

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. 30-015-34558
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name SS Snakebite Fee
8. Well Number 2
9. OGRID Number 229137
10. Pool name or Wildcat Esperanza; Delaware
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3097' GL

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-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well  Gas Well  Other

2. Name of Operator  
COG Operating, LLC

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

4. Well Location  
Unit Letter B : 330 feet from the NO line and 1550 feet from the EAST line  
Section 9 Township 22S Range 27E NMPM County EDDY

**NM OIL CONSERVATION**  
ARTESIA DISTRICT  
JUL 25 2017

RECEIVED

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

<b>NOTICE OF INTENTION TO:</b>		<b>SUBSEQUENT REPORT OF:</b>	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input checked="" type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <input type="checkbox"/>	

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.

- Set 5 1/2" CIBP @ 4770'. Circulate hole w. MLF. Pressure test csg. Spot 25 sx cmt @ 4770-4670'. - WOE & TAG
- Spot 25 sx cmt @ 2750-2650'. (Cherry Canyon) **ADD A PLUG @ 4120' COVERS BRUSHY CANYON**
- Spot 25 sx cmt @ 1880-1780'. (Delaware Sand) **SET CIBP @ 3350' - SPOT CMT - WOE & TAG**
- Spot 55 sx cmt @ 455 Surface **PERP @ 450' - SO - WOE & TAG - COVERS TOP OF SALT**
- Cut off well head, verify cmt to surface, weld on Dry Hole Marker.

Spud Date:

Rig Release Date:

**WELL MUST BE PLUGGED BY 7/25/2018**

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  
[www.enr.state.nm.us/oed](http://www.enr.state.nm.us/oed).

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

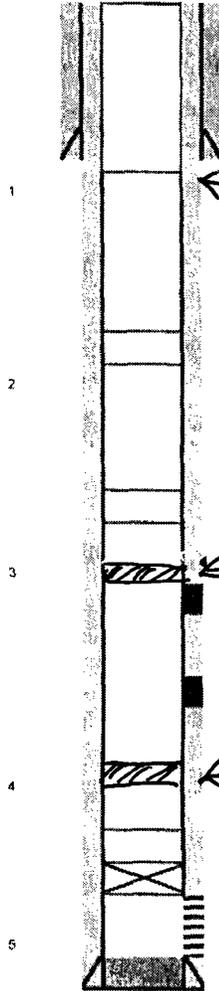
SIGNATURE Abigail Montgomery TITLE Agent DATE 7/24/17  
 Type or print name Abigail Montgomery E-mail address: abbym@bernardassociates.com  
 For State Use Only PHONE: 432-580-7161

APPROVED BY: Robert J. Byrd TITLE COMPLIANCE OFFICER DATE 7/25/2017  
 Conditions of Approval (if any):

**★ SEE ATTACHED COA-S**

Author:	MRM (7/2017)
Well Name	SS Snakebite Fee Well No. #2
Field	Esperanza API #: 30-015-34568
County	Eddy Prop #: 35333
State	New Mexico Zone: Delaware
Spud Date	6/8/2006 330 FNL & 1550 FEL
GL	3.097' Sec 9 T22S R27E
KB	

Description	O.D.	Grade	Weight	Depth	Cmt Sx	TOC
Surface Csg	8.625"	J-55	24	377	375	surface
Inter Csg						
Prod Csg	5.5"	J-55	17	5,353	1,250	surface
Liner						



**12 1/4" hole**

8-5/8" (24#) @ 377' w/ 375 sks, circ w/ 90 sks  
TOC @ surface

4. Spot 55 sx cmt @ 477' Surface.

← **PERF @ 450' - SQ - WOE & TAG - COVERS TOP OF SALT**

Formation Tops

Salado	403
Base of Salt	1308
Lamar Limestone	1800
Bell Canyon	2007
Cherry Canyon	2704
Brushy Canyon	4070
Bone Spring	5231

3. Spot 25 sx cmt @ 1880-1780'. (Delaware Sand)

2. Spot 25 sx cmt @ 2750-2650'. (Cherry Canyon)

← **SET CIBP @ 3350' - SPOT CMT - WOE & TAG**

3,424'-3,443' (Delaware) 20 holes - 05/2008 acidized w/ 750 gal 05/2008 - sqz w/ 150 sks, displace 16 bbis w/ 3,500 lbs. Rvrs out 15 sks.

