

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

API 47 - 017 - 06621 County Doddridge District Central  
Quad Oxford 7.5' Pad Name Robert Williams Pad Field/Pool Name ---  
Farm name Williams, Robert Well Number McGee Unit 1H  
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 4343158m Easting 511856m  
Landing Point of Curve Northing 4342881.48m Easting 511899.02m  
Bottom Hole Northing 4340651m Easting 512958m

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 11/14/2014 Date drilling commenced 11/19/2014 Date drilling ceased 2/12/2015  
Date completion activities began 4/6/2015 Date completion activities ceased 6/17/2015  
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug  
Freshwater depth(s) ft 57' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1507' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by:  
JK 8/21/15  
**10/23/2015**

API 47-017 - 06621

Farm name Williams, Robert

Well number McGee Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	30"	20"	40'	New	94# H-40	N/A	Y
Surface	17- 1/2"	13- 3/8"	463'	New	48# H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2521'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5-1/2"	15251'	New	23# P-110	N/A	Y
Tubing		2-3/8"	6624'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	150 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	554 sx	15.6	1.18	322	0'	8 Hrs.
Coal							
Intermediate 1	Class A	925 sx	15.6	1.18	790	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	875 sx (Lead) 1345 sx (Tail)	13.5 Lead 15.2 Tail	1.44 Lead 1.81 Tail	3031	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15253' MD, 5606' TVD (BHL); 6545' TVD (Deepest point drilled)

Loggers TD (ft) 15204'

Deepest formation penetrated Marcellus

Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 5829'

\*\* 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 \_\_\_\_\_

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WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

API 47- 017 - 06621 Farm name Williams, Robert Well number McGee Unit 1H

**PERFORATION RECORD**

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

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)
<b>*PLEASE SEE ATTACHED EXHIBIT 2</b>								

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API 47- 017 - 06621 Farm name Williams, Robert Well number McGee Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
Marcellus	6478' (TOP) TVD	6690' (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 9417 mcfpd Oil 39 bpd NGL --- bpd Water 350 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 <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
<b>*PLEASE SEE ATTACHED EXHIBIT 3</b>					

Please insert additional pages as applicable.

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

Logging Company Rush Wellsite Services  
Address 600 Alpha Drive City Canonsburg State PA Zip 15317

Cementing Company Nabors Completion & Production Services, Co.  
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company US Well Services  
Address 533 Industrial Park Drive 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 7/6/2015

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	6-Apr-15	14,990	15,160	60	Marcellus
2	11-Apr-15	14,789	14,959	60	Marcellus
3	12-Apr-15	14,587	14,757	60	Marcellus
4	17-May-15	14,386	14,556	60	Marcellus
5	18-May-15	14,184	14,354	60	Marcellus
6	18-May-15	13,983	14,153	60	Marcellus
7	18-May-15	13,781	13,951	60	Marcellus
8	19-May-15	13,580	13,750	60	Marcellus
9	19-May-15	13,378	13,548	60	Marcellus
10	19-May-15	13,177	13,347	60	Marcellus
11	19-May-15	12,975	13,145	60	Marcellus
12	20-May-15	12,774	12,944	60	Marcellus
13	20-May-15	12,572	12,742	60	Marcellus
14	20-May-15	12,371	12,541	60	Marcellus
15	20-May-15	12,169	12,339	60	Marcellus
16	21-May-15	11,968	12,138	60	Marcellus
17	21-May-15	11,766	11,936	60	Marcellus
18	21-May-15	11,565	11,735	60	Marcellus
19	21-May-15	11,363	11,533	60	Marcellus
20	21-May-15	11,162	11,332	60	Marcellus
21	22-May-15	10,961	11,130	60	Marcellus
22	22-May-15	10,759	10,929	60	Marcellus
23	22-May-15	10,558	10,727	60	Marcellus
24	22-May-15	10,356	10,526	60	Marcellus
25	23-May-15	10,155	10,324	60	Marcellus
26	23-May-15	9,953	10,123	60	Marcellus
27	23-May-15	9,752	9,922	60	Marcellus
28	23-May-15	9,550	9,720	60	Marcellus
29	23-May-15	9,349	9,519	60	Marcellus
30	24-May-15	9,147	9,317	60	Marcellus
31	24-May-15	8,946	9,116	60	Marcellus
32	24-May-15	8,744	8,914	60	Marcellus
33	24-May-15	8,543	8,713	60	Marcellus
34	24-May-15	8,341	8,511	60	Marcellus
35	25-May-15	8,140	8,310	60	Marcellus
36	25-May-15	7,938	8,108	60	Marcellus
37	25-May-15	7,737	7,907	60	Marcellus
38	26-May-15	7,535	7,705	60	Marcellus
39	26-May-15	7,334	7,504	60	Marcellus
40	26-May-15	7,132	7,302	60	Marcellus
41	26-May-15	6,931	7,101	60	Marcellus
42	26-May-15	6,729	6,899	60	Marcellus

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Marcellus

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API 47-017-06621 Farm Name Williams, Robert Well Number McGee Unit 1H

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	11-Apr-15	59.2	7,233	5,733	4,016	141,100	7,205	N/A
2	12-Apr-15	50.0	7,892	6,026	4,048	25,530	7,505	N/A
3	12-Apr-15	61.4	7,472	5,876	5,114	134,750	7,272	N/A
4	17-May-15	57.8	7,533	6,400	4,698	134,400	6,714	N/A
5	18-May-15	62.7	7,354	6,146	4,887	151,730	7,351	N/A
6	18-May-15	49.1	8,246	6,448	4,740	39,000	6,560	N/A
7	19-May-15	62.6	6,999	5,807	4,080	130,700	6,881	N/A
8	19-May-15	60.7	7,087	5,848	4,179	158,070	6,769	N/A
9	19-May-15	61.0	7,276	5,841	4,760	177,750	6,530	N/A
10	19-May-15	60.5	7,004	6,418	5,137	127,380	7,067	N/A
11	19-May-15	62.3	7,125	5,858	4,439	112,140	6,693	N/A
12	20-May-15	63.3	7,116	5,645	3,549	242,270	6,746	N/A
13	20-May-15	60.4	6,955	5,794	4,694	150,550	6,413	N/A
14	20-May-15	59.6	7,239	6,213	4,895	117,900	6,691	N/A
15	20-May-15	62.6	7,636	5,877	5,001	116,800	6,564	N/A
16	21-May-15	66.3	7,001	5,687	5,279	234,860	7,005	N/A
17	21-May-15	65.1	6,887	5,644	4,703	236,450	6,451	N/A
18	21-May-15	65.0	7,117	6,415	4,792	201,100	6,881	N/A
19	21-May-15	67.1	7,045	5,654	5,285	181,500	6,938	N/A
20	22-May-15	67.1	6,947	6,101	4,468	223,560	6,931	N/A
21	22-May-15	64.7	6,997	5,934	4,775	194,400	6,744	N/A
22	22-May-15	63.1	7,420	5,963	4,605	173,050	6,886	N/A
23	22-May-15	62.4	6,673	5,878	5,143	236,170	6,452	N/A
24	22-May-15	64.7	6,846	5,991	5,479	231,420	6,140	N/A
25	23-May-15	65.3	6,929	5,761	5,385	235,310	6,071	N/A
26	23-May-15	64.1	6,796	5,305	5,400	246,730	6,253	N/A
27	23-May-15	64.0	6,663	5,999	5,246	223,470	6,339	N/A
28	23-May-15	66.2	6,891	5,716	5,421	233,175	6,807	N/A
29	24-May-15	65.3	6,703	5,776	5,674	242,055	6,171	N/A
30	24-May-15	64.8	6,615	5,862	5,561	241,290	6,133	N/A
31	24-May-15	63.2	7,059	5,554	5,028	219,560	6,267	N/A
32	24-May-15	63.1	7,099	6,248	5,257	195,670	6,595	N/A
33	24-May-15	65.7	6,681	5,947	5,733	242,975	6,259	N/A
34	24-May-15	66.4	6,699	5,836	4,746	248,115	6,175	N/A
35	25-May-15	63.4	6,762	5,933	5,357	209,380	6,549	N/A
36	25-May-15	63.0	6,786	5,769	5,329	168,970	6,009	N/A
37	25-May-15	61.2	7,300	5,887	4,528	137,370	6,106	N/A
38	26-May-15	62.0	6,704	5,926	5,018	215,730	6,201	N/A
39	26-May-15	62.8	6,721	5,769	4,871	241,680	6,201	N/A
40	26-May-15	63.2	6,593	5,450	4,814	246,090	6,225	N/A
41	26-May-15	66.5	6,436	5,418	5,679	247,520	6,225	N/A
42	27-May-15	67.0	6,296	6,033	5,053	247,840	6,062	N/A
AVG=		62.8	7,020	5,890	4,925	7,915,510	275,941	TOTAL

