Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5 Lease Serial No. NMLC029392B

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 CHESAPEAKE OPERATING, INC. Contact: LINDA GOOD E-Mail: linda good@chk com

8 Lease Name and Well No PRINCIPLE FEDERAL 4

3 Address OKLAHOMA CITY, OK 73154-0496

3a Phone No. (include area code) Ph: 405 767.4275

9 API Well No 30-015-32894-00-S1

4 Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface SWNW 1920FNL 660FWL Sec 27 T18S R31E Mer NMP
At top prod interval reported below
At total depth

JUL 16 2008
OCD-ARTESIA

10. Field and Pool, or Exploratory SHUGART

11. Sec , T., R., M., or Block and Survey or Area Sec 27 T18S R31E Mer NMP

12. County or Parish EDDY

13. State NM

14 Date Spudded 12/03/2003

15 Date T.D Reached 12/24/2003

16 Date Completed ☐ D & A ☒ Ready to Prod. 07/02/2008

17. Elevations (DF, KB, RT, GL)* 3632 GL

18. Total Depth MD 6367 TVD

19. Plug Back T D.. MD 6095 TVD

20 Depth Bridge Plug Set MD 6095 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 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
12 250	9.625 J-55	40.0	0	648		300		0	
8 750	5.500 J-55	17 0	0	6367		1350		1480	

24 Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 875	5368		2.875	6126				

25 Producing Intervals / 26 Perforation Record

	Formation	Top	Bottom	Perforated Interval	Size	No Holes	Perf Status
A)	DELAWARE			5173 TO 5268		39	OPEN
B)	CHERRY CANYON	5173	5268	6140 TO 6222	3.130	100	OPEN
C)							
D)							

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

Depth Interval	Amount and Type of Material
5173 TO 5268	FLUSH W/5150 GAL 20# LINEAR GEL
5173 TO 5268	FRAC W/12,400 GAL 20# BORATE X-LINK GEL CONT 24,980# 20/40 JORDAN SAND, TAILING W/10,020# SUPER LC
5173 TO 5268	ACID W/2000 GAL 15% NEFE + BALL SEALERS
6140 TO 6222	38000 GAL VIKING 2500 CROSS-LINKED GEL W/86000# 16/20 SD + 18000 16/30 SUPER LC RESIN COATED SD

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
02/11/2004	03/15/2004	24	→	60	30	228 0			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
			→	6	3	228	500	POW

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
02/11/2004	07/05/2008	24	→	90	5.0	118.0			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
			→	9	5	118		POW

ACCEPTED FOR RECORD
JUL 12 2008
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

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

ELECTRONIC SUBMISSION #61344 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

32. Additional remarks (include plugging procedure):
(CHK PN 890591)

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 #61344 Verified by the BLM Well Information System.
For CHESAPEAKE OPERATING, INC., sent to the Carlsbad
Committed to AFMSS for processing by KURT SIMMONS on 07/11/2008 (08KMS2177SE)

Name *(please print)* LINDA GOOD Title REGULATORY COMPLIANCE SPEC.

Signature (Electronic Submission) Date 07/10/2008

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

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

Additional data for transaction #61344 that would not fit on the form

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

Depth Interval	Amount and Type of Material
6140 TO 6222	5000 GAL 7-1/2% 90/10 ACID + 150 BS