

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NM OIL CONSERVATION

ARTESIAN DIAMONDS

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.

OCT 14 2014

RECEIVED

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NNNM97123
2. Name of Operator COG OPERATING LLC Contact: BRIAN MAIORINO E-Mail: bmaiorino@concho.com		6. If Indian, Allottee or Tribe Name
3a. Address ONE CONCHO CENTER 600 W ILLINOIS AVENUE MIDLAND, TX 79701	3b. Phone No. (include area code) Ph: 432-221-0467	7. If Unit or CA/Agreement, Name and/or No. NNNM114024
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 34 T18S R27E NWSE 1800FSL 1980FEL		8. Well Name and No. SAGEBRUSH FEDERAL COM 1
		9. API Well No. 30-015-33910-00-S1
		10. Field and Pool, or Exploratory ANGEL RANCH
		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 checked="" type="checkbox"/> Recomplete	<input 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 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 LLC respectfully request to abandon the Upper Penn and recomplete the Sagebrush Federal Com #1 in the Wolfcamp and/or Bone Spring.

Please see attached procedures, current wellbore schematic, and proposed wellbore schematic.

All operations will be carried out using a closed-loop system.

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

grd 10/15/14
Accepted for record
NMDCD
Provide C102's

14. I hereby certify that the foregoing is true and correct. Electronic Submission #254497 verified by the BLM Well Information System For COG OPERATING LLC, sent to the Carlsbad Committed to AFMSS for processing by JENNIFER MASON on 10/10/2014 (15JAM0014SE)	
Name (Printed/Typed) BRIAN MAIORINO	Title AUTHORIZED REPRESENTATIVE
Signature (Electronic Submission)	Date 07/24/2014
THIS SPACE FOR FEDERAL OR STATE OFFICE USE	
Approved By _____	Title _____
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 any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.	

APPROVED

OCT 10 2014

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

Sage Brush Fed Com 1
1800' fsl, 1980' fel
J-34-18S-27E
Eddy Co., NM
30-015-33910
Recompletion Procedure
18 Jul 14

Basic Data:

13-3/8" @ 290' Circ. Cmt.
9-5/8" @ 1998' Circ. Cmt.
5-1/2" @ 10340' DV @ 7917', Circ. Cmt off of DV Stage 1, TOC @ 1800' TS Stage 2
5.5"/17ppf/M95-110/LTC Burst=10640 psi, 8512 psi at 80% Nom. ID=4.892" Drift ID=4.767"

Objective: Recomplete well from Canyon Lime to Wolfcamp and/or Bone Spring carbonates.

Note: Procedure written prior to receipt of an approved sundry notice from the BLM and is subject to change on the plug back portions of the procedure.

Procedure:

1. Install 7-1/16" 3k minimum WP double ram hydraulic BOP with blind rams and 2-3/8" pipe rams. BOP trailer will have accumulator bottles and powered pump for two ways to hydraulically open and close BOPs. Install hand wheels so BOPs can be manually operated. Plumb casing to a frac tank or gas buster tank.


Note: The intervals being tested did not kick while being drilled with a cut brine mud, therefore a full choke manifold will not be needed. However, a choke manifold will be installed if well conditions dictate.

2. Set a CIBP at ~~8700'~~ ^{minimum 50' above top most perf. @ 8678'} RIH open ended, tag CIBP to ensure it's in place and spot 25 sx Class H neat (15.6 ppg, 1.18 cfps, 5.2 gwps) on top of CIBP at 8700' that is set above Canyon Lime perms 8732-8994'. The 25 sk plug will occupy 226' inside the 5-1/2" casing. Tag plug. If tag deeper than 8513', visit with the BLM petroleum tech to see if re-spotting plug is necessary.
3. Perf the Wolfcamp Lime 7874-7877' (8 shots) and acidize with 750 gals. NE Fe 15% HCl acid. Swab/flow test until notified to do otherwise.
4. ^{See COA} When/if ready to move uphole, plugback method will be determined based on results of previous zone—let's discuss. If Wolfcamp Lime is to be abandoned, RIH open-ended to 7970', spot 25 sx Class C neat (14.8 ppg, 1.32 cfps, 6.3 gwps) to cover DV tool at 7917'. Tag plug. If tag deeper than 7815', visit with the BLM petroleum tech to see if re-spotting plug is necessary.
5. Perf the Lower Wolfcamp Dolomite 7678-7683', 7710-7713' (16 shots) and acidize with 1000 gals. NE Fe 20% HCl. Swab/flow test until notified to do otherwise.
6. When/if ready to move uphole, plugback method will be determined based on results of previous zone—let's discuss. If zone is wet, will set a cement retainer at approx. 7640' and squeeze Lower Wolfcamp Dolomite with 50 sx Class C with fluid loss control followed by 50-100 sx Class C neat—let's discuss.

