RM

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

MAR 3 0 2009

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. NMNM100844

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator: COG OPERATING LLC
Contact: PHYLLIS A EDWARDS
E-Mail: pedwards@conchoresources.com

8. Lease Name and Well No.: REINDEER 21 FEDERAL 3

3. Address: 550 W TEXAS, STE 1300 FASKEN TOWER II, MIDLAND, TX 79701
3a. Phone No. (include area code): Ph: 432-685-4340

9. API Well No.: 30-015-36538-00-S1

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface: Sec 21 T16S R28E Mer NMP SWNW 1980FNL 430FWL
At top prod interval reported below: Sec 21 T16S R28E Mer NMP
At total depth: SENE 1980FNL 330FEL

ENTERED 10-2-09

10. Field and Pool, or Exploratory: CROW FLATS 97691

11. Sec., T., R., M., or Block and Survey or Area: Sec 21 T16S R28E Mer NMP

12. County or Parish: EDDY
13. State: NM

14. Date Spudded: 12/02/2008
15. Date T.D. Reached: 12/23/2008
16. Date Completed: ☐ D & A ☒ Ready to Prod. 03/05/2009
17. Elevations (DF, KB, RT, GL)*: 3587 GL

18. Total Depth: MD 10600 TVD 6780
19. Plug Back T.D.: MD TVD
20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
COMPENSATEDNEWT CCL

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☒ No. ☐ 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 Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17.500	13.375 J-55	54.5	0	562		500		0	
12.250	9.625 K-55	40.0	0	1835		710		0	
8.750	7.000 HCP-110	26.0	0	5985		750		0	
~~6.125~~	~~4.500~~	~~11.6~~	~~5864~~	~~10600~~					
6.125	4.500 HCP-110	11.6	5864	10600					

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)

25. Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) ABO			TO 6845			open
B)			TO 7291			open
C)			TO 7728			open
D)			TO 8039			open

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

Depth Interval	Amount and Type of Material
TO 6845	bbls 15% acid, frac, w/ 3085 bbls silverstim, 3512 gel, 99099# sand
TO 7291	bbls 15% acid, frac, w/ 2877 bbls silverstim, 1008 gel, 81573# sand
TO 7728	bbls 15% acid, frac, w/ 3007 bbls silverstim, 3700 gel, 103751# sand
TO 8039	bbls 15% acid, frac, w/ 3011 bbls silverstim, 2968 gel, 106427# sand

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
03/09/2009	03/14/2009	24	→	1353 0	1243.0	764.0	41.7		ELECTRIC PUMPING UNIT

Choke Size	Tbg Press Flwg SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status
			→	1353	1243	764	919	POW

ACCEPTED FOR RECORD
MAR 28 2009
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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 SI	Csg Press	24 Hr Rate	Oil BBL	Gas MCF	Water BBL	Gas Oil Ratio	Well Status
			→					

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

ELECTRONIC SUBMISSION #68084 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Send C-102 w/ corrected pool

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.)*
CAPTURED

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	862				
SEVEN RIVERS	1020				
SAN ANDRES	1960				
GLORIETA	3352				
ABO	4708				
WOLFCAMP	6640				

32. Additional remarks (include plugging procedure):
1-30-09 Abo Perfs @ 6845?, 7291?, 7728?, 8039?, 8477?, 8873?, 9227?, 9585?, & 9857?, & 10,312

3-05-09 Frac 10 stage Abo frac.
1st stage acidize w/ 98 BBLS 15% acid. Frac w/ 2893 BBLS Silverstim, 10,121 gel & 97,185# sand.
2nd stage acidize w/ 76 BBLS 15% acid. Frac w/ 3019 BBLS Silverstim, 1871 gel & 99,797# sand.

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 #68084 Verified by the BLM Well Information System.
For COG OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by KURT SIMMONS on 03/18/2009 (09KMS1040SE)

Name *(please print)* PHYLLIS A EDWARDS Title REGULATORY ANALYST

Signature (Electronic Submission) Date 03/17/2009

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 fradulent statements or representations as to any matter within its jurisdiction.

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

Additional data for transaction #68084 that would not fit on the form

26. Perforation Record, continued

Perf Interval	Size	No. Holes	Perf Status
TO 8477			open
TO 8873			open
TO 9227			open
TO 9585			open
TO 9857			open
TO 10312			open

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

Depth Interval	Amount and Type of Material
TO 8477	bbls 15% acid, frac, w/ 3083 bbls silverstim, 3194 gel, 106432# sand
TO 8873	bbls 15% acid, frac, w/ 3049 bbls silverstim, 1642 gel, 103200# sand
TO 9227	bbls 15% acid, frac, w/ 3202 bbls silverstim, 1350 gel, 117120# sand
TO 9585	bbls 15% acid, frac, w/ 3086 bbls silverstim, 1345 gel, 105406# sand
TO 9857	bbls 15% acid, frac, w/ 3019 bbls silverstim, 1871 gel, 99797# sand
TO 10312	bbls 15% acid, frac, w/ 2893 bbls silverstim, 10121 gel, 97185# sand

32. Additional remarks, continued

3rd stage acidize w/ 82 BBLS 15% acid. Frac w/ 3086 BBLS Silverstim, 1345 gel & 105,406# sand.
4th stage acidize w/ 71 BBLS 15% acid. Frac w/ 3202 BBLS Silverstim, 1350 gel & 117,120# sand.
5th stage acidize w/ 70 BBLS 15% acid. Frac w/ 3049 BBLS Silverstim, 1642 gel & 103,200# sand.
6th stage acidize w/ 70 BBLS 15% acid. Frac w/ 3083 BBLS Silverstim, 3194 gel & 106,432# sand.
7th stage acidize w/ 78 BBLS 15% acid. Frac w/ 3011 BBLS Silverstim, 2968 gel & 106,427# sand.
8th stage acidize w/ 71 BBLS 15% acid. Frac w/ 3007 BBLS Silverstim, 3700 gel & 103,751# sand.
9th stage acidize w/ 73 BBLS 15% acid. Frac w/ 2877 BBLS Silverstim, 1008 gel & 81,573# sand.
10th stage acidize w/ 73 BBLS 15% acid. Frac w/ 3085 BBLS Silverstim, 3512 gel & 99,099# sand.