

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: 8/5/2013
API #: 47-017-06129

Farm name: Moore, Dwight E. & Tina M. Operator Well No.: Moore Unit 2H

LOCATION: Elevation: 1,237' Quadrangle: Smithburg 7.5'

District: Grant County: Doddridge
Latitude: 9.413 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 5.623 Feet West of 80 Deg. 40 Min. 00 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'	39 Cu Ft Class A
Agent: CT Corporation System	13 3/8" 48#	543'	543'	754 Cu Ft Class A
Inspector: Douglas Newlon	9 5/8" 36#	2,583'	2,583'	1,052 Cu Ft. Class A
Date Permit Issued: 10/05/2012	5 1/2" 20#	14,725'	14,725'	3,617 Cu Ft. Class H
Date Well Work Commenced: 12/6/2012				
Date Well Work Completed: 5/10/2013				
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): 7113' TVD (Deepest Point Drilled)				
Total Measured Depth (ft): 14,725' MD, 7111' TVD (BHL)				
Fresh Water Depth (ft.): 192'				
Salt Water Depth (ft.): 1336', 1681'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 274', 444', 1290'				
Void(s) encountered (N/Y) Depth(s) N, N/A				

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

Producing formation Marcellus Pay zone depth (ft) 7,041 TVD (Top)
Gas: Initial open flow ---- MCF/d Oil: Initial open flow ---- Bbl/d
Final open flow 8,794 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

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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.

Kaitlin Buck
Signature

12/6/13
Date

04/04/2014



Antero Resources
 Moore Unit 2H
 Doddridge County WV
 Northing: 14277823.33
 Easting: 1725282.39
 Original Wellpath

17.06129

WELL DETAILS: Moore Unit 2H

+N/S	+E/W	Northing	Easting	Longitude	Slot
0.0	0.0	14277823.33	1725282.39	39° 19' 4.431 N80° 41' 59.768 W	

REFERENCE INFORMATION

Coordinates (N/E) Reference: Wellbore Log 2H_G14.km
 Vertical (TV) Reference: Moore Unit 2H.DL 1237 * 23 RK68 @ 1200 Buam (Original Well Elev)
 Measured Depth Reference: Moore Unit 2H.DL 1237 * 23 RK68 @ 1200 Buam (Original Well Elev)
 Circulation Method: Minimum Circulation

PROJECT DETAILS: Doddridge County WV

Geodesic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD 1983 (NAD83 CONUS)
 Ellipsoid: GRS 1980
 Zone: Zone 17N (84 W to 78 W)
 System Datum: Mean Sea Level

Genie Lightfoot
 15:11, July 18 2013
 Scientific Drilling
 421 South Eagle Lane
 Oklahoma City, OK

