

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: HAZLETT, FREDERICK S. Operator Well No.: SHL-1F-HS

LOCATION: Elevation 1166.13' Quadrangle: MAJORSVILLE

District: SANDHILL County: MARSHALL
Latitude: Feet South of 39 Deg. 58 Min. 24.1 Sec.
Longitude Feet West of 80 Deg. 34 Min. 29.54 Sec.

Company:

CNX Gas Company LLC	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 200 Evergreene Drive Waynesburg, PA 15370				
Agent: Tim Rinehart				
Inspector: Bill Hendershot				
Date Permit Issued: 01/24/2011				
Date Well Work Commenced: 09/27/2011	30"	39'	39'	Grouted in
Date Well Work Completed:				
Verbal Plugging N/A	13 3/8"	1016'	1016'	670 sks
Date Permission granted on: 01/26/2011				
Rotary Cable Rig X	9 5/8"	2913'	2913'	950 sks
Total Depth (feet): 9,201'	5 1/2"	9,111'	9,111'	1,069 sks
Fresh Water Depth (ft.): 200'				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? Yes				
Coal Depths (ft.) <u>652'-658'</u>				

OPEN FLOW DATA

Producing formation Marcellus 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

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

*Commingled with previous formations

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.

Signed: Tim Rinehart
By: Tim Rinehart
Date: 09-28-11

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WELL: 47-5101402

Were core samples taken? Yes / No Were cuttings caught during drilling? Yes / No
 Were Electrical Yes / No, Mechanical Yes / No, or Geophysical logs Yes / No recorded on this well?

NOTE: IN THE AREA BELOW PUT THE FOLLOWING:

- 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR PHYSICAL CHANGE, ETC.
- 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

PERFORATED INTERVALS, FRACTURING, OR STIMULATING:

FORMATIONS ENCOUNTERED:

GAMMA RAY /FORMATION TOPS

FORMATION

TOP

BASE

Depths Determined By Drillers Log

Driller's Log	
Depth	Formation
0'-15'	Fill
15'-150'	Shale
150'-652'	Shale/Sand
652'-658'	Coal
658'-762'	Shale/Sand
762'-1013'	Red Rock
1013'-1249'	Shale
1249'-1377'	Shale/Sand
1377'-1408'	Shale/Lime
1408'-1502'	Shale/Sand
1502'-1659'	Sand
1659'-1721'	Sand/Lime
1721'-1782'	Sand/Shale/Lime
1782'-1847'	Sand
1847'-2003'	Shale/Sand
2003'-2097'	Shale/Lime
2097'-2253'	Sand/Shale/Lime
2253'-2284'	Sand/Shale/Lime
2284'-2378'	Sand/Lime/Silt
2378'-2473'	Red Rock/Shale
2473'-2505'	Red Rock/Shale
2505'-2599'	Shale/Lime
2599'-2694'	Sand/Shale/Lime
2694'-2820'	Sand/Shale/Silt
2820'-2946'	Shale/Lime
2946'-3027'	Sand/Shale/Silt
3027'-3500'	Sand/Silt



Geological Top Estimations

Well (Pad) Name Datum (GR)	SHL01 pad 1163	TVD	S.L.
Gas Sand Top		1262	-99
Gas Sand Base		1326	-163
1st Salt Sand Top		1358	-195
1st Salt Sand Base		1366	-203
2nd Salt Sand Top		1463	-300
2nd Salt Sand Base		1518	-355
3rd Salt Sand Top		1551	-388
3rd Salt Sand Base		1592	-429
Maxton Top		1613	-450
Maxton Base		1693	-530
Big Lime Top		1697	-534
Big Injun Top		1730	-567
Big Injun Base		1916	-753
Berea Top		2212	-1049
Berea Base		2229	-1066
Gantz Top		2265	-1102
Gantz Base		2313	-1150
Gordon Top		2631	-1468
Gordon Base		2649	-1486
Fifth Top		2741	-1578
Fifth Base		2772	-1609
Burkett Shale		6302	-5139
Tully Top		6310	-5147
Hamilton Top		6343	-5180
Marcellus		-6449	-5206
Onondaga		-6508	-5345

The salt sands could possibly be a fluid thief zone

TVD: ~6530