Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

OCD Hobbs

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

Do not use th abandoned we	NOTICES AND REPORT is form for proposals to dr II. Use form 3160-3 (APD) PLICATE - Other instruction	for such proposals.	2 2013 	5. Lease Serial No. NMLC061936 6. If Indian, Allottee 7. If Unit or CA/Agre 8. Well Name and No DOS XX 27 FED	rement, Name and/or No.
Name of Operator COG PRODUCTION LLC	Contact: ST E-Mail: sdavis@concl	ORMI DAVIS ho.com		9. API Well No. 30-025-40090-0	00-X1
3a. Address 2208 W MAIN STREET ARTESIA, NM 88210	F	b. Phone No. (include area code Ph: 575-748-6946 x: 575-748-6968)		one Spring Upgg
4. Location of Well (Footage, Sec., T Sec 27 T24S R32E NENE 440				11. County or Parish, LEA COUNTY,	
12. СНЕСК АРРІ	ROPRIATE BOX(ES) TO I	NDICATE NATURE OF	NOTICE, R	EPORT, OR OTHE	R DATA
TYPE OF SUBMISSION		ТҮРЕ О	F ACTION		
■ Notice of Intent □ Subsequent Report	☐ Acidize ☐ Alter Casing ☐ Casing Repair	☐ Deepen ☐ Fracture Treat ☐ New Construction	☐ Reclam	plete	☐ Water Shut-Off ☐ Well Integrity ☑ Other Drilling Operations
☐ Final Abandonment Notice	☐ Change Plans ☐ Convert to Injection	☐ Plug and Abandon ☐ Plug Back	☐ Tempor	rarily Abandon Disposal	Diffing Operations
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab- determined that the site is ready for final COG Production LLC respectf attached.	ally or recomplete horizontally, given will be performed or provide the operations. If the operation results and onment Notices shall be filed on all inspection.)	e subsurface locations and measi Bond No. on file with BLM/BI/s s in a multiple completion or rec- only after all requirements, include	ored and true v.A. Required su completion in a ling reclamation	ertical depths of all pertir ibsequent reports shall be new interval, a Form 316 in, have been completed,	nent markers and zones. filed within 30 days 0-4 shall be filed once
		,	SEE	ATTACHED I	FOR APPROVAL
14. I hereby certify that the foregoing is	true and correct	T			

14. I hereby certify that	the foregoing is true and correct. Electronic Submission #204016 verifie For COG PRODUCTION Committed to AFMSS for processing by JOHN	LLĆ, s	ent to the Hobbs	s	
Name(Printed/Typed	7) STORMI DAVIS	Title	PREPARER		
Signature	(Electronic Submission)	Date	04/10/2013	ADDOUED	
•	THIS SPACE FOR FEDERA	AL OR	STATE OFFIC	CE USE APPRUVEU	
Approved By		Title		APR 2 0 2012 Dale	
certify that the applicant h	any, are attached. Approval of this notice does not warrant or olds legal or equitable title to those rights in the subject lease oplicant to conduct operations thereon.	Office	KZ	RUPKIN OF THE MANAGEMENT	-
Title 18 U.S.C. Section 10 States any false, fictition	01 and Title 43 U.S.C. Section 1212, make it a crime for any purish or fraudulent statements or representations as to any matter w	erson kno	wingly and willfully	lly to make CARLY BAD IFFE D OFFE DT the United	



Recement Procedure (7,600'-4,200')

Dos XX 27 Federal Com No. 1H

440' FNL & 440' FEL, Sec 27, T24S, R32E

Lea County, New Mexico 30-025- 40090

Well Data:

Reference elevation: 3,582' GL 18' KB

Casing:

13-3/8 54.5# J-5 @1, 129 (circulated 108 sx)

9-5/8" 40# N-80/ @ 4,736'(circulated 250 sx)

5-1/2" 17# P-11 @ 5586 Did not circulated cement

CBL TC @7,300

PBTD

13,677

Perforations:

13,579'-9,837'(474 Shot)

Tubing Detail: NA

Procedure:

- 1. Test anchors
- 2. Check wellhead pressure. Use produced water for kill fluid.
- 3. MIRU PU. ND wellhead.
- 4. NU 5M double ram hydraulic BOP.

Prepare to lubricate in CBP on wireline

- 5. Pump 200 bbl of 2% KCl-water sweep in vertical wellbore @-+BPM-
- 6. MIRU wireline unit and 5M lubricator.
- 7. Make gauge ring/junk basket run to KOP $@\beta$,946.
- 8. Lubricate in and set CBP @ 7,300'.
- 9. Dump bail 10' of cement on top of CBP.
- 10. Pressure test 5-1/2" casing to 3,000 psi.
 - a. Release pressure after successful test.

Prepare to perforate

- 11. Lubricate in and perforate 4 shots @7,200'
 - a. 3-3 8" BH, RDX 24 gm charges
- 12. POH, lay down spent gun, inspect, and report shots fired.

