

Submit 1 Copy To Appropriate District Office

District I - (575) 393-6161  
1625 N. French Dr., Hobbs, NM 88240  
District II - (575) 748-1283  
811 S. First St., Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV - (505) 476-3460  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
October 13, 2009

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. <b>30-015-25845</b>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. <b>B-8814</b>
7. Lease Name or Unit Agreement Name <b>Elk State</b>
8. Well Number 1
9. OGRID Number <b>229137</b>
10. Pool name or Wildcat <b>Red Lake Q-GB-SA</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>3678.6' GR</b>

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-103) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well

2. Name of Operator  
**COG Operating, LLC**

3. Address of Operator  
**600 W. Illinois, Midland, TX 79701**

4. Well Location  
Unit Letter M : 719 feet from the S line and 760 feet from the W line  
Section 27 Township 17S Range 28E NMPM County Eddy

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
FEB 14 2017  
RECEIVED

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

- PERFORM REMEDIAL WORK
- TEMPORARILY ABANDON
- PULL OR ALTER CASING
- DOWNHOLE COMMINGLE
- PLUG AND ABANDON
- CHANGE PLANS
- MULTIPLE COMPL.

SUBSEQUENT REPORT OF:

- REMEDIAL WORK
- COMMENCE DRILLING OPNS.
- CASING/CEMENT JOB
- ALTERING CASING
- P AND A

OTHER:

OTHER:

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

1. Set 5 1/2" CIBP @ 2170'. Circulate hole w/ MLF. Pressure test csg. Spot 25 sx cmt @ 2170-2070'. - *WOC & TAG*
2. Spot 25 sx cmt @ 1470-1370'. (Seven Rivers)
3. Spot 30 sx cmt @ 1180-1000'. WOC & Tag (Yates & B.Salt)
4. ~~Spot 25 sx cmt @ 540-440'. WOC & Tag (T.Salt & Shoe) - SQ - WOC & TAG~~
5. Spot 25 sx cmt @ 100-Surface.
6. Cut off well head, weld on Dry Hole Marker.

Approved for plugging of well bore only.  
Liability under bond is retained pending receipt  
of C-103 (Subsequent Report of Well Plugging)  
which may be found at OCD Web Page under  
Forms, www.emnrd.state-nm.us/oed.

Spud Date:

[Empty box for Spud Date]

Rig Release Date:

[Empty box for Rig Release Date]

**WELL MUST BE PLUGGED BY 2/13/18**

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Ben Montgomery

TITLE Agent

DATE 2/13/17

Type or print name Ben Montgomery  
For State Use Only

E-mail address: benm@bcmadassociates.com

PHONE: 432-580-7161

APPROVED BY: Robert J. Ryal

TITLE COMPLIANCE OFFICER

DATE 2/13/17

Conditions of Approval (if any):

**SEE ATTACHED COA-5**



CURRENT WELLBORE DIAGRAM

<b>API:</b> 30-015-25845 <b>SPUD:</b> 12/17/1987 <b>FRR:</b> <b>RIG:</b>	<b>Elk State 1</b> <b>Red Lake Field</b> <b>Queen-Grayburg-SA Pool</b> <b>Eddy County, NM</b> <b>San Andres Formation</b>	<b>SHL:</b> Sec. 27, T 17S - R 28E 719' FSL & 760' FWL  <b>LAT:</b> 32.8003922 <b>LONG:</b> -104.1700592 NAD83
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Hole Size: 12-1/4"

Surface Casing

8-5/8" 24# J-55 @ 491'  
CMT'ed w/:

350 SX CLASS C + ADDS

CIRC. 50 SX / TOC 0'

Hole Size: 7-7/8"

Production Casing

5-1/2" 17# @ 3,030'  
CMT'ed w/:

550 SX HALLIBURTON LITE + ADDS  
400 SX CLASS C + ADDS

CIRC. 200 SX / TOC 0'

Perforations

San Andres

2,220-2,750', 49 shots

Acidize with 4,000 gal 10# NE acid, Frac with 5,000 bbl gel wtr carrying 50,000 lb 20/40, 200,000 lb 12/20 and 100,000 lb 8/16 sand

PBTD 3,000'

32.8003922  
-104.1700592

UPDATED: 02/07/2017



CURRENT WELLBORE DIAGRAM

API: 30-015-25845  
SPUD: 12/17/1987  
FRR:  
RIG:

Elk State 1  
Red Lake Field  
Queen-Grayburg-SA Pool  
Eddy County, NM  
San Andres Formation

SHL: Sec. 27, T 17S - R 28E  
719' FSL & 760' FWL

LAT: 32.8003922  
LONG: -104.1700592 NAD83

GL: 3,679'  
KB: 3,688'

Hole Size: 12-1/4"

5. Spot 25 sx cmt @ 100-Surface.

Surface Casing

8-5/8" 24# J-55 @ 491'  
CMT'ed w/  
350 SX CLASS C + ADDS  
CIRC. 50 SX / TOC 0'

Hole Size: 7-7/8"

4. ~~Spot~~ 25 sx cmt @ 540-440'. WOC & Tag (T.Salt & Shoe)

*PEAR @ 540' - SQ - WOC & TAG*

Production Casing

5-1/2" 17# @ 3,030'  
CMT'ed w/  
550 SX HALLIBURTON LTEE + ADDS  
400 SX CLASS C + ADDS  
CIRC. 200 SX / TOC 0'

3. Spot 30 sx cmt @ 1180-1000'. WOC & Tng (Yates & B.Salt)

2. Spot 25 sx cmt @ 1470-1370'. (Seven Rivers)

Perforations

San Andres  
2,220-2,750', 49 shots

1. Set 5 1/2" CIBP @ 2170'. Circulate hole w/ MLF. Pressure test csg. *← WOC & TAG*  
Spot 25 sx cmt @ 2170-2070'.

Acidize with 4,000 gal 10# NE acid, Frac with 5,000 bbl gel wtr carrying 50,000 lb 20/40, 200,000 lb 12/20 and 100,000 lb 8/16 sand

PBTD 3,000'

32.8003922  
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UPDATED: 02/07/2017

## CONDITIONS FOR PLUGGING AND ABANDONMENT

### District II / Artesia N.M.

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, **Notify NMOCD District Office II at (575)-748-1283 at least 24 hours before beginning work.**

1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs.
2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.
6. **Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.**
7. Produced water **will not** be used during any part of the plugging operation.
8. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
9. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
10. **Class 'C' cement will be used above 7500 feet.**
11. **Class 'H' cement will be used below 7500 feet.**
12. **A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged**
13. **All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing**
14. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
15. **A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.**

16. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, **(WOC 4 hrs and tag)**.
17. No more than **3000'** is allowed between cement plugs in cased hole and **2000'** in open hole.
18. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
  - A) Fusselman
  - B) Devonian
  - C) Morrow
  - D) Wolfcamp
  - E) Bone Springs
  - F) Delaware
  - G) Any salt sections
  - H) Abo
  - I) Glorieta
  - J) Yates.
  - K) **Potash---** (In the R-111-P Area (Potash Mine Area), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, **WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.**
19. **If cement does not exist behind casing strings at recommended formation depths**, the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing

#### **DRY HOLE MARKER REQUIRMENTS**

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

**1. Operator name 2. Lease and Well Number 3.API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County**

#### **(SPECIAL CASES)**

#### **AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS**

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)