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## EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Fresh Water	57'	N/A	57'	N/A
Shale/ Sandstone	0	427	0	427
Limestone/ Sandstone	est. 427	507	est. 427	507
Shale/ Siltstone	est. 507	587	est. 507	587
Sandstone/ Trace Coal	est. 587	607	est. 587	607
Sandstone/ Siltstone	est. 607	687	est. 607	687
Sandstone/ Limestone	est. 687	787	est. 687	787
Shale/ Sandstone	est. 787	947	est. 787	947
Siltstone/ Limestone	est. 947	1327	est. 947	1327
Shale/ Trace Coal	est. 1327	1387	est. 1327	1387
Shale/ Sandstone	est. 1387	1427	est. 1387	1427
Shale/ Coal	est. 1427	1487	est. 1427	1487
Sandstone	est. 1487	1527	est. 1487	1527
Sandstone/ Trace Coal	est. 1527	1667	est. 1527	1667
Sandstone/ Siltstone	est. 1667	1907	est. 1667	1907
Sandstone/ Trace Coal	est. 1907	1991	est. 1907	1994
Big Lime	1991	2082	1994	2085
Big Injun	2082	2414	2085	2417
Gantz Sand	2414	2598	2417	2601
Fifty Foot Sandstone	2598	2666	2601	2669
Gordon	2666	2992	2669	2995
Fifth Sandstone	2992	3031	2995	3034
Bayard	3031	3409	3034	3412
Warren	3409	3769	3412	3772
Speechley	3769	4065	3772	4068
Baltown	4065	4526	4068	4529
Bradford	4526	4925	4529	4928
Benson	4925	5183	4928	5186
Alexander	5183	5356	5186	5359
Elk	5356	5774	5359	5777
Rhinestreet	5774	6155	5777	6178
Sycamore	6136	6300	6159	6354
Middlesex	6300	6422	6354	6544
Burkett	6422	6450	6544	6606
Tully	6450	6478	6606	6690
Marcellus	6478	NA	6690	NA

\*Please note Antero determines shallow formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.

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10/23/2015



**McGee Unit 1H**  
**Doddridge County WW**  
 Northing: 14248463.93  
 Easting: 1679267.16  
 As Drilled



Precision 523: GL 990' + KB 1' @ 1009 Durbt  
 Or: 990.0

**WELL DETAILS** McGee Unit 1H

Ground Level:	990.0
Northing:	14248463.93
Easting:	1679267.16
Latitude:	39° 14' 13.233" N
Longitude:	80° 51' 46.041" W

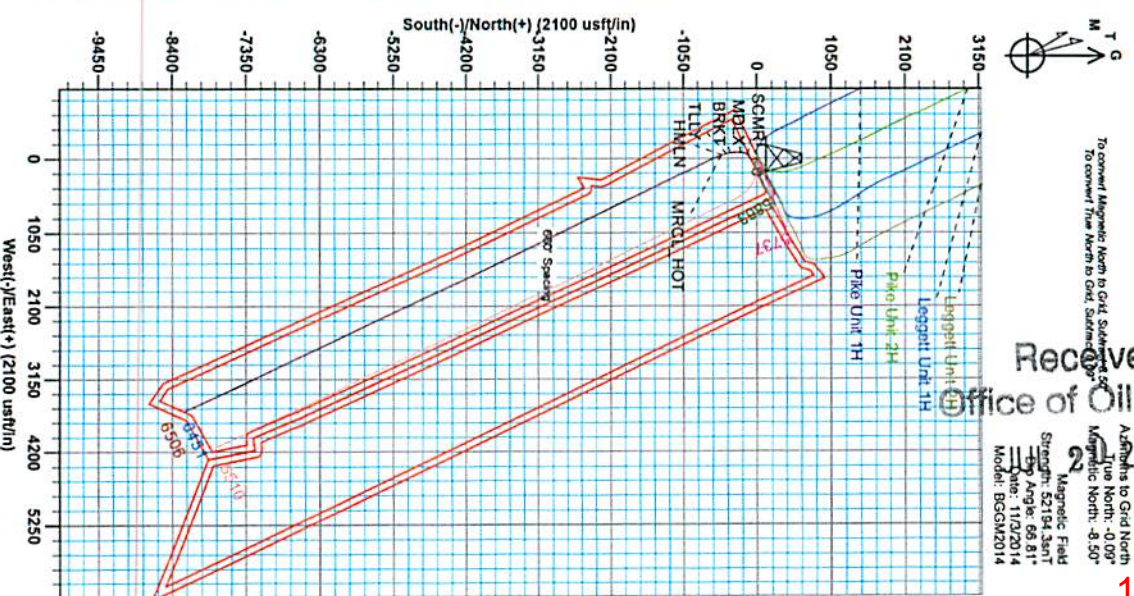
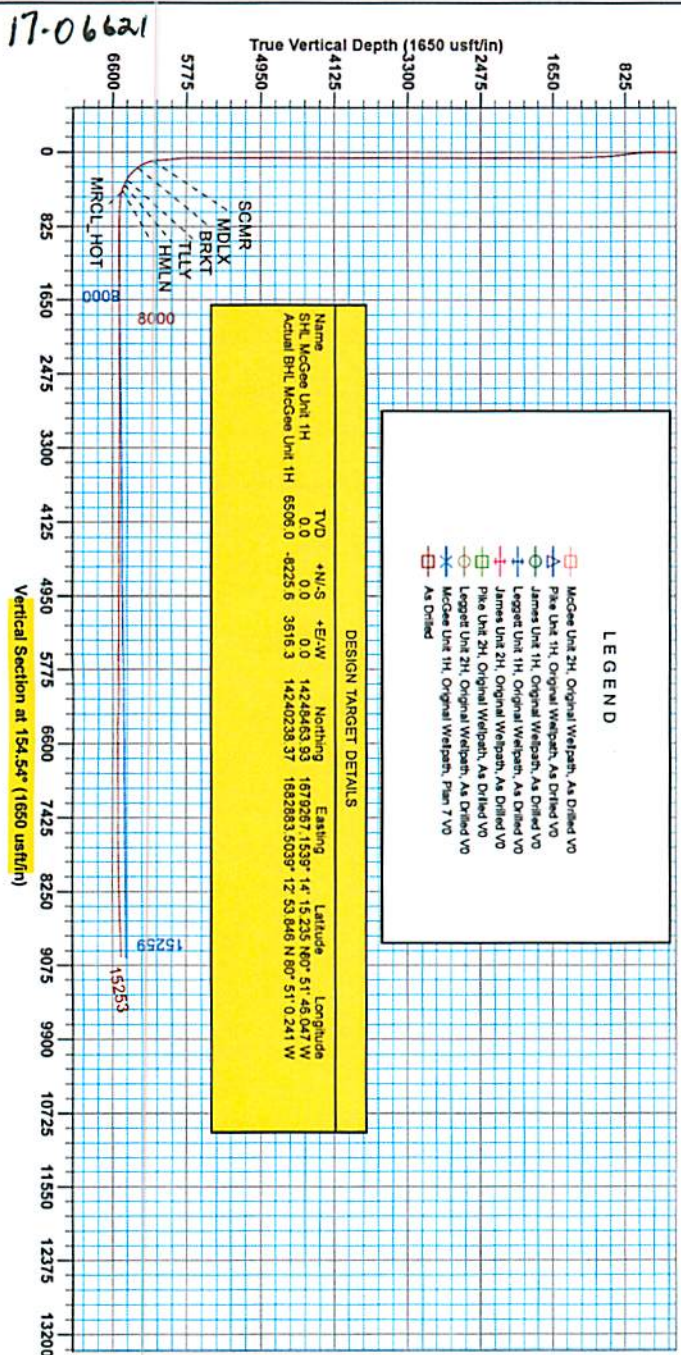
Genie Lightfoot  
 1505, February 11 2015  
 Scientific Drilling  
 11220 N.W. 10th Street  
 Yukon, OK 73099

