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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: 8/12/2013
API #: 47-095-02068

Farm name: Moore, Forest & Brenda Operator Well No.: Sweeney Unit 1H

LOCATION: Elevation: 749' Quadrangle: Center Point 7.5'

District: McElroy County: Tyler
Latitude: 9.023' Feet South of 39 Deg. 25 Min. 00 Sec.
Longitude 7.558' Feet West of 80 Deg. 42 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" 96#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13 3/8" 48#	355'	355'	493 Cu. Ft. Class A
Inspector: Joe Taylor	9 5/8" 36#	2,586'	2,586'	1053 Cu. Ft. Class A
Date Permit Issued: 10/31/2012	5 1/2" 20#	13,297'	13,297'	3223 Cu. Ft. Class H
Date Well Work Commenced: 11/29/2012				
Date Well Work Completed: 6/26/2013	2 3/8" 4.7#	6,729'		
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): 6693' TVD				
Total Measured Depth (ft): 13,297' MD				
Fresh Water Depth (ft.): 275'				
Salt Water Depth (ft.): 2063'				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 672', 747'				
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) 6572' (TOP)

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

Final open flow 7,311 MCF/d Final open flow ---- Bbl/d

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

Static rock Pressure 3550 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.

Kailen Buck
Signature

12/10/2013
Date

04/04/2014

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Were core samples taken? Yes _____ No

Were cuttings caught during drilling? Yes _____ No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes - CBL,

This is a subsequent well. Antero only runs wireline logs on the first well on a multi-well pad (Ed Arnold Unit 1H API#47-095-02038). Please reference the wireline logs submitted with Form WR-35 for Ed Arnold Unit 1H.

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:

Perforations: 6,831'- 13,242' (2592 Holes)

Frac'd w/ 18,500 gals HCL Acid, 182,219 bbls Slick Water carrying 724,690# 100 mesh, 2,335,445# 40/70 sand and 1,296,715# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			
Gantz Sand	2678' est		2803'
Fifty Foot Sand	2804' est		2918'
Gordon	2919' est		3122'
Fifth Sandstone	3123' est		3153'
Bayard	3154' est		3526'
Warren	3527' est		3903'
Speechley	3904' est		4183'
Balltown	4184' est		4381'
Bradford	4382' est		4836'
Benson	4837' est		5090'
Alexander	5091' est		5283'
Elk	5284' est		5901'
Rhinestreet	5902' est		6184'
Sycamore	6185'		6223'
Middlesex	6224'		6485'
Burkett	6486'		6513'
Tully	6514'		6571'
Marcellus	6572'		6693' TVD

[Faint handwritten notes and stamps]

04/04/2014

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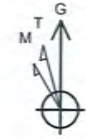
Antero Resources
Sweeney Unit 1H
Tyler County WV
Original Wellpath
Northing: 14306193.85
Easting: 1713795.42

WELL DETAILS: Sweeney Unit 1H

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	14306193.85	1713795.42	39° 23' 45.296 N	80° 44' 24.943 W	
		Ground Level: 749.0				

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SHL Sweeney Unit 1H	0.0	0.0	0.0	14306193.85	1713795.42	39° 23' 45.296 N	80° 44' 24.943 W	Point
Actual BHL Sweeney Unit 1H	6647.3	-2172.3	6440.8	14304021.58	1720236.17	39° 23' 23.626 N	80° 43' 2.957 W	Point
PBHL of Sweeney Unit 1H	6647.3	-2172.3	6440.8	14304021.58	1720236.17	39° 23' 23.626 N	80° 43' 2.957 W	Point



