

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

API 47-017-06294 County Doddridge District Central
Quad Oxford 7.5' Pad Name Robert Williams Pad Field/Pool Name ----
Farm name Williams, Robert Well Number Pike Unit 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop St. City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4343161m Easting 511844m
Landing Point of Curve Northing 4343374.18m Easting 511882.26m
Bottom Hole Northing 4344951m Easting 511119m

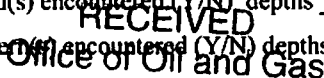
Elevation (ft) 990' GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
Air- Foam & 4% KCL
Mud- Polymer

Date permit issued 8/21/2013 Date drilling commenced 2/9/2014 Date drilling ceased 7/20/2014
Date completion activities began 8/21/2014 Date completion activities ceased 11/12/2014
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 59' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1509' Void(s) encountered (Y/N) depths No
Coal depth(s) ft None Identified Covered(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No



JUN 15 2015

Reviewed by:
JK 6/17/15
10/23/2015

API 47-017 - 06294 Farm name Williams, Robert Well number Pike Unit 2H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/f	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	40'	New	94# H-40	N/A	Y
Surface	17- 1/2"	13- 3/8"	362'	New	48# H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2549'	New	40# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5-1/2"	12757'	New	20# P-110	N/A	Y
Tubing		2-3/8"	6695'		4.7# N-80	N/A	
Packer type and depth set	N/A						

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	185 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	450 sx	15.6	1.18	251	0'	8 Hrs.
Coal							
Intermediate 1	Class A	941 sx	15.6	1.18	798	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	859 sx (Lead) 1021 sx (Tail)	13.5 Lead 15.2 Tail	1.44 Lead 1.8 Tail	2457	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 12757 MD, 6532' TVD (BHL); 6535' TVD (Deepest point drilled) Loggers TD (ft) 12708'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5833'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Pike Unit 1H API #47-017-06289). Please reference the wireline logs submitted with Form WR-35 for the Pike Unit 1H. A Cement Bond Log has been included with this submittal.

Check all wireline logs run caliper density deviated/directional induction neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Conductor- 0
 Surface- 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface
 Intermediate- 1 above float joint, 1 above float collar, 1 every 4th joint to surface
 Production- 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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API 47- 017 - 06294 Farm name Williams, Robert Well number Pike Unit 2H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
*PLEASE SEE ATTACHED EXHIBIT 1					

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
*PLEASE SEE ATTACHED EXHIBIT 2								

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Please insert additional pages as applicable.

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API 47- 017 - 06294 Farm name Williams, Robert Well number Pike Unit 2H

PRODUCING FORMATION(S)	DEPTHS	
Marcellus	6482' (TOP) TVD	6754' (TOP) MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3600 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 7142' mcfpd Oil 12 bpd NGL --- bpd Water 325 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
*PLEASE SEE ATTACHED EXHIBIT 3					

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Company, LP
Address 2640 Reach Rd. City Williamsport State PA Zip 17701

Logging Company STRC
Address 1560 Good Hope Pike City Clarksburg State WV Zip 26301

Cementing Company Allied Oil & Gas Services, LLC
Address 1036 East Main Street City Bridgeport State WV Zip 26330

Stimulating Company US Well Services
Address 533 Industrial Park Dr. City Jane Lew State WV Zip 26378

Please insert additional pages as applicable.

Completed by Kara Quackenbush Telephone 303-357-7233
Signature *[Signature]* Title Permit Representative Date 6/9/2015

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

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EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	21-Aug-14	12,518	12,684	60	Marcellus
2	28-Sep-14	12,320	12,487	60	Marcellus
3	28-Sep-14	12,123	12,289	60	Marcellus
4	29-Sep-14	11,925	12,092	60	Marcellus
5	29-Sep-14	11,728	11,895	60	Marcellus
6	29-Sep-14	11,531	11,697	60	Marcellus
7	29-Sep-14	11,333	11,500	60	Marcellus
8	30-Sep-14	11,136	11,302	60	Marcellus
9	30-Sep-14	10,938	11,105	60	Marcellus
10	30-Sep-14	10,741	10,907	60	Marcellus
11	30-Sep-14	10,543	10,710	60	Marcellus
12	30-Sep-14	10,346	10,513	60	Marcellus
13	1-Oct-14	10,149	10,315	60	Marcellus
14	1-Oct-14	9,951	10,118	60	Marcellus
15	2-Oct-14	9,754	9,920	60	Marcellus
16	2-Oct-14	9,556	9,723	60	Marcellus
17	3-Oct-14	9,359	9,525	60	Marcellus
18	3-Oct-14	9,161	9,328	60	Marcellus
19	3-Oct-14	8,964	9,131	60	Marcellus
20	3-Oct-14	8,767	8,933	60	Marcellus
21	4-Oct-14	8,569	8,736	60	Marcellus
22	4-Oct-14	8,372	8,538	60	Marcellus
23	4-Oct-14	8,174	8,341	60	Marcellus
24	4-Oct-14	7,977	8,143	60	Marcellus
25	5-Oct-14	7,779	7,946	60	Marcellus
26	5-Oct-14	7,582	7,749	60	Marcellus
27	6-Oct-14	7,385	7,551	60	Marcellus
28	6-Oct-14	7,187	7,354	60	Marcellus
29	6-Oct-14	6,990	7,156	60	Marcellus
30	6-Oct-14	6,792	6,959	60	Marcellus

