

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

Farm name: Thelma Hays 3H Operator Well No.: 833117

RECEIVED

LOCATION: Elevation: 1250' Quadrangle: Bethany, WV

AUG 16 2012

District: Liberty County: Ohio
Latitude: 3490' Feet South of 40 Deg. 10 Min. 00 Sec.
Longitude 5570' Feet West of 80 Deg. 32 Min. 30 Sec.

WV GEOLOGICAL SURVEY
MORGANTOWN, WV

Company: Chesapeake Appalachia, L.L.C.

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 18496 Oklahoma City, OK 73154-0496	20"	100'	100'	353 Cu. Ft.
Agent: Eric Gillespie	13 3/8"	656'	656'	718 Cu. Ft.
Inspector: Bill Hendershot & Joe Taylor	9 5/8"	2074'	2074'	988 Cu. Ft.
Date Permit Issued: 4-12-2011	5 1/2"	11595'	11595'	3003 Cu. Ft.
Date Well Work Commenced: 5-23-2011				
Date Well Work Completed: 5-15-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6447'(cement plugs @ 5530' & 5709')				
Total Measured Depth (ft): 11600'				
Fresh Water Depth (ft.): 200'				
Salt Water Depth (ft.): 800'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 590'				
Void(s) encountered (N/Y) Depth(s) Y 590'				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,604' - 11,461'

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

Final open flow 1,459* MCF/d Final open flow 186 Bbl/d

Time of open flow between initial and final tests 30 Hours *Calculated

Static rock Pressure 4,073* 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

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.

Marlene Williams
Signature

8-15-2012
Date

VERTICAL PILOT HOLE

Formation/Lithology	Top Depth, TVD/MD (ft)	Bottom Depth, TVD/MD (ft)
LS/SH	0	300
SS/LS	300	589
PITTSBURG COAL	589	595
LS/SH/SS	595	790
SS	790	1510
SH/SS	1510	1620
BIG LIME (LS)	1620	1646
BIG INJUN (SS)	1646	1920
SHALE	1920	6198
GENESEO (SH)	6198	6217
TULLY (LS)	6217	6260
HAMILTON (SH)	6260	6366
MARCELLUS (SH)	6366	6431
ONONDAGA (LS)	6431	
TD OF PILOT HOLE		6447

**LATERAL SIDETRACK
WELLBORE**

Formation/Lithology	Top Depth, MD (ft)	Top Depth, TVD (ft)	Bottom Depth, MD (ft)	Bottom Depth, TVD (ft)
LS/SH	0	0	300	300
SS/LS	300	300	589	589
PITTSBURG COAL	589	589	595	595
LS/SH/SS	595	595	790	790
SS	790	790	1510	1510
SH/SS	1510	1510	1620	1620
BIG LIME (LS)	1620	1620	1646	1646
BIG INJUN (SS)	1646	1646	1920	1920
SHALE	1920	1920	6211	6164
GENESEO (SH)	6211	6164	6238	6166
TULLY (LS)	6238	6166	6294	6229
HAMILTON (SH)	6294	6229	6535	6343
MARCELLUS (SH)	6535	6343		
TD OF LATERAL			11600	6266