Form 3160-4
(April 2004)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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FORM APPROVED
OMB NO 1004-0137
Expires. March 31, 2007

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5 Lease Serial No **NMLC-054988B**

1a Type of Well ☐ Oil Well ☐ Gas Well ☐ Dry ☑ Other
b Type of Completion ☐ New Well ☑ Work Over ☐ Deepen ☐ Plug Back ☐ Diff Resvr,
Other **CONVERT TO INJECTION**

6 If Indian, Allottee or Tribe Name

7 Unit or CA Agreement Name and No

2 Name of Operator **COG Operating LLC**

8 Lease Name and Well No. **Jenkins B Federal #13**

3 Address **550 W. Texas, Ste. 1300 Midland, Texas 79701**

3a Phone No *(include area code)* **432-685-4332**

9 AFI Well No **30-015-31560**

4 Location of Well *(Report location clearly and in accordance with Federal requirements)**

At surface **2310 FNL & 880 FWL, Unit E**

OCT 10 2007
OCD-ARTESIA

10 Field and Pool, or Exploratory **Loco Hills; Glorieta-Yeso 96718**

At top prod interval reported below

11 Sec , T , R, M , on Block and Survey or Area **Sec.20.,T17S, R30E**

At total depth

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

14 Date Spudded	15 Date T D Reached	16 Date Completed	17. Elevations (DF, RKB, RT, GL)*
02/23/2001	**03/05/2001**	☐ D & A ☑ Ready to Prod **09/12/2007**	**3637 GL**

18. Total Depth	19. Plug Back T D	20 Depth Bridge Plug Set
MD **4880** TVD	MD **4838** TVD	MD **4838** TVD

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

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#**		**450**		**450 sxs**			**None**
12 1/4	**8-5/8**	**24#**		**1090**		**600 sxs**			**None**
7 7/8	**5-1/2**	**17#**		**4874**		**960 sxs**			**None**

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	**4217**	**4217**						

25 Producing Intervals / 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf Status
A) **San Andres**			**3106.5 - 3928**			**Closed**
B) **Paddock**			**4312.5 - 4715.5**			**Open**
C)						
D)						

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

Depth Interval	Amount and Type of Material
3106.5 - 3928	**Squeezed off - See Attachment**
4312.5 - 4715.5	**See Attachment**

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
		24	→						
Choke Size	**Tbg Press Flwg SI**	**Csg Press**	**24 Hr Rate**	**Oil BBL**	**Gas MCF**	**Water BBL**	**Gas/Oil Ratio**	**Well Status**	
			→					**Closed**	

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**	
			→					**Injecting**	

(See instructions and spaces for additional data on page 2)

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.)*

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
QUEEN	**2016**				
SAN ANDRES	**2738**				
GLORIETA	**4183**				
PADDOCK	**4251**				

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)* **Kanicia Carrillo** Title **Regulatory Analyst**

Signature  Date **10/08/2007**

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.