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EXHIBIT 2

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	28-Sep-14	61.7	6,841	5,733	4,807	235,800	6,657	N/A
2	28-Sep-14	61.5	6,567	6,015	4,395	236,000	6,535	N/A
3	29-Sep-14	65.7	6,778	5,912	4,478	229,600	6,393	N/A
4	29-Sep-14	63.5	6,591	5,919	5,146	214,800	7,104	N/A
5	29-Sep-14	62.8	6,330	5,904	5,533	236,800	6,515	N/A
6	29-Sep-14	65.0	6,335	5,744	5,282	236,100	6,350	N/A
7	29-Sep-14	67.0	6,764	5,894	4,470	231,000	6,328	N/A
8	30-Sep-14	64.7	6,859	5,736	4,817	221,400	6,990	N/A
9	30-Sep-14	64.7	6,419	5,421	4,563	232,400	6,336	N/A
10	30-Sep-14	64.0	6,574	5,811	4,785	231,850	6,231	N/A
11	30-Sep-14	64.0	6,664	5,929	5,379	222,950	6,127	N/A
12	1-Oct-14	62.6	6,607	5,389	4,120	157,500	6,282	N/A
13	1-Oct-14	62.7	6,413	5,186	4,281	157,500	6,265	N/A
14	2-Oct-14	62.8	6,763	5,479	5,311	228,750	6,151	N/A
15	2-Oct-14	65.0	6,887	5,436	6,030	195,850	6,455	N/A
16	3-Oct-14	65.0	6,508	5,279	4,492	204,100	6,809	N/A
17	3-Oct-14	62.9	6,371	5,604	3,927	236,750	6,184	N/A
18	3-Oct-14	62.0	6,866	6,409	4,184	197,800	5,666	N/A
19	3-Oct-14	65.0	6,753	5,535	4,599	240,200	6,292	N/A
20	3-Oct-14	65.0	6,744	5,690	5,196	236,050	6,331	N/A
21	4-Oct-14	62.1	6,345	5,554	5,053	212,750	5,789	N/A
22	4-Oct-14	62.1	6,314	5,804	4,638	235,250	6,066	N/A
23	4-Oct-14	65.0	6,421	5,325	4,177	236,750	6,129	N/A
24	5-Oct-14	62.9	6,187	5,908	4,063	235,000	6,028	N/A
25	5-Oct-14	65.0	7,011	6,040	4,792	177,850	6,593	N/A
26	5-Oct-14	65.0	6,530	5,472	5,111	237,725	6,160	N/A
27	6-Oct-14	65.0	6,155	5,375	4,857	237,900	5,957	N/A
28	6-Oct-14	63.8	6,168	5,411	3,623	236,050	5,938	N/A
29	6-Oct-14	65.0	6,399	5,919	6,119	209,825	5,672	N/A
30	6-Oct-14	65.0	6,346	6,419	4,835	241,800	6,054	N/A
AVG=		64.0	6,550	5,708	4,769	6,644,100	188,387	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Fresh Water	59'	N/A	59'	N/A
Shale/ Sandstone	0	429	0	429
Limestone/ Sandstone	429	509	429	509
Shale/ Siltstone	509	589	509	589
Sandstone/ Trace Coal	589	609	589	609
Sandstone/ Siltstone	609	689	609	689
Sandstone/ Limestone	689	789	689	789
Shale/ Sandstone	789	949	789	949
Siltstone/ Limestone	949	1329	949	1329
Shale/ Trace Coal	1329	1389	1329	1389
Shale/ Sandstone	1389	1429	1389	1429
Shale/ Coal	1429	1489	1429	1489
Sandstone	1489	1529	1489	1529
Sandstone/ Trace Coal	1529	1669	1529	1669
Sandstone/ Siltstone	1669	1909	1669	1909
Sandstone/ Trace Coal	1909	1999	1909	1999
Big Lime	1999	2093	1999	2093
Big Injun	2093	2404	2093	2404
Gantz Sand	2404	2589	2404	2589
Fifty Foot Sandstone	2589	2641	2589	2641
Gordon	2641	2980	2641	2980
Fifth Sandstone	2980	3026	2980	3026
Bayard	3026	3426	3026	3426
Warren	3426	3789	3426	3789
Speechley	3789	4085	3789	4085
Baltown	4085	4550	4085	4550
Bradford	4550	4958	4550	4958
Benson	4958	5220	4958	5220
Alexander	5220	5469	5220	5469
Elk	5469	5815	5469	5815
Rhinestreet	5815	6141	5815	6171
Sycamore	6141	6308	6171	6414
Middlesex	6308	6427	6414	6614
Burkett	6427	6454	6614	6673
Tully	6454	6482	6673	6754
Marcellus	6482	NA	6754	NA

