Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD
NOV 25 2013
RECEIVED

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.

5. Lease Serial No.
NMNM120910

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other: INJECTION

8. Well Name and No.
PINTAIL 3 FEDERAL SWD 1

2. Name of Operator
COG OPERATING LLC
Contact: STORMI DAVIS

9. API Well No.
30-025-41208-00-X1

3a. Address
ONE CONCHO CENTER 600 W ILLINOIS AVENUE
MIDLAND, TX 79701-4287

3b. Phone No. (include area code)
Ph: 575.748.6946

10. Field and Pool, or Exploratory
SWD

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 3 T26S R32E NWSE 2500FSL 1400FEL
32.390479 N Lat, 103.658323 W Lon

11. County or Parish, and State
LEA COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Drilling Operations
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ 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 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.)

1. RU lubricator & perf Delaware poor quality show zones w/1 shot every 2 ft @ any phasing @ depths shown below using 3 1/8" or 4" csg gun. Total number of perfs approx 51.

Top Perf Perfs	Btm Perf @ 1 shot/2'	Ft of Perfs @ 1 shot/2'	Cum Ft of	Ft of Perfs	Cum Ft of Perfs
6092	6106	14	14	7	7
6130	6188	58	72	29	36
6354	6384	30	102	15	51
102		51			

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #219921 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Hobbs
Committed to AFMSS for processing by JOHNNY DICKERSON on 09/13/2013 (13JLD0689SE)

Name *(Printed/Typed)* BRIAN COLLINS — Title SENIOR OPERATIONS ENGINEER

Signature (Electronic Submission) — Date 09/12/2013

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

APPROVED
NOV 22 2013
/s/ Chris Walls
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Approved By (BLM Approver Not Specified) — Title — Date 11/22/2013

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 Hobbs

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 any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

DEC 02 2013

Additional data for EC transaction #219921 that would not fit on the form

32. Additional remarks, continued

2. Install stripper head, p-up oscillation tool, xo, jt of tbg, check vlv & remaining 2 7/8" WS & RIH to 6384'. If necessary, RIH w/peewee GR tool & correlate oscillation tool on depth. Pump PW @ 2-3 bpm & cycle oscillation tool across interval 6354-6384' 2 times. Repeat this process across each perf interval shown above in Step 4. LD oscillation tool when finished.

3. RIH w/pkr/RBP combo. Set RBP @ approx 6250', test RBP to 1500#, set pkr@ approx 6050', test annulus to 500#, RU swab & swab test Delaware zone 6092-6188' for potential oil show until notified to do otherwise.

4. Latch onto RBP, set pkr @ approx 6300' w/RBP swinging, load annulus w/fluid if not already full, RU swab & swab test Delaware zone 6354-6384' for potential oil show until notified to do otherwise. Monitor annulus while swabbing.

5. BLM will be contacted & given results of swab test of each zone before continuing w/procedure.

OPTION 1: IF NO SHOW FROM 6092-6188' OR 6354-6384' ON SWAB TESTS:

6. RU lubricator & perf Delaware w/2 spf @ any phasing @ depths shown below using 3 1/8" or 4" csg gun. Total number of perfs approx 808.

Top Perf	Btm Perf	Ft of Perfs	Cum Ft of	Ft of Perfs	Cum Ft of Perfs
Perfs	@ 2 spf	@ 2 spf			
5704	5760	56	56	112	112
5810	5846	36	92	72	184
5870	5910	40	132	80	264
5926	5976	50	182	100	364
5992	6062	70	252	140	504
6092	6106	14	266	28	532
6130	6188	58	324	116	648
6230	6248	18	342	36	684
6280	6312	32	374	64	748
6354	6384	30	404	60	808
404		808			

7. Install stripper head, p-up oscillation tool, xo, jt of tbg, check vlv & remaining 2 7/8" WS & RIH to 6384'. If necessary, RIH w/peewee GR tool & correlate oscillation tool on depth. Pump PW @ 2-3 bpm & cycle oscillation tool across interval 6354-6384' 2 times. Repeat this process across each perf interval shown above.

8. RIH w/pkr, set pkr @ approx 5600', test annulus to 500#, RU swab & swab test Delaware 5704-6384' for potential oil show until notified to do otherwise. If significant, potentially commercial oil show is obtained, will RIH w/pkr/RBP combo & test individual perf intervals to determine where show was. Any commercial show intervals encountered will be squeeze cemented & pressure tested.

