District I 1625 N. French Dr., Hobbs, NM 88240 MAY 30 Extegregy, Minerals & Natural Resources Department District II 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV 1220 S. st. Francis Dr., Santa Fe, NM 87505 Phone: Soly 476-3460 Phone: Soly 476-3460 Ph								Subr	Revis nit one o	Form C-102 ed August 1, 2011 copy to appropriate District Office ENDED REPORT
		W	ELL LO	CATION	I AND ACR	EAGE DEDIC	ATION PLA	Т		
¹ AP1 Number 30-015-31891				² Pool Code 96718 Loco Hills; Glorieta					so	
⁴ Property Code 302504				Holder	⁵ Property Name CB Federal				⁶ Well Number б	
⁷ OGRID No. 229137				[°] Operator Name COG Operating LLC					[°] Elevation 3654	
¹⁰ Surface Location										
UL or lot no. E	Section 17	Township 17S	Range 30E	Lot Idn	Feet from the 2310	North/South line North	Feet from the 990	East/ West	West line	County Eddy

Page 1

" Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres	13 Joint of	Infill ¹⁴ C	Consolidation (Code 15 Or	der No.				
40									

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

16		"OPERATOR CERTIFICATION
		I hereby certify that the information contained herein is true and complete
		to the best of my knowledge and belief, and that this organization either
		owns a working interest or unleased mineral interest in the land including
		the proposed bottom hole location or has a right to drill this well at this
23101		location pursuant to a contract with an owner of such a mineral or working
2310		interest, or to a voluntary pooling agreement or a compulsory pooling
		order heretofore entered by the division.
		× 5/29/13
		Signature Date
		Kanicia Castillo
		Printed Name
990' V		kcastillo@concho.com
<i>←−−−</i> > •		E-mail Address
		ISURVEYOR CERTIFICATION
		I hereby certify that the well location shown on this
		plat was plotted from field notes of actual surveys
		made by me or under my supervision and that the
		made by me of under my supervision, and sharine
		same is true and correct to the best of my bellej.
	 	 Date of Survey
		Signature and Seal of Professional Surveyor:
		Certificate Number
L		

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Holder CB Federal #6 Deepening Program

1. Estimated Tops of Important Geologic Markers

Yeso Group +/- 4275'

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

Yeso Group +/- 4275'

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	Weight	Grade**	Jt./Condition	Burst/collapse/tension
4-3/4″	4837' - 5900'	4″	11.3#	L-80 or	ULT-FJ/New	3.98/4.09/3.21 (L80)
1.1		l		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 A VARIANCE TO THE 0.422" STAND OFF RULE BETWEEN CASING AND WELLBORE.

4. Cement Program

4" Liner: Class C, 125 sxs, yield 1.37. 100' 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 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 TO THE PRODUCTION CASING BECAUSE THE LOWEST PERFORATION IS AT 4635'. THE 100' WILL ALLOW US TO NOT COVER EXISTING PERFORATIONS.

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-Dual Laterolog, Spectral Density, 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 2300 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, float collar, stabilizer sub.

Perf Interval Location - between perf intervals

Above the first set of perforations, the Lower Blinebry, we will set 1 stabilizer sub.

Top of Liner Location

We will set on stabilizer sub 1 jt under the DV-tool.

12. Summary Drilling and Completion Program

Deepening Procedure

- 1. MIRU rig.
- 2. LD production equipment
- 3. Sqz Paddock w/ +/- 600sx of Class C neat.
- 4. Sqz San Andres with +/- 1200 sx of Class C cmt.
- 5. Drill out squeeze. Test squeeze to 500 psi for 20 minutes using chart recorder.
- 6. PU 4-3/4" bit and drill 4-3/4" from 4837' to 5900'.
- 7. POOH w/ bit and drillstring.
- 8. RIH w/ logs and log from TD to 4500'.
- 9. RIH w/ 4", 11.3# casing. See next attachment for general centralizer program.
- 10. Cement casing from TD to 4738' w/ 125 sxs Class C cmt. Drop plug and open DV tool. Circ cmt off DV tool. Drop plug to close DV tool.
- 11. PU workstring and RIH and drill out DV tool. POOH and LD workstring.
- 12. RDMO rig.

Completion Procedure

- 1. MIRU rig.
- 2. RIH w/ perforating guns and perforate Yeso from 5420'-5620'with 26 holes @ 1 spf.
- 3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 5370'.
- 4. RIH w/ perforating guns and perforate Yeso from 5120'- 5320'.
- 5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 5070'.
- 6. RIH w/ perforating guns and perforate Yeso from 4820 5020'.
- 7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand.
- 8. RIH and drill out plugs at 5070' and 5370'.
- 9. RIH and cut or back off 4" casing at 4738'. POOH w/ 4" casing. Leave 4" liner from 4738' to 5900' (TD).
- 10. RIH w/ tbg and locate end of tbg at 4700'.
- 11. RIH w/ rods and pump.
- 12. RDMO rig.



COG OPERATING, LLC