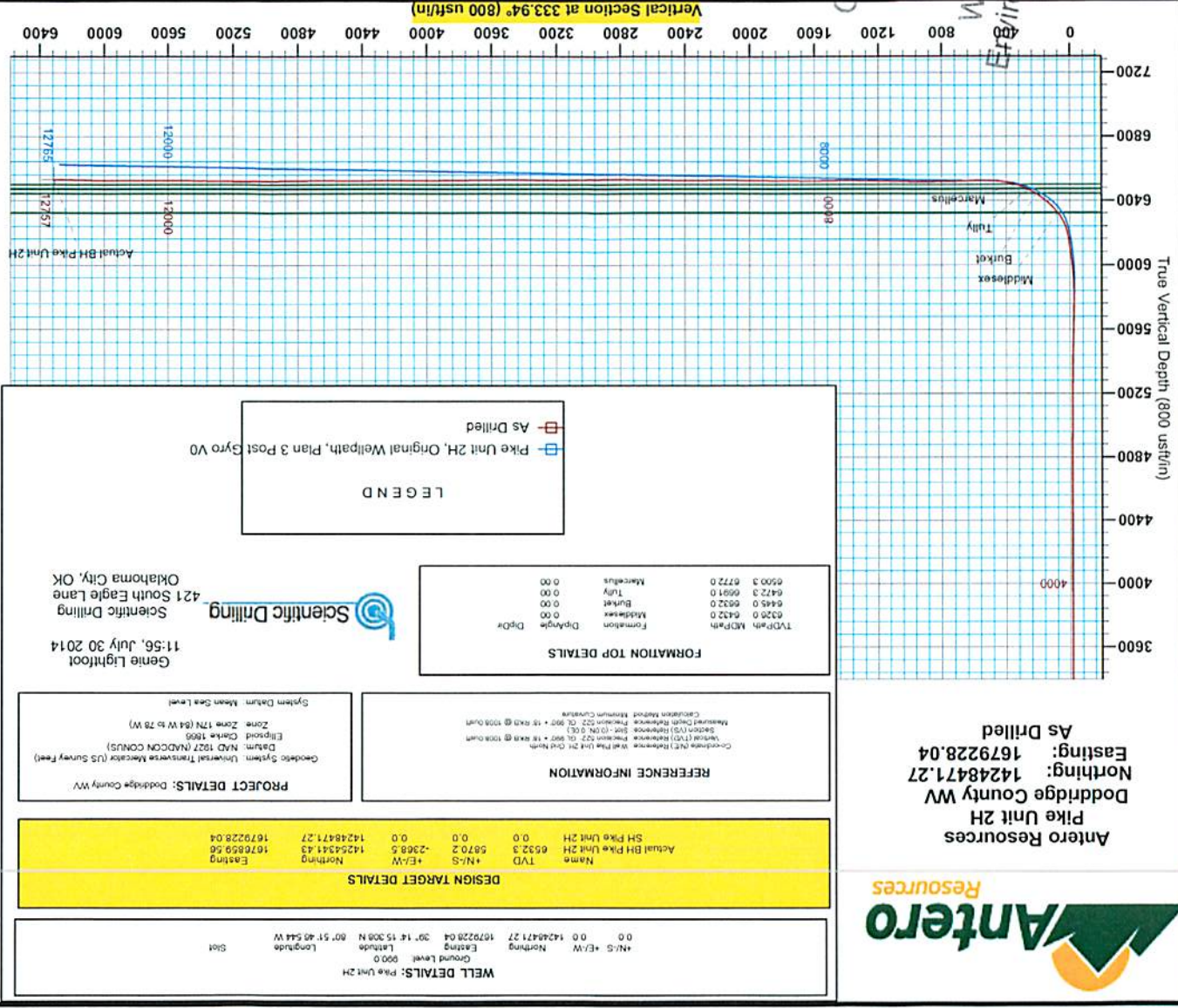
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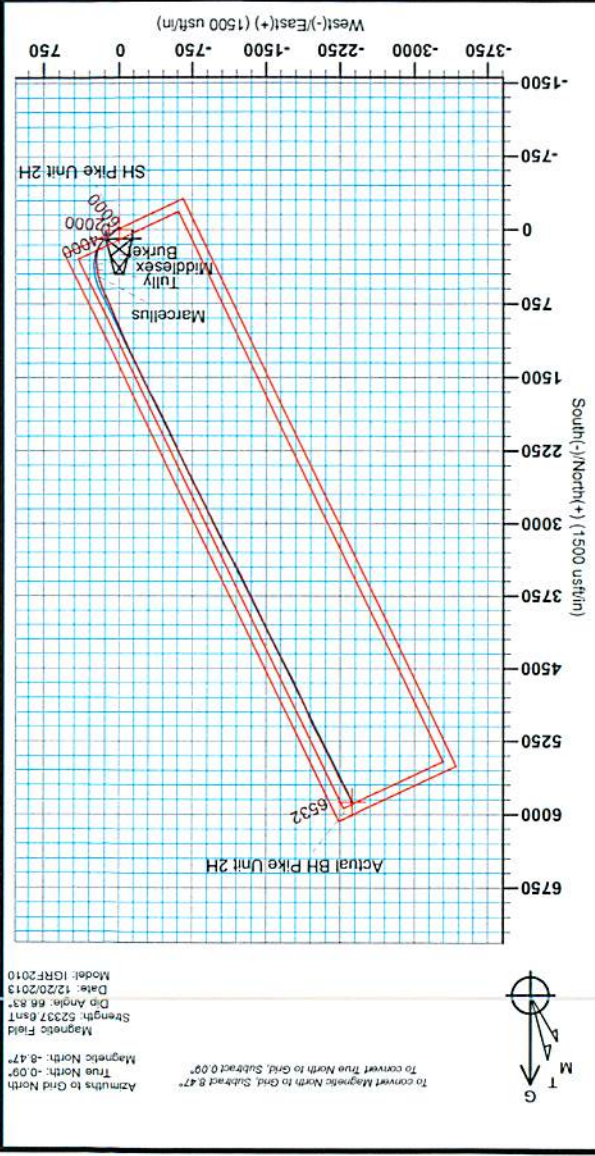
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Antero Resources
Pike Unit 2H
Doddridge County WV
Northing: 14248471.27
Easting: 1679228.04
As Drilled



46270-L1

17.06294



Antero Resources

Doddridge County WV
Leggett/ Pike Pad
Pike Unit 2H

Original Wellpath

Design: As Drilled

Standard Survey Report

30 July, 2014

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Scientific Drilling International
Survey Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Pike Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Site:	Leggett/ Pike Pad	MD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Well:	Pike Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Project	Doddridge County WV, McClellan District		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 17N (84 W to 78 W)		

Site	Leggett/ Pike Pad		
Site Position:		Northing:	14,248,467.61 usft
From:	Map	Easting:	1,679,248.10 usft
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "
		Latitude:	39° 14' 15.272 N
		Longitude:	80° 51' 46.289 W
		Grid Convergence:	0.09 °