**PROJECT DETAILS:** Doddridge County WW

Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1987 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Zone 17N (84 W to 78 W)  
 System Datum: Mean Sea Level

**SITE DETAILS:**

Robert Williams Pad: Leggett Pike Pad/James+McGee  
 Site Centre Northing: 14248467.61  
 Easting: 1679248.10  
 Positional Uncertainty: 0.0  
 Convergence: 0.09  
 Local North: Grid



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17-06621



# Antero

Doddridge County WV  
Robert Williams Pad: Leggett/ Pike Pad/James/McGee  
McGee Unit 1H  
Original Wellpath

Design: As Drilled

## EOW Completion Report

11 February, 2015



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<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

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

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

<b>Well</b>	McGee Unit 1H, Marcellus					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,248,463.93 usft	<b>Latitude:</b>	39° 14' 15.235 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,679,267.16 usft	<b>Longitude:</b>	80° 51' 46.047 W
<b>Position Uncertainty</b>		2.0 usft	<b>Wellhead Elevation:</b>	1,009.0 usft	<b>Ground Level:</b>	990.0 usft

<b>Wellbore</b>	Original Wellpath				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2014	11/3/2014	-8.42	66.81	52,194

<b>Design</b>	As Drilled				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>		<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
		0.0	0.0	0.0	154.54

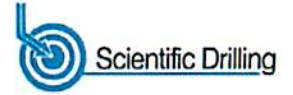
<b>Survey Program</b>	Date 2/11/2015				
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
31.0	5,706.0	Survey #4 Def KOP Gyro (Original Wellpa	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
5,706.0	15,253.0	Survey #5 MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1	

<b>Survey</b>								
<b>MD (usft)</b>	<b>Inc (°)</b>	<b>Azi (azimuth) (°)</b>	<b>TVD (usft)</b>	<b>N/S (usft)</b>	<b>E/W (usft)</b>	<b>V. Sec (usft)</b>	<b>DLeg (°/100usft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	
31.0	0.03	78.25	31.0	0.0	0.0	0.0	0.10	
56.0	0.06	78.25	56.0	0.0	0.0	0.0	0.12	
81.0	0.09	78.25	81.0	0.0	0.1	0.0	0.12	
106.0	0.11	78.25	106.0	0.0	0.1	0.0	0.08	
131.0	0.14	48.57	131.0	0.0	0.1	0.0	0.28	
156.0	0.05	87.44	156.0	0.1	0.2	0.0	0.42	
181.0	0.11	56.35	181.0	0.1	0.2	0.0	0.29	
206.0	0.08	75.94	206.0	0.1	0.2	0.0	0.18	
231.0	0.10	63.78	231.0	0.1	0.3	0.0	0.11	
256.0	0.09	75.39	256.0	0.1	0.3	0.0	0.09	

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EOW Completion Report



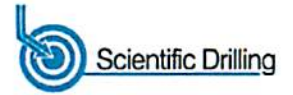
<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)		TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
281.0	0.08	58.75		281.0	0.1	0.4	0.0	0.11	
306.0	0.09	83.89		306.0	0.2	0.4	0.0	0.15	
331.0	0.09	93.21		331.0	0.2	0.4	0.0	0.06	
356.0	0.04	111.05		356.0	0.1	0.5	0.1	0.21	
381.0	0.06	74.15		381.0	0.1	0.5	0.1	0.15	
406.0	0.08	101.23		406.0	0.1	0.5	0.1	0.15	
431.0	0.07	125.41		431.0	0.1	0.5	0.1	0.13	
456.0	0.09	127.64		456.0	0.1	0.6	0.1	0.08	
481.0	0.45	134.11		481.0	0.0	0.7	0.2	1.44	
506.0	0.95	145.22		506.0	-0.2	0.8	0.5	2.06	
531.0	1.68	148.91		531.0	-0.7	1.2	1.1	2.94	
556.0	2.78	151.33		556.0	-1.5	1.6	2.1	4.42	
581.0	3.81	153.54		580.9	-2.8	2.3	3.5	4.15	
606.0	4.45	156.00		605.9	-4.4	3.1	5.3	2.66	
631.0	4.91	157.60		630.8	-6.3	3.9	7.4	1.91	
656.0	5.39	159.30		655.7	-8.4	4.7	9.6	2.01	
681.0	5.80	159.72		680.6	-10.7	5.5	12.0	1.65	
706.0	6.07	160.22		705.4	-13.1	6.4	14.6	1.10	
731.0	6.18	160.24		730.3	-15.6	7.3	17.3	0.44	
756.0	6.21	159.98		755.1	-18.2	8.2	19.9	0.16	
781.0	6.27	160.25		780.0	-20.7	9.2	22.6	0.27	
806.0	6.27	160.03		804.8	-23.3	10.1	25.4	0.10	
831.0	6.33	159.75		829.7	-25.9	11.0	28.1	0.27	
856.0	6.34	160.50		854.5	-28.5	12.0	30.8	0.33	
881.0	6.28	160.41		879.4	-31.0	12.9	33.6	0.24	
906.0	6.18	160.91		904.2	-33.6	13.8	36.3	0.46	
931.0	5.72	161.59		929.1	-36.1	14.6	38.8	1.86	
956.0	5.41	161.95		954.0	-38.4	15.4	41.2	1.25	
981.0	5.18	162.08		978.9	-40.6	16.1	43.5	0.92	
1,006.0	4.97	162.38		1,003.8	-42.7	16.8	45.7	0.85	
1,031.0	4.28	161.64		1,028.7	-44.6	17.4	47.7	2.77	
1,056.0	3.84	161.60		1,053.6	-46.3	17.9	49.5	1.76	
1,081.0	3.60	162.09		1,078.6	-47.8	18.5	51.1	0.97	
1,106.0	3.36	162.22		1,103.5	-49.2	18.9	52.6	0.96	
1,131.0	3.13	161.69		1,128.5	-50.6	19.4	54.0	0.93	
1,156.0	2.82	161.10		1,153.5	-51.8	19.8	55.3	1.25	
1,181.0	2.48	161.19		1,178.4	-52.9	20.1	56.4	1.36	
1,206.0	2.17	162.63		1,203.4	-53.9	20.5	57.4	1.26	
1,231.0	1.92	162.58		1,228.4	-54.7	20.7	58.3	1.00	
1,256.0	1.84	165.84		1,253.4	-55.5	21.0	59.1	0.53	
1,281.0	1.57	164.58		1,278.4	-56.2	21.1	59.9	1.09	
1,306.0	1.40	165.38		1,303.4	-56.9	21.3	60.5	0.69	
1,331.0	1.22	163.23		1,328.4	-57.4	21.5	61.1	0.75	
1,356.0	1.24	164.28		1,353.4	-57.9	21.6	61.6	0.12	



