UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB NO. 1004-013:
Expires: July 31, 201

LOKIM	ALL.	$\kappa \omega v$	/ED
OMB N	O 10	104-	0135
Expires:	July	31,	2010

Expires:	July 31,	
ease Serial No.		
Case Serial INU.		

Form 3160-5 August 2007) 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			OCD Artesi	FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010	
				5. Lease Serial No. NMLC054988A	
abandoned wel	II. Use form 3160-3 (API	D) for such proposal	ls.	6. If Indian, Allottee	or Tribe Name
SUBMIT IN TRII	PLICATE - Other instruc	tions on reverse sid	e.	7. If Unit or CA/Agre	ement, Name and/or No.
1. Type of Well				8. Well Name and No BERRY A FEDE	
Oil Well Gas Well Oth Name of Operator		NETHA AARON		9. API Well No.	
COG OPERATING LLC		onchoresources.com		30-015-30289-	
3a. Address 550 WEST TEXAS AVENUE S MIDLAND, TX 79701	SUITE 1300	3b. Phone No. (include Ph: 432-818-2319 Fx: 432-685-4396	area code)	10. Field and Pool, or LOCO HILLS	Exploratory
4. Location of Well (Footage, Sec., 7	., R., M., or Survey Description)		11. County or Parish,	and State
Sec 21 T17S R30E SWNW 2	310FNL 330FWL	•		EDDY COUNT	Y, NM
12. CHECK APPI	ROPRIATE BOX(ES) TO	INDICATE NATU	RE OF NOTICE, RE	EPORT, OR OTHE	R DATA
TYPE OF SUBMISSION		-	TYPE OF ACTION		
Notice of Intent	☐ Acidize	Deepen		ion (Start/Resume)	☐ Water Shut-Off
Subsequent Report	Alter Casing	☐ Fracture Trea ☐ New Constru	_		Well Integrity
Final Abandonment Notice	☐ Casing Repair ☐ Change Plans	Plug and Aba	_	arily Abandon	□ Other
U	Convert to Injection	☐ Plug Back	□ Water D	and the second s	
If the proposal is to deepen directions Attach the Bond under which the wo following completion of the involved testing has been completed. Final Al determined that the site is ready for f BERRY A FEDERAL #10 DEE 1. Estimated Tops of Importar Yeso Group +/- 4350? 2. Estimated Depths of Anticip Yeso Group +/- 4350? This deepening originates in t group is an oil and gas bearing	rk will be performed or provide a operations. If the operation resonand on more performed or provide and on ment notices shall be fill final inspection.) EPENING PROGRAM on Geologic Markers Dated Fresh Water, Oil, and he Yeso and will finish at	the Bond No. on file with sults in a multiple complet ed only after all requireme	BLM/BIA. Required sulton or recompletion in a rate ints, including reclamation SEE ATTA CONDITION	ACHED FOR ONS OF API	e filed within 30 days 60-4 shall be filed once , and the operator has
3. Casing Program NMOCD ARTES				•	
14. I hereby certify that the foregoing is	Electronic Submission #	104158 verified by the PERATING LLC, sent	BLM Well Information	n System	
	nmitted to AFMSS for proc	essing by KURT SIMM	ONS on 03/15/2011 (1	· ·	
Name (Printed/Typed) NETHA A	ARON	Title	AUTHORIZED REP	RESENTATIVE	
Signature (Electronic S			03/11/2011		
	THIS SPACE FO	OR FEDERAL OR S	STATE OFFICE US	SE	
Approved By CHRISTOPHER WA			TROLEUM ENGINE	ER	Date 05/03/201
Conditions of approval, if any, are attached. Approval of this notice does not waterify that the applicant holds legal or equitable title to those rights in the subject which would entitle the applicant to conduct operations thereon.		e subject lease	Carlsbad		

Additional data for EC transaction #104158 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? 4868? ? 6500? 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.

NOTE: CHEVRON USA INC 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 4868? 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 ATTACHED DOCUMENT

BERRY A FEDERAL #10 DEEPENING PROGRAM

1. Estimated Tops of Important Geologic Markers

Yeso Group +/- 4350'

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

Yeso Group +/- 4350'

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

o	9 1 10 9 10 11 1				· ·	
Hole	Interval	OD	Weigh	Grade	Jt./Condition	Burst/collapse/tens
Size	<u></u>	Casing	†	**	·	ion
4-3/4"	4868' –	4''	11.3#	L-80 or	ULT-FJ/New	3.98/4.09/3.21 (L80)
	6500']		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: CHEVRON USA INC 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 4868' 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

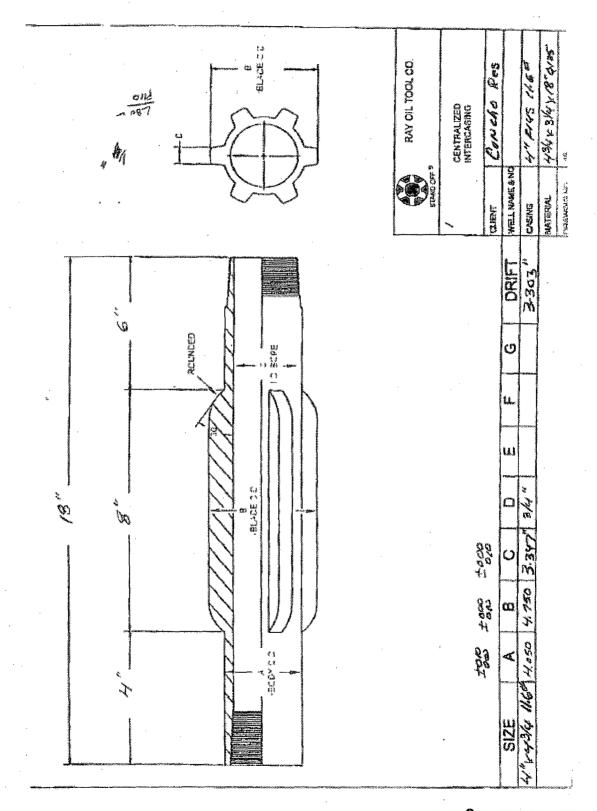
- 1. MIRU ria.
- 2. Sqz upper Yeso w/ +/- 400 sx of Class C neat. Drill out squeeze.

Created by Neevia Document Converter trial version http://www.neevia.com

- 3. PU 4-3/4" bit and drill 4-3/4" hole from 4950' 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 4868' 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 4868'. POOH w/ 4" casing. Leave 4" liner from 4868' to 6500' (TD).
- 10. RIH w/tbg and locate end of tbg at 4810'.
- 11. RIH w/ rods and pump.
- 12. RDMO rig.



Centralizer Diagram