

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTOCT 03 2008
OCD-ARTESIAFORM APPROVED
OMB NO 1004-0137
Expires March 31, 2007

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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 NMLC-029338B
b Type of Completion <input type="checkbox"/> New Well <input type="checkbox"/> Work Over <input type="checkbox"/> Deepen <input type="checkbox"/> Plug Back <input checked="" type="checkbox"/> Drill Resvr Other Recompletion & Commingle DHC-4036		6 If Indian Allottee or Tribe Name
2 Name of Operator COG Operating LLC		7 Unit or CA Agreement Name and No
3 Address 550 W. Texas, Ste.1300 Midland, Texas 79701		8 Lease Name and Well No Harvard Federal #5
3a Phone No (include area code) 432-685-4335		9 AFI Well No 30-015-34709
4 Location of Well (Report location clearly and in accordance with Federal requirements)* At surface 2310 FNL & 990 FEL, Unit H At top prod interval reported below At total depth		10 Field and Pool, or Exploratory Loco Hills; Glorieta-Yeso 96718 11 Sec, T, R, M. on Block and Survey or Area Sec.11, T17S, R30E 12 County or Parish Eddy 13 State NM
14 Date Spudded 04/17/2006	15 Date T D Reached 05/02/2006	16 Date Completed 07/21/2008 <input type="checkbox"/> D & A <input checked="" type="checkbox"/> Ready to Prod
17 Elevations (DF, RKB, RT, GL)* 3742' GL	18. Total Depth MD 6250 TVD	19 Plug Back T D MD 6217 TVD
20 Depth Bridge Plug Set MD TVD	21. Type Electric & Other Mechanical Logs Run (Submit copy of each) Spectral Gamma Ray	
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 report) Directional Survey? <input checked="" type="checkbox"/> No <input type="checkbox"/> 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		441		628 sxs			None
12 1/4	8 5/8	32#		1328		780 sxs			None
7 7/8	5 1/2	17		6243		1475 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	5351							

25 Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No Holes	Perf Status
A) Yeso (Existing)	5098	5331	3440 - 3640	.041	36	Open
B) San Andres (New)	3440	3640	3710 - 3910	.041	36	Open
C) San Andres (New)	3710	3910	3980 - 4450	.041	72	Open
D) San Andres (New)	3980	4450	5098 - 5331	.045	68	Open

26 Perforation Record

Depth Interval	Amount and Type of Material
3440 - 3640	Acidize w/7500 gal 15% acid. Frac w/69,412 gal gel; 63,360# 16/30 white sand; 28,335# 40/70 SiberProp sand.
3710 - 3910	Acidize w/3500 gal 15% acid. Frac w/61,858 gal gel; 68,897# 16/30 white sand; 17,910# 40/70 SiberProp sand.
3980 - 4180	Acidize w/3500 gal 15% acid. Frac w/67,422 gal gel; 66,123# 16/30 white sand; 23,399# 40/70 SiberProp sand.
4250 - 4450	Acidize w/2500 gal 15% acid. Frac w/61,744 gal gel; 65,362# 16/30 white sand; 24,972# 40/70 SiberProp sand.

27 Acid, Fracture, Treatment, Cement Squeeze, etc

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	
			→					Shut In	

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)

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.)

Shut In

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 Seven Rivers Queen Grayburg San Andres Glorietta Yeso	1428 1728 2326 2724 3042 4494 5098				

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 CarrilloTitle Regulatory Analyst

Signature _____

Date 09/29/2008

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.

District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised June 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-34709	² Pool Code 96718	³ Pool Name Loco Hills; Glorieta-Yeso
⁴ Property Code 302440	⁵ Property Name Harvard Federal	⁶ Well Number 5
⁷ OGRID No. 229137	⁸ Operator Name COG OPERATING LLC	⁹ Elevation 3743

¹⁰ Surface Location

UL or lot no. H	Section 11	Township 17S	Range 30E	Lot Idn	Feet from the 2310	North/South line North	Feet from the 990	East/West line East	County Eddy
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¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
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¹² Dedicated Acres 40	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	¹⁷ OPERATOR CERTIFICATION <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</i> Signature Kanicia Carrillo Printed Name Regulatory Analyst Title and E-mail Address 04/09/08 Date
	¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i> Referred Original Plat Date of Survey Signature and Seal of Professional Surveyor
	Certificate Number

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	<p>¹⁸ SURVEYOR CERTIFICATION <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief</i></p> <p>Referred Original Plat</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p>
	<p>Certificate Number</p>