9. BLM will be contacted & given results of swab test before continuing w/procedure.

OPTION 2: IF NO SHOWS FROM 6092-6188' BUT W/COMMERCIAL-LOOKING SHOWS 6354-6384' ON SWAB TESTS:

10. P-up cmt retainer & slowly RIH w/retainer on tbg. Set retainer @ approx 6300', sting out, pump tbg volume w/FW, sting into retainer, establish injection rate into perfs, install squeeze manifold & trap 1000# on annulus. Plumb lines to allow circ to mud tank, reverse pit & waste pit as needed.

Continued on attachment.

Pintail 3 Fed SWD 1
2500' fsl, 1400' fel
J-3-26s-32e
Lea Co., NM
API: 30-025-41208

Abbreviated SWD Completion Procedure
For BLM NOI
5 Sept 13

11. RU cementers and squeeze perfs 6354-6384' with approximately 75 sx Class C with fluid loss control (14.8 ppg, 1.32 cfps, 6.3 gwps). Sting out of retainer, reverse circulate cement out of tubing and POOH with tubing.

12. RU lubricator and perf Delaware with 2 spf at any phasing at the depths shown below using 3-1/8" or 4" casing gun. Total number of perfs approx. 684.

Top Perf	Bttm Perf	Ft of Perfs	Cumul Ft of Perfs	Ft of Perfs @ 2 spf	Cumul Ft of Perfs @ 2 spf
5704	5760	56	56	112	112
5810	5846	36	92	72	184
5870	5910	40	132	80	264
5926	5976	50	182	100	364
5992	6062	70	252	140	504
6092	6106	14	266	28	532
6130	6188	58	324	116	648
6230	6248	18	342	36	684
		342		684	

13. Install stripper head, pick up oscillation tool, xo, joint of tubing, check valve and remaining 2-7/8" work string and RIH to 6248'. 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 6230-6248' two times. Repeat this process across each perf interval shown above.

14. RIH with packer, set packer at approximately 5600', test annulus to 500 psi, RU swab and swab test Delaware 5704-6248' for potential oil show until notified to do otherwise. 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.

15. BLM will be contacted and given the results of the swab test before continuing with procedure.

OPTION 3: IF HAVE COMMERCIAL-LOOKING SHOWS 6092-6188' AND 6354-6384' ON

16. Pick up cement retainer and slowly RIH with retainer on tubing. Set retainer at approx. 6040', sting out, pump tubing volume with fresh water, sting into retainer, establish injection rate into the perfs, install squeeze manifold and trap 1000 psi on annulus. Plumb lines to allow circulation to the mud tank, reverse pit and waste pit as needed.

17. RU cementers and squeeze perfs 6092-6188' and 6354-6384' with approximately 75 sx Class C cement with fluid loss control followed by 75 sx Class C neat (14.8 ppg, 1.32 cfps, 6.3 gwps). Sting out of retainer, reverse circulate cement out of tubing and POOH with tubing.

18. RU lubricator and perf Delaware with 2 spf at any phasing at the depths shown below using 3-1/8" or 4" casing gun. Total number of perfs approx. 364.

Top Perf	Bttm Perf	Ft of Perfs	Cumul Ft of Perfs	Ft of Perfs @ 2 spf	Cumul Ft of Perfs @ 2 spf
5704	5760	56	56	112	112
5810	5846	36	92	72	184
5870	5910	40	132	80	264
5926	5976	50	182	100	364
		182		364	

19. Install stripper head, pick up oscillation tool, xo, joint of tubing, check valve and remaining 2-7/8" work string and RIH to 5976'. 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 5926-5976' two times. Repeat this process across each perf interval shown above in Step 34. Lay down oscillation tool when finished.