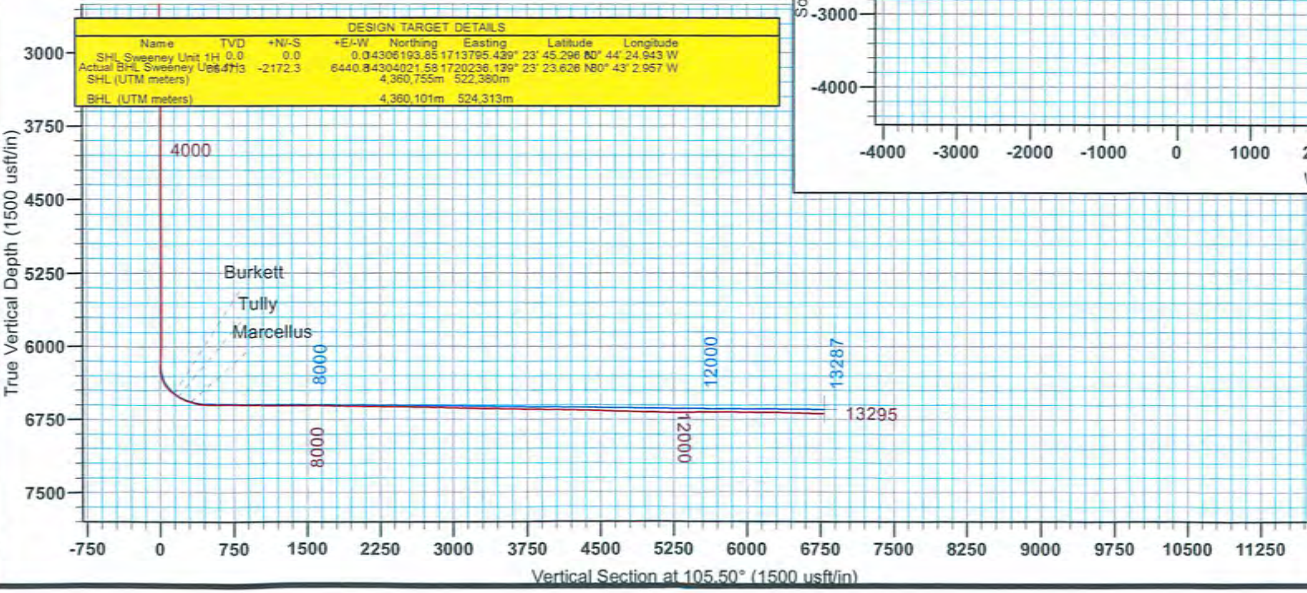
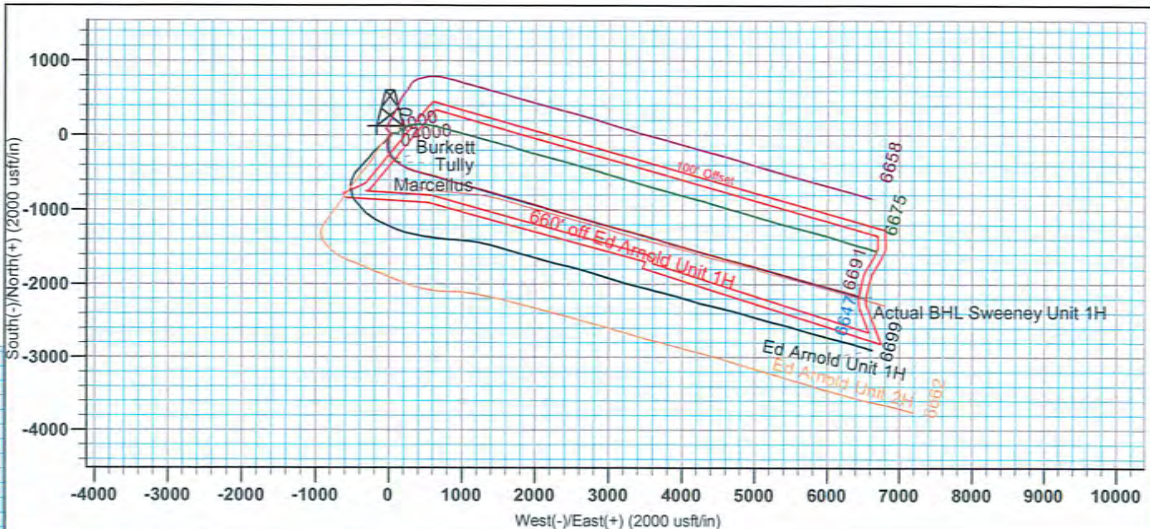
To convert Magnetic North to Grid, Subtract 8.63°
 To convert True North to Grid, Subtract 0.16°

