Form 3160-5 (August 2007)

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# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT



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

	Expires	July	31,
Lease Seri	ial No		
NMLC06	64790		

SUNDRY NOTICES AND REPORTS ON WEILLS 2 1 201	12
Do not use this form for proposals to drill or to re-enter an	
shandaned well. Hee form 2160-2 (ADD) for euch proposals	

6. If Indian, Allottee or Tribe Name

apandoneu we	ii. Use luliii 3160-3 (AP		OFCENED				
SUBMIT IN TRI	PLICATE - Other instruc	ctions on rev	Contraction of the Contraction o		7 If Unit or CA/Agree	ement, Name and/or No	)
1. Type of Well Gas Well Gother INJECTION					8 Well Name and No FEDERAL 18 04		
Oil Well Gas Well Oth  Name of Operator COG OPERATING LLC		CHASITY JA	CKSON		9 API Well No 30-025-01671-0	)0-S1	
			. (include area code 6-3087	e)	10. Field and Pool, or SWD <b>SEN</b> TONTO	Exploratory Len River	<u> </u>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description)					11 County or Parish,		
Sec 18 T19S R33E SENE 1980FNL 660FEL					LEA COUNTY,	NM	
12. CHECK APPI	ROPRIATE BOX(ES) TO	O INDICATE	NATURE OF	NOTICE,	REPORT, OR OTHE	R DATA	
TYPE OF SUBMISSION			TYPE O	F ACTION	I		
Notice of Intent	Acidize	□ Dee		_	uction (Start/Resume)	□ Water Shut-Of	f
<del></del>	☐ Alter Casing	_	ture Treat	□ Recla		□ Well Integrity	
☐ Subsequent Report	☐ Casing Repair		Construction	□ Reco	mplete	Other Workover Operat	ione
☐ Final Abandonment Notice	Change Plans		and Abandon	_	oorarily Abandon	workover Operat	10115
	Convert to Injection	□ Plug	Back	□ Wate	r Disposal		
following completion of the involved testing has been completed. Final At determined that the site is ready for final and the	pandonment Notices shall be fil nal inspection.)  In that in a cement squeeze surun and cemented to surfit at/near the base of the evith fresh water.  In the composite plugner to remove the liner flow of the li	ed only after all sufficient to parace to insure existing 5 ?? or and cements eating equipm 3/82-IPC_tubin ner as is possi	ass an MIT. mechanical intecasing. ed in place, cement and drill up	egrity nent will be	ation, have been completed,	60-4 shall be filed once and the operator has	<b>&amp;</b>
additional depth allowance by	the NMOCD in the past.			gram.	EST SOLL	Signal Art	
14 I hereby certify that the foregoing is	true and correct. Electronic Submission #1	OPERATING 4	LC, sent to the I	Hobbs		R	
Name(Printed/Typed) CHASITY JACKSON		Title PREPARER					
Signature (Electronic S			Date 06/07/2				
	THIS SPACE FO	R FEDERA	L OR STATE	OFFICE	APPROVEL	)	
Approved By			Title		JUN 1 9 2012	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those lights make subject lease which would entitle the applicant to orduct operations thereon			Office		MA-		
Title 18 U S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	USC Section 1212, make it a tatements or representations as	to any matter wi	erson knowingly and thin its jurisdiction	d willfully is	ETROLEUM PENGINE	Expancy of the United	

### Additional data for EC transaction #139997 that would not fit on the form

#### 32. Additional remarks, continued

9. The well will be MIT?d prior to return to disposal.

Liner:

1. WBD w/ Liner mods attached

WBD W Liner mods attached
 Liner Spec: 4?, 11.34 ppf, L80, Ultra Flush Joint
 Cement Spec: Class C w/ 2% CaCl2 and other additives as required for pump ability.
 Liner length: approx 3,340? depending upon Composite plug depth.
 Cement: Volume to pump, 175 sxs, Volume to order, 200 sxs. Order volume is larger to insure that the total required can be pumped and not remain in tub.

We have submitted a subsequent sundry updating the well work. The Electronic Submission number for that sundry is 139816.