Prepare to establish circulation rate

- 13. Pump 300 bbl of fresh water and establish a circulation rate. (Monitor and note circulation)
 - a. If unable to establish circulation call Midland office prior to proceeding.
 - b. If circulation is established proceed to step 14.
- 14. PU composite mechanically set cement retainer.
- 15. TIH and set cement retainer on 2-7/8" #7.90 PH-6 WS @ 7,150'
 - a. Pump tbg capacity + 10bbls thru retainer prior to setting retainer.
- 16. Load and pressure test annulus to 500 psi.
- 17. Establish injection rate and pressure. (Monitor and note circulation throughout entire job)
- 18. Pump 40 bbl FW spacer
- 19. Mix and pump 250 sacks

11.8 ppg EconoCem C

0.5% Halad 322

5 lbm/sk Kol-Seal

0.25 lbm/sk D-AIR 5000

20. Mix and pump 250 sacks

14.8 ppg HalCem – C

0.2% HR-601

- 21. Shut down, wash up pumps and lines
- 22. Displace cement with 38 bbl fresh water.
- 23. Sting out of cement retainter, reverse tubing clean.
- 24. TOH w/ tubing and stinger.
- 25. Wait on cement for 24 hours.
- 26. Test casing and chart to 500 psi and hold for 30 minutes.
- 27. TIH w/ 4-3/4" sealed bearing mill tooth tri cone bit on 2-7/8" #7.90 PH-6 WS to drill out retainer, cement, and CBP while reverse circulating.
- 28. Drill cement to \sim 7,210'.
- 29. Test and chart squeezed perforations to 500 psi. and hold for 30 minutes.
- 30. If squeeze holds continue drilling while reverse circulating.
 - a. If squeeze DOES NOT hold call Midland office.
- 31. Continue TIH and drill out CBP @ 7,300' circulate well clean.
- 32. Continue to drill out frac plugs to PB TD @ 13,629'.
- 33. TOH with 4-3/4" bit and 2-7/8" #7.90 PH-6 WS.
- 34. Install artificial lift equipment. (design to come from production)
- 35. ND 5M double ram hydraulic BOP.
- 36. Install wellhead.
- 37. RDMO PU.
- 38. Turn back to production.

	EVALUATION .	sĥo j on	sgoJ oN	CSNG/SDLT/DLLT/MGRD/DSNT/B	y K. LaFortune 3/18/2013	
	(4°) T2H8			145 F @ 8,916°	Updated by Date:	
	(6dd) WM	9.2	10.0	<u>0</u>	מכו	
	HOFE SIZE	"S/1-71	17-1/4"	"8/ <i>T-T</i>		
	SHL: 440 FNL & 440' FEL Sec 27, T24S R32E BHL: 342' FSL & 390' FEL (est) Sec 27, T24S R32E GL: 3,582' KB: 3,600' ZERO: 18.0' AGL	<u>-</u>	P. Cooley	rablish circulation rate, pressure restamment.	Production Casing @ 13,679 5-1/2" 17# P-110 LTC Did not circulate cement CBL TOC @ 7,300' Wet Shoe-Float Collar @ 13,677' Marker joint @ 8,834' (PERC)	
CURRENT WELL SKETCH	Dos XX 27 Federal Com No. 1H Wildcat Lea, NM	Surface Casing @ 1.129' 13-3/8'' 54.5# 1-55 STC Circulated 283 sx cement.	Intermediate Casing @, 4,736' 9-5/8" 40# N-80/1-55 LTC Circulated 250 ex coment	7200 4 perfs establish circulation rate, pressure testannulua. 7300 700 pert Cisting 10 Be a great testaning to 3000 psi KOP @ 8,946' EOC @ 9,997' EOL @ 13,679' Avg TVD in Lateral 9,600'	ELM	
					9 7 3	
	hrs ırs				test to	
	API: 30-025-40090 SPUD: 1/6/13 @ 10:00 hrs FRR: 1/29/13@ 22:30 hrs RIG: Silver Oak #7				757 7210 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	
			•	Logged Open Hole	all done cement to	
			·		ofter. Drill c	

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	BHST (°F)			145 F @ 8,916'	Updated by Date:	
	(6dd) WM	9.2	10.0	9.1		
	HOFE SIZE	"S\1-71	12-1/4"	872-2		
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			w			

DOS XX 27 Federal Com 1H 30-025-40090 COG Operating LLC April 29, 2013 Conditions of Approval

Notify BLM at 575-361-2822 a minimum of 24 hours prior to commencing work.

Work to be completed by July 29, 2013.

- 1. Surface disturbance beyond the originally approved pad must have prior approval.
- 2. Closed loop system required.
- 3. All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of work over operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.
- 4. Operator to have H2S monitoring equipment on location.
- 5. A minimum of a 3000 (3M) BOP to be used. All blowout preventer (BOP) and related equipment (BOPE) shall comply with reasonable well control requirements. A two ram system with a blind ram and a pipe ram designed for the size of the work string shall be adequate. Tapered work strings will require an additional pipe ram. The manifold shall comply with Onshore Oil and Gas Order #2 Attachment I (3M Diagrams of Choke Manifold Equipment). The accumulator system shall have an immediately available power source to close the rams and retain 200 psi above pre-charge. The pre-charge test shall follow requirements in Onshore Order #2.
- 6. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
- 7. Set CBP at 7300' and dump bail 10' of neat class C cement on top.
- 8. Pressure test casing after squeeze to 500 psi and submit results to BLM. Contact BLM if test fails.
- 9. Provide BLM-with an electronic copy (Adobe Acrobat Document) cement bond log record from 8,000' to surface. The CBL may be attached to a <u>pswartz@blm.gov</u> email. The CFO BLM on call engineer may be reached at 575-706-2779.
- 10. Submit a subsequent Sundry Form 3160-5 detailing all of the work and tests done on this well with documentation.

JAM 042913