Azimuths to Grid North
 True North: -0.17°
 Magnetic North: -8.63°

Magnetic Field
 Strength: 52522.3snT
 Dip Angle: 67.03°
 Date: 1/8/2013
 Model: IGRF2010

LEGEND

- Thorlkidson Unit 1H, Original Wellpath, As Drilled V0
- Ed Arnold Unit 1H, Original Wellpath, Original Wellpath V0
- Sweeney Unit 2H, Original Wellpath, Original Wellpath V0
- Ed Arnold Unit 2H, Original Wellpath, Original Wellpath V0
- Sweeney Unit 1H, Original Wellpath, Plan 4 V0
- Original Wellpath



SITE DETAILS: Ed Arnold Pad
 Ed Arnold Pad McElroy District

Site Centre Northing: 14306188.32
 Easting: 1713823.50

Positional Uncertainty: 2.0
 Convergence: 0.16
 Local North: Grid

PROJECT DETAILS: Tyler County WV

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

Genie Lightfoot
 13:26, September 09 2013

Scientific Drilling
 421 South Eagle Lane
 Oklahoma City, OK



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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/17/2013
Job End Date:	6/26/2013
State:	West Virginia
County:	Tyler
API Number:	47-095-02068-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Sweeney Unit 1H
Longitude:	-80.74026110
Latitude:	39.39591670
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,691
Total Base Water Volume (gal):	7,653,198
Total Base Non Water Volume:	224,225



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
Water	Antero Resources	Base Fluid					
			Water	7732-18-5	100.00000	93.34625	
Sand	U.S. Well Services, LLC	Proppant					
			Crystalline Silica, quartz	14808-60-7	100.00000	6.37178	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid					
			Water	7732-18-5	87.50000	0.09862	
			Hydrogen Chloride	7641-01-1	18.00000	0.02356	
WFRA-405	U.S. Well Services, LLC	Friction Reducer					
			Water	7732-18-5	40.00000	0.02593	
			Anionic Polyacrylamide	Proprietary	40.00000	0.02593	
			Petroleum Distillates	64742-47-8	40.00000	0.02087	
			Crystalline Salt	12125-02-9	5.00000	0.00324	
			Ethoxylated alcohol blend	Proprietary	5.00000	0.00324	
LGC-15	U.S. Well Services, LLC	Gelling Agents					
			Guar Gum	9000-30-0	50.00000	0.02704	
			Petroleum Distillates	64742-47-8	60.00000	0.02561	
			Suspending agent (solid)	14808-60-7	3.00000	0.00414	

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			Surfactant	68439-51-0	3.00000	0.00162
SI-1000	U.S. Well Services, LLC	Scale Inhibitor				
			Anionic Copolymer	Proprietary		0.00483
			Ethylene Glycol	107-21-1	20.00000	0.00436
			Water	7732-18-5	30.00000	0.00364
K-BAC 1020	U.S. Well Services, LLC	Anti-Bacterial Agent				
			2,2-dibromo-3-nitropropionamide	10222-01-2	20.00000	0.00515
			Deionized Water	7732-18-5	28.00000	0.00294
AP One	U.S. Well Services, LLC	Gel Breakers				
			Ammonium Persulfate	7727-54-0	100.00000	0.00065
AI-300	U.S. Well Services, LLC	Acid Corrosion Inhibitor				
			Ethylene Glycol	107-21-1	40.00000	0.00026
			N,N-Dimethylformamide	68-12-2	20.00000	0.00008
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	15.00000	0.00007
			Cinnamaldehyde	104-55-2	15.00000	0.00007
			2-Butoxyethanol	111-76-2	15.00000	0.00006
			1-Decanol	112-30-1	5.00000	0.00002
			Poly(oxy-1,2-ethanediyl), alpha-(4-nolylphenyl)-omega-hydroxy, branched	127087-87-0	5.00000	0.00002
			1-Octanol	111-87-5	3.00000	0.00001
			isopropyl Alcohol	67-63-0	2.50000	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)