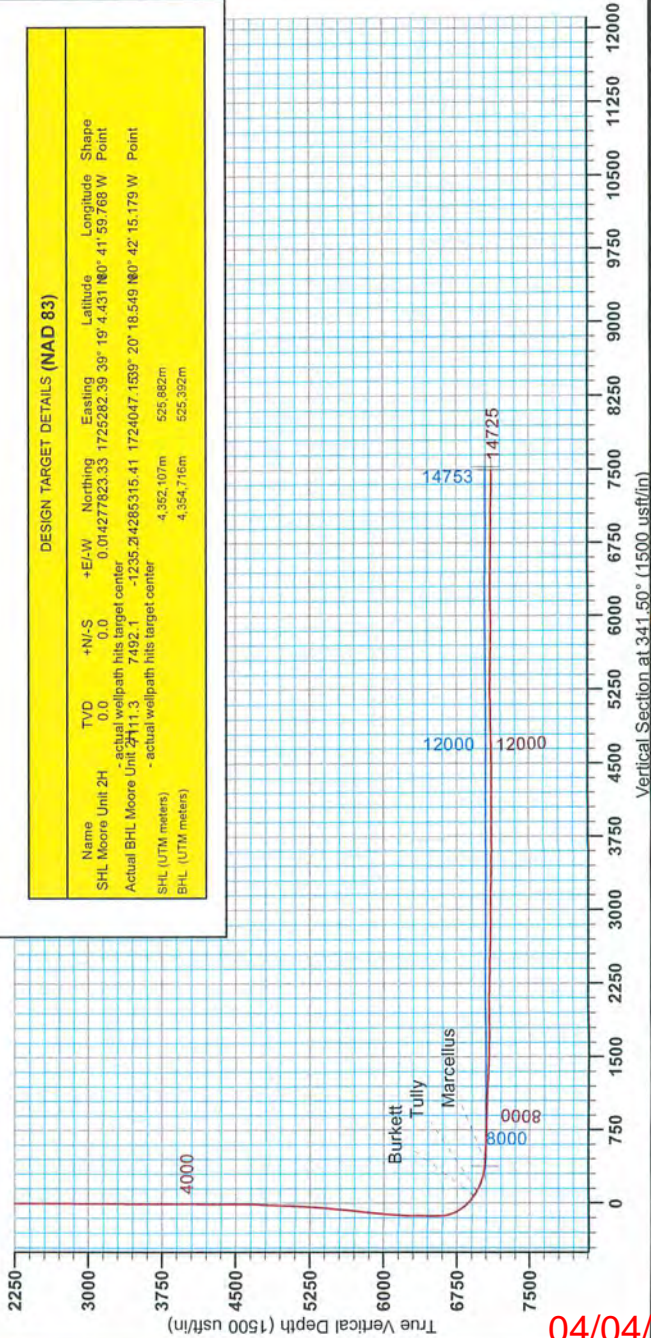


LEGEND

- Moore Unit 2H, Original Wellpath, Plan 4 VO
- Original Wellpath

DESIGN TARGET DETAILS (NAD 83)

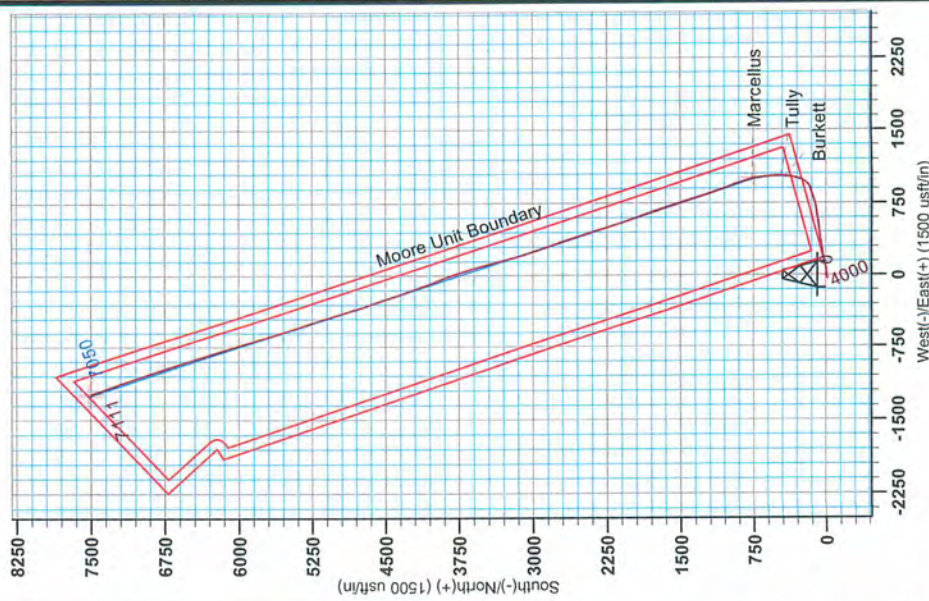
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
SHL Moore Unit 2H	0.0	0.0	0.0	14277823.33	1725282.39	39° 19' 4.431 N80° 41' 59.768 W	Point	
Actual BHL Moore Unit 2H	11.3	7492.1	-1235.2	4285315.41	1724047.1639	20° 18.549 N80° 42' 15.775 W	Point	
SHL (UTM meters)				4,362,107m	525,862m			
BHL (UTM meters)				4,354,716m	525,392m			



