

NM OIL CONSERVATION
ARTESIA DISTRICT

FEB 2 2015
OCD Artesia

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

| | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------|--|
| 1a. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Dry <input type="checkbox"/> Other | | 5. Lease Serial No. NMNM114969 | |
| b. Type of Completion <input checked="" type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input type="checkbox"/> Diff. Resvr. Other _____ | | 6. If Indian, Allottee or Tribe Name | |
| 2. Name of Operator COG OPERATING LLC | | 7. Unit or CA Agreement Name and No. | |
| 3. Address 2208 W MAIN ST ARTESIA, NM 88210 | | 8. Lease Name and Well No. BARN OWL FEDERAL 2H | |
| 3a. Phone No. (include area code) Ph: 575-748-6946 | | 9. API Well No. 30-015-42472 | |
| 4. Location of Well (Report location clearly and in accordance with Federal requirements)* Sec 19 T26S R27E Mer NMP At surface NWNE 520FNL 1450FEL At top prod interval reported below Sec 18 T26S R27E Mer NMP At total depth NWNE 334FNL 1894FEL | | 10. Field and Pool, or Exploratory WELCH; BONE SPRING | |
| 14. Date Spudded 07/29/2014 | | 11. Sec., T., R., M., or Block and Survey or Area Sec 19 T26S R27E Mer NMP | |
| 15. Date T.D. Reached 08/15/2014 | | 12. County or Parish EDDY | |
| 16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 10/11/2014 | | 13. State NM | |
| 17. Elevations (DF, KB, RT, GL)* 3319 GL | | | |

| | | |
|-------------------------------------------------------------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 18. Total Depth: MD 14118 TVD 8750 | 19. Plug Back T.D.: MD 14100 TVD 8750 | 20. Depth Bridge Plug Set: MD TVD |
| 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) SEE ATTACHED | | 22. Was well cored? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Was DST run? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) Directional Survey? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes (Submit analysis) |

23. Casing and Liner Record (Report all strings set in well)

| Hole Size | Size/Grade | Wt. (#/ft.) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sk. & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|-----------|------------|-------------|----------|-------------|----------------------|-----------------------------|-------------------|-------------|---------------|
| 17.500 | 13.375 H40 | 48.0 | 0 | 360 | | 400 | | 0 | |
| 12.250 | 9.625 J55 | 36.0 | 0 | 2030 | | 750 | | 0 | |
| 8.750 | 5.500 P110 | 17.0 | 0 | 14105 | | 2750 | | 0 | |
| | | | | | | | | | |
| | | | | | | | | | |

24. Tubing Record

| Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|-------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|
| 2.875 | 9023 | 8132 | | | | | | |

| 25. Producing Intervals | | | 26. Perforation Record | | | |
|-------------------------|------|--------|------------------------|-------|-----------|--------------|
| Formation | Top | Bottom | Perforated Interval | Size | No. Holes | Perf. Status |
| A) BONE SPRING | 9527 | 14005 | 9527 TO 14005 | 0.430 | 540 | OPEN |
| B) | | | | | | |
| C) | | | | | | |
| D) | | | | | | |

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

| Depth Interval | Amount and Type of Material |
|----------------|-----------------------------|
| 9527 TO 14005 | SEE IN REMARKS |
| | |
| | |

28. Production - Interval A

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|-------------------|--------------|-----------------|---------|---------|-----------|-----------------------|-------------|-----------------------|
| 10/15/2014 | 10/26/2014 | 24 | → | 406.0 | | 2379.0 | | | Gas lift - per second |
| Choke Size | Tbg. Press. Flwg. | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio | Well Status | |
| 2 1/64 | SI | 450.0 | → | 406 | | 2379 | | POW | |

28a. Production - Interval B

| Date First Produced | Test Date | Hours Tested | Test Production | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
|---------------------|-------------------|--------------|-----------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| | | | → | | | | | | |
| Choke Size | Tbg. Press. Flwg. | Csg. Press. | 24 Hr. Rate | Oil BBL | Gas MCF | Water BBL | Gas:Oil Ratio | Well Status | |
| | SI | | → | | | | | | |

ACCEPTED FOR RECORD
JAN 28 2015
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #280567 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

Due: 4/26/15

28b. Production - Interval C

| | | | | | | | | | |
|---------------------|----------------------|--------------|----------------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |

28c. Production - Interval D

| | | | | | | | | | |
|---------------------|----------------------|--------------|----------------------|---------|---------|-----------|-----------------------|-------------|-------------------|
| Date First Produced | Test Date | Hours Tested | Test Production → | Oil BBL | Gas MCF | Water BBL | Oil Gravity Corr. API | Gas Gravity | Production Method |
| Choke Size | Tbg. Press. Flwg. SI | Csg. Press. | 24 Hr. Rate → | Oil BBL | Gas MCF | Water BBL | Gas/Oil Ratio | Well Status | |

29. Disposition of Gas(Sold, used for fuel, vented, etc.)

FLARED

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

| Formation | Top | Bottom | Descriptions, Contents, etc. | Name | Top |
|-----------------|------|--------|------------------------------|-----------------|-------------|
| | | | | | Meas. Depth |
| LAMAR | 2037 | 2073 | | TOS | 359 |
| BELL CANYON | 2074 | 2929 | | BOS | 1854 |
| CHERRY CANYON | 2930 | 4040 | | LAMAR | 2037 |
| BRUSHY CANYON | 4041 | 5629 | | BELL CANYON | 2074 |
| BONE SPRING LM | 5630 | 6580 | | CHERRY CANYON | 2930 |
| 1ST BONE SPRING | 6581 | 7098 | | BRUSHY CANYON | 4041 |
| 2ND BONE SPRING | 7099 | 8404 | | BONE SPRING LM | 5630 |
| 3RD BONE SPRING | 8405 | 8750 | | 1ST BONE SPRING | 6581 |

32. Additional remarks (include plugging procedure):

Perfs 7 1/2" Sand (#) Fluid (gal)
 13801-14005' 3000 452897 391038
 13496-13700' 5964 453225 403074
 13196-13394' 5982 452598 375246
 12886-13089' 5982 454591 420606
 12580-12784' 8250 471921 401726
 11359-11562' 8988 452377 414120
 11054-11257' 5999 425083 364890

33. Circle enclosed attachments:

- 1. Electrical/Mechanical Logs (1 full set req'd.)
- 2. Geologic Report
- 3. DST Report
- 4. Directional Survey
- 5. Sundry Notice for plugging and cement verification
- 6. Core Analysis
- 7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

**Electronic Submission #280567 Verified by the BLM Well Information System.
 For COG OPERATING LLC, sent to the Carlsbad
 Committed to AFMSS for processing by DEBORAH HAM on 01/15/2015 ()**

Name (please print) STORMI DAVIS Title REGULATORY ANALYST

Signature (Electronic Submission) Date 11/19/2014

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.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

Additional data for transaction #280567 that would not fit on the form

32. Additional remarks, continued

10748-10952' 5982 417378 364620
10443-10649' 5982 452165 412458
10138-10341' 5982 452599 371886
9832-10036' 5999 453161 368711
9527-9731' 6552 510966 387870
Totals 74660 5448961 4676243

Additional Tops:
2nd Bone Spring 7099
3rd Bone Spring 8405

Surveys and logs are attached.