Form 3160-5 (August 2007)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010

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.

NMLC054988A

Lease Serial No.

abandoned wel	I. Use form 3160-3 (APD) fo	or such propo	sals.	'a	o. Il fildian, Anottee of	Tribe Ivanie	•
SUBMIT IN TRI		7. If Unit or CA/Agreement, Name and/or No.					
1. Type of Well  ✓ ☑ Oil Well ☐ Gas Well ☐ Oth		8. Well Name and No. BERRY A FEDERAL 11					
2. Name of Operator COG OPERATING LLC		9. API Well No. 30-015-30669-00-S1					
3a. Address 550 WEST TEXAS AVENUE MIDLAND, TX 79701	Phone No. (include): 432-818-231	19	)	10. Field and Pool, or Exploratory LOCO HILLS-PADDOCK			
4. Location of Well (Footage, Sec., 7				11. County or Parish, a	and State		
Sec 21 T17S R30E SENW 17		EDDY COUNTY, NM					
ULF							
12. CHECK APPE	ROPRIATE BOX(ES) TO IN	DICATE NAT	URE OF 1	NOTICE, RE	EPORT, OR OTHER	R DATA	
TYPE OF SUBMISSION			F ACTION	· +-			
Notice of Intent	☐ Acidize	Deepen		☐ Producti	ion (Start/Resume)	☐ Water	Shut-Off
Notice of Intent	, —		Fracture Treat Recla				Integrity
☐ Subsequent Report	Casing Repair	□ New Cons	truction	Recomp	lete	Other	
Final Abandonment Notice	☐ Change Plans ☐ Plug		g and Abandon Tempo		orarily Abandon		
	Convert to Injection	☐ Plug Back		□ Water D	isposal		•
testing has been completed. Final Al determined that the site is ready for f BERRY A FEDERAL #11 DEF 1. Estimated Tops of Importar Yeso Group +/- 4300?  2. Estimated Depths of Anticit Yeso Group +/- 4300?  This deepening originates in t group is an oil and gas bearin 3. Casing Program	inal inspection.) EPENING PROGRAM It Geologic Markers Dated Fresh Water, Oil, and Content of the Yeso and will finish at the g interval.	Gas	S	SEE ATT	RECEINMAY 0 6	R PROV. /ED 2011	
	Electronic Submission #1041 For COG OPEF nmitted to AFMSS for processi	ng by KURT SIN	MONS on	03/15/2011 (1 <sup>.</sup>	1KMS1110SE)		
Name (Printed/Typed) NETHA A	ARON	Title	AUTHO	RIZED REP	RESENTATIVE		
Signature (Electronic S	ubmission)	Date	03/11/2	011		•	
	THIS SPACE FOR	FEDERAL OF	STATE	OFFICE US	SE .		
Approved By CHRISTOPHER WALLS  Conditions of approval, if any, are attached. Approval of this notice does not warrant or			TitlePETROLEUM ENGINEER C			Date	05/03/201
certify that the applicant holds legal or equivalent would entitle the applicant to condition	uitable title to those rights in the sub act operations thereon.	oject lease Offi	Office Carlsbad				
Title 18 U.S.C. Section 1001 and Title 43	U.S.C. Section 1212, make it a crim	ne for any person k	nowingly an	d willfully to m	ake to any department or	agency of th	ne United

#### Additional data for EC transaction #104159 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? 4857? ? 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 4857? 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.

 Auxillary Well Control and Monitoring Equipment
 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 #11 DEEPENING PROGRAM

## 1. Estimated Tops of Important Geologic Markers

Yeso Group +/- 4300'

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

Yeso Group +/- 4300'

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. Casina Program

9. 9000						
Hole	Interval	OD	Weigh	Grade	Jt./Condition	Burst/collapse/tens
Size	,	Casing	t	**		ion
4-3/4"	4857'	- 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)

<sup>\*\*</sup> 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 4857' 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% KCI.

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# 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.

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- 3. PU 4-3/4" bit and drill 4-3/4" hole from 4928' 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 4857' 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 4857'. POOH w/ 4" casing. Leave 4" liner from 4857' to 6500' (TD).
- 10. RIH w/tbg and locate end of tbg at 4800'.
- 11. RIH w/ rods and pump.
- 12. RDMO rig.