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EOW Completion Report



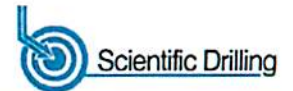
<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
1,381.0	0.93	160.74	1,378.4	-58.4	21.8	62.1	1.27		
1,406.0	0.83	161.62	1,403.3	-58.7	21.9	62.4	0.40		
1,431.0	0.74	161.50	1,428.3	-59.1	22.0	62.8	0.36		
1,456.0	0.75	163.88	1,453.3	-59.4	22.1	63.1	0.13		
1,481.0	0.75	159.20	1,478.3	-59.7	22.2	63.4	0.24		
1,506.0	0.74	162.66	1,503.3	-60.0	22.3	63.7	0.18		
1,531.0	0.61	164.28	1,528.3	-60.3	22.4	64.0	0.53		
1,556.0	0.60	164.29	1,553.3	-60.5	22.4	64.3	0.04		
1,581.0	0.52	161.52	1,578.3	-60.8	22.5	64.5	0.34		
1,606.0	0.51	164.00	1,603.3	-61.0	22.6	64.8	0.10		
1,631.0	0.51	164.99	1,628.3	-61.2	22.6	65.0	0.04		
1,656.0	0.51	164.55	1,653.3	-61.4	22.7	65.2	0.02		
1,681.0	0.48	163.36	1,678.3	-61.6	22.8	65.4	0.13		
1,706.0	0.43	168.70	1,703.3	-61.8	22.8	65.6	0.26		
1,731.0	0.30	187.59	1,728.3	-62.0	22.8	65.8	0.70		
1,756.0	0.17	210.76	1,753.3	-62.1	22.8	65.8	0.63		
1,781.0	0.18	209.35	1,778.3	-62.1	22.8	65.9	0.04		
1,806.0	0.17	223.12	1,803.3	-62.2	22.7	65.9	0.17		
1,831.0	0.22	213.11	1,828.3	-62.3	22.7	65.9	0.24		
1,856.0	0.22	214.60	1,853.3	-62.3	22.6	66.0	0.02		
1,881.0	0.19	210.87	1,878.3	-62.4	22.6	66.0	0.13		
1,906.0	0.24	209.98	1,903.3	-62.5	22.5	66.1	0.20		
1,931.0	0.19	203.04	1,928.3	-62.6	22.5	66.2	0.23		
1,956.0	0.21	208.83	1,953.3	-62.7	22.4	66.2	0.11		
1,981.0	0.16	219.42	1,978.3	-62.7	22.4	66.3	0.24		
2,006.0	0.22	216.99	2,003.3	-62.8	22.3	66.3	0.24		
2,031.0	0.21	213.43	2,028.3	-62.9	22.3	66.3	0.07		
2,056.0	0.24	211.52	2,053.3	-62.9	22.2	66.4	0.12		
2,081.0	0.20	213.98	2,078.3	-63.0	22.2	66.4	0.16		
2,106.0	0.21	221.86	2,103.3	-63.1	22.1	66.5	0.12		
2,131.0	0.23	210.79	2,128.3	-63.2	22.1	66.5	0.19		
2,156.0	0.20	216.23	2,153.3	-63.3	22.0	66.6	0.15		
2,181.0	0.19	207.19	2,178.3	-63.3	22.0	66.6	0.13		
2,206.0	0.19	214.22	2,203.3	-63.4	21.9	66.7	0.09		
2,231.0	0.14	233.21	2,228.3	-63.4	21.9	66.7	0.29		
2,256.0	0.14	221.18	2,253.3	-63.5	21.8	66.7	0.12		
2,281.0	0.14	227.31	2,278.3	-63.5	21.8	66.7	0.06		
2,306.0	0.14	236.37	2,303.3	-63.6	21.7	66.7	0.09		
2,331.0	0.17	221.58	2,328.3	-63.6	21.7	66.8	0.20		
2,356.0	0.17	231.36	2,353.3	-63.7	21.6	66.8	0.12		
2,381.0	0.14	265.33	2,378.3	-63.7	21.6	66.8	0.38		
2,406.0	0.16	262.75	2,403.3	-63.7	21.5	66.8	0.08		
2,431.0	0.20	273.64	2,428.3	-63.7	21.4	66.7	0.21		
2,456.0	0.18	267.29	2,453.3	-63.7	21.4	66.7	0.12		
2,481.0	0.20	259.27	2,478.3	-63.7	21.3	66.7	0.13		

17.06621



## EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

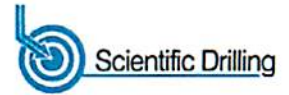
## Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
2,506.0	0.23	246.98	2,503.3	-63.7	21.2	66.7	0.22
2,531.0	0.24	240.47	2,528.3	-63.8	21.1	66.7	0.11
2,556.0	0.23	252.04	2,553.3	-63.8	21.0	66.7	0.19
2,581.0	0.17	247.54	2,578.3	-63.9	20.9	66.6	0.25
2,606.0	0.17	242.02	2,603.3	-63.9	20.8	66.6	0.07
2,631.0	0.22	247.93	2,628.3	-63.9	20.8	66.6	0.22
2,656.0	0.28	249.57	2,653.3	-64.0	20.7	66.6	0.24
2,681.0	0.21	245.86	2,678.3	-64.0	20.6	66.6	0.29
2,706.0	0.26	240.53	2,703.3	-64.0	20.5	66.6	0.22
2,731.0	0.29	241.79	2,728.3	-64.1	20.4	66.6	0.12
2,756.0	0.22	265.26	2,753.3	-64.1	20.3	66.6	0.50
2,781.0	0.22	247.81	2,778.3	-64.2	20.2	66.6	0.27
2,806.0	0.28	244.05	2,803.3	-64.2	20.1	66.6	0.25
2,831.0	0.27	241.06	2,828.3	-64.3	20.0	66.6	0.07
2,856.0	0.27	249.00	2,853.3	-64.3	19.9	66.6	0.15
2,881.0	0.26	242.71	2,878.3	-64.4	19.8	66.6	0.12
2,906.0	0.29	232.23	2,903.3	-64.4	19.7	66.6	0.23
2,931.0	0.21	237.00	2,928.3	-64.5	19.6	66.6	0.33
2,956.0	0.22	225.58	2,953.3	-64.5	19.5	66.7	0.18
2,981.0	0.24	234.12	2,978.3	-64.6	19.4	66.7	0.16
3,006.0	0.20	244.52	3,003.3	-64.7	19.3	66.7	0.23
3,031.0	0.24	235.97	3,028.3	-64.7	19.3	66.7	0.21
3,056.0	0.23	236.89	3,053.3	-64.8	19.2	66.7	0.04
3,081.0	0.20	241.32	3,078.3	-64.8	19.1	66.7	0.14
3,106.0	0.20	246.35	3,103.3	-64.8	19.0	66.7	0.07
3,131.0	0.25	233.96	3,128.3	-64.9	18.9	66.7	0.28
3,156.0	0.24	244.80	3,153.3	-65.0	18.8	66.7	0.19
3,181.0	0.33	241.45	3,178.3	-65.0	18.7	66.7	0.37
3,206.0	0.33	245.84	3,203.3	-65.1	18.6	66.7	0.10
3,231.0	0.36	236.12	3,228.3	-65.1	18.5	66.8	0.26
3,256.0	0.34	243.71	3,253.3	-65.2	18.3	66.8	0.20
3,281.0	0.37	239.54	3,278.3	-65.3	18.2	66.8	0.16
3,306.0	0.31	228.82	3,303.3	-65.4	18.1	66.8	0.35
3,331.0	0.36	233.74	3,328.3	-65.5	18.0	66.8	0.23
3,356.0	0.35	228.00	3,353.3	-65.6	17.8	66.9	0.15
3,381.0	0.33	228.94	3,378.3	-65.7	17.7	66.9	0.08
3,406.0	0.30	233.68	3,403.3	-65.8	17.6	66.9	0.16
3,431.0	0.30	239.25	3,428.3	-65.8	17.5	67.0	0.12
3,456.0	0.32	233.95	3,453.3	-65.9	17.4	67.0	0.14
3,481.0	0.34	220.29	3,478.3	-66.0	17.3	67.0	0.32
3,506.0	0.31	231.13	3,503.3	-66.1	17.2	67.1	0.27
3,531.0	0.35	228.89	3,528.3	-66.2	17.1	67.1	0.17
3,556.0	0.27	243.00	3,553.3	-66.3	17.0	67.1	0.44
3,581.0	0.28	229.44	3,578.3	-66.3	16.9	67.1	0.26

