# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

JUL 29 2009

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

RM
<del></del> -

SUNDRY Do not use thi abandoned we		5. Lease Serial No NMNM074935  6. If Indian, Allottee or Tribe Name				
SUBMIT IN TRI	PLICATE - Other instruc	tions on reverse side.	7 If Unit or CA/Ag	reement, Name and/or No.		
Type of Well		ZANIJOJA OARDII I O	8 Well Name and N ELECTRA FED 9 API Well No			
COG OPERATING LLC		KANICIA CARRILLO onchoresources.com		9. API Well No 30-015-31776-00-S1		
3a Address 550 W TEXAS, STE 1300 FA: MIDLAND, TX 79701		3b Phone No. (include area code Ph: 432-685-4332	LOCO HILLS			
4 Location of Well (Footage, Sec., 7	., R., M., or Survey Description	)	11. County or Paris	h, and State		
Sec 15 T17S R30E SWNW 16	EDDY COUN	EDDY COUNTY, NM				
12. CHECK APPE	ROPRIATE BOX(ES) TO	INDICATE NATURE OF 1	NOTICE, REPORT, OR OTH	ER DATA		
TYPE OF SUBMISSION	-	ТҮРЕ О	F ACTION			
Notice of Intent ☐ Subsequent Report ☐ Final Abandonment Notice	☐ Acidize ☐ Alter Casing ☐ Casing Repair ☐ Change Plans ☐ Convert to Injection	Deepen  ☐ Fracture Treat ☐ New Construction ☐ Plug and Abandon ☐ Plug Back	☐ Production (Start/Resume) ☐ Reclamation ☐ Recomplete ☐ Temporarily Abandon ☐ Water Disposal	☐ Water Shut-Off ☐ Well Integrity ☐ Other		

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 recomplete 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 recompletion 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 respectfully requests 180 days approval.

See attachment.

# SEE ATTACHED FOR CONDITIONS OF APPROVAL

14. I hereby certify that the	ne foregoing is true and correct.  Electronic Submission #70453 verified For COG OPERATING LI Committed to AFMSS for processing by KU	_C, ser	t to the Carlsbad		
Name (Printed/Typed)	KANICIA CARRILLO	Title	PREPARER		
Signature	(Electronic Submission)	Date	06/02/2009		
	THIS SPACE FOR FEDERA	L OR	STATE OFFICE USE		
Approved By WESLEY	'INGRAM	TitleF	ETROLEUM ENGINEER	I	<i>2009</i> Date 07/25/2(
certify that the applicant hol	ny, are attached. Approval of this notice does not warrant or ids legal or equitable title to those rights in the subject lease licant to conduct operations thereon.	ŀ	Carlsbad		
Title 18 U.S.C. Section 100	l and Title 43 U.S.C. Section 1212, make it a crime for any p	erson kr	owingly and willfully to make to any department	or agency	y of the United

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

DISTRICT I F.O. Best 1680, Hobber, NH 68241-1980

#### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Bevised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

East/West line

DISTRICT H P.O. Drumer ED, Artenia, NM 88211-0719

DISTRICT III

UL or lot No.

40

Dedicated Acres

Section

Township

Joint or Infill

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT IV F.O. BOX 2088, SANT	•		WELL LO	CATION	AND ACREA	GE DEDICATI	ON PLAT	□ AMENDED	REPORT
API Number				Pool Code Pool Name					
t.	96718 Loco Hills								
Property Code Property Name Well Nu ELECTRA FEDERAL 4						Well Num	aber		
OGRID N	OGRID No. Operator Name					Elevation 368			
		,			Surface Loc	ation			
UL or lot No.	Section	Township	Range	Let Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	15	17-S	30-E		1650	NORTH	330'	WEST	EDDY
	***************************************		Bottom	Hole Loc	cation If Diffe	rent From Sur	face	***************************************	

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

Feet from the North/South line

Feet from the

Lot Idn

Order No.

Range

Consolidation Code

	R HON BIMI	DAND CIVIT HAD DEL	SI ATTIOTED DI TIL	J DIVIDION
3587.4 SEE DETAIL 3682.2	3692.0			OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and being  Signature  Printed Name  I t t  Title  Date  SURVEYOR CERTIFICATION  I hereby vertify that the well location shown on this plat was plotted from field noise of actual surveys made by me ar under my supervison and that the same is true and correct to the best of my being  JANUARY 16, 2001  Date Surveyed with the sum of the signature & Seal of Professional Surveyor  AMEL BURNAY 01/19/51
	,			Certificate No. RONALD 17 RIDSON 3239 12841

#### **ELECTRA FED #4 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

Hole	Interval	OD	Weigh	Grade	Jt./Condition	Burst/collapse/tens
Size		Casing	t	**		ion
4-3/4"	4797' – 6100'	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)

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

## 4. Cement Program

4" Liner: Class C, 115 sxs, yield 1.37. 150' 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 4728'. THE 150' 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.

