



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0135
Expires: July 31, 2010

5 Lease Serial No.
NMLC029338B

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.
HARVARD FEDERAL 14

9. API Well No.
30-015-37412-00-S1

10. Field and Pool, or Exploratory
LOCO HILLS
UNKNOWN

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

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

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

2 Name of Operator
COG OPERATING LLC
Contact: KANICIA CARRILLO
E-Mail: kcarrillo@conchoresources.com

3a Address
550 W TEXAS, STE 1300 FASKEN TOWER II
MIDLAND, TX 79701
3b. Phone No. (include area code)
Ph: 432-685-4332

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
Sec 11 T17S R30E NENE Lot A 990FNL 510FEL

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

| TYPE OF SUBMISSION | TYPE OF ACTION |
|---|---|
| <input type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize |
| <input checked="" type="checkbox"/> Subsequent Report | <input type="checkbox"/> Deepen |
| <input type="checkbox"/> Final Abandonment Notice | <input type="checkbox"/> Fracture Treat |
| | <input type="checkbox"/> Production (Start/Resume) |
| | <input type="checkbox"/> Reclamation |
| | <input type="checkbox"/> Recomplete |
| | <input type="checkbox"/> Temporarily Abandon |
| | <input type="checkbox"/> Water Disposal |
| | <input type="checkbox"/> Water Shut-Off |
| | <input type="checkbox"/> Well Integrity |
| | <input checked="" type="checkbox"/> Other Drilling Operations |
| | <input type="checkbox"/> Change Plans |
| | <input type="checkbox"/> Plug and Abandon |
| | <input type="checkbox"/> Plug Back |
| | <input type="checkbox"/> Convert to Injection |

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.)

4/27/10 Test 5-1/2 csg 3500psi, ok. Perf Lower Blinbry @ 5600-5800 w/ 1 SPF, 26 holes.
5/5/10 Acidize w/2,500 gals acid. Frac w/118,404 gals gel, 143,629# 16/30 Ottawa Sand, 28,819#
16/30 Siberprop. Set comp plug @ 5550. Perf Middle Blinbry @ 5320-5520 w/1 SPF, 26 holes. Acidize w/2,500 gals acid. Frac w/124,220 gals gel, 149,474# 16/30 Ottawa Sand, 30,614# 16/30 Siberprop.
5/6/10 Set comp plug @ 5280. Perf Upper Blinbry @ 5050-5250 w/1 SPF, 26 holes. Acidize w/2,500 gals acid. Frac w/124,485 gals gel, 149,821# 16/30 Ottawa sand, 31,442# 16/30 Siberprop. Set comp plug @ 4910. Perf Paddock @ 4630-4880 w/ 1 SPF, 29 holes. Acidize w/3,000 gals acid. Frac w/109,737 gals gel, 114,702# 16/30 Ottawa Sand, 19,565# 16/30 Siberprop.
5/10/10 Drill out plugs. Clean out to PBTD 6055.
5/11/10 RIH w/177jts 2-7/8" J55 6.5# tbg, SN @ 5583.
5/12/10 RIH w/2-1/2"x1-1/4"x24" tbg pump. Hang on well.

14 I hereby certify that the foregoing is true and correct

Electronic Submission #88716 verified by the BLM Well Information System
For COG OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by CHERYLE RYAN on 06/29/2010 (10CMR0524SE)

Name (Printed/Typed) KANICIA CARRILLO

Title PREPARER

Signature (Electronic Submission)

Date 06/29/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTED

JAMES A AMOS
Title SUPERVISOR EPS

Date 07/24/20

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 Carlsbad

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 **

MR
OK

RECEIVED

JUL 30 2010

OCD Artesia

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
NMOCD ARTESIA OF LAND MANAGEMENT

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. NMLC029338B | | |
| 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 | | | Contact: KANICIA CARRILLO E-Mail: kcarrillo@conchoresources.com | | |
| 3. Address 550 W TEXAS, STE 1300 FASKEN TOWER II MIDLAND, TX 79701 | | | 3a. Phone No. (include area code) Ph: 432-685-4332 | | |
| 4. Location of Well (Report location clearly and in accordance with Federal requirements)* At surface NENE Lot A 990FNL 510FEL At top prod interval reported below NENE Lot A 990FNL 510FEL At total depth NENE Lot A 990FNL 510FEL | | | 8. Lease Name and Well No. HARVARD FEDERAL 14 | | |
| 14. Date Spudded 04/02/2010 | | | 15. Date T.D. Reached 04/11/2010 | | |
| 16. Date Completed <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod. 05/12/2010 | | | 9. API Well No. 30-015-37412-00-S1 | | |
| 18. Total Depth: MD 6105 TVD 6105 | | | 19. Plug Back T.D.: MD 6055 TVD 6055 | | |
| 20. Depth Bridge Plug Set: MD TVD | | | 10. Field and Pool, or Exploratory LOCO HILLS | | |
| 21. Type Electric & Other Mechanical Logs Run (Submit copy of each) COMPENSATEDNEUT | | | 11. Sec., T., R., M., or Block and Survey or Area Sec 11 T17S R30E Mer NMP | | |
| 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 checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Submit analysis) | | | 12. County or Parish EDDY | | |
| 23. Casing and Liner Record (Report all strings set in well) | | | 13. State NM | | |
| 17. Elevations (DF, KB, RT, GL)* 3750 GL | | | 17. Elevations (DF, KB, RT, GL)* 3750 GL | | |