3,864'-4,105' (Delaware) 20 holes - 05/2008 acidized w/ 2500 gal and frac'd w/ 150,000 lbs 11/2008 - sqz w/ 550 sks

← **ADD A PLUG @ 4120' - COVERS BRUSHY CANYON**

1. Set 5 1/2" CIBP @ 4770'. Circulate hole w. MLF. Pressure test csg. Spot 25 sx cmt @ 4770-4670'. - **WOE & TAG**

4,820'-4,834' (Delaware) 15 holes - 05/2008 acidized w/ 750 gal

5,118'-5,132' (Delaware) 45 holes - 07/2006 frac'd w/ 180,000 lbs

**7 7/8" hole**

5-1/2" (17#) @ 5,353' w/ 1,250 sks

DV tool @ 1st stage: 450 sks, circ 90 sks

TOC @ su 2nd stage: 800 sks, circ 112 sks

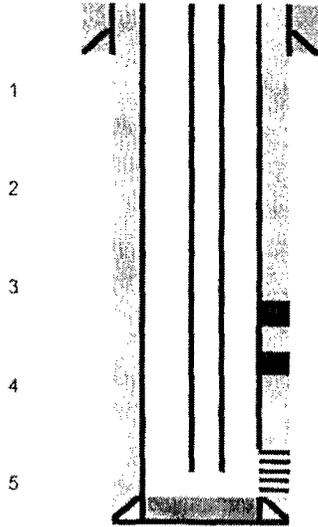
TD @ 5,360'

PBTD @ 5,330'

Author:	MRM (7/2017)	
Well Name	SS Snakebite Fee	Well No. #2
Field	Esperanza	API #: 30-015-34558
County	Eddy	Prop #: 35333
State	New Mexico	Zone: Delaware
Spud Date	6/8/2006	330 FNL & 1550 FEL
GL	3,097'	Sec 9 T22S R27E
KB		

Description	O.D.	Grade	Weight	Depth	Cmt Sx	TOC
Surface Csg	8.625"	J-55	24	377	375	surface
Inter Csg						
Prod Csg	5.5"	J-55	17	5,353	1,250	surface
Liner						

Marbob d  
COG tool



12 1/4" hole  
8-5/8" (24#) @ 377' w/ 375 sks, circ w/ 90 sks  
TOC @ surface

7 7/8" hole  
5-1/2" (17#) @ 5,353' w/ 1,250 sks  
DV tool @ ? 1st stage: 450 sks, circ 90 sks  
TOC @ surface 2nd stage: 800 sks, circ 112 sks

3,424'-3,443' (Delaware) 20 holes - 05/2008 acidized w/ 750 gal  
05/2008 - sqz w/ 150 sks, displace 16 bbls w/ 3,500 lbs. Rvrs out 15 sks.  
3,864'-4,105' (Delaware) 20 holes - 05/2008 acidized w/ 2,500 gal and frac'd w/ 150,000 lbs  
11/2008 - sqz w/ 550 sks

4,820'-4,834' (Delaware) 15 holes - 05/2008 acidized w/ 750 gal  
5,118'-5,132' (Delaware) 45 holes - 07/2006 frac'd w/ 180,000 lbs

TD @ 5,360'  
PBTD @ 5,330'

**ROD DETAIL circa 2008**

1 1/4" X 26' PR W/ 1 1/2" X 16' LINER  
2 - 6' X 7/8" SUBS  
4' X 7/8" SUB  
199 - 7/8" N-97 RODS  
6 K-BARS  
2 1/2" X 1 1/2" X 24' RHBC HVR #Y-7848

**Formation Tops**

Salado  
Base of Salt  
Lamar Limestone  
Bell Canyon  
Cherry Canyon  
Brushy Canyon  
Bone Spring

32. 4136047  
- 104. 1912613

## 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 and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing**
14. **A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.**
15. **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**

16. **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**
17. 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).**
18. **No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.**
19. Any Production Formations will be isolated with cement plugs: Some of these are:
  - A) **Strawn, Fusselman, Devonian, Marrow, Atoka, Wolfcamp, Bone springs, Delaware, San Andres, Abo, Glorieta, Any Salt Section, (Potash), Grayburg, Queen, Yates, Tubb, 7-Rivers**
  - B) **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.**
20. **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)