Sec COA

#### 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, 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 it casing, stabilizer sub, 1 it casing, stabilizer sub

#### 12. Summary Drilling and Completion Program

Deepening Procedure

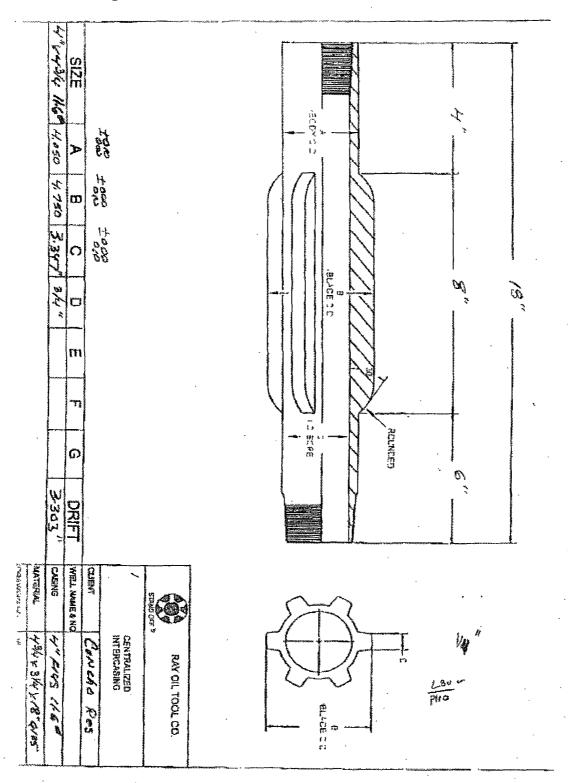
- 1. MIRU rig.
- 2. Sqz upper Yeso w/ +/- 400 sx of Class C neat. Drill out squeeze.

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

- 3. PU 4-3/4" bit and drill 4-3/4" hole from 4947' to 6100'.
- 4. POOH w/ bit and drillstring.
- 5. RIH w/logs and log from TD to 4900'.
- 6. RIH w/ 4", 11.3# casing. See section 11 for general centralizer program.
- 7. Cement casing from TD to 4797' w/ 115 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 5700 5900 w/ 2 spf, 30 holes.
- 3. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 5650'.
- 4. RIH w/ perforating guns and perforate Yeso from 5400' 5600'.
- 5. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand. Set plug at 5350'.
- 6. RIH w/ perforating guns and perforate Yeso from 5100' 5300'.
- 7. Acidize w/ 2500 gals of 15% HCl. Frac zone w/ 179,800 # of sand.
- 8. RIH and drill out plug at 5350' and 5650'.
- 9. RIH and cut or back off 4" casing at 4791'. POOH w/ 4" casing. Leave 4" liner from 4791' to 6100' (TD).
- 10. RIH w/tbg and locate end of tbg at 4700'.
- 11. RIH w/rods and pump.
- 12. RDMO rig.



Electra Federal 4
COG Operating LLC
30-015-31776
July 25, 2009
Conditions of Approval

- 1. Work to be complete within 180 days.
- 2. Surface disturbance beyond the existing pad requires prior approval.
- 3. Closed loop system to be used.
- 4. H2S monitoring equipment should be onsite for personnel protection from surrounding oil operations. Operator should not encounter H2S while deepening.
- 5. BOP to be tested to 1000 psi based on BHP expected.
- 6. Variance for stand-off of less than 0.422" is approved due to NMOCD classifying the formations in this area as the Yeso group.
- 7. Variance approved for a minimum tie back of 150'. When plugged, cement plug will be required across this tie back and across squeezed perforations.
- 8. Variance for not testing seal also approved based on NMOCD classification of formations in this area as the Yeso group.
- 9. If cement does not circulate to DV tool, the appropriate BLM office is to be notified.
- 10. Test casing as per Onshore Order 2.III.B.1.h.
- 11. Subsequent sundry detailing work and current well test data are to be submitted when work is complete.

WWI 072509