| Hole Size | Size/Grade | Wt. (#/ft) | Top (MD) | Bottom (MD) | Stage Cementer Depth | No. of Sks & Type of Cement | Slurry Vol. (BBL) | Cement Top* | Amount Pulled |
|-----------|------------|------------|----------|-------------|----------------------|-----------------------------|-------------------|-------------|---------------|
| 17.500 | 13.375 H40 | 48.0 | 0 | 478 | | 450 | | 0 | 0 |
| 11.000 | 8.625 J55 | 24.0 | 0 | 1337 | | 500 | | 0 | 0 |
| 7.875 | 5.500 J55 | 17.0 | 0 | 6105 | | 1150 | | 0 | 0 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) | Size | Depth Set (MD) | Packer Depth (MD) |
|-------|----------------|-------------------|------|----------------|-------------------|------|----------------|-------------------|
| 2.875 | 5583 | | | | | | | |

| Formation | Top | Bottom | Perforated Interval | Size | No. Holes | Perf. Status |
|-------------|------|--------|---------------------|-------|-----------|--------------|
| A) YESO | | | 4630 TO 4880 | 0.410 | 29 | OPEN |
| B) PADDOCK | 4630 | 4880 | 5050 TO 5250 | 0.410 | 26 | OPEN |
| C) BLINEBRY | 5600 | 5800 | 5320 TO 5520 | 0.410 | 26 | OPEN |
| D) | | | 5600 TO 5800 | 0.410 | 26 | OPEN |

| Depth Interval | Amount and Type of Material |
|----------------|---|
| 4630 TO 4880 | ACIDIZE W/3,000 GALS 15% ACID |
| 4630 TO 4880 | FRAC W/109,737 GALS GEL, 114,702# 16/30 OTTAWA SAND, 19,565# 16/30 SIBERPROP SAND. |
| 5050 TO 5250 | ACIDIZE W/2,500 GALS 15% ACID |
| 5050 TO 5250 | FRAC W/ 124,485 GALS GEL, 149,821# 16/30 OTTAWA SAND, 31,442# 16/30 SIBERPROP SAND. |

| | | | | | | | | | | | |
|-----------------------------------|-------------------------|--------------------|----------------------|-----------------|------------------|--------------------|------------------------------|--------------------|--|---|--|
| 28 Production - Interval A | | | | | | | | | | <div style="border: 2px solid black; padding: 5px; display: inline-block;"> ACCEPTED FOR RECORD ELECTRIC PUMPING UNIT JUL 24 2010 BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE </div> | |
| Date First Produced 05/14/2010 | Test Date 05/25/2010 | Hours Tested 24 | Test Production → | Oil BBL 81 0 | Gas MCF 136 0 | Water BBL 229 0 | Oil Gravity Corr API 37 8 | Gas Gravity | | | |
| Choke Size | Tbg Press 70 | Csg Press 70.0 | 24 Hr Rate → | Oil BBL 81 | Gas MCF 136 | Water BBL 229 | Gas Oil Ratio 1679 | Well Status POW | | | |

| | | | | | | | | | |
|-----------------------------------|-------------------------|--------------------|----------------------|-----------------|------------------|--------------------|------------------------------|---------------------|--|
| 28a Production - Interval B | | | | | | | | | |
| Date First Produced 05/14/2010 | Test Date 05/25/2010 | Hours Tested 24 | Test Production → | Oil BBL 81 0 | Gas MCF 136 0 | Water BBL 229 0 | Oil Gravity Corr API 37 8 | Gas Gravity 0.60 | |
| Choke Size | Tbg Press 70 | Csg Press 70.0 | 24 Hr Rate → | Oil BBL 81 | Gas MCF 136 | Water BBL 229 | Gas Oil Ratio | Well Status POW | |

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

ELECTRONIC SUBMISSION #88720 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

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

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.)
SOLD

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 |
| YATES | 1437 | | DOLOMITE & SAND | YATES | 1437 |
| QUEEN | 2337 | | SAND | QUEEN | 2337 |
| SAN ANDRES | 3062 | | DOLOMITE & ANHYDRITE | SAN ANDRES | 3062 |
| GLORIETA | 4523 | | SAND & DOLOMITE | GLORIETA | 4523 |
| YESO | 4578 | | DOLOMITE & ANHYDRITE | | |
| TUBB | 5946 | | SAND | | |

32. Additional remarks (include plugging procedure):

Acid, Fracture, Treatment, Cement Squeeze etc. continued...

5320 - 5520 ACIDIZE W/2,500 GALS 15% ACID.

5320 - 5520 Frac w/124,220 gals gel, 149,474# 16/30 Ottawa sand, 30,614# 16/30 Siberprop sand.

5600 - 5800 ACIDIZE W/2,500 GALS 15% ACID.

5600 - 5800 FRAC W/118,404 gals gel, 143,629# 16/30 Ottawa sand, 28,819# 16/30 Siberprop

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 #88720 Verified by the BLM Well Information System.

For COG OPERATING LLC, sent to the Carlsbad

Committed to AFMSS for processing by CHERYLE RYAN on 06/29/2010 (10CMR0525SE)

Name (please print) KANICIA CARRILLO

Title PREPARER

Signature (Electronic Submission)

Date 06/29/2010

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.

**** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ** REVISED ****

Additional data for transaction #88720 that would not fit on the form

27. Acid, Fracture, Treatment, Cement Squeeze, etc., continued

| Depth Interval | Amount and Type of Material |
|----------------|---|
| 5320 TO 5520 | gal 15% acid |
| 5320 TO 5520 | gal gel, 149474# 16/30 Ottawa sand, 30614# 16/30 Siberprop sand |
| 5600 TO 5800 | gal 15% acid |
| 5600 TO 5800 | gal gel, 143629# 16/30 Ottawa sand, 28819# 16/30 siberprop sand |

32. Additional remarks, continued

sand.