Well	Pike Unit 2H		
Well Position	+N/-S	0.0 usft	Northing: 14,248,471.27 usft
	+E/-W	0.0 usft	Easting: 1,679,228.04 usft
Position Uncertainty	2.0 usft	Wellhead Elevation:	1,008.0 usft
		Latitude:	39° 14' 15.308 N
		Longitude:	80° 51' 46.544 W
		Ground Level:	990.0 usft

Wellbore	Original Wellpath		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/20/2013	-8.39	66.83	52,338

Design	As Drilled		
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Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	333.94

Survey Program	Date 7/30/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
107.0	5,649.5	Survey #4 Final Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper
5,710.0	12,757.0	Survey #5 MWD (Original Wellpath)	MWD SDI	MWD - Standard ver 1.0

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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
107.0	0.60	157.17	107.0	-0.5	0.2	-0.6	0.56	0.56	0.00
207.0	0.39	198.07	207.0	-1.3	0.3	-1.3	0.40	-0.21	40.90
307.0	0.37	184.31	307.0	-2.0	0.2	-1.8	0.09	-0.02	-13.76
407.0	0.32	172.73	407.0	-2.6	0.2	-2.4	0.09	-0.05	-11.58
507.0	0.32	180.79	507.0	-3.1	0.2	-2.9	0.04	0.00	8.06
607.0	0.37	179.00	607.0	-3.7	0.2	-3.4	0.05	0.05	-1.79
707.0	0.37	181.63	707.0	-4.4	0.2	-4.0	0.02	0.00	2.63
807.0	0.37	171.21	807.0	-5.0	0.3	-4.6	0.07	0.00	-10.42
907.0	0.38	178.51	907.0	-5.7	0.3	-5.2	0.05	0.01	7.30

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Scientific Drilling International
Survey Report



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Project:	Doddridge County WV	TVD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
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Well:	Pike Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,007.0	0.31	184.34	1,007.0	-6.3	0.3	-5.8	0.08	-0.07	5.83
1,107.0	0.23	201.76	1,107.0	-6.7	0.2	-6.1	0.11	-0.08	17.42
1,207.0	0.10	180.34	1,207.0	-7.0	0.1	-6.3	0.14	-0.13	-21.42
1,307.0	0.14	215.58	1,307.0	-7.2	0.1	-6.5	0.08	0.04	35.24
1,407.0	0.12	163.42	1,407.0	-7.4	0.0	-6.6	0.12	-0.02	-52.16
1,507.0	0.20	116.23	1,507.0	-7.6	0.2	-6.9	0.15	0.08	-47.19
1,607.0	0.27	110.97	1,607.0	-7.7	0.6	-7.2	0.07	0.07	-5.26
1,707.0	0.22	118.55	1,707.0	-7.9	1.0	-7.5	0.06	-0.05	7.58
1,807.0	0.18	146.19	1,807.0	-8.1	1.2	-7.8	0.10	-0.04	27.64
1,907.0	0.25	180.85	1,907.0	-8.5	1.3	-8.2	0.14	0.07	34.66
2,007.0	0.24	184.63	2,007.0	-8.9	1.3	-8.6	0.02	-0.01	3.78
2,107.0	0.24	183.62	2,107.0	-9.3	1.3	-8.9	0.00	0.00	-1.01
2,207.0	0.32	181.73	2,207.0	-9.8	1.2	-9.4	0.08	0.08	-1.89
2,307.0	0.25	192.59	2,307.0	-10.3	1.2	-9.8	0.09	-0.07	10.86
2,407.0	0.32	189.83	2,407.0	-10.8	1.1	-10.2	0.07	0.07	-2.76
2,507.0	0.36	200.21	2,507.0	-11.3	0.9	-10.6	0.07	0.04	10.38
2,607.0	0.35	198.59	2,607.0	-11.9	0.7	-11.0	0.01	-0.01	-1.62
2,707.0	0.32	185.08	2,707.0	-12.5	0.6	-11.5	0.08	-0.03	-13.51
2,807.0	0.49	210.93	2,807.0	-13.1	0.4	-12.0	0.25	0.17	25.85
2,907.0	0.46	205.52	2,907.0	-13.9	0.0	-12.5	0.05	-0.03	-5.41
3,007.0	0.45	205.37	3,007.0	-14.6	-0.4	-12.9	0.01	-0.01	-0.15
3,107.0	0.48	202.23	3,107.0	-15.3	-0.7	-13.5	0.04	0.03	-3.14
3,207.0	0.41	199.39	3,206.9	-16.1	-1.0	-14.0	0.07	-0.07	-2.84
3,307.0	0.34	203.40	3,306.9	-16.7	-1.2	-14.4	0.07	-0.07	4.01
3,407.0	0.34	198.45	3,406.9	-17.2	-1.4	-14.9	0.03	0.00	-4.95
3,507.0	0.34	225.44	3,506.9	-17.7	-1.7	-15.2	0.16	0.00	26.99
3,607.0	0.37	225.62	3,606.9	-18.1	-2.2	-15.4	0.03	0.03	0.18
3,707.0	0.19	245.62	3,706.9	-18.4	-2.5	-15.4	0.20	-0.18	20.00
3,807.0	0.23	219.44	3,806.9	-18.7	-2.8	-15.5	0.10	0.04	-26.18
3,907.0	0.27	223.45	3,906.9	-19.0	-3.1	-15.7	0.04	0.04	4.01
4,007.0	0.30	339.17	4,006.9	-18.9	-3.4	-15.5	0.48	0.03	115.72
4,107.0	0.51	20.78	4,106.9	-18.3	-3.3	-14.9	0.35	0.21	41.61
4,207.0	0.83	41.02	4,206.9	-17.3	-2.7	-14.4	0.39	0.32	20.24
4,307.0	0.88	45.23	4,306.9	-16.2	-1.7	-13.8	0.08	0.05	4.21
4,407.0	0.96	42.81	4,406.9	-15.1	-0.5	-13.3	0.09	0.08	-2.42
4,507.0	0.97	44.49	4,506.9	-13.8	0.6	-12.7	0.03	0.01	1.68
4,607.0	0.93	66.90	4,606.9	-12.9	2.0	-12.5	0.37	-0.04	22.41
4,707.0	0.77	108.90	4,706.9	-12.8	3.3	-13.0	0.63	0.16	42.00
4,807.0	0.32	173.08	4,806.9	-13.3	4.0	-13.7	0.69	-0.45	64.18
4,907.0	0.41	244.26	4,906.9	-13.7	3.7	-14.0	0.43	0.09	71.18
5,007.0	0.46	237.79	5,006.9	-14.1	3.1	-14.0	0.07	0.05	-6.47
5,107.0	0.42	212.04	5,106.9	-14.6	2.5	-14.3	0.20	0.04	-25.75
5,207.0	0.60	204.57	5,206.9	-15.4	2.1	-14.8	0.19	0.18	0.07

