

OCD-ARTESIA

Form 3160-4
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMBNO. 1004-0137
Expires: March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

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

b. Type of Completion: ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.,
Other _____

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

3. Address **550 W. Texas, Ste.1300
Midland, Texas 79701** 3a. Phone No. (include area code)
432-685-4340

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface **1690' FSL & 1870' FEL**
At top prod. interval reported below
At total depth

5. Lease Serial No.
LC-029020-L

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

8. Lease Name and Well No.
SHAWNEE FEDERAL #4

9. AFI Well No.
30-015-34899

10. Field and Pool, or Exploratory
LOCO HILLS; Glorieta Yeso

11. Sec., T., R., M., on Block and Survey or Area **Sec. 15, T17S, R30E**

12. County or Parish **Eddy** 13. State **NM**

14. Date Spudded **12/03/2006** 15. Date T.D. Reached **12/17/2006** 16. Date Completed **10/06/2006**
☐ D & A ☒ Ready to Prod.

17. Elevations (DF, RKB, RT, GL)*
3692'

18. Total Depth: MD **6050'** 19. Plug Back T.D.: MD **6032'** 20. Depth Bridge Plug Set: MD
TVD TVD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
Comp.Neutron/HNGS, Micro-CFL/HNGS

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit report)
Directional Survey? ☐ No ☒ Yes (Submit copy)

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 1/2	13 3/8	48#		409		580 sxs, CLC		Surf.	
12 1/4	8 5/8	24#		1345		700 sxs, CLC		Surf.	
7 7/8	5 1/2	17#		6027		1780 sxs, CLC		Surf.	

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 7/8	5968'							

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) Yeso			4951' - 5126'	2 SPF	56	Open
B)			5230' - 5621'	2 SPF	70	Open
C)			5721.5' - 5953.5'	2 SPF	68	Open
D)						

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

Depth Interval	Amount and Type of Material
4951 - 5126	Acidize w/ 1900 gals acid. Frac w/ 40,000 gals 30# gel, 8004# LiteProp, 89,314# 16/30, & 45,000 gals 40# gel
5230 - 5621	Acidize w/ 2500 gal acid. Frac w/ 96,138 gals gel, 8357# LiteProp, 86,988# 16/30 sand.
5721.5 - 5953.5	Acidize w/ 2500 gals acid. Frac w/ 91,400 gals gel, 8000# LiteProp, and 90,480# 16/30 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
01/18/2007	02/01/2007	24	→	94	109	219	37.8		Pumping
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	
			→						

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 page 2)

ACCEPTED FOR RECORD

MAR - 7 2007

LES BABYAK
PETROLEUM ENGINEER

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	1264				
7 Rivers	1564				
Queen	2178				
Grayburg	2575				
San Andres	2893				
Glorieta	4375				
Yeso	4470				

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

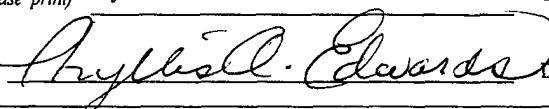
- ☒ Electrical/Mechanical Logs (1 full set req'd.)
 ☐ Geologic Report
 ☐ DST Report
 ☒ Directional Survey
 ☐ Sundry Notice for plugging and cement verification
 ☐ Core Analysis
 ☐ Other:

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

Name (please print) Phyllis A. Edwards

Title Regulatory Analyst

Signature



Date

02/28/2007

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.



PO Box 1370
Artesia, NM 88211-1370
(505) 748-1288

December 22, 2006

COG, LLC
Fasken Center, Tower II
550 West Texas Ave, Suite 1300
Midland, TX 79701

RE: Shawnee Federal #4
1690' FSL & 1870' FEL
Sec. 15, T17S, R30E
Eddy County, New Mexico

Dear Sir,

The following is the Deviation Survey for the above captioned well.

<u>DEPTH</u>	<u>DEVIATION</u>	<u>DEPTH</u>	<u>DEVIATION</u>
281'	1/2°	4096'	1°
739'	1 3/4°	4567'	2 1/2°
962'	1/4°	4754'	2 3/4°
1237'	1/2°	4880'	2°
1456'	1/2°	5069'	2°
1895'	1/4°	5192'	2°
2359'	3/4°	5441'	1 1/2°
2792'	3/4°	5692'	1 1/4°
3292'	1 3/4°	6040'	1°
3659'	1 3/4°		

Very truly yours,

Eddie C. LaRue
Operations Manager

State of New Mexico }
County of Eddy }

The foregoing was acknowledged before me this 22nd day of December, 2006.

Notary Public