

New Mexico Oil Conservation Division, District I

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
1625 N French Drive
HOBBS NM 88405FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010**EC****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.

NOV 23 2011

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

RECEIVED

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM105885
2. Name of Operator COG OPERATING LLC		6. If Indian, Allottee or Tribe Name
3a. Address 550 WEST TEXAS AVENUE SUITE 100 MIDLAND, TX 79701-4287		7. If Unit or CA/Agreement, Name and/or No. NMNM125999
3b. Phone No. (include area code) Ph: 432-685-4385		8. Well Name and No. HERCULES FEDERAL 3H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 15 T15S R31E SWSW 1980FSL 430FWL		9. API Well No. 30-005-29050-00-X1
10. Field and Pool, or Exploratory BLUITT-WOLFCAMP		11. County or Parish, and State CHAVES 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	Change to Original / PD
	<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 recompleat 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 to update the current drilling practices.

An updated drilling plan is attached for your review.

14. I hereby certify that the foregoing is true and correct Electronic Submission #122271 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Roswell Committed to AFMSS for processing by DAVID GLASS on 11/07/2011 (12DG0010SE)	
Name (Printed/Typed) ROBYN ODOM	Title PERSON RESPONSIBLE
Signature (Electronic Submission)	Date 11/04/2011

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

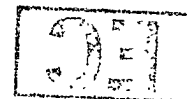
Approved By DAVID R GLASS	Title PETROLEUM ENGINEER	Date 11/14/2011
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office Roswell

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 **

NOV 28 2011

Revisions to Operator-Submitted EC Data for Sundry Notice #122271



	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM105885	NMNM105885
Agreement:		NMNM125999
Operator:	COG OPERATING LLC 550 WEST TEXAS AVE, STE 1300 MIDLAND, TX 79701 Ph: 432-683-7443	COG OPERATING LLC 550 WEST TEXAS AVENUE SUITE 100 MIDLAND, TX 79701-4287 Ph: 432-685-9158
Admin Contact:	ROBYN ODOM PERSON RESPONSIBLE E-Mail: rodome@conchoresources.com Ph: 432-685-4385	ROBYN ODOM PERSON RESPONSIBLE E-Mail: rodome@conchoresources.com Ph. 432-685-4385
Tech Contact:	ROBYN ODOM PERSON RESPONSIBLE E-Mail: rodome@conchoresources.com Ph: 432-685-4385	ROBYN ODOM PERSON RESPONSIBLE E-Mail: rodome@conchoresources.com Ph: 432-685-4385
Location State County	NM CHAVES	NM CHAVES
Field/Pool	WILDCAT; WOLFCAMP	BLUITT-WOLFCAMP
Well/Facility:	HERCULES FEDERAL COM 3 Sec 15 T15S R31E 1980FSL 430FWL	HERCULES FEDERAL 3H Sec 15 T15S R31E SWSW 1980FSL 430FWL

ATTACHMENT TO FORM 3160-3
COG Operating, LLC
Hercules Federal Com #3H
SHL: 1980' FSL & 430' FWL, Unit L
BHL: 1980' FSL & 330' FEL, Unit I
Sec 15, T15S, R31E
Chaves County, NM

1. Proration Unit Spacing: 160 Acres
2. Ground Elevation: 4400'
3. Proposed Depths: Pilot hole TD = 9,050', Horizontal TVD = 8,780', MD = 13,084'
4. Estimated tops of geological markers:

Quaternary	Surface
Chinle	420'
Rustler	1360'
Salt	1500'
Yates	2405'
Seven Rivers	2660'
Queen	3210'
Grayburg	3690'
San Andres	3970'
Glorietta	5470'
Paddock	5580'
Blinley	6140'
Tubb	6730'
Drinkard	6920'
Abo	7200'
Abo Shale	7510'
Lower Abo/Wolfcamp	8763'

5. Possible mineral bearing formations:

Water Sand	150'	Fresh Water
Yates	2405'	Oil / Gas
Queen	3210'	Oil / Gas
San Andres	3970'	Oil / Gas
Tubb	6730'	Oil / Gas
Abo	7200'	Oil / Gas
Lower Abo/Wolfcamp	8763'	Oil / Gas

6. Casing Program - Proposed ★

<u>Hole size</u>	<u>Interval</u>	<u>OD of Casing</u>	<u>Weight</u>	<u>Cond.</u>	<u>Collar</u>	<u>Grade</u>
17-1/2"	0' - +/-450' ★	13-3/8"	48#	New	STC	H-40 or J/K-55
Collapse sf - 4.36, Burst sf - 9.79, Tension sf - 16.77						
12 1/4"	0' - +/-4000'	9-5/8"	40#	New	STC	J/K-55
Collapse sf - 1.36, Burst sf - 2.09, Tension sf - 3.25						
8-3/4"	0' - +/-7850' ★	7"	26#	New	LTC	P-110
Collapse sf - 1.67, Burst sf - 2.68, Tension sf - 3.40						
6-1/8"	7750' - 13084' ★	4-1/2"	11.6#	New	LTC	P-110
Collapse sf - 1.74, Burst sf - 2.46, Tension sf - 2.74						

Respectfully request permission for 100' liner overlap to set pump as deep as possible.

