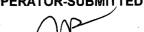
Form 3160-5 (August 2007)	UNITED STATES DEPARTMENT OF THE II -BUREAU OF LAND MANA	NTERIOR	OCD Artes	OMB N Expires:	APPROVED IO. 1004-0135 July 31, 2010		
Do not use	Y NOTICES AND REPO	drill or to re-enter as		5. Lease Serial No. NMLC029020L 6. If Indian, Allottee			
abandoned well. Use form 3160-3 (APD) for such proposals. SUBMIT IN TRIPLICATE - Other instructions on reverse side.					7. If Unit or CA/Agreement, Name and/or No.		
1. Type of Well				8. Well Name and No			
☑ Oil Well ☐ Gas Well ☐ Other				SHAWNEE FEDI	ERAL 1		
2. Name of Operator Contact: NETHA AARON COG OPERATING LLC E-Mail: oaaron@conchoresources.com				9. API Well No. 30-015-30628			
3a. Address 3b. Phone 550 WEST TEXAS SUITE 100 Ph: 432- MIDLAND, TX 79701 Fx: 432-			area code)	10. Field and Pool, or LOCO HILLS P	ADDOCK		
4. Location of Well (Footage, Sec) NEC	CIVLU	11. County or Parish,			
Sec 15 T17S R30E 1650F5 以して	APR	18 2011	EDDY COUNT	Y COUNTY, NM			
12. CHECK AF	PPROPRIATE BOX(ES) TO	INDICATE NATUI	REOFNOTICE,	REPORT, OR OTHE	CR DATA		
TYPE OF SUBMISSION	TYPE OF SUBMISSION TYPE OF ACTION				• · · · · · · · · · · · · · · · · · · ·		
If the proposal is to deepen directionally or recomplete horizontally, give		give subsurface locations a	acture Treat Reclamation Well Integrity ew Construction Recomplete Other ug and Abandon Temporarily Abandon ug Back Water Disposal ding estimated starting date of any proposed work and approximate duration thereof the locations and measured and true vertical denths of all pertinent markers and zones				
following completion of the invol-	DEEPENING PROGRAM	sults in a multiple completi ed only after all requiremen	on or recompletion in	n a new interval, a Form 31 ation, have been completed.	60-4 shall be filed once , and the operator has		
·	2. Estimated Depths of Anticipated Fresh Water, Oil, and Gas						
This deepening originates in the Yeso and will finish at the base of the Yeso. The entire Yeso APPROVEU group is an oil and gas bearing interval. 3. Casing Program							
				1 P APH 14			
14. I hereby certify that the foregoing	g is true and correct. Electronic Submission # For COG O	103819 verified by the I	3LM Well Informato the Carlsbad	tion System AU OF LAND	MANAGEMENT IELD OFFICE		
Name (Printed/Typed) NETHA	AARON	Title	AUTHORIZED R	EPRESENTATIVE	•		
Signature (Electron	ic Submission)	Date	03/08/2011				
	THIS SPACE FO	OR FEDERAL OR S	TATE OFFICE	USE			
Approved By		Title	SER AT	TACHETY	Date		
Conditions of approval, if any, are atta certify that the applicant holds legal or which would entitle the applicant to co	equitable title to those rights in the nduct operations thereon.	e subject lease Office	eandi	TIONS OF AP	K PROVAT		
Title 18 U.S.C. Section 1001 and Title States any false, fictitious or fraudule	43 U.S.C. Section 1212, make it a	crime for any person know	vingly and willfully t	make to any department of	or agency of the United		





Additional data for EC transaction #103819 that would not fit on the form

32. Additional remarks, continued

Hole Size Interval OD Casing Weight Grade** Jt./Condition Burst/collapse/tension 4-3/4? 4841? ? 6300? 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.

of requesting permit.

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

4. Cement Program
4. Liner: Class C, 120 sxs, yield 1.37. 200? 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 OPERATING LLC 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. COG OPERATING LLC
PROPOSES TO SET TOP OF LINER AT 4841? WHICH WOULD ALLOW 50? OF TIE BACK. THE PROPOSAL IS BASED ON
CONVERSATION WITH BLM REPRESENTATIVE WHERE IN IT WAS MUTUALLY AGREEABLE TO BLM AND COG OPERATING
LLC.

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.

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% KCI.

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.
SEE ATTACHMENT

SEE ATTACHED FOR CONDITIONS OF APPROVAL

SHAWNEE FEDERAL #1 DEEPENING PROGRAM

1. Estimated Tops of Important Geologic Markers

Yeso Group

+/- 4400'

SEE ATTACHED FOR CONDITIONS OF APPROVAL

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

Yeso Group +/- 4400'

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	Casing Weight Grade** Jt./Condit		Jt./Condition	Burst/collapse/tension	
4-3/4"	4841' - 6300'	4"	11.3#	L-80 or	ULT-FJ/New	3.98/4.09/3.21 (L80)	
				P-110		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 REQUESTS A VARIANCE TO THE 0.422" STAND OFF RULE BETWEEN CASING AND WELLBORE.

4. Cement Program

4" Liner:

Class C, 120 sxs, yield 1.37. 200' 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 OPERATING LLC 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. COG OPERATING LLC PROPOSES TO SET TOP OF LINER AT 4841' WHICH WOULD ALLOW 50' OF TIE BACK. THE PROPOSAL IS BASED ON CONVERSATION WITH BLM REPRESENTATIVE WHERE IN IT WAS MUTUALLY AGREEABLE TO BLM AND COG OPERATING LLC.

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, Spectral Gr, 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 2800 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. Sqz upper Yeso w/ +/- 400 sx of Class C neat. Drill out squeeze.
- 3. PU 4-3/4" bit and drill 4-3/4" hole from 5077' to 6500'.
- 4. POOH w/ bit and drillstring.
- 5. RIH w/ logs and log from TD to 4300'.
- 6. RIH w/ 4", 11.3# casing. See section 11 for general centralizer program.
- 7. Cement casing from TD to 4841' w/ 120 sxs Class C cmt. Drop plug and open DV tool. Circ cmt off DV tool. Drop plug to close DV tool.
- 8. PU workstring and RIH and drill out DV tool. POOH and LD workstring.

9. RDMO rig.

Completion Procedure

- 1. MIRU rig.
- 2. RIH/ w/ perforating guns and perforate Yeso from 6200 6400 w/ 2 spf, 30 holes.
- 3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 6150'.
- 4. RIH w/ perforating guns and perforate Yeso from 5900′ 6100′.
- 5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 5850'.
- 6. RIH w/ perforating guns and perforate Yeso from 5600' 5800'.
- 7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand.
- 8. RIH and drill out plug at 5850' and 6150'.
- 9. RIH and cut or back off 4" casing at 4841'. POOH w/ 4" casing. Leave 4" liner from 4841' to 6500' (TD).
- 10. RIH w/ tbg and locate end of tbg at 4790'.
- 11. RIH w/ rods and pump.
- 12. RDMO rig.

SIZE A HVY34 MAN HOSO			**
# 1750 3.347" 3/4"		3C 33v16'	8"
m Ti		ACUNCED 1.2 SCPE	
DRIFT CARNE		Transfer Line	6;
CENTRALIZED INTERCASING CLIENT CONCASING WELL NAME AND CASING HILLYS 1/6 & MATERIAL HILLY SHEY 1/8" O/85	RAY OIL TOOL CD	BL-CEC:	ly "