Note: If decision is made to squeeze Lower Wolfcamp, and the Wolfcamp Lime is to be abandoned, and a plug hasn't been placed across the DV tool yet, spot a plug across the DV tool as shown in Step 4 above before squeezing Lower Wolfcamp.

7. Perf the Upper Wolfcamp Dolomite 7555-7563', 7596-7601' (26 shots) and acidize with 2000 gals. NE Fe 20% HCl. Swab/flow test until notified to do otherwise. If the Wolfcamp is productive, will put all productive zones together.

50' above top perf @ 7505'

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8. If decision is made to abandon Wolfcamp, set a CIBP at ~~7540~~' RIH open ended, tag CIBP to ensure it's in place and spot 25 sx Class C neat (14.8 ppg, 1.32 cfps, 6.3 gwps) on top of CIBP at ~~7540~~' that is set above Wolfcamp perfs 7555-7877' and covers the top of the Wolfcamp at 7539'. The 25 sk plug will occupy 253' inside the 5-1/2" casing. Tag plug. If tag deeper than 7365', visit with the BLM petroleum tech to see if re-spotting plug is necessary.

Note: If all the Wolfcamp zones are open and a plug hasn't been set across DV tool yet, set plug across DV tool as shown in Step 4 above before abandoning Wolfcamp.

9. Perf the Bone Spring 7110-7120' (20 shots) and acidize with 1000 gals. NE Fe 20% HCl. Swab/flow test until notified to do otherwise.

