REVISED

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 01/10/2013
API #: 47-023-00035

Farm name: ALLEGHENY MINING CORP. Operator Well No.: 1H

LOCATION: Elevation: 3,204' GL Quadrangle: GRENNLAND GAP 7.5

District: UNION County: GRANT
Latitude: 800 Feet South of 39 Deg. 12 Min. 30 Sec.
Longitude 7460 Feet West of 79 Deg. 12 Min. 30 Sec.

Company: CARRIZO (MARCELLUS) WV LLC

Address: 500 DALLAS, SUITE 2300	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
HOUSTON, TX 77002	13-3/8"	398'	398'	552 cft
Agent:	9-5/8"	3,288'	3,288'	1362 cft
Inspector:	5-1/2"	13,466'	13,466'	2558 cft
Date Permit Issued: 10/26/11				
Date Well Work Commenced: 01/09/12				
Date Well Work Completed: 5/26/12				
Verbal Plugging:				
Date Permission granted on:				
Rotary ☑ Cable ☐ Rig ☐				
Total Vertical Depth (ft): 10,271'				
Total Measured Depth (ft): 13,476'				
Fresh Water Depth (ft.): 100'				
Salt Water Depth (ft.): NA				
Is coal being mined in area (N/Y)? NO				
Coal Depths (ft.):				
Void(s) encountered (N/Y) Depth(s) NONE				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)
Producing formation MARCELLUS SHALE Pay zone depth (ft) 9,800
Gas: Initial open flow 635 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 754 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 1000 psig (surface pressure) after _____ Hours

Second producing formation_____ Pay zone depth (ft)_____
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

Received
Office of Oil & Gas
JAN 11 2013

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Carol Pruitt
Signature

01/10/13
Date

02/15/2013

Were core samples taken? Yes_____ No X Were cuttings caught during drilling? Yes X No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list DENSITY, RESISTIVITY, SONIC & ECS LOGS

NOTE: IN THE AREA BELOW 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 THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PERFORATED AND FRAC'D 12 STAGES FROM 10,273' (md) - 13,342' (md) WITH 3,889,600 LBS SAND AND 96,904 BBLS FLUID

Plug Back Details Including Plug Type and Depth(s): KICK-OFF PLUG: 272 SACKS CLASS A 9,974' - 10,202'

Formations Encountered: Surface:	Top Depth	/ Bottom Depth
DK GREY SILTSTONE	0	600
GREY SANDSTONE	600	1100
RED/BROWN SHALE	1100	1900
DK GREY LIMESTONE	1900	2300
DK GREY SILTSTONE	2300	3500
DK GREY SHALE	3500	4450
LT GREY SANDSTONE	4450	4600
LT GREY SILTSTONE	4600	4900
DK GREY SHALE	4900	5500
LT GREY SILTSTONE	5500	5700
DK GREY SHALE	5700	9358
TULLY LIMESTONE	9358	9371
HAMILTON SHALE	9371	9800
UPPER MARCELLUS SHALE	9800	9843
CHERRY VALLEY LIMESTONE	9843	9895
LOWER MARCELLUS SHALE	9895	9963
ONONDAGO	9963	10090
ORISKANY SANDSTONE	10090	

02/15/2013