

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.

SUBMIT IN TRIPLICATE: Other instructions on reverse side.

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: INJECTION		5. Lease Serial No. NMMN113939
2. Name of Operator COG OPERATING LLC Contact: STORMI DAVIS E-Mail: sdavis@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address 2208 WEST MAIN STREET ARTESIA, NM 88210	3b. Phone No. (include area code) Ph: 575-748-6946 Fx: 575-748-6968	7. If Unit or CA/Agreement, Name, and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 10 T26S R26E NENE 660FNL 660FEL		8. Well Name and No. SOUTH CRAIG 10 SWD 1
		9. API Well No. 30-015-24469
		10. Field and Pool, or Exploratory SWD; DELAWARE
		11. County or Parish, and State EDDY COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

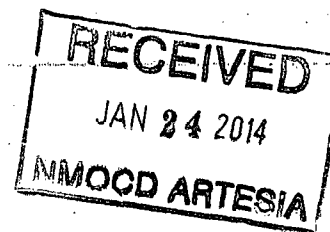
13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths 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 recompleat 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.)

As requested by the COA for the APD, I have attached the completion procedure for this well.

Since this APD was submitted 1/29/13, COG Operating, LLC requests that the approval process for this sundry be expedited.

Accepted for record
NMOCD 105
1-24-2014

SEE ATTACHED FOR
CONDITIONS OF APPROVAL



14. I hereby certify that the foregoing is true and correct. Electronic Submission #226774 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JOHNNY DICKERSON on 11/14/2013 ()	
Name (Printed/Typed) BRIAN COLLINS	Title SENIOR OPERATIONS ENGINEER
Signature (Electronic Submission)	Date 11/14/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By _____	Title _____	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 rights in the subject lease which would entitle the applicant to conduct operations thereon.		Office _____
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to the Department of the Interior any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.		APPROVED JAN 21 2014 /s/ Chris Walls BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE

** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

South Craig 10 SWD 1
(formerly Exxon Shewell Fed 1)
660' fnl, 660' fel
A-10-26s-26e
Eddy Co., NM

Abbreviated Reentry/SWD Conversion Procedure
For BLM NOI
5 Sept 13

1. RU lubricator and run GR/CCL Log from PBD to 3200'. RU lubricator and perf Delaware with 2 spf at any spacing at the depths shown below using 3-1/8", 3-3/8" or 4" casing gun.

Top Perf	Bttm Perf	Ft of Perfs	Cumul Ft of Perfs	Ft of Perfs @ 2 spf	Cumul Ft of Perfs @ 2 spf
3551	3574	23	23	46	46
3586	3602	16	39	32	78
3614	3622	8	47	16	94
3630	3640	10	57	20	114
3650	3658	8	65	16	130
3668	3684	16	81	32	162
3696	3716	20	101	40	202
3742	3762	20	121	40	242
3882	3892	10	131	20	262
3986	3994	8	139	16	278
4002	4026	24	163	48	326
4050	4058	8	171	16	342
4172	4188	16	187	32	374
4216	4230	14	201	28	402
4258	4266	8	209	16	418
4274	4278	4	213	8	426
4286	4302	16	229	32	458
4308	4318	10	239	20	478
4380	4408	28	267	56	534
4500	4524	24	291	48	582
4572	4592	20	311	40	622
4612	4622	10	321	20	642
4644	4664	20	341	40	682
4682	4720	38	379	76	758
4730	4742	12	391	24	782
4756	4766	10	401	20	802
4788	4814	26	427	52	854
4840	4890	50	477	100	954

4926	4938	12	489	24	978
4982	4988	6	495	12	990
5005	5009	4	499	8	998
5044	5048	4	503	8	1006
5070	5084	14	517	28	1034

2. Install stripper head, pick up oscillation tool, xo, joint of tubing, check valve and remaining 2-7/8" work string and RIH to 5084'. If necessary, RIH with peewee GR tool and correlate oscillation tool on depth. Pump produced water at 2-3 bpm and cycle oscillation tool across interval 5070-5084' two times. Repeat this process across each perf interval shown above.
3. RIH with packer. Set packer at approximately 3475', test annulus to 500 psi, RU swab and swab test Delaware zone 3551-5084' for potential oil show until notified to do otherwise. POOH and lay down work string and packer. If a significant, potentially commercial oil show is obtained, will RIH with packer/RBP combo and test individual perf intervals to determine where the show was. Any commercial show intervals encountered will be squeeze cemented and pressure tested.
4. BLM will be contacted and given the results of the swab test before continuing with procedure.

Conditions of Approval

COG Operating LLC
South Craig 10 SWD - 01
API 3001524469, T26S-R26E, Sec 10

1. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.
2. Subject to like approval by the New Mexico Oil Conservation Division.
3. Surface disturbance beyond the existing pad must have prior approval.
4. 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.
5. Functional H₂S monitoring equipment shall be on location.
6. Minimum 2000 (2M) Blow Out Prevention Equipment is to be used. All BOPE and workover procedures shall establish fail safe well control. Ram(s) for the work string(s) used is required equipment. Manual BOP closure system including a blind ram and pipe ram(s) designed to close on all (hand wheels) equipment shall be installed regardless of BOP design. Function test the installed BOPE to 500psig when well conditions allow. Related equipment, (choke manifolds, kill trucks, gas vent or flare lines, etc.) shall be employed when needed for reasonable well control requirements.
7. 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.
8. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from 3400 or below to surface. The CBL may be attached to a pswartz@blm.gov email. The CFO BLM on call engineer may be reached at 575-706-2779.**
9. **A minimum 25 sx Class C cement plug will be necessary to cover the Bone Spring formation. Set a plug from 5502 MTD. Tag the plug at 5350 or less. Formation isolation plugs of Class "C" to be mixed 14.8#/gal, 1.32 ft³/sx, 6.3gal/sx water.**
10. File intermediate **subsequent sundry** Form 3160-5 within 30 days of any interrupted workover procedures and a complete workover subsequent sundry
11. Submit the BLM Form 3160-4 **Recompletion Report** within 30 days of the date all BLM approved procedures are complete.
12. 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.

Operations for a Well with an Inj Packer

- 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 a minimum 200 psig differential 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 one hour full rotation 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) **Make arrangements 24 hours before the test for BLM to witness. In Eddy County email Paul R. Swartz pswartz@blm.gov or phone 575-200-7902**, if there is no response, 575-361-2822. If no answer, leave a voice mail or email with the API#, workover purpose, and a call back phone number. Note the contact, 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. Approved injection pressure compliance is required. If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
- 9) 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.
- 10) Unexplained significant variations of rate or pressure to be reported within 5 days of notice.
- 11) 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 a full annular fluid level at any time.
- 12) 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.

- 13) Loss of packer fluid above five barrels per month indicates a developing problem. Notify BLM Carlsbad Field Office, Petroleum Engineering within 5 days.
- 14) A suggested format for monthly records documenting that the casing annulus is fluid filled is available from the BLM Carlsbad Field Office.
- 15) Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of 0 psi. Notify the BLM's authorized officer ("Paul R. Swartz" <pswartz@blm.gov>, cell phone 575-200-7902). If there is no response phone 575-361-2822.
- 16) 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 installed 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 daily descriptions of any previously unreported wellbore workover(s) and reason(s) the well annular fluid was replaced.

CRW 012114

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

NM Fed Regs & Forms - http://www.blm.gov/nm/st/en/prog/energy/oil_and_gas.html

§ 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.