Form 3160-5 (August 2007) UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT (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.			OMB N Expires 5 Lease Serial No. NMNM118710				
			7. If Unit or CA/Agr				
1. Type of Well			8 Well Name and No HIGH LONESON	8 Well Name and No. HIGH LONESOME 25 FEDERAL 1H			
2. Name of Operator Contact. ROBYN ODOM COG OPERATING LLC E-Mail: rodom@conthoresources.com			9. API Well No. 30-015-37275	COM			
3a Address 3b. Phone No (include area code) 550 WEST TEXAS AVE, STE 1300 Ph: 432-685-4385 MIDLAND, TX 79701 Ph: 432-685-4385			10. Field and Pool, o	10. Field and Pool, or Exploratory WC,CROW FLATS; ABO			
4. Location of Well (Footage, Sec., 1	11 County or Parish	11 County or Parish, and State					
Sec 25 T16S R29E 430FNL 6	560FWL SL L 660'BL	EDDY COUNT	EDDY COUNTY, NM				
	ROPRIATE BOX(ES) TO INDICAT	E NATURE OF N	OTICE, REPORT, OR OTHE	ER DATA			
TYPE OF SUBMISSION							
Notice of Intent		acture Treat	Production (Start/Resume) Reclamation	□ Water Shut-Off □ Well Integrity			
Subsequent Report		w Construction	Recomplete	.⊠ ^{Other}			
Final Abandonment Notice		ig and Abandon ig Back	Temporarily Abandon Water Disposal				
determined that the site is ready for f	bandonment Notices shall be filed only after al final inspection) ully requests permission for an extens OCT 21 2 NMOCD AF	sion to this APD scl	heduled to expire APPROVED FOR $\frac{2}{M_{12}}$	ONTH PERIOD			
14 Thereby certify that the foregoing is		ed by the BLM Well	Information System	<u> </u>			
Name(Printed/Typed) ROBYN ODOM		Title PERSON RESPONSIBLE					
Signature (Electronic Submission)		Date 08/01/2011					
		AL OR STATE O		· · · · · · · · · · · · · · · · · · ·			
Approved By Conditions of approval, if any, are attached certify that the applicant holds legal or eq which would entitle the applicant to condu	Approval of this notice does not warrant or uitable title to those rights in the subject lease uct operations thereon	Title 'Office	AFM	Date 10/19			
Title 18 U S C Section 1001 and Title 43 ^d States any false, fictitious or fraudulent	U.S.C. Section 1212, make it a crime for any statements or representations as to any matter	person knowingly and within its jurisdiction	willfully to make to any department o	or agency of the United			
** OPERAT	TOR-SUBMITTED ** OPERATOR	-SUBMITTED **	OPERATOR-SUBMITTED ACCEPIED NMO	or record			

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PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	COG Operating		
LEASE NO.:	NM118710		i.
WELL NAME & NO.:	High Lonesome 25 Federal Com #1H		
SURFACE HOLE FOOTAGE:	430' FNL & 660' FWL	۲.	i
BOTTOM HOLE FOOTAGE	430' FSL & 660' FWL		
LOCATION:	Section 25, T.16S., R.29E., NMPM		
COUNTY:	Eddy County, New Mexico		

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Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

The previously approved Conditions of Approval for the approved APD dated 09/08/2009 still apply. Any additions to the originally approved COAs will be addressed below.

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Drilling

Waste Material and Fluids 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
 - b. Setting and/or Cementing of all casing strings
 - c. BOPE tests

Eddy County

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

- 1. Although there are no measured amounts of Hydrogen Sulfide reported, it is always a potential hazard. 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. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) 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 and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.

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. 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 lost circulation in Grayburg and San Andres Formations.

- 1. The 13-3/8 inch surface casing shall be set at approximately 400 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 action will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Cement to surface. If cement does not circulate see B.1.a-d above.

3. The minimum required fill of cement behind the 7 inch production casing is:

Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

Pilot hole plugs shall include cement placed at the top Wolfcamp and top Abo formations per BLM Guidelines for plugging. 4. The minimum required fill of cement behind the 4-1/2 inch production casing is:

Cement not required as packer system is being used. Tie back of 100' approved.

5. 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.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
 - 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.
- Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8" intermediate casing shoe shall be 3000 (3M) psi.
- 4. 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 results of the test shall be reported to the appropriate BLM office.
- d. 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.
- e. 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.
- f. Effective November 1, 2008, no variances will be granted on reduced pressure tests on the surface casing and BOP/BOPE. Onshore Order 2 requirements will be in effect.

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.

TMM 08/10/2011