

State of West Virginia
 Division of Environmental Protection
 Section of Oil and Gas
 Well Operator's Report of Well Work

Farm name: Imperial & Blackcat Mines
 Location Elevation: 1483'
 District: Cabin Creek

Operator Well No: 825784
 Quadrangle: Cedar Grove
 County: Kanawha

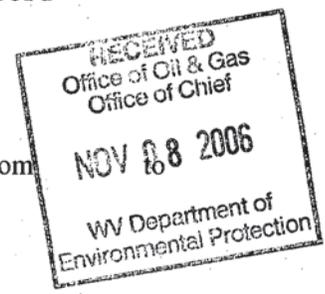
CHESAPEAKE APPALACHIA, L.L.C.	Casing & Tubing	Used in drilling	Left in Well	Cement fill up Cu.Ft.
Address: P.O. Box 6070	13 3/8"	666	666	655
Charleston, WV 25362	7"	2251	2251	716
Agent: Michael A. John	4 1/2"	4950	4950	424
Inspector: Carlos W. Hively	2 3/8"	4855	4855	
Date Permit Issued: 02/21/06				
Date Well work commenced: 04/28/06				
Date Well Work completed: 07/15/06				
Verbal Plugging:				
Date Permission granted on:				
<input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Cable <input type="checkbox"/> Rig				
Total Depth (feet): 4984'				
Fresh Water Depth (ft): None Reported				
Salt Water Depth (ft.): 1450'				
Is coal being mined in area <input checked="" type="checkbox"/> N <input type="checkbox"/> Y				
Coal Depths (ft): 285', 385', 521', 560', 609', 639'				

OPEN FLOW DATA (SEE ATTACHED)

Producing formation: Pay zone depth (ft) from _____ to _____ from _____ to _____
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure _____ psig (surface pressure) after _____ Hours

2nd producing formation: Pay zone depth (ft) from _____ to _____ from _____ to _____
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure _____ psig (surface pressure) after _____ Hours

3rd producing formation: Pay zone depth (ft) from _____ to _____ from _____ to _____
 Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
 Final open flow _____ MCF/d Final open flow _____ Bbl/d
 Time of open flow between initial and final tests _____ Hours
 Static rock Pressure _____ psig (surface pressure) after _____ Hours



NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

WELL OPERATOR: CHESAPEAKE APPALACHIA, L.L.C.

By: [Signature] Date: 11-3-06

Operator Well No: 825784

1st Stage: Foam Frac of Lower Huron

Date Fraced: 06/06/2006

14 Perforations from 4,883 - 4,295 Acid 500 gal. 15 % HCL
Breakdown @ 2,741 PSI Avg Rate 32 SCFM BPM
ATP 2,929 PSI Total H2O 151 Bbl., Total Sand 51,019 lbs.
Total N2 730,385 SCF Post ISIP 1,900 PSI

2nd Stage: Foam Frac of Devonian Shale

Date Fraced: 06/06/06

16 Perforations from 3,610 - 3,167 Acid 500 gal. 15 % HCL
Breakdown @ 3,106 PSI Avg Rate 32.2 SCFM BPM
ATP 3,188 PSI Total H2O 141 Bbl., Total Sand 50,364 lbs.
Total N2 717,968 SCF Post ISIP 2,305 PSI

3rd Stage: Foam Frac of Weir

Date Fraced: 06/06/06

40 Perforations from 2,576 - 2,677 Acid 300 gal. 15 % HCL
Breakdown @ 2,807 PSI Avg Rate 45 SCFM BPM
ATP 2,898 PSI Total H2O 283 Bbl., Total Sand 93,340 lbs.
Total N2 923,100 SCF Post ISIP 2,214 PSI

4th Stage: Foam Frac of Injun

Date Fraced: 06/06/06

24 Perforations from 2,488 - 2,482 Acid 250 gal. 15 % HCL
Breakdown @ 2,300 PSI Avg Rate 8.8 SCFM BPM
ATP 2,500 PSI Total H2O 71 Bbl., Total Sand 23,700 lbs.
Total N2 295,785 SCF

5th Stage: Foamed Acid Treatment of Big Lime

Date Fraced: 06/06/06

25 Perforations from 2,420 - 2,412 Acid 250 gal. 28 % HCL
Breakdown @ 2,383 PSI Avg Rate 10.0 SCFM BPM
ATP 2,217 PSI Total H2O 66 Bbl., Total Acid 2500 gal 20 %HCL
Total N2 87,116 SCF Post ISIP 2,049 PSI

Lower Huron, Shale, Weir, Injun, Big Lime FOF 516 Mcf/d 6 hours
Lower Huron, Shale, Weir, Injun, Big Lime FRP 175 PSI

Chesapeake Energy Corp.-Eastern Division
Chesapeake Energy 825784
Cabin Creek District, Kanawha County, WV
47-039-05806-0000
Ground elevation:1483'

Formation	Top	Bottom
Siltstone, Sand & Shale	0	1542
Salt Sand	1542	1812
Siltstone & Shale	1812	1833
Maxon U	1833	1855
Siltstone & Shale	1855	1920
Maxon M	1920	1939
Siltstone & Shale	1939	2160
Maxon L	2160	2205
Little Lime	2205	2253
Big Lime	2253	2481
Injun sand	2481	2505
Shale	2505	2565
Weir	2565	2695
Shale	2695	2910
Sunbury	2910	2925
Berea sandstone	2926	2929
Shale	2929	3142
Gordon	3142	3190
Shale	3190	4083
Lower Huron	4083	4884
Java	4884	
LTD	4984	

Depths are electric log data.



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street SE
Charleston, WV 25304
(304) 926-0450
(304) 926-0452 fax

Joe Manchin III, Governor
Stephanie R. Timmermeyer, Cabinet Secretary
www.wvdep.org

February 21, 2006

WELL WORK PERMIT
New Well

This permit, API Well Number: 47-3905806, issued to COLUMBIA NATURAL RESOURCES, LLC, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, well operators report of well work, is to be submitted to this office within 90 days of completion of drilling, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable.

Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced.

If there are any questions, please feel free to contact me or Mr. Al Blankenship at 304-926-0499 ext. 1653.

JAMES MARTIN
Chief,
Office of Oil and Gas

Operator's Well No: 825784

Farm Name: IMPERIAL & BLACKCAT MINES

API Well Number: 47-3905806

Permit Type: New Well

Date Issued: 02/21/2006

Promoting a healthy environment.