# **COG Operating LLC**

Lease & Well #	Federal "18" # 4	Liner Modifications in Green
Spud - 6/23/60		Lea Co., NM Sec 18, T19S R33E, 1980 FNL & 660 FEL
Elevation - 3642' GL	Casing leak bet	ween 1426 - 57' Squeezed w/350 sx C nt    C   N o mi   N =   W    4", 14-34 ppf, L80 Ultra FJ Liner, Surface to +/- 3,340'  Cementing Data:  Slurry: Class C w/ 2% CaCl2, Yeild 1.32 cu ft/sx  Volume: 3,340' @ 0.04974 cuft/ft, total of 166 cu ft  Excess: 216 cu ft  Sxs: 175  3 3,130', calc
Composite plug, 3,34	Squeezed 5 1/2" 14 # cs 7 Rivers	d' Acidized w/2,500 gal 15% HCL. I off w/100 sx. Did not hold. Re-squeezed w/100 sx. Sg @ 3,349' Cmt w/40 sx.
	3,450' TD	

# **Conditions of Approval**

## COG Operating LLC Federal 18 4 API 3002501671

June 19, 2012

- 2. Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from the liner shoe to top of cement.
- 3. After injection rates and pressures stabilize, an injection profile shall be run and submitted to BLM CFO for review. If it is determined that injection water is moving down into the Capitan Reef, operator shall take necessary measures to restrict injection to the Seven Rivers. Operator shall submit logs to TD, since they were not submitted when well was deepened.
- 4. Surface disturbance beyond the existing pad shall have prior approval.
- 5. A closed loop system is required. The operator shall properly dispose of drilling/circulating contents at an authorized disposal site. Tanks are required for all operations, no excavated pits.
- 6. Functional H<sub>2</sub>S monitoring equipment shall be on location.
- 7. A 2000 (2M) BOPE 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 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 1, 2M 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.
- 8. All waste (i.e. 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.
- 9. Liner shall be tested as required in Onshore Order 2.III.B.1.h., submit chart to BLM.
- 10. Workover approval is good for 90 days (completion to be within 90 days of approval). A legitimate request is necessary for extension of that date.
- 11. Submit subsequent report detailing work by date performed.

### Well with a Packer - Operations

- 1) Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
- 2) The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
- 3) Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
- 4) At least 24 hours before the test: In Lea County email Andy Cortez <a href="mailto:acortez@blm.gov">acortez@blm.gov</a>, (phone 575-393-3612 or 575-631-5801). If no answer, leave a voice mail with the API#, workover purpose, and a call back phone number. Note the contact notification method, time, & date in your subsequent report.
- 5) Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
- 6) Use of tubing internal protection, tubing on/off equipment just above the packer, a profile nipple, and an in line tubing check valve below the packer or between the on/off tool and packer is a "Best Management Practice". The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.
- 7) Submit the original subsequent sundry with three copies to BLM Carlsbad.
- 8) Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
  - a) Approved injection pressure compliance is required.
  - b) If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
  - c) When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
- 9) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 10) The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity. A BLM inspector may request verification of the annular fluid level at any time.

- 11) A "Best Management Practice" is to maintain the annulus full of packer fluid at atmospheric pressure. Equipment that will display on site, continuous open to the air fluid level is necessary to achieve this goal.
- 12) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 13) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 14) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0 psia. Notify the BLM's authorized officer ("Paul R. Swartz" cpswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 15) Submit a (Sundry Form 3160-5) subsequent report (daily reports) describing all wellbore activity and Mechanical Integrity Test as per item 1) above. Include the date(s) of the well work, and the setting depths of equipment: internally corrosive protected tubing, tubing on/off equipment just above the packer, and an in-line tubing check valve below the packer or between the on/off tool and packer. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore workover.

PRS / WWI 061912

Access information for use of Form 3160-5 "Sundry Notices and Reports on Wells"

NM Fed Regs & Forms - <a href="http://www.blm.gov/nm/st/en/prog/energy/oil\_and\_gas.html">http://www.blm.gov/nm/st/en/prog/energy/oil\_and\_gas.html</a>

§ 43 CFR 3162.3-2 Subsequent Well Operations.

§ 43 CFR 3160.0-9 (c)(1) Information collection.

§ 3162.4-1 (c) Well records and reports.