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COG Operating, LLC
Hercules Federal Com #3H
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7. Cement Program

13 3/8" Surface Casing set at +/- 450', Circ to Surf with +/- 550 sx Class "C" w/ 2% CaCl₂ w/0.25 pps CF, 14.8 ppg, 1.35 cf/sk, 1.35 yd. 138% excess calculated to surface.

9 5/8" Intrmd. Csg. Set at +/- 4000'. Lead: 1000sx 35:65:6 C:Poz:gel w/ 5pps LCM-1 0.2% sodium metasilicate, 0.3% FL5ZA, 5% NaCl, 2.05 yd. Tail: 200sx Class "C" w/ 2% CaCl₂, 1.35 yd. 93% excess, calculated to surface.

7" Production Casing set at +/- 7850' MD, Lead: 800 sx 35:65:6 C:Poz w/ 1% CaCl₂, 1.89 yd. Tail: 200sx Class "C" w/ 2% CaCl₂, 0.35% R-3, 1.33 yd. 102% excess in open hole, calculated to surface.

6-1/8" Pilot hole 7750' to 9050' plugged back completely with 350 sx Class "C" with 0.3% R-3, 1.5% CD-32, 0.99 yd. 30% excess calculated to bottom of 7" at 7850'.

4 1/2" Production Liner set from +/- 7850' to +/-13084' MD, 8780' TVD, Liner run with +/- 12 isolation Packers and Sliding sleeves in un-cemented Lateral.

8. Pressure Control Equipment:

After setting 13 3/8" casing and installing 3000 psi casing head, NU 13 5/8" 3000 psi annular BOP. Test annular BOP, casing and manifold with clear fluid to **1000** psi. After setting 9 5/8" casing and installing 3000 psi casing spool, NU 3000 psi double ram BOP and 3000 psi annular BOP. Test double ram BOP and manifold to 3000# with clear fluid and annular to 1500 psi using an independent tester, this equipment will be used continuously until TD is reached. Blind rams will be operationally checked on each trip out of hole. Pipe rams will be operationally checked each 24 hour period. These checks will be noted on daily tour sheets. Other accessories to the BOP equipment include a Kelly cock and floor safety valves, choke lines and choke manifold with 3000 psi WP rating.

9. Proposed Mud Circulating System

Interval	Mud Wt.	Visc.	FL	Type Mud System
0' - 450'	8.5	28	NC	Fresh water native mud w/ paper for seepage and sweeps. Lime for PH.
450'- 4000'	9.1	30	NC	Cut brine mud, lime for PH and paper for seepage and sweeps.
4000'- 7850'	9.1	29	NC	Drill section with fresh water/cut brine circulating the reserve utilizing periodic sweeps of paper as needed for seepage control and solids removal.
7850' - 13084'	9.5	36	10	Drill pilot hole, curve and horizontal section with XCD polymer / cut brine / starch.

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the well site at all times.

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10. Production Hole Drilling Summary:

Set 7" production casing at +/- 7850'. Drill 6-1/8" pilot hole thru Lower Abo/Wolfcamp to +/- 9050', run open hole logs. Spot +/-350 sx. "C" Kick off plug from +/- 9050' to +/-7850'. Drill 6-1/8" hole and kick off at +/- 8285', building curve over +/- 450' to horizontal at 8763' TVD. Drill horizontal section in a Easterly direction for +/-4050' lateral to TD at +/-13,084' MD, 8780' TVD. Run 4-1/2" production liner in Open hole lateral and set isolation packers and liner top packer @ +/- 7750' MD.

11. Auxiliary Well Control and Monitoring Equipment

- A. Kelly cock will be kept in the drill string at all times.
- B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

12. 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 ran from T.D. in vertical pilot hole to 9 5/8" casing shoe.
- B. The mud logging program will consist of lagged 10' samples from intermediate casing point to T.D. in vertical pilot hole and from Kick off point to TD in Horizontal hole.
- C. Drill Stem test is not anticipated.
- D. No conventional coring is anticipated.
- E. Further testing procedures will be determined after the 4 1/2" production casing has been cemented at TD based on drill shows and log evaluation.

13. Abnormal Conditions, Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are anticipated. The estimated bottom hole at TD is 120 degrees and estimated maximum bottom hole pressure is 3160 psig. Low levels of Hydrogen sulfide have been monitored in producing wells in the area, so H2S may be present while drilling of the well. An H2S plan is attached to the Drilling Program. No major loss of circulation zones has been reported in offsetting wells.

14. Anticipated Starting Date

Drilling operations will commence approximately on November 30 with drilling and completion operations lasting approximately 90 days.