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Scientific Drilling International
Survey Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Pike Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Site:	Leggett/ Pike Pad	MD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Well:	Pike Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,307.0	0.74	188.46	5,306.8	-16.5	1.8	-15.6	0.23	0.14	-16.11
5,407.0	0.94	166.04	5,406.8	-18.0	1.9	-17.0	0.38	0.20	-22.42
5,507.0	1.38	169.05	5,506.8	-19.9	2.3	-18.9	0.44	0.44	3.01
5,607.0	1.20	168.88	5,606.8	-22.2	2.8	-21.1	0.18	-0.18	-0.17
5,649.5	1.17	165.83	5,649.3	-23.0	3.0	-22.0	0.16	-0.07	-7.17
5,710.0	1.33	160.48	5,709.8	-24.3	3.3	-23.3	0.33	0.26	-8.85
5,803.0	0.93	124.32	5,802.7	-25.7	4.3	-25.0	0.86	-0.43	-38.88
5,833.0	3.25	60.44	5,832.7	-25.4	5.3	-25.2	9.87	7.73	-212.93
5,864.0	6.83	50.76	5,863.6	-23.8	7.5	-24.7	11.83	11.55	-31.23
5,895.0	9.94	47.31	5,894.3	-20.9	10.9	-23.5	10.16	10.03	-11.13
5,926.0	13.79	47.64	5,924.6	-16.5	15.6	-21.7	12.42	12.42	1.06
5,957.0	16.95	48.57	5,954.5	-11.1	21.7	-19.5	10.22	10.19	3.00
5,988.0	20.12	48.63	5,983.9	-4.6	29.1	-16.9	10.23	10.23	0.19
6,019.0	23.08	48.66	6,012.7	3.0	37.6	-13.8	9.55	9.55	0.10
6,049.0	25.62	47.86	6,040.0	11.2	46.9	-10.5	8.54	8.47	-2.67
6,080.0	27.83	47.60	6,067.7	20.6	57.2	-6.6	7.14	7.13	-0.84
6,111.0	30.63	49.72	6,094.8	30.6	68.5	-2.6	9.63	9.03	6.84
6,142.0	33.52	51.79	6,121.0	41.0	81.3	1.1	9.97	9.32	6.68
6,173.0	36.84	52.01	6,146.4	52.0	95.4	4.8	10.72	10.71	0.71
6,204.0	40.70	51.32	6,170.5	64.1	110.6	9.0	12.53	12.45	-2.23
6,234.0	44.12	51.47	6,192.7	76.7	126.4	13.4	11.40	11.40	0.50
6,265.0	46.52	50.12	6,214.5	90.6	143.5	18.4	8.34	7.74	-4.35
6,296.0	47.57	45.40	6,235.6	105.9	160.2	24.7	11.65	3.39	-15.23
6,327.0	47.74	39.98	6,256.5	122.7	175.8	33.0	12.93	0.55	-17.48
6,358.0	48.02	34.58	6,277.3	141.0	189.7	43.3	12.95	0.90	-17.42
6,389.0	48.80	28.33	6,297.9	160.7	201.8	55.8	15.28	2.52	-20.16
6,420.0	49.28	22.55	6,318.2	181.9	211.8	70.3	14.16	1.55	-18.65
6,432.0	49.24	20.22	6,326.0	190.3	215.1	76.5	14.70	-0.36	-19.39
Middlesex									
6,450.0	49.26	16.73	6,337.8	203.3	219.4	86.2	14.70	0.13	-19.40
6,481.0	50.19	11.00	6,357.8	226.2	225.1	104.3	14.41	3.00	-18.48
6,512.0	52.06	6.01	6,377.3	250.1	228.6	124.2	13.91	6.03	-16.10
6,543.0	54.13	2.66	6,395.9	274.8	230.5	145.6	10.92	6.68	-10.81
6,574.0	55.54	359.53	6,413.8	300.1	231.0	168.1	9.42	4.55	-10.10
6,605.0	57.49	357.10	6,430.9	325.9	230.2	191.7	9.07	6.29	-7.84
6,632.0	59.44	355.19	6,445.0	348.9	228.7	213.0	9.41	7.22	-7.09
Burket									
6,636.0	59.73	354.91	6,447.0	352.3	228.4	216.2	9.41	6.92	-6.92
6,667.0	62.99	353.56	6,461.9	379.4	225.6	241.7	11.19	10.52	-4.35
6,691.0	65.85	352.51	6,472.3	400.9	223.0	262.2	12.54	11.90	-4.39
Tully									
6,697.0	66.56	352.25	6,474.7	406.3	222.3	267.4	12.54	11.92	-4.27
6,728.0	69.78	349.82	6,486.2	434.7	217.8	294.9	12.68	10.39	-7.84
6,759.0	71.93	346.58	6,496.4	463.4	211.8	323.2	12.07	10.94	-10.45

