement.
 - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 3. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. The tests shall be done by an independent service company utilizing a test plug **not** a **cup** or **J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.
 - d. The results of the test shall be reported to the appropriate BLM office.
 - e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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