

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

DATE: 9/28/2010
API #: 47-502318

Handwritten:
Mined
9-30-11

Farm name: Berwin Winifrede Operator Well No.: BW-53

LOCATION: Elevation: 1010 FT Quadrangle: Belle 7.5'

District: Sherman County: Boone
Latitude: 430 Feet South of 38 Deg. 07 Min. 30 Sec.
Longitude: 3580 Feet West of 81 Deg. 35 Min. 00 Sec.

Company: NorthStar Energy Corp

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
900 Lee St. E Ste. 940 Charleston, WV	Conduct.	32'	30'	
Agent: James Abcouwer	9 5/8"	515'	506'	376
Inspector: Barry Stollings	7"	1938'	1928'	392
Date Permit Issued: 02/05/2009	4 1/2"	5250'	5236'	486
Date Well Work Commenced: 1/1/2011				
Date Well Work Completed: 1/12/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Vertical Depth (ft): 5256				
Total Measured Depth (ft): 5250				
Fresh Water Depth (ft.): , 382,439				
Salt Water Depth (ft.): 1486, 1745				
Is coal being mined in area (N/Y)?				
Coal Depths (ft.): 368, 905,				
Void(s) encountered (N/Y) Depth(s) N				

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

Producing formation LH, Rhinestreet, Marc. Pay zone depth (ft) 4680
Gas: Initial open flow 270 MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 214 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 48 Hours
Static rock Pressure 460 psig (surface pressure) after 48 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

RECORDED
MAR 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.


Signature

9-27-11
Date

03/15/2013

5-02318

Were core samples taken? Yes _____ No* _____

Were cuttings caught during drilling? Yes* _____ No _____

Were _____ Electrical, Y Mechanical, _____ or Geophysical logs recorded on this well?
Y/N Y/N Y/N

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:

2 fracture zones performed on the well BJ Services Tested lines to 4200 psi

1st- Marcellus Perf Intervals 4750'-4850' Nitrogen Fracture, 16 holes total Total Nitrogen = 20,043
125 gal. 15% HCL in Hole. Broke and displaced treated water with 75 Mscf N2 dropped 10 pref bal

2nd- Rhinestreet Perf Intervals 4600'-4700' N2 Fracture, 14 holes total, Total Nitrogen = 14,044
125 gal. 15% HCL in Hole. Broke and displaced treated water with 75 Mscf N2 dropped 8 pref balls

Formations Encountered: Surface:	Top Depth	Bottom Depth
Sub Base	0'	10'
Fill	10'	21'
Sand and Shale	21'	935'
Upper Maxon	1020'	1043'
Lower Maxon	1684'	1698'
Little Lime	1745'	1813'
Big Lime	1857'	2100'
Big Injun	2111'	2138'
Middle Weir	2328'	2343'
Lower Weir	2485'	2506'
Berea	2561'	2573'
Middle Huron	3753'	4167'
Lower Huron	4654'	5072'
Marcellus Shale	5165'	5212'