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Scientific Drilling International
Survey Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Pike Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Site:	Leggett/ Pike Pad	MD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Well:	Pike Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,772.0	72.89	345.91	6,500.3	475.4	208.9	335.4	8.85	7.38	-5.13
Marcellus									
6,790.0	74.22	345.00	6,505.4	492.1	204.5	352.3	8.85	7.40	-5.07
6,821.0	76.79	342.56	6,513.2	521.0	196.1	381.8	11.26	8.29	-7.87
6,852.0	80.94	341.73	6,519.1	549.9	186.8	411.9	13.64	13.39	-2.68
6,913.0	88.20	337.88	6,524.9	606.8	165.8	472.3	13.46	11.90	-6.31
7,016.0	91.01	335.33	6,525.6	701.4	125.0	575.2	3.68	2.73	-2.48
7,109.0	91.54	336.03	6,523.6	786.1	86.7	668.1	0.94	0.57	0.75
7,201.0	91.10	336.56	6,521.4	870.3	49.7	760.0	0.75	-0.48	0.58
7,294.0	89.69	337.17	6,520.8	955.8	13.2	852.9	1.65	-1.52	0.66
7,387.0	90.13	336.30	6,520.9	1,041.3	-23.6	945.8	1.05	0.47	-0.94
7,479.0	89.69	334.36	6,521.1	1,124.8	-62.0	1,037.7	2.16	-0.48	-2.11
7,574.0	88.90	334.89	6,522.2	1,210.7	-102.7	1,132.7	1.00	-0.83	0.56
7,668.0	88.02	334.98	6,524.8	1,295.8	-142.5	1,226.7	0.94	-0.94	0.10
7,763.0	89.43	334.90	6,526.9	1,381.8	-182.7	1,321.6	1.49	1.48	-0.08
7,857.0	90.84	335.33	6,526.7	1,467.1	-222.3	1,415.6	1.57	1.50	0.46
7,951.0	91.10	333.31	6,525.1	1,551.8	-263.0	1,509.6	2.17	0.28	-2.15
8,046.0	90.48	332.17	6,523.8	1,636.2	-306.5	1,604.5	1.37	-0.65	-1.20
8,141.0	90.04	332.43	6,523.3	1,720.3	-350.7	1,699.5	0.54	-0.46	0.27
8,236.0	89.08	333.48	6,524.1	1,805.0	-393.9	1,794.5	1.50	-1.01	1.11
8,329.0	89.16	332.96	6,525.5	1,888.0	-435.8	1,887.5	0.57	0.09	-0.56
8,423.0	90.04	335.07	6,526.1	1,972.5	-476.9	1,981.5	2.43	0.94	2.24
8,517.0	89.34	333.92	6,526.7	2,057.3	-517.4	2,075.4	1.43	-0.74	-1.22
8,609.0	89.43	335.59	6,527.6	2,140.5	-556.6	2,167.4	1.82	0.10	1.82
8,702.0	89.96	336.47	6,528.1	2,225.5	-594.4	2,260.4	1.10	0.57	0.95
8,795.0	90.40	336.12	6,527.8	2,310.6	-631.8	2,353.3	0.60	0.47	-0.38
8,887.0	89.78	334.54	6,527.7	2,394.2	-670.2	2,445.3	1.84	-0.67	-1.72
8,980.0	89.78	334.27	6,528.1	2,478.1	-710.4	2,538.2	0.29	0.00	-0.29
9,073.0	87.67	332.17	6,530.1	2,561.1	-752.3	2,631.2	3.20	-2.27	-2.26
9,165.0	88.64	333.04	6,533.1	2,642.7	-794.6	2,723.1	1.42	1.05	0.95
9,258.0	89.08	333.13	6,534.9	2,725.6	-836.7	2,816.1	0.48	0.47	0.10
9,350.0	92.24	335.59	6,533.9	2,808.6	-876.5	2,908.1	4.35	3.43	2.67
9,443.0	91.54	335.24	6,530.8	2,893.1	-915.1	3,001.0	0.84	-0.75	-0.38
9,535.0	90.04	334.80	6,529.5	2,976.5	-954.0	3,093.0	1.70	-1.63	-0.48
9,628.0	90.40	334.80	6,529.2	3,060.6	-993.6	3,186.0	0.39	0.39	0.00
9,721.0	89.16	333.75	6,529.5	3,144.4	-1,034.0	3,278.9	1.75	-1.33	-1.13
9,813.0	89.16	332.25	6,530.9	3,226.4	-1,075.7	3,370.9	1.63	0.00	-1.63
9,906.0	90.22	332.43	6,531.4	3,308.7	-1,118.9	3,463.9	1.16	1.14	0.19
9,998.0	89.78	330.14	6,531.4	3,389.4	-1,163.1	3,555.8	2.53	-0.48	-2.49
10,091.0	91.19	332.87	6,530.6	3,471.1	-1,207.4	3,648.7	3.30	1.52	2.95
10,184.0	91.19	333.57	6,528.7	3,554.1	-1,249.3	3,741.7	0.75	0.00	0.75
10,276.0	90.04	334.89	6,527.7	3,637.0	-1,289.3	3,833.6	1.90	-1.45	1.43
10,369.0	90.31	334.36	6,527.4	3,721.0	-1,329.2	3,926.6	0.64	0.29	0.57

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Scientific Drilling International
Survey Report



Company:	Antero Resources	Local Co-ordinate Reference:	Well Pike Unit 2H
Project:	Doddridge County WV	TVD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Site:	Leggett/ Pike Pad	MD Reference:	Precision 522: GL 990' + 18' RKB @ 1008.0usft
Well:	Pike Unit 2H	North Reference:	Grid
Wellbore:	Original Wellpath	Survey Calculation Method:	Minimum Curvature
Design:	As Drilled	Database:	Oklahoma District

