

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: 8/7/2013
API #: 47-033-05640

JK

Farm name: Matheny, Norman C. Operator Well No.: Rogers Unit 1H

LOCATION: Elevation: 1,275' Quadrangle: West Milford

District: Union County: Harrison
Latitude: 15,427' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 833' Feet West of 80 Deg. 22 Min. 30 Sec.

Company: Antero Resources Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
1625 17th Street Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	544'	544'	756 Cu. Ft. Class A
Inspector: Sam Ward	9 5/8" 36#	2,579'	2,579'	1050 Cu. Ft. Class A
Date Permit Issued: 8/16/2012	5 1/2" 20#	14,202'	14,202'	3474 Cu. Ft. Class H
Date Well Work Commenced: 9/20/2012				
Date Well Work Completed: 2/27/2013	2 3/8" 4.7#	7220'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7,172' TVD				
Total Measured Depth (ft): 14,202' MD				
Fresh Water Depth (ft.): 187'				
Salt Water Depth (ft.): 747', 908'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): <small>Pad constructed on reclaimed Pittsburgh coal bench</small>				
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 Pay zone depth (ft) 6999' (TOP)

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

Final open flow 3,854 MCF/d Final open flow ---- Bbl/d

Time of open flow between initial and final tests --- Hours

Static rock Pressure 3600 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.

Karen Buck
Signature

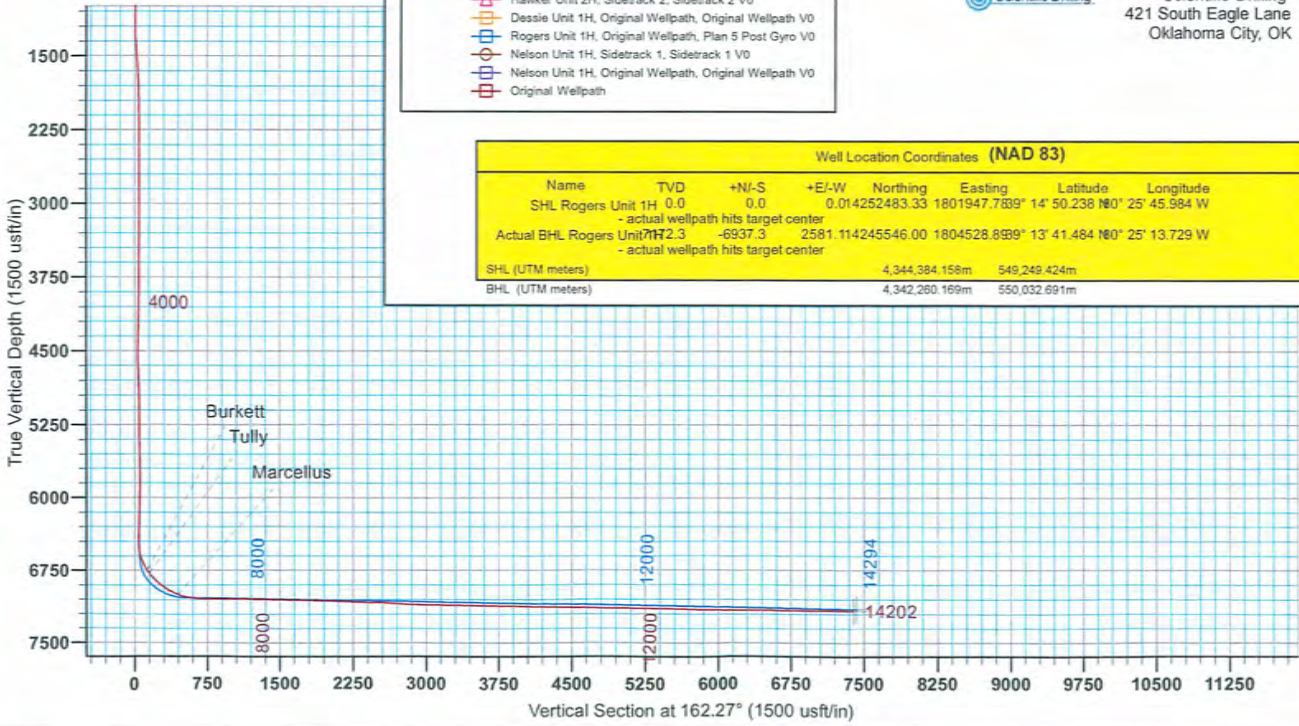
12/10/2013
Date

04/04/2014

33-05640



Antero Resources
Rogers Unit 1H
Harrison County West Virginia
Northing: 14252483.33
Easting: 1801947.78
Original Wellpath