Vertical Section at 341.50° (1500 usft/m)

Azimuths to Grid North
 True North: -0.19°
 Magnetic North: -8.87°
 Strength: 52.82 Gauss
 Declination: 12.68°
 Date: 12/13/2012
 Model: IGRF2010

To convert Magnetic North to Grid, Subtract 6.67°
 To convert True North to Grid, Subtract 0.19°



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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/4/2013
Job End Date:	5/11/2013
State:	West Virginia
County:	Doddridge
API Number:	47-017-06129-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Moore Unit 2H
Longitude:	-80.66684400
Latitude:	39.33325000
Datum:	NAD27
Federal/Tribal Well:	NO
Total Base Water Volume (gal):	7,911,246
Total Base Non Water Volume:	26,520



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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	water	Water	7732-18-5	100.00000	88.21144	
40/70 White	US Silica	Proppant	Sand	14808-60-7	100.00000	6.34453	
20/40 White	US Silica	Proppant	Sand	14808-60-7	100.00000	3.64705	
100 Mesh	US Silica	Proppant	Sand	14808-60-7	100.00000	1.59303	
Beta M-4.0	PfP	Guar Gel	Petroleum Distillate	64742-47-8	55.00000	0.06500	
			Guar Gum	9000-30-0	50.00000	0.05910	
			Clay	1302-78-9	5.00000	0.00591	
			Surfactant	154518-36-2	1.00000	0.00118	
Plexslick 953	Chemplex	Friction Reducer	Water	7732-18-5	35.00000	0.02007	
			Polyacrylamide-co-acrylic acid	9003-06-9	32.00000	0.01835	
			Hydrotreated Petroleum Distillate	64742-47-8	30.00000	0.01720	
			Alcohol Ethoxylate Surfactants	Proprietary	8.00000	0.00459	
Plexcide 15G	Chemplex	Biocide	Water	7732-18-5	90.00000	0.02217	

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			Glutaraldehyde	111-30-8	14.00000	0.00345
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	3.00000	0.00074
			Alkyl Dimethyl Benzyl Ammonium Chloride	68424-85-1	3.00000	0.00074
			Ethanol	64-17-5	3.00000	0.00074
Hydrochloric Acid 10-15%	Reagent	Acid				
			Hydrchloric Acid	7647-01-0	15.00000	0.02036
Plexaid 673	Chemplex	Scale Inhibitor				
			Water	7732-18-5	85.00000	0.01130
			Methyl Alcohol	67-56-1	25.00000	0.00332
			Sodium Salt of Phosphonodimethylated Diamine	Proprietary	5.00000	0.00066
Sodium Persulfate	Chemplex	Breaker				
			Sodium Persulfate	7775-27-1	100.00000	0.00154
Plexhib 256	Chemplex	Corrosion				
			Methyl Alcohol	67-56-1	70.00000	0.00030
			Alcohol Ethoxylate Surfactants	Proprietary	30.00000	0.00013
			thiourea-formaldehyde copolymer	68527-49-1	30.00000	0.00013
			n-olefins	Proprietary	10.00000	0.00004
			Propargyl Alcohol	107-19-7	8.00000	0.00003
Plexbreak 145	Chemplex	Non-emulsifier				
			Water	732-18-5	66.00000	0.00031
			Ethylene Glycol Monobutyl Ether	111-76-2	15.00000	0.00007
			Methyl Alcohol	67-56-1	15.00000	0.00007
			Cocamide Diethanolamine Salt	68603-42-9	10.00000	0.00005
			Diethanolamine	111-42-2	5.00000	0.00002
Ferriplex 66	Chemplex	Iron Control				
			Acetic Acid	64-19-7	50.00000	0.00014
			Water	7732-18-5	35.00000	0.00010
			Citric Acid	77-92-9	30.00000	0.00008

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)