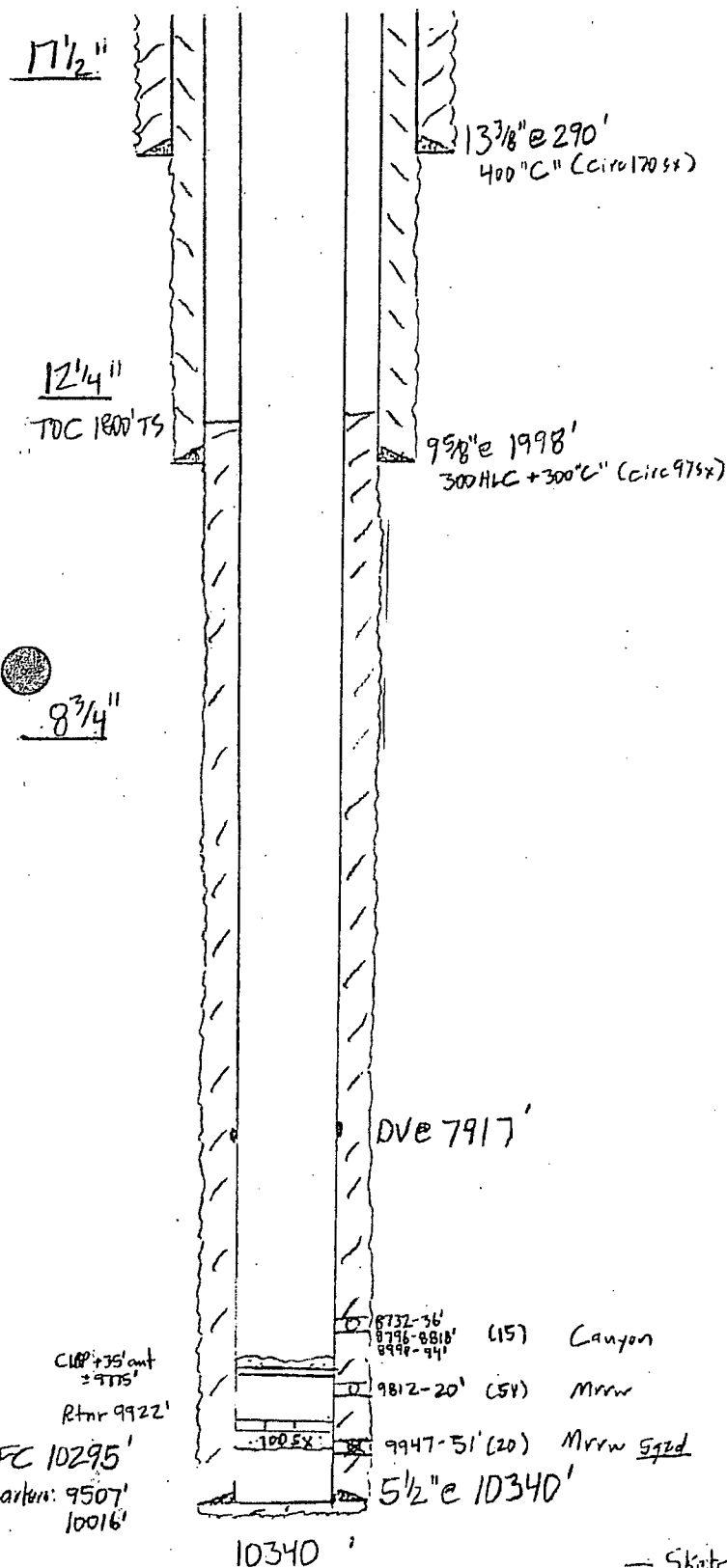
Well: Sage Brush Fed Com 1

Location: 1800' FSL, 1980' FEL
J-34-185-27c
Eddy NM
30-015-33910

Zone: 17' AGL
 KB: 3452'
 GL: 3435'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8"	54.5	J55	STC	290'
9 5/8"	36	J55	STC	1998'
5 1/2"	17	M95-110	LTC	10340'
2 3/8"	4.7	L80	EUE	



BEFORE

1st: 720 Supr H (circ 168 5x)
 2nd: 1250 HLC + 250 Supr H

— Sketch Not To Scale —

KBCollins/

Well: Sage Brush Fed Com 1

Location: 1800' FSL, 1980' FEL
J-34-185-27e
Eddy NM
30-015-33910

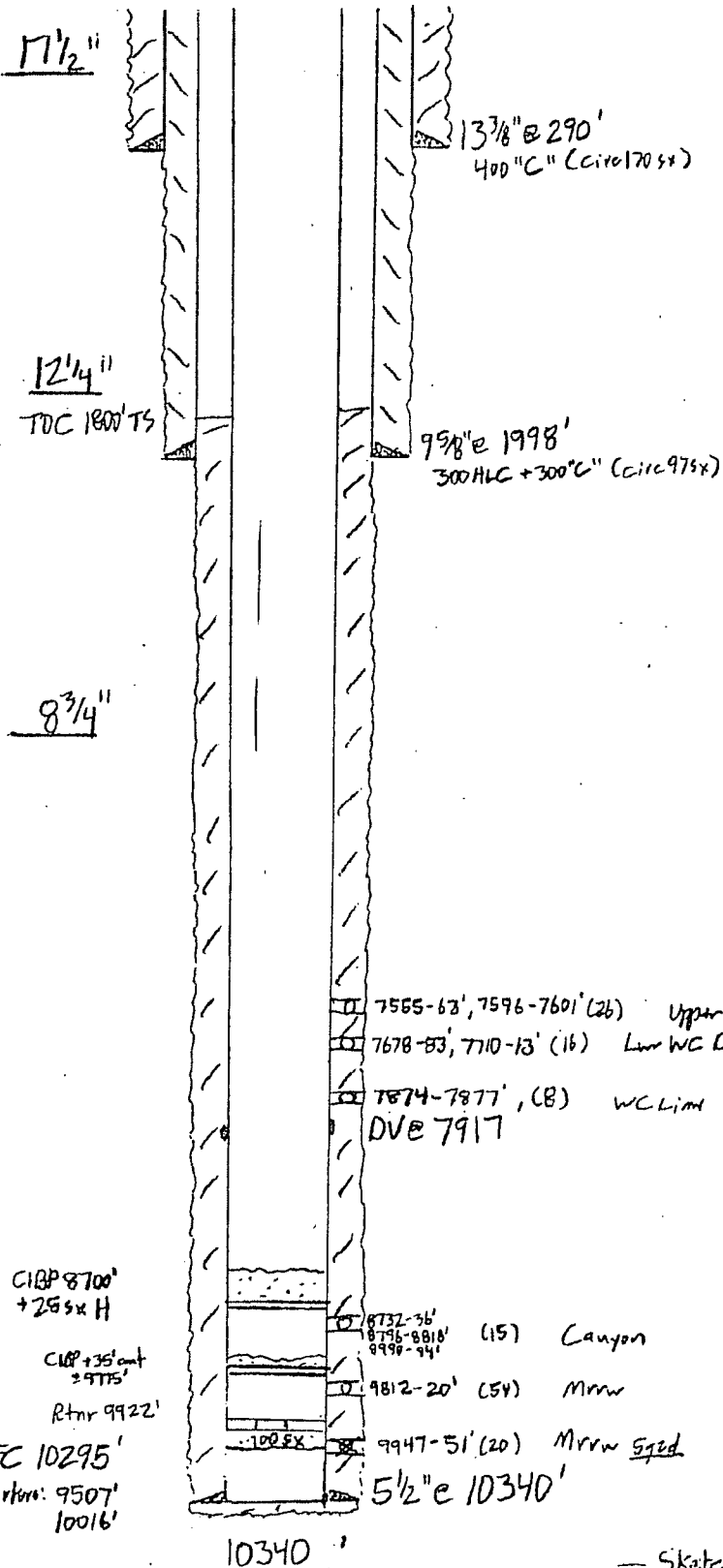
Zen: 17' AGL

KB: 3452'

GL: 3435'

Casing Program:

Size	Wt.	Grade	Conn.	Depth
13 3/8"	54.5	J55	STC	290'
9 5/8"	36	J55	STC	1998'
5 1/2"	17	M95-110	LTC	10340'
2 3/8"	4.7	L80	EVE	



AFTER

1st: 7205 sup H (circ 168 sx)
 2nd: 1250 HLC + 2505 sup H

— Sketch Not To Scale —

KBC Collins /

**Sagebrush Fed Com 1
30-015-33910
COG Operating, LLC.
October 10, 2014
Conditions of Approval**

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

Work to be completed by January 10, 2015.