WELL DETAILS: Rogers Unit 1H

+N/-S	+E/-W	Northing	Ground Level	1275.0	Latitude	Longitude	Slot
0.0	0.0	14252483.33	1801947.7839°	14° 50.238 N	80° 25' 45.984 W		

PROJECT DETAILS: Harrison County West Virginia

Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: Zone 17N (84 W to 78 W)
 System Datum: Mean Sea Level

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Rogers Unit 1H, Grid North
 Vertical (TVD) Reference: Rogers 1H 1275 GL + 28 KB @ 1303 Sust
 Section (VS) Reference: Slot - (0.0N, 0.0E)
 Measured Depth Reference: Rogers 1H 1275 GL + 28 KB @ 1303 Sust
 Calculation Method: Minimum Curvature

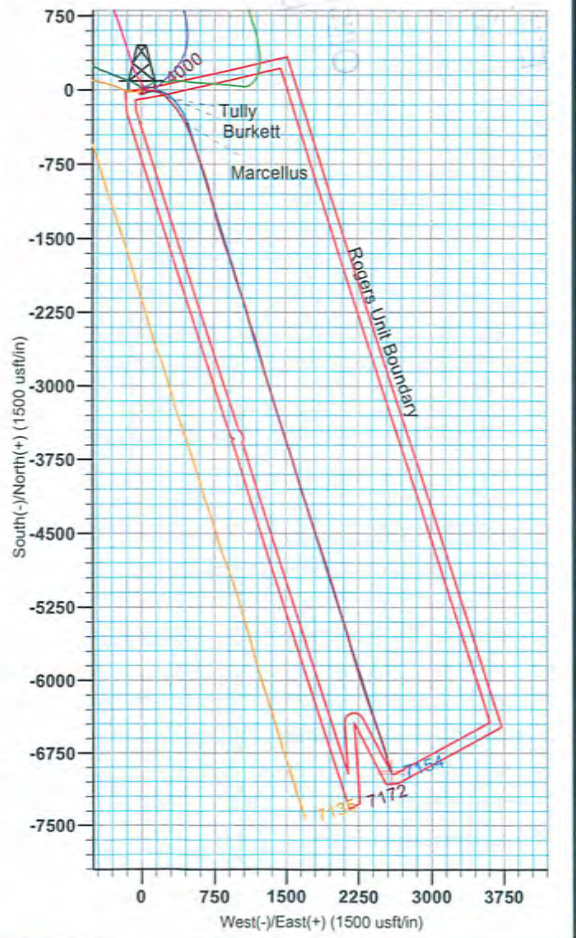
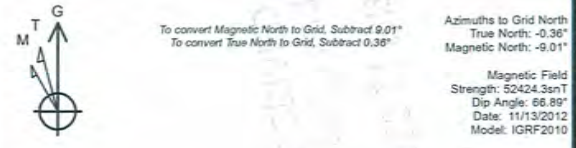
- LEGEND**
- ◆ Hawker Unit 1H, Original Wellpath, Original Wellpath V0
 - Nelson Unit 2H, Original Wellpath, Original Wellpath V0
 - ▲ Hawker Unit 2H, Sidetrack 2, Sidetrack 2 V0
 - Dessie Unit 1H, Original Wellpath, Original Wellpath V0
 - Rogers Unit 1H, Original Wellpath, Plan 5 Post Gyro V0
 - Nelson Unit 1H, Sidetrack 1, Sidetrack 1 V0
 - Nelson Unit 1H, Original Wellpath, Original Wellpath V0
 - Original Wellpath