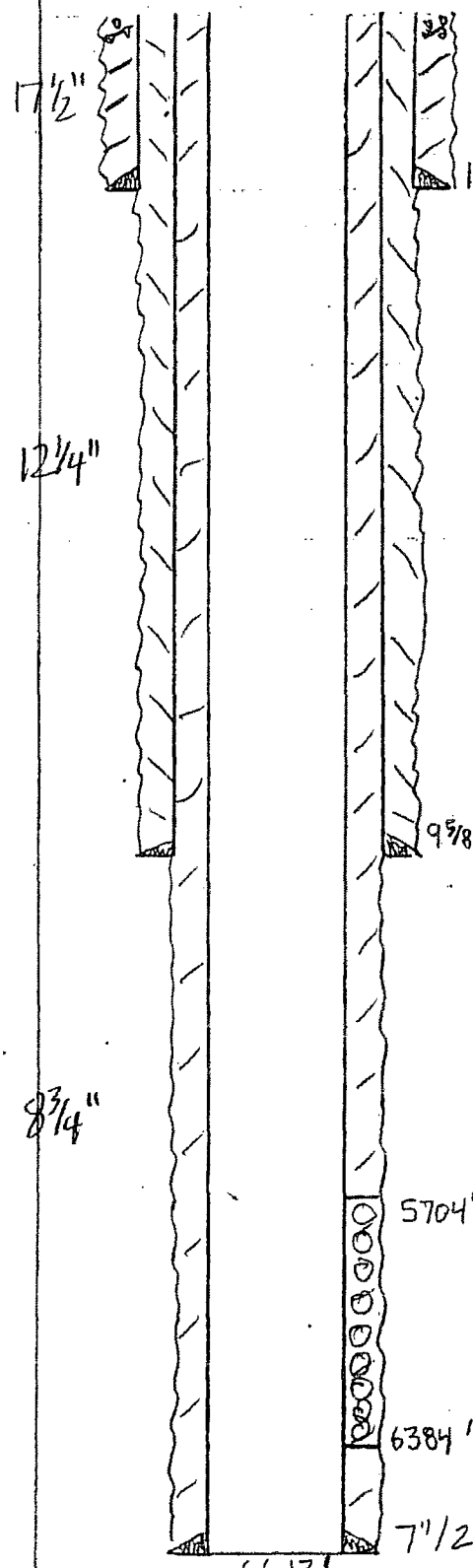
20. RIH with packer, set packer at approximately 5600', test annulus to 500 psi, RU swab and swab test Delaware 5704-5976' for potential oil show until notified to do otherwise. If a significant, potentially commercial oil show is obtained, will RIH with packer/RBP combo and test individual perf intervals to determine where the show was. Any commercial show intervals encountered will be squeeze cemented and pressure tested.

21. BLM will be contacted and given the results of the swab test before continuing with procedure.

30-025-41208

Pintail 3 Fed SWD 1
2500' FSL, 1400' FEL
J-3-26s-32e
Lea, NM

SWD-1396
5700-6420'
Max 1140 psi



575sx "C" 4% gel + 250sx "C" (circ 96 sx) Dropped 19' 2yd redimix to surf

1000sx HLC + 250sx "C" (circ 185 sx)

Delaware Sd

300sx Interfill C + 300sx Super C (circ 24 sx)

KBCollins/

Tops
35500

Conditions of Approval

COG Operating LLC
Pintail SWD - 01
API 3002541208, T26S-R32E, Sec 03

October 31, 2013

1. **Operator didn't request any additional stimulation if the well will be turned over for injection. Additional approval is required if well stimulation is desired prior to injection.**
2. Subject to like approval by the New Mexico Oil Conservation Division.
3. Notify BLM 575-393-3612 Lea Co as work begins. Some procedures are to be witnessed. If no answer, leave a voice mail with the API#, workover purpose, and a call back phone number. Note the contact, time, & date in your subsequent report.
4. Casing added or replaced requires a prior notice of intent (BLM Form 3160-5) approval of the design.
5. **Provide BLM with an electronic copy (Adobe Acrobat Document) cement bond log record from PBTD or below to top of cement. The CBL may be attached to a pswartz@blm.gov email. The CFO BLM on call engineer may be reached at 575-706-2779.**
6. Surface disturbance beyond the existing pad shall have prior approval.
7. 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.
8. Functional H_2S monitoring equipment shall be on location.
9. 2000 (2M) Blow Out Prevention Equipment to be used. All BOPE and workover procedures shall establish fail safe well control. A ram system including a blind ram and pipe ram(s) designed to close on all of the work string(s) used is required equipment. Manual BOP closure (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.
10. 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.
11. File intermediate **subsequent sundry** Form 3160-**5** within 30 days of any interrupted workover procedures and a complete workover subsequent sundry

12. Submit the BLM Form 3160-**4 Completion Report** within 30 days of the date all BLM approved procedures are complete.
13. Approval is granted for disposal of water produced from the lease or communization/unit agreement of this well only. An additional request (including authorization from the surface owner) is required for the well to receive other disposal fluids.

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 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 Lea County phone 575-393-3612. 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, 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 a full 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 0psia. 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.
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 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.

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.