



DEEP

DATE: February 12, 2004

API: 47-039-05532

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

*MB*

Farm name: W. D. Lewis Heirs  
Location Elevation: 1272'  
District: Malden

Operator Well No: 824213  
Quadrangle: Quick  
County: Kanawha

COLUMBIA NATURAL RESOURCES	Casing & Tubing	Used in drilling	Left in Well	Cement fill up Cu.Ft.
Address: P.O. Box 6070	20"	15'	15'	
Charleston, WV 25362	13 3/8"	672'	672'	660
Agent: Mike John	9 5/8"	1907'	1907'	650
Inspector: Carlos Hively	7"	5332'	5332'	224
Date Permit Issued:	4 1/2"		6708	242
Date Well work commenced: 04/1/03	2 3/8"		6764'	
Date Well Work completed: 09/22/03				
Verbal Plugging:				
Date Permission granted on:				
Rotary X Cable Rig				
Total Depth (feet): 6775' <i>6820' at least</i>				
Fresh Water Depth (ft): 107				
Salt Water Depth (ft): 1205				
Is coal being mined in area (No)				
Coal Depths (ft): N/A				

OPEN FLOW DATA

**Producing formation: Tuscarora** Pay zone depth (ft) from 6708' to 6820' Openhole  
 Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d  
 Final open flow 502 MCF/d Final open flow Bbl/d  
 Time of open flow between initial and final tests 6 Hours  
 Static rock Pressure 960 psig (surface pressure) after 72 Hours

**2nd producing formation:** Pay zone depth (ft) 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  
 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: COLUMBIA NATURAL RESOURCES, INC.

By: *[Signature]* Date: 2-12-04

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DEEPWELL

KAN 5532

MAR 19 2004

Well 825213

Well Treatment

Acid Clean up

Openhole 6708'-6820', Acid 1250 gallons, 15% HCL, Average pump rate 3 BPM, ATP 3000 psi,  
Post ISIP 2080, 5 min vacuum

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Columbia Natural Resources  
W. D. Lewis Hrs. 824213  
Malden District, Kanawha County, WV  
47-039-05532

Formation	Top	Bottom
Siltstone & shale	0	1004
Sandstone	1004	1062
Siltstone & shale	1062	1170
- Salt Sand	1170	1391
Shale	1391	1435
- Maxon Sand	1435	1540
Shale	1540	1623
- Little Lime	1623	1659
- Big Lime	1659	1851
- Injun Sand	1851	1904
- Pocono Shale	1904	2270
- Coffee Shale	2270	2294
- Berea Siltstone	2294	2297
- Devonian Shale	2297	3485
- Lower Huron	3485	4226
- Devonian Shale	4226	4665
- Rhinestreet Shale	4665	5093
- Marcellus Shale	5093	5157
- Onondaga Lime	5157	5248
- Oriskany Sand	5248	5272
- Helderberg Lime	5272	5500
- Salina Dolomite & Shale	5500	6024
- Newburg Sand	6024	6044
- McKenzie Limestone	6044	6257
- Keefer Sandstone	6257	6298
- Rose Hill Shale	6298	6710
- Tuscarora Sandstone	6710	6784
- Juniata Shale	6784	TD

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