17-06621



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
3,606.0	0.32	235.20	3,603.3	-66.4	16.8	67.2	0.20		
3,631.0	0.29	235.58	3,628.3	-66.5	16.7	67.2	0.12		
3,656.0	0.25	237.21	3,653.3	-66.6	16.6	67.2	0.16		
3,681.0	0.27	249.31	3,678.3	-66.6	16.5	67.2	0.23		
3,706.0	0.29	235.66	3,703.3	-66.7	16.4	67.2	0.28		
3,731.0	0.25	248.86	3,728.3	-66.7	16.3	67.2	0.29		
3,756.0	0.23	251.37	3,753.3	-66.8	16.2	67.2	0.09		
3,781.0	0.20	247.57	3,778.3	-66.8	16.1	67.2	0.13		
3,806.0	0.19	264.40	3,803.3	-66.8	16.0	67.2	0.23		
3,831.0	0.15	247.98	3,828.3	-66.8	15.9	67.2	0.25		
3,856.0	0.29	239.47	3,853.3	-66.9	15.8	67.2	0.57		
3,881.0	0.23	237.07	3,878.3	-66.9	15.7	67.2	0.24		
3,906.0	0.18	216.13	3,903.3	-67.0	15.7	67.2	0.36		
3,931.0	0.15	228.07	3,928.3	-67.0	15.6	67.2	0.18		
3,956.0	0.15	228.49	3,953.3	-67.1	15.6	67.3	0.00		
3,981.0	0.16	234.94	3,978.3	-67.1	15.5	67.3	0.08		
4,006.0	0.13	293.39	4,003.3	-67.1	15.5	67.3	0.58		
4,031.0	0.10	330.84	4,028.3	-67.1	15.4	67.2	0.32		
4,056.0	0.13	335.22	4,053.3	-67.1	15.4	67.2	0.12		
4,081.0	0.21	1.82	4,078.3	-67.0	15.4	67.1	0.44		
4,106.0	0.24	12.50	4,103.3	-66.9	15.4	67.0	0.21		
4,131.0	0.24	15.23	4,128.3	-66.8	15.4	66.9	0.05		
4,156.0	0.28	40.26	4,153.3	-66.7	15.5	66.9	0.48		
4,181.0	0.44	22.13	4,178.3	-66.6	15.6	66.8	0.78		
4,206.0	0.39	23.86	4,203.3	-66.4	15.6	66.7	0.21		
4,231.0	0.43	34.94	4,228.3	-66.2	15.7	66.6	0.35		
4,256.0	0.47	24.73	4,253.3	-66.1	15.8	66.4	0.36		
4,281.0	0.65	24.37	4,278.3	-65.8	15.9	66.3	0.72		
4,306.0	0.50	27.79	4,303.3	-65.6	16.0	66.1	0.62		
4,331.0	0.49	23.20	4,328.3	-65.4	16.1	66.0	0.16		
4,356.0	0.58	28.32	4,353.3	-65.2	16.2	65.9	0.41		
4,381.0	0.63	30.93	4,378.3	-65.0	16.4	65.7	0.23		
4,406.0	0.60	37.96	4,403.3	-64.8	16.5	65.6	0.32		
4,431.0	0.57	41.17	4,428.3	-64.6	16.7	65.5	0.18		
4,456.0	0.61	44.69	4,453.3	-64.4	16.8	65.4	0.22		
4,481.0	0.59	44.17	4,478.3	-64.2	17.0	65.3	0.08		
4,506.0	0.56	48.58	4,503.3	-64.0	17.2	65.2	0.21		
4,531.0	0.59	43.42	4,528.3	-63.8	17.4	65.1	0.24		
4,556.0	0.52	50.63	4,553.3	-63.7	17.6	65.0	0.40		
4,581.0	0.53	52.88	4,578.3	-63.5	17.7	65.0	0.09		
4,606.0	0.47	58.45	4,603.3	-63.4	17.9	65.0	0.31		
4,631.0	0.48	53.88	4,628.3	-63.3	18.1	64.9	0.16		
4,656.0	0.43	57.72	4,653.3	-63.2	18.3	64.9	0.23		
4,681.0	0.45	58.95	4,678.3	-63.1	18.4	64.9	0.09		

17-06621



## EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

## Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
4,706.0	0.41	69.04	4,703.3	-63.0	18.6	64.9	0.34
4,731.0	0.43	60.22	4,728.3	-62.9	18.8	64.9	0.27
4,756.0	0.40	54.14	4,753.3	-62.8	18.9	64.9	0.21
4,781.0	0.38	52.93	4,778.3	-62.7	19.0	64.8	0.09
4,806.0	0.31	54.07	4,803.3	-62.6	19.2	64.8	0.28
4,831.0	0.35	35.82	4,828.3	-62.5	19.3	64.7	0.45
4,856.0	0.27	40.91	4,853.3	-62.4	19.4	64.7	0.34
4,881.0	0.37	33.41	4,878.3	-62.3	19.4	64.6	0.43
4,906.0	0.25	49.35	4,903.3	-62.2	19.5	64.6	0.59
4,931.0	0.27	58.32	4,928.3	-62.1	19.6	64.5	0.18
4,956.0	0.28	41.17	4,953.3	-62.1	19.7	64.5	0.33
4,981.0	0.34	33.61	4,978.3	-62.0	19.8	64.4	0.29
5,006.0	0.24	43.45	5,003.3	-61.9	19.9	64.4	0.45
5,031.0	0.28	37.12	5,028.3	-61.8	19.9	64.3	0.20
5,056.0	0.23	54.68	5,053.3	-61.7	20.0	64.3	0.37
5,081.0	0.20	48.82	5,078.3	-61.6	20.1	64.3	0.15
5,106.0	0.20	85.86	5,103.3	-61.6	20.2	64.3	0.51
5,131.0	0.18	79.89	5,128.3	-61.6	20.2	64.3	0.11
5,156.0	0.17	74.96	5,153.3	-61.6	20.3	64.3	0.07
5,181.0	0.22	107.61	5,178.3	-61.6	20.4	64.4	0.48
5,206.0	0.17	107.97	5,203.3	-61.6	20.5	64.4	0.20
5,231.0	0.19	85.31	5,228.3	-61.6	20.6	64.5	0.29
5,256.0	0.13	107.44	5,253.3	-61.6	20.6	64.5	0.34
5,281.0	0.17	136.55	5,278.3	-61.7	20.7	64.6	0.34
5,306.0	0.26	118.33	5,303.3	-61.7	20.8	64.6	0.45
5,331.0	0.31	148.22	5,328.3	-61.8	20.8	64.8	0.62
5,356.0	0.20	130.40	5,353.3	-61.9	20.9	64.9	0.54
5,381.0	0.34	171.15	5,378.3	-62.0	21.0	65.0	0.92
5,406.0	0.35	151.75	5,403.3	-62.1	21.0	65.1	0.47
5,431.0	0.25	137.96	5,428.3	-62.2	21.1	65.2	0.49
5,456.0	0.35	149.39	5,453.3	-62.3	21.1	65.4	0.46
5,481.0	0.28	127.57	5,478.3	-62.4	21.2	65.5	0.55
5,506.0	0.33	133.30	5,503.3	-62.5	21.3	65.6	0.23
5,531.0	0.31	149.51	5,528.3	-62.6	21.4	65.8	0.37
5,556.0	0.44	161.45	5,553.3	-62.8	21.5	65.9	0.60
5,581.0	0.45	169.64	5,578.3	-63.0	21.5	66.1	0.26
5,606.0	0.51	140.93	5,603.3	-63.2	21.6	66.3	0.98
5,631.0	0.60	138.68	5,628.3	-63.3	21.8	66.6	0.37
5,656.0	0.61	170.85	5,653.3	-63.6	21.9	66.8	1.34
5,681.0	0.58	148.56	5,678.3	-63.8	22.0	67.1	0.93
5,706.0	0.53	155.74	5,703.3	-64.0	22.1	67.3	0.34
5,739.0	0.44	150.98	5,736.3	-64.3	22.2	67.6	0.30
5,769.0	0.43	163.20	5,766.3	-64.5	22.3	67.8	0.31
5,799.0	0.77	154.37	5,796.3	-64.8	22.4	68.1	1.17