- 1. Operator shall tag plug back depth of the Morrow. If it is lower than 9,742', additional 25sx Class H cement will be needed to seal the top of the Morrow formation as the plug back was done without BLM approval. Tag required.**
- 2. Operator shall set a CIBP at 8,678' and place 25sx Class H cement on top. Tag required at a minimum of 8,491' to seal the top of the producing interval.**
- 3. Must conduct a casing integrity test before perforating and fracturing the Wolfcamp formation. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails.**
- 4. If Wolfcamp Lime is unproductive operator shall set a Solid Class H Cement plug from 7,967'-7,867' to cover the DV tool. Tag required.**
- 5. If the Wolfcamp Dolomite perfs are unproductive, operator must squeeze perfs as proposed.**
- 6. Operator shall set a CIBP at 7,505' and place 25sx Class C cement on top. Tag required at a minimum of 7,330' to seal the producing interval and the top of the Wolfcamp formation.**
- 7. Must conduct a casing integrity test before perforating and fracturing the Bone Spring formation. Submit results to BLM. The CIT is to be performed on the production casing to max treating pressure. Notify BLM if test fails.**
- 8. Before casing or a liner is added or replaced, prior BLM approval of the design is required. Use notice of intent Form 3160-5.**
- 9. Surface disturbance beyond the originally approved pad must have prior approval.**

10. Closed loop system required.
11. 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.
12. Operator to have H2S monitoring equipment on location.
13. 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.
14. **Subsequent sundry required detailing work done and completion report for the new formations. Operator to include well bore schematic of current well condition when work is complete.**
15. **Operator shall submit a sundry to remove "Com" from the name.**
16. **See attached for general requirements.**

JAM 101014

BUREAU OF LAND MANAGEMENT
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220
575-234-5972

General Requirements for Plug Backs

Failure to comply with the following Conditions of Approval may result in a Notice of Incidents of Noncompliance (INC) in accordance with 43 CFR 3163.1.

1. Plugging operations shall commence within **ninety (90)** days from this approval.

If you are unable to plug back the well by the 90th day provide this office, prior to the 90th day, with the reason for not meeting the deadline and a date when we can expect the well to be plugged back. Failure to do so will result in enforcement action.

2. **Notification:** Contact the appropriate BLM office at least 24 hours prior to the commencing of any plug back operations. For wells in Eddy County, call 575-361-2822.

3. **Blowout Preventers:** A blowout preventer (BOP), as appropriate, shall be installed before commencing any plugging operation. The BOP must be installed and maintained as per API and manufacturer recommendations. The minimum BOP requirement is a 2M system for a well not deeper than 9,090 feet; a 3M system for a well not deeper than 13,636 feet; and a 5M system for a well not deeper than 22,727 feet.

4. **Mud Requirement:** Mud shall be placed between all plugs. Minimum consistency of plugging mud shall be obtained by mixing at the rate of 25 sacks (50 pounds each) of gel per 100 barrels of brine water. Minimum nine (9) pounds per gallon.

5. **Cement Requirement:** Sufficient cement shall be used to bring any required plug to the specified depth and length. Any given cement volumes on the proposed plugging procedure are merely estimates and are not final. Unless specific approval is received, no plug except the surface plug shall be less than 25 sacks of cement. Any plug that requires a tag will have a minimum WOC time of 4 hours.

In lieu of a cement plug across perforations in a cased hole (not for any other plugs), a bridge plug set within 50 feet to 100 feet above the perforations shall be capped with 25 sacks of cement.

Before pumping cement on top of CIBP, tag will be required to verify depth. Based on depth, a tag of the cement may be deemed necessary.

Unless otherwise specified in the approved procedure, the cement plug shall consist of either **Neat Class "C"**, for up to 7,500 feet of depth or **Neat Class "H"**, for deeper than 7,500 feet plugs.

6. **Subsequent Plug back Reporting:** Within 30 days after plug back work is completed, file one original and three copies of the Subsequent Report, Form 3160-5 to BLM. The report should give in detail the manner in which the plug back work was carried out, the extent (by depths) of cement plugs placed, and the size and location (by depths) of casing left in the well. **Show date work was completed.**

7. **Trash:** All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.