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,462.0	89.43	334.36	6,527.6	3,804.8	-1,369.4	4,019.6	0.95	-0.95	0.00
10,554.0	90.20	334.12	6,527.9	3,887.7	-1,409.4	4,111.6	0.88	0.84	-0.26
10,647.0	90.57	334.01	6,527.3	3,971.3	-1,450.1	4,204.6	0.42	0.40	-0.12
10,739.0	91.19	333.31	6,525.9	4,053.8	-1,490.9	4,296.6	1.02	0.67	-0.76
10,832.0	90.48	335.50	6,524.5	4,137.6	-1,531.1	4,389.6	2.48	-0.76	2.35
10,924.0	88.99	334.36	6,524.9	4,221.0	-1,570.1	4,481.6	2.04	-1.62	-1.24
11,017.0	89.16	333.75	6,526.5	4,304.6	-1,610.7	4,574.6	0.68	0.18	-0.66
11,109.0	89.96	332.87	6,527.2	4,386.8	-1,652.1	4,666.6	1.29	0.87	-0.96
11,202.0	90.66	333.31	6,526.7	4,469.7	-1,694.1	4,759.5	0.89	0.75	0.47
11,294.0	91.01	332.17	6,525.3	4,551.5	-1,736.3	4,851.5	1.30	0.38	-1.24
11,387.0	90.22	334.63	6,524.3	4,634.6	-1,777.9	4,944.5	2.78	-0.85	2.65
11,479.0	91.10	334.36	6,523.3	4,717.6	-1,817.5	5,036.5	1.00	0.96	-0.29
11,572.0	90.40	336.38	6,522.0	4,802.2	-1,856.3	5,129.4	2.30	-0.75	2.17
11,664.0	88.99	337.09	6,522.5	4,886.7	-1,892.6	5,221.3	1.72	-1.53	0.77
11,757.0	89.60	337.59	6,523.7	4,972.5	-1,928.4	5,314.2	0.85	0.66	0.54
11,849.0	88.72	334.89	6,525.0	5,056.7	-1,965.5	5,406.1	3.09	-0.96	-2.93
11,942.0	89.25	333.92	6,526.7	5,140.5	-2,005.7	5,499.0	1.19	0.57	-1.04
12,034.0	89.96	333.04	6,527.3	5,222.9	-2,046.7	5,591.0	1.23	0.77	-0.96
12,127.0	90.57	332.17	6,526.9	5,305.4	-2,089.5	5,684.0	1.14	0.66	-0.94
12,220.0	90.57	333.13	6,525.9	5,388.0	-2,132.3	5,777.0	1.03	0.00	1.03
12,312.0	89.69	335.33	6,525.7	5,470.9	-2,172.3	5,869.0	2.58	-0.96	2.39
12,405.0	89.69	334.80	6,526.2	5,555.2	-2,211.5	5,962.0	0.57	0.00	-0.57
12,497.0	88.29	333.31	6,527.9	5,637.9	-2,251.7	6,053.9	2.22	-1.52	-1.62
12,590.0	88.72	333.66	6,530.3	5,721.1	-2,293.2	6,146.9	0.60	0.46	0.38
12,683.0	89.43	333.13	6,531.8	5,804.2	-2,334.9	6,239.9	0.95	0.76	-0.57
12,697.0	89.60	332.96	6,531.9	5,816.7	-2,341.2	6,253.9	1.72	1.21	-1.21
12,757.0	89.60	332.96	6,532.3	5,870.2	-2,368.5	6,313.9	0.00	0.00	0.00

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,432.0	6,326.0	Middlesex		0.00	
6,632.0	6,445.0	Burket		0.00	
6,691.0	6,472.3	Tully		0.00	
6,772.0	6,500.3	Marcellus		0.00	

Checked By: _____ Approved By: _____ Date: _____

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/28/2014
Job End Date:	10/6/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06294-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Pike Unit 2H
Longitude:	-80.86276100
Latitude:	39.23766400
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,535
Total Base Water Volume (gal):	7,912,254
Total Base Non Water Volume:	339,014



17.06294

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	89.57272	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	10.07722	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.12812	
			Hydrogen Chloride	7647-01-0	18.00000	0.03060	
WFRA-405	U.S. Well Services, LLC	Friction Reducer	Water	7732-18-5	40.00000	0.03240	
			Anionic Polyacrylamide	Proprietary		0.03240	
			Petroleum Distillates	64742-47-8	22.00000	0.02608	
			Ethoxylated alcohol blend	Proprietary	5.00000	0.00405	
			Crystalline Salt	12125-02-9	5.00000	0.00405	
GC-16	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.03343	
			Petroleum Distillates	64742-47-8	60.00000	0.03166	
			Suspending agent (solid)	14808-60-7	3.00000	0.00511	

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17.06294

			Surfactant	68439-51-0	3.00000	0.00201
SI-1000	J.S. Well Services, LLC	Scale Inhibitor				
			Anionic Copolymer	Proprietary		0.00412
			Ethylene Glycol	107-21-1	20.00000	0.00372
			Water	7732-18-5	30.00000	0.00310
K-BAC 1020	J.S. Well Services, LLC	Anti-Bacterial Agent				
			2,2-dibromo-3-nitripropionamide	10222-01-2	20.00000	0.00461
			Deionized Water	7732-18-5	28.00000	0.00263
AP One	J.S. Well Services, LLC	Gel Breakers				
			Ammonium Persulfate	7727-54-0	100.00000	0.00145
AI-301	J.S. Well Services	Acid Corrosion Inhibitors				
			Diethylene Glycol	111-46-6	30.00000	0.00020
			Methenamine	100-97-0	20.00000	0.00016
			Hydrogen Chloride	7647-01-0	10.00000	0.00007
			Polyethylene polyamine	68603-67-8	10.00000	0.00006
			Coco amine	61791-14-8	5.00000	0.00003