Jenkins B Federal #13
API#: 30-015-31560
EDDY, NM

3160-4 (#27) ADDITIONAL INFORMATION

27 ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
3106 5 - 3928 Squeezed off	TIH, tag PBTD @ 4838. Pump 200 bbls, no circ. TOOH. PU CIBP set @ 4237. TOOH. PU treating packer @ 4143 Load tbg w/ 18 bbls LSW. Pressure test CIBP, tubing to 1500 psi for 30 min.TOOH. SICP - 60 psi. Blow down. PU EZ drill cement retainer. TIH on tbg Set @ 3,830' Establish injection rate of 1,650 psi @ 1.5 bpm Wait on cement eqp. Pump 40 bbls LSW. Mix 80 sacks Class C plus additives @ 14.8#/gal Displace tbg w LSW @ 1/2 bpm, Squeeze to 2,400 psi. Sting out of retainer. TOOH. SDFNEstablish injection rate of vacuum @ 5 bpm. Pump 40 bbls LSW. Mix 300 sacks Class C plus additives @ 14.8#/gal. Displace tbg w LSW @ <1 bpm, No pressure, overdisplace w 20 bbls. Wait on cement. Mix and pump 300 sks Class C neat @ 14 8#/gal. Squeeze to 2,000 psi with 255 sks below retainer. Sting out of retainer. TOOH. Pump 120 bbl @ 5 bpm down casing. SIFN. Prepare to squeeze third set Wednesday AM. SICP - 0 psi. PU EZ drill cement retainer. TIH on tbg. Set @ 3,021'. Load and pressure annulus to 500 psi. Establish injection rate of vacuum @ 5 bpm. Pump 30 bbls LSW. Mix 300 sacks Class C plus additives @ 14.8#/gal. Displace tbg w LSW @ <1/2 bpm, No pressure, overdisplace w 20 bbls. Wait on cement. Mix and pump 300 sks Class C + 150# CaCl2 @ 14 8#/gal. Squeeze to 1,650 psi with 235 sks below retainer. Sting out of retainer. Reverse 12 1/2 bbls cement to tank. TOOH, LD stinger. PU new 4 3/4" bit, sub, 6 - 3 1/2" DCs, XO, 50 jts tbg. SDFN. SICP - 0 psi. TIH, tag cement @ 3,015'. Pressure test casing 500 psi for 40 min. Drill cement/cement retainer/cement to 3,152' SDFN. SICP - 0. Drill cement to 3,335'. Pressure test casing/squeeze holes to 500 psi. Bleed off from 500 psi to 0 in 20 min. Repeat test three times. Check all surface isolation valves. TOOH, Schedule squeeze for Tuesday AM. SICP - 0. PU packer, TIH, set @ 3050'. Pressure annulus to 625 psi, holds good. Pressure test casing. Very slow bleed off: 500 psi to 400 psi in 10 min, Pressure to 2,000 psi. Bleed to 1,200 in 10 min. TOOH, LD packer. TIH, spot 35 sks Class H cement w FL from 3,241' to 3,000'. TOOH. PU packer, TIH to 1,500 psi. Pressure to 1,350 psi. Watch 1 hr. SI tbg. SDFNSICP - 0, SITP - 0. Release packer, TOOH. PU 4 3/4" bit, 6 - 3 1/8" collars, 2 7/8" tbg.Close BOP, pressure test casing to 500 psi for 30 min. Tag cement top @ 3,000'. Drill cement to retainer @ 3,335'. Close BOP, pressure squeeze/csg to 500 psi for 30 min SDFN. Drillout cement retainer, cement to 3,500'. TOOH, bit worn. PU new 4 3/4" Varrel bit, TIH. SIFNSICP - 0. Drill cement to 3,830' Pressure test casing. RE-test. Shut down to let fluid settle and bring in chart recorder. SIFN SITP - 0. Pressue test casing to 500 psi, 30 min, 18 psi bleed-off. Drill cement retainer/cement to 3910'. SDFN. SITP - 0. Drill cement to CIBP @ 4,237' Pressure test casing to 500 psi, 30 min, <20 psi bleed-off. Drill CIBP retainer/cement Casing on strong vacuum. Push plug to PBTD @ 4,815'. Pump 200 bbls via csg. TOOH. LD bit, collars. PU Arrowset packer, SN, 135 jts tbg. Set packer @ 4,236'. Load and pressure annulus.SIFN

27 ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC	
DEPTH INTERVAL	AMOUNT AND KIND MATERIAL USED
4312 5 – 4715 5	Pressure and monitor annulus 200 psi. Acidize via tbg w 2,500 gal 15% HCl NeFe carrying 150 7/8" 1.3SG RCN ballsealers @ 6 bpm, 100 psi. Flush plus overflush with 76 bbls LSW. ISIP - strong vacuum. Release packer. TIH w 7 stands to knock off balls. Repair rig. LD 2 7/8" tbg, packer. SIFN. SICP - 200 psi. Blow down to tank. PU PC WLRG, PC AS1X packer, PC 2.25" SN, 137 jts PC 2 7/8" tbg. Set packer @ 4217 in 10 K tension. Load and pressure annulus. ND BOP. NU wellhead. Schedule MIT test for Friday AM.