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## EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

## Survey

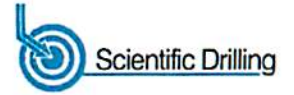
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
5,829.0	3.57	157.27	5,826.2	-65.8	22.9	69.3	9.34
5,858.0	6.76	166.53	5,855.1	-68.3	23.6	71.8	11.33
5,888.0	8.90	194.39	5,884.8	-72.3	23.4	75.3	14.32
5,918.0	11.93	206.94	5,914.4	-77.3	21.5	79.0	12.56
5,948.0	14.51	215.77	5,943.6	-83.1	17.9	82.7	10.90
5,978.0	17.15	224.48	5,972.4	-89.3	12.6	86.0	11.82
6,008.0	20.16	231.37	6,000.8	-95.7	5.4	88.7	12.42
6,037.0	23.31	236.78	6,027.8	-102.0	-3.3	90.6	12.86
6,067.0	25.25	242.43	6,055.1	-108.2	-13.9	91.7	10.08
6,097.0	25.31	240.47	6,082.3	-114.3	-25.2	92.4	2.80
6,127.0	25.23	231.17	6,109.4	-121.5	-35.7	94.3	13.22
6,157.0	26.28	222.54	6,136.4	-130.4	-45.2	98.3	12.97
6,178.0	27.32	218.16	6,155.2	-137.6	-51.3	102.2	10.61
<b>SCMR</b>							
6,187.0	27.80	216.38	6,163.2	-140.9	-53.9	104.1	10.61
6,217.0	29.02	211.17	6,189.5	-152.8	-61.8	111.4	9.21
6,247.0	30.51	204.10	6,215.6	-165.9	-68.6	120.3	12.70
6,277.0	32.04	196.99	6,241.2	-180.5	-74.1	131.1	13.31
6,306.0	33.60	191.93	6,265.6	-195.7	-78.0	143.2	10.88
6,336.0	35.79	187.26	6,290.3	-212.6	-80.8	157.2	11.48
6,366.0	38.80	183.89	6,314.2	-230.6	-82.6	172.7	12.12
6,373.0	39.49	183.33	6,319.6	-235.1	-82.8	176.6	11.08
<b>MDLX</b>							
6,396.0	41.77	181.58	6,337.0	-250.0	-83.5	189.8	11.08
6,426.0	44.70	179.97	6,358.9	-270.6	-83.7	208.3	10.43
6,456.0	47.94	179.20	6,379.6	-292.2	-83.6	227.9	10.96
6,485.0	51.66	178.14	6,398.3	-314.4	-83.1	248.1	13.13
6,515.0	55.64	175.40	6,416.1	-338.5	-81.7	270.5	15.17
6,545.0	59.32	171.82	6,432.2	-363.6	-78.9	294.4	15.86
6,563.0	60.87	170.51	6,441.2	-379.0	-76.5	309.4	10.67
<b>BRKT</b>							
6,575.0	61.91	169.66	6,447.0	-389.4	-74.7	319.5	10.67
6,605.0	63.96	167.42	6,460.6	-415.6	-69.3	345.4	9.53
6,625.0	66.25	165.59	6,469.0	-433.2	-65.1	363.2	14.13
<b>TLLY</b>							
6,635.0	67.40	164.70	6,473.0	-442.1	-62.7	372.2	14.13
6,665.0	70.30	162.75	6,483.8	-469.0	-54.9	399.8	11.41
6,689.0	72.33	161.64	6,491.5	-490.6	-47.9	422.4	9.52
<b>HMLN</b>							
6,695.0	72.84	161.37	6,493.3	-496.1	-46.1	428.0	9.52
6,709.0	74.34	160.94	6,497.2	-508.8	-41.8	441.4	11.10
<b>MRCL_HOT</b>							
6,725.0	76.05	160.45	6,501.3	-523.4	-36.7	456.8	11.10
6,762.0	81.52	159.44	6,508.5	-557.4	-24.2	492.9	15.02
6,792.0	83.54	159.06	6,512.4	-585.3	-13.7	522.5	6.85



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EOW Completion Report



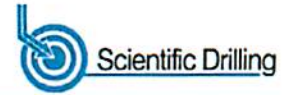
<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)		TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
6,822.0	85.30	158.13		6,515.3	-613.0	-2.8	552.3	6.63
6,852.0	87.81	155.80		6,517.1	-640.6	8.9	582.2	11.41
6,881.0	89.20	153.93		6,517.9	-666.8	21.2	611.2	8.03
6,971.0	88.59	153.38		6,519.6	-747.5	61.2	701.2	0.91
7,061.0	89.80	153.12		6,520.9	-827.8	101.7	791.1	1.38
7,150.0	90.47	154.78		6,520.7	-907.8	140.7	880.1	2.01
7,240.0	89.93	155.60		6,520.4	-989.5	178.5	970.1	1.09
7,329.0	89.80	155.58		6,520.6	-1,070.5	215.3	1,059.1	0.15
7,419.0	89.06	154.53		6,521.5	-1,152.1	253.2	1,149.1	1.43
7,509.0	89.40	155.11		6,522.7	-1,233.6	291.5	1,239.1	0.75
7,598.0	91.17	152.95		6,522.2	-1,313.6	330.5	1,328.1	3.14
7,688.0	90.30	153.91		6,521.1	-1,394.1	370.8	1,418.1	1.44
7,777.0	90.00	155.10		6,520.8	-1,474.4	409.1	1,507.1	1.38
7,867.0	90.54	153.70		6,520.4	-1,555.6	447.9	1,597.1	1.67
7,957.0	88.99	154.62		6,520.8	-1,636.6	487.2	1,687.0	2.00
8,046.0	90.07	155.65		6,521.5	-1,717.3	524.6	1,776.0	1.68
8,136.0	90.37	155.63		6,521.2	-1,799.3	561.7	1,866.0	0.33
8,225.0	90.24	154.87		6,520.7	-1,880.1	599.0	1,955.0	0.87
8,315.0	89.97	152.64		6,520.5	-1,960.8	638.8	2,045.0	2.50
8,404.0	90.10	155.24		6,520.5	-2,040.8	677.9	2,134.0	2.92
8,494.0	89.93	154.99		6,520.5	-2,122.4	715.7	2,224.0	0.34
8,583.0	88.86	154.63		6,521.4	-2,202.9	753.6	2,313.0	1.27
8,673.0	89.76	155.58		6,522.5	-2,284.6	791.5	2,403.0	1.45
8,762.0	90.60	154.73		6,522.2	-2,365.3	828.9	2,491.9	1.34
8,852.0	90.30	156.20		6,521.5	-2,447.2	866.3	2,581.9	1.67
8,941.0	90.81	154.01		6,520.6	-2,527.9	903.7	2,670.9	2.53
9,031.0	89.73	153.80		6,520.2	-2,608.7	943.3	2,760.9	1.22
9,120.0	88.96	154.66		6,521.2	-2,688.9	982.0	2,849.9	1.30
9,210.0	89.70	154.92		6,522.3	-2,770.3	1,020.3	2,939.9	0.87
9,299.0	90.30	155.83		6,522.3	-2,851.2	1,057.4	3,028.9	1.22
9,389.0	89.60	154.45		6,522.4	-2,932.9	1,095.3	3,118.9	1.72
9,479.0	89.90	153.80		6,522.7	-3,013.8	1,134.5	3,208.9	0.80
9,572.0	89.53	155.30		6,523.2	-3,097.8	1,174.5	3,301.9	1.66
9,666.0	88.62	154.58		6,524.7	-3,183.0	1,214.3	3,395.9	1.23
9,760.0	88.42	154.98		6,527.2	-3,268.0	1,254.3	3,489.8	0.48
9,854.0	88.96	155.54		6,529.3	-3,353.3	1,293.7	3,583.8	0.83
9,948.0	90.40	154.24		6,529.8	-3,438.4	1,333.6	3,677.8	2.06
10,042.0	90.67	154.30		6,529.0	-3,523.1	1,374.4	3,771.8	0.29
10,136.0	90.91	153.23		6,527.7	-3,607.4	1,415.9	3,865.8	1.17
10,230.0	89.43	154.50		6,527.4	-3,691.8	1,457.3	3,959.7	2.07
10,323.0	89.13	155.47		6,528.5	-3,776.1	1,496.6	4,052.7	1.09
10,417.0	90.40	153.59		6,528.9	-3,860.9	1,537.1	4,146.7	2.41
10,511.0	89.87	153.65		6,528.7	-3,945.1	1,578.8	4,240.7	0.57
10,605.0	88.49	155.42		6,530.1	-4,030.0	1,619.2	4,334.7	2.39

17.06621



EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey							
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)
10,695.0	90.57	154.45	6,530.8	-4,111.5	1,657.4	4,424.7	2.55
10,784.0	90.94	155.65	6,529.6	-4,192.2	1,694.9	4,513.7	1.41
10,874.0	90.74	153.04	6,528.3	-4,273.3	1,733.9	4,603.7	2.91
10,963.0	90.20	153.55	6,527.6	-4,352.8	1,773.8	4,692.6	0.83
11,053.0	90.67	154.66	6,526.9	-4,433.8	1,813.2	4,782.6	1.34
11,142.0	89.93	155.00	6,526.4	-4,514.3	1,851.0	4,871.6	0.92
11,232.0	89.76	155.61	6,526.7	-4,596.1	1,888.6	4,961.6	0.70
11,322.0	90.17	154.80	6,526.7	-4,677.8	1,926.3	5,051.6	1.01
11,411.0	90.13	154.97	6,526.5	-4,758.4	1,964.1	5,140.6	0.20
11,501.0	90.03	153.71	6,526.4	-4,839.5	2,003.1	5,230.6	1.40
11,590.0	90.03	154.44	6,526.3	-4,919.5	2,042.0	5,319.6	0.82
11,679.0	88.52	153.79	6,527.4	-4,999.6	2,080.9	5,408.6	1.85
11,769.0	88.32	153.12	6,529.9	-5,080.1	2,121.1	5,498.5	0.78
11,858.0	88.62	155.81	6,532.3	-5,160.3	2,159.4	5,587.5	3.04
11,948.0	88.66	155.41	6,534.4	-5,242.3	2,196.6	5,677.5	0.45
12,038.0	88.73	154.94	6,536.5	-5,324.0	2,234.3	5,767.4	0.53
12,127.0	89.46	155.08	6,537.9	-5,404.6	2,271.9	5,856.4	0.84
12,216.0	90.54	155.67	6,537.9	-5,485.5	2,309.0	5,945.4	1.38
12,306.0	89.70	154.35	6,537.7	-5,567.1	2,347.0	6,035.4	1.74
12,396.0	90.07	153.41	6,537.9	-5,647.9	2,386.7	6,125.4	1.12
12,485.0	89.16	153.90	6,538.5	-5,727.6	2,426.1	6,214.4	1.16
12,575.0	87.68	154.02	6,541.0	-5,808.5	2,465.6	6,304.3	1.65
12,664.0	89.16	153.39	6,543.4	-5,888.2	2,505.1	6,393.3	1.81
12,754.0	89.87	154.32	6,544.2	-5,969.0	2,544.7	6,483.3	1.30
12,844.0	90.20	154.84	6,544.1	-6,050.3	2,583.3	6,573.3	0.68
12,933.0	90.20	154.29	6,543.8	-6,130.7	2,621.6	6,662.3	0.62
13,023.0	89.56	155.26	6,544.0	-6,212.1	2,659.9	6,752.3	1.29
13,112.0	89.70	154.54	6,544.6	-6,292.7	2,697.7	6,841.3	0.82
13,202.0	90.84	154.19	6,544.2	-6,373.8	2,736.6	6,931.3	1.33
13,291.0	90.84	155.73	6,542.8	-6,454.5	2,774.3	7,020.2	1.73
13,380.0	91.04	154.95	6,541.4	-6,535.3	2,811.4	7,109.2	0.90
13,470.0	91.01	155.35	6,539.8	-6,617.0	2,849.2	7,199.2	0.45
13,560.0	90.13	155.12	6,538.9	-6,698.7	2,886.9	7,289.2	1.01
13,649.0	89.90	155.50	6,538.9	-6,779.6	2,924.1	7,378.2	0.50
13,739.0	90.20	153.82	6,538.8	-6,860.9	2,962.6	7,468.2	1.90
13,828.0	90.48	152.68	6,538.3	-6,940.4	3,002.7	7,557.2	1.32
13,917.0	91.18	152.89	6,537.0	-7,019.5	3,043.4	7,646.1	0.82
14,007.0	91.44	155.10	6,534.9	-7,100.4	3,082.8	7,736.1	2.47
14,096.0	90.50	154.62	6,533.4	-7,180.9	3,120.6	7,825.1	1.19
14,186.0	89.16	151.92	6,533.7	-7,261.3	3,161.1	7,915.0	3.35
14,275.0	91.11	152.43	6,533.5	-7,340.0	3,202.6	8,003.9	2.26
14,365.0	91.28	154.89	6,531.6	-7,420.6	3,242.6	8,093.9	2.74
14,454.0	91.51	155.31	6,529.4	-7,501.3	3,280.0	8,182.9	0.54
14,544.0	91.11	154.80	6,527.4	-7,582.9	3,318.0	8,272.8	0.72
14,633.0	91.88	157.19	6,525.0	-7,664.2	3,354.2	8,361.8	2.82

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well McGee Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Site:</b>	Robert Williams Pad: Leggett/ Pike Pad/James/M	<b>MD Reference:</b>	Precision 523: GL 990' + KB 19' @ 1009.0usft
<b>Well:</b>	McGee Unit 1H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	EW (usft)	V. Sec (usft)	DLeg (°/100usft)	
14,723.0	91.28	156.03	6,522.5	-7,746.8	3,389.9	8,451.7	1.45	
14,813.0	91.68	155.35	6,520.2	-7,828.8	3,426.9	8,541.6	0.88	
14,902.0	91.48	153.78	6,517.8	-7,909.1	3,465.1	8,630.6	1.78	
14,992.0	93.67	154.74	6,513.7	-7,990.1	3,504.2	8,720.5	2.66	
15,082.0	92.22	155.16	6,509.1	-8,071.5	3,542.2	8,810.4	1.68	
15,171.0	90.24	154.39	6,507.2	-8,152.0	3,580.1	8,899.3	2.39	
15,196.0	90.74	153.60	6,507.0	-8,174.5	3,591.1	8,924.3	3.74	
15,253.0	91.18	153.80	6,506.0	-8,225.6	3,616.3	8,981.3	0.85	

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,178.0	6,155.2	-137.6	-51.3	SCMR
6,373.0	6,319.6	-235.1	-82.8	MDLX
6,563.0	6,441.2	-379.0	-76.5	BRKT
6,625.0	6,469.0	-433.2	-65.1	TLLY
6,689.0	6,491.5	-490.6	-47.9	HMLN
6,709.0	6,497.2	-508.8	-41.8	MRCL_HOT

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/11/2015
Job End Date:	5/27/2015
State:	West Virginia
County:	Doddridge
API Number:	47-017-06621-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	McGee Unit 1H
Longitude:	-80.86262200
Latitude:	39.23764700
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,545
Total Base Water Volume (gal):	12,139,402
Total Base Non Water Volume:	441,887



## 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	92.21180	
Sand	U.S. Well Services, LLC	Proppant					
			Crystalline Silica, quartz	14808-60-7	100.00000	7.20945	
LGC-15	U.S. Well Services	Gelling Agents					
			Guar Gum	9000-30-0	50.00000	0.11262	
			Petroleum Distillates	64742-47-8	60.00000	0.10666	
			Suspending agent (solid)	14808-60-7	3.00000	0.01722	
			Surfactant	68439-51-0	3.00000	0.00676	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid					
			Water	7732-18-5	87.50000	0.16269	
			Hydrogen Chloride	7647-01-0	18.00000	0.03886	
WFRA-405	U.S. Well Services	Friction Reducer					
			Anionic Polyacrylamide	Proprietary	40.00000	0.03292	
			Water	7732-18-5	40.00000	0.03292	
			Sodium Chloride	7647-14-5	20.00000	0.01646	
			Petroleum Distillates	64742-47-8	20.00000	0.01325	
			Ethoxylated alcohol blend	Proprietary	5.00000	0.00412	

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SI-1100	U.S. Well Services	Scale Inhibitor				
			Di Water	7732-18-5	80.00000	0.01043
			Ethylene Glycol	107-21-1	40.00000	0.00590
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	10.00000	0.00176
			2-Phosphonobutane 1,2,4 tricarboxylic salt	37971-36-1	10.00000	0.00168
			hexamethylenediamine tetra (methylene phosphonic acid)	38820-59-6	10.00000	0.00163
			Copolymer of Maleic and Acrylic acid	26677-99-6	10.00000	0.00154
			bis (hexamethylene) tramine penta (methylene phosphonic acid) - phosphate acid	40623-75-4	10.00000	0.00150
			Acrylic polymer	52255-49-9	5.00000	0.00065
K-BAC 1020	U.S. Well Services	Anti-Bacterial Agent				
			2,2-dibromo-3-nitriopropionamide	10222-01-2	20.00000	0.00420
			Deionized Water	7732-18-5	28.00000	0.00240
AP One	U.S. Well Services	Gel Breakers				
			Ammonium Persulfate	7727-54-0	100.00000	0.00227
AI-301	U.S. Well Services	Acid Corrosion Inhibitors				
			Diethylene Glycol	111-46-6	30.00000	0.00012
			Methenamine	100-97-0	20.00000	0.00010
			Hydrogen Chloride	7647-01-0	10.00000	0.00004
			Polyethylene polyamine	68603-67-8	10.00000	0.00004
			Coco amine	61791-14-8	5.00000	0.00002

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)

17-06621

WELL OPERATOR: ANTERO RESOURCES CORP., 1615 WYNKOOP STREET, DENVER, CO 80202  
 DESIGNATED AGENT: DIANNA STAMPER, CT CORPORATION SYSTEM, 5400 D BIG TYLER ROAD, CHARLESTON, WV 25313

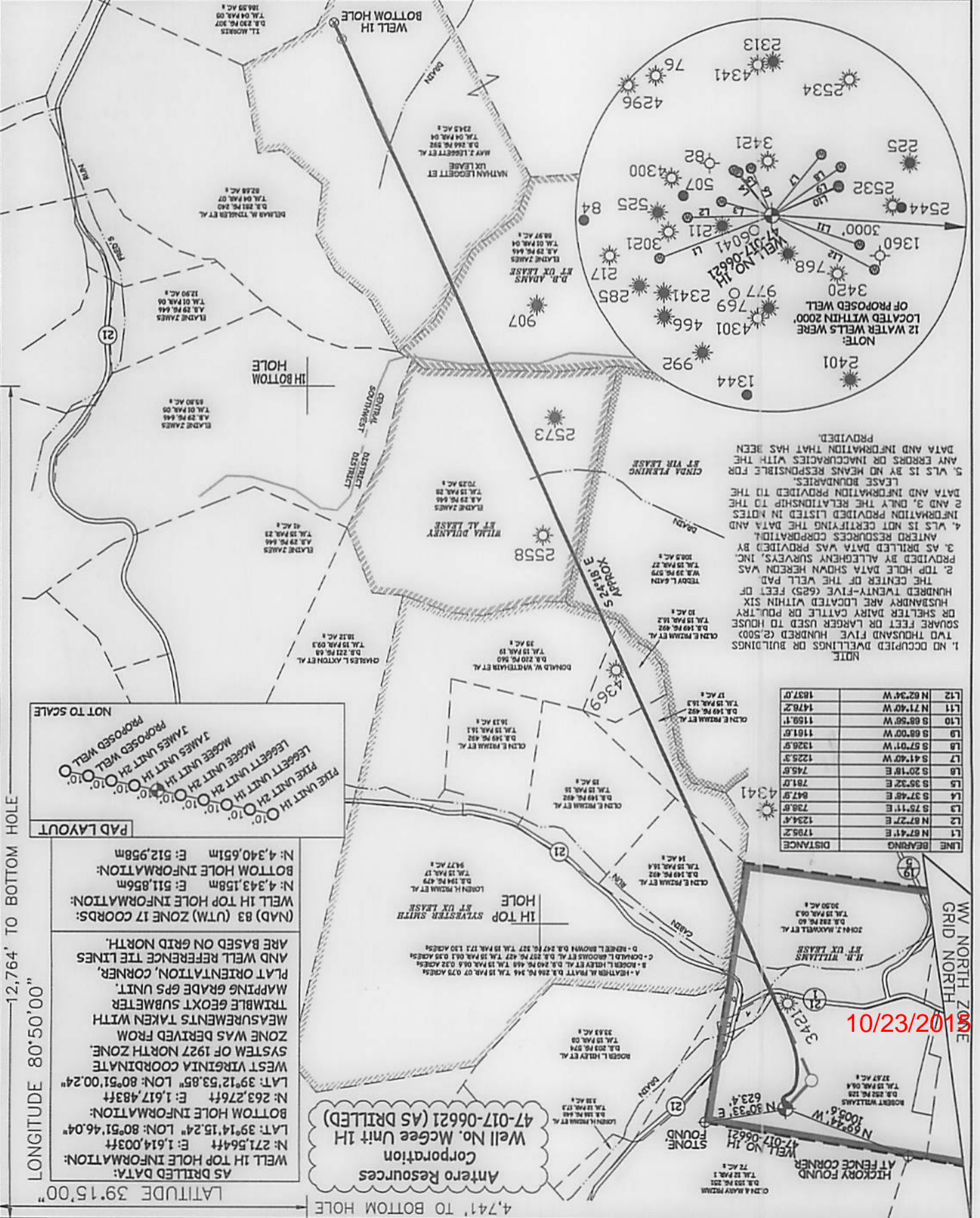
TARGET FORMATION: MARCELLUS  
 ESTIMATED DEPTH: 6,506.17VD 15,253.17 MD  
 PLUG & ABANDON: CLEAN OUT & REPLUG  
 (SPECIFY) (X) AS DRILLED

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE  
 CINDA FLEMING ET VIR: WILLA DULANEY ET AL; D.B. ADAMS ET UX; NATHAN LEGGETT ET UX  
 OIL & GAS ROYALTY OWNER: B. WILLIAMS ET UX; SYLVESTER SMITH ET UX  
 LEASE ACRES: 307 ACRES; 210 ACRES; 123.86 ACRES; 67 ACRES; 89 ACRES; 93 ACRES

COUNTY NAME: PERMIT  
 COUNTY: CENTRAL DISTRICT: NORTH FORK HUGHES RIVER  
 STATE: COUNTY: PERMIT  
 WASTE DISPOSAL: SHALLOW X DEEP  
 LOCATION: ELEVATION: 1,000' ORIGINAL - 990' AS DRILLED  
 SURFACE QUADRANGLE: OXFORD 7.5  
 SURFACE OWNER: ROBERT WILLIAMS  
 ACRES: 37.67 ACRES +/-  
 DODDRIDGE

WELL TYPE: OIL GAS X  
 LIQUID INJECTION  
 STORAGE  
 DEPT: SHALLOW X  
 WATERSHED: NORTH FORK HUGHES RIVER  
 STATE: COUNTY: PERMIT  
 WASTE DISPOSAL: SHALLOW X DEEP  
 LOCATION: ELEVATION: 1,000' ORIGINAL - 990' AS DRILLED  
 SURFACE QUADRANGLE: OXFORD 7.5  
 SURFACE OWNER: ROBERT WILLIAMS  
 ACRES: 37.67