Well Location Coordinates (NAD 83)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Rogers Unit 1H	0.0	0.0	0.0	14252483.33	1801947.7839°	14° 50.238 N	80° 25' 45.984 W
- actual wellpath hits target center							
Actual BHL Rogers Unit 1H	7172.3	-6937.3	2581.1	114245546.00	1804528.8989°	13° 41.484 N	80° 25' 13.729 W
- actual wellpath hits target center							
SHL (UTM meters)				4,344,384.158m	549,249.424m		
BHL (UTM meters)				4,342,260.169m	550,032.691m		

Genie Lightfoot
 13:31, July 18 2013

Scientific Drilling
 421 South Eagle Lane
 Oklahoma City, OK



33.05640

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	2/19/2013
Job End Date:	2/27/2013
State:	West Virginia
County:	Harrison
API Number:	47-033-05640-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Rogers Unit 1H
Longitude:	-80.42943890
Latitude:	39.24728890
Datum:	NAD27
Federal/Tribal Well:	NO
Total Base Water Volume (gal):	7,906,164
Total Base Non Water Volume:	28,309



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Freshwater	Antero Resources	Carrier	Water	7732-18-5	100.00000	88.67178	
40/70 White	US Silica	Proppant	Sand	14808-60-7	100.00000	6.25925	
20/40 White	US Silica	Proppant	Sand	14808-60-7	100.00000	3.23573	
100 Mesh	US Silica	Proppant	Sand	14808-60-7	100.00000	1.65576	
Beta M-4.0	PIP	Guar Gel	Petroleum Distillate	64742-47-8	55.00000	0.05304	
			Guar Gum	9000-30-0	50.00000	0.04822	
			Clay	1302-78-9	5.00000	0.00482	
			Surfactant	154518-36-2	1.00000	0.00096	
Plexslick 953	Chemplex	Friction Reducer	Water	7732-18-5	35.00000	0.01977	
			Polyacrylamide-co-acrylic acid	9003-06-9	32.00000	0.01808	
			Hydrotreated Petroleum Distillate	64742-47-8	30.00000	0.01695	
			Alcohol Ethoxylate Surfactants	Trade Secret	8.00000	0.00452	
Plexicide 15G	Chemplex	Biocide	Water	7732-18-5	90.00000	0.02337	

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			Glutaraldehyde	111-30-8	14.00000	0.00363
			Alkyl Dimethyl Benzyl Ammonium Chloride	68424-85-1	3.00000	0.00078
			Ethanol	64-17-5	3.00000	0.00078
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	3.00000	0.00078
Hydrochloric Acid 10-15%	Reagent	Acid				
			Hydrchloric Acid	7647-01-0	15.00000	0.01833
Plexaid 673	Chemplex	Scale Inhibitor				
			Water	7732-18-5	85.00000	0.01262
			Methyl Alcohol	67-56-1	25.00000	0.00371
			Sodium Salt of Phosphonodimethylated Diamine	Trade Secret	5.00000	0.00074
Sodium Persulfate	Chemplex	Breaker				
			Sodium Persulfate	7775-27-1	100.00000	0.00133
Ferriplex 66	Chemplex	Iron Control				
			Acetic Acid	64-19-7	50.00000	0.00025
			Water	7732-18-5	35.00000	0.00018
			Citric Acid	77-92-9	30.00000	0.00015
Plexhib 256	Chemplex	Corrosion				
			Methyl Alcohol	67-56-1	70.00000	0.00014
			thiourea-formaldehyde copolymer	68527-49-1	30.00000	0.00006
			Alcohol Ethoxylate Surfactants	Trade Secret	30.00000	0.00006
			n-olefins	Trade Secret	10.00000	0.00002
			Propargyl Alcohol	107-19-7	8.00000	0.00002
Plexbreak 145	Chemplex	Non-emulsifier				
			Water	732-18-5	66.00000	0.00014
			Methyl Alcohol	67-56-1	15.00000	0.00003
			Ethylene Glycol Monobutyl Ether	111-76-2	15.00000	0.00003
			Cocamide Diethanolamine Salt	68603-42-9	10.00000	0.00002
			Diethanolamine	111-42-2	5.00000	0.00001

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)