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)

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LATITUDE 39°15'00"

8,382'

LATITUDE 39°17'30"

LONGITUDE 80°50'00" TO BOTTOM HOLE
LONGITUDE 80°50'00"

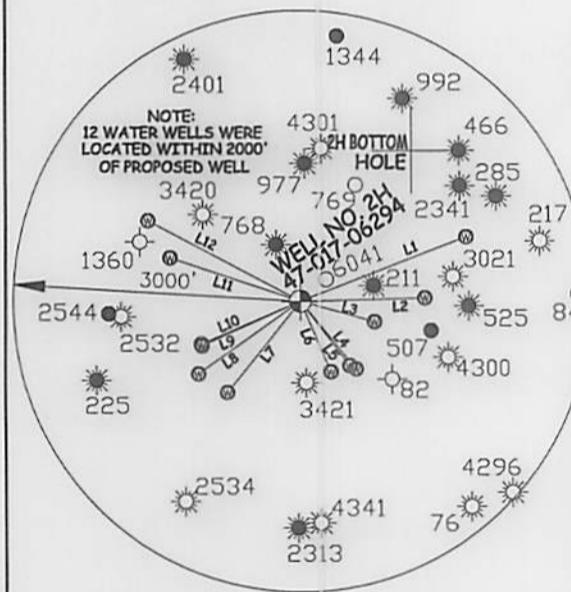
Antero Resources Corporation
Well No. Pike Unit 2H
47-017-06294 (AS DRILLED)

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
N: 271,573ft E: 1,613,965ft
LAT: 39°14'15.32" LON: 80°51'46.53"
BOTTOM HOLE INFORMATION:
N: 277,486ft E: 1,611,684ft
LAT: 39°15'13.42" LON: 80°52'16.67"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

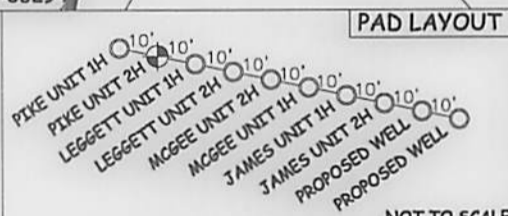
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
N: 4,343,161m E: 511,844m
BOTTOM HOLE INFORMATION:
N: 4,344,951m E: 511,119m

WV NORTH ZONE
GRID NORTH

- NOTE
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
 2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
 3. AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
 4. WLS IS NOT CERTIFYING THE DATA AND INFORMATION PROVIDED LISTED IN NOTES 2 AND 3, ONLY THE RELATIONSHIP TO THE DATA AND INFORMATION PROVIDED TO THE LEASE BOUNDARIES.
 5. WLS IS BY NO MEANS RESPONSIBLE FOR ANY ERRORS OR INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.



LINE	BEARING	DISTANCE
L1	N 68°55' E	1838.8'
L2	N 88°27' E	1288.6'
L3	S 74°48' E	794.9'
L4	S 39°47' E	898.0'
L5	S 37°49' E	829.9'
L6	S 23°33' E	784.8'
L7	S 39°05' W	1205.1'
L8	S 54°57' W	1292.6'
L9	S 66°00' W	1118.9'
L10	S 66°57' W	1115.8'
L11	N 71°44' W	1417.7'
L12	N 62°20' W	1779.0'



PAD LAYOUT

NOT TO SCALE

JOB # **13-018WA**
DRAWING # **PIKE2HAD**
SCALE **1" = 1000'**
MINIMUM DEGREE OF ACCURACY **SUBMETER**
PROVEN SOURCE OF ELEV. **SUBMETER MAPPING GRADE GPS**



STATE OF WEST VIRGINIA, DIVISION
OF ENVIRONMENTAL PROTECTION,
OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO
WEST VIRGINIA 26415

LEGEND
 - - - - - Surface Owner Boundary Lines +/-
 - - - - - Interior Surface Tracts +/-
 X Existing Fence
 ⊕ Found monument, as noted
 ○ Proposed Well Path
 ⊗ As Drilled Well Path

DATE **05/26/15**
OPERATOR'S WELL # **PIKE UNIT #2H**
API WELL # **47 - 017 - 06294**
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF OIL AND GAS
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION **1,000' ORIGINAL - 990' AS DRILLED** WATERSHED **NORTH FORK HUGHES RIVER**
QUADRANGLE **OXFORD 7.5 (TOP HOLE) WEST UNION 7.5 (BOTTOM HOLE)** DISTRICT **CENTRAL** COUNTY **DODDRIDGE**
SURFACE OWNER **ROBERT WILLIAMS** ACREAGE **37.67 ACRES +/-**
OIL & GAS ROYALTY OWNER **H.B. WILLIAMS ET UX; RALPH LEGGETT ET UX;** LEASE ACREAGE **307 ACRES +/-; 72 ACRES +/-;**
F.H. ROSS ET UX; CASSIE REESE **72 ACRES +/-; 142 ACRES +/-**
PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) **(X) AS DRILLED** PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION **MARCELLUS** ESTIMATED DEPTH **6,532' TVD 12,757' MD**
WELL OPERATOR **ANTERO RESOURCES CORP.** DESIGNATED AGENT **DIANNA STAMPER**
ADDRESS **1615 WYNKOOP STREET** ADDRESS **CT CORPORATION SYSTEM**
FORM WW-6 **DENVER, CO 80202** ADDRESS **5400 D BIG TYLER ROAD**
CHARLESTON, WV 25313

10/23/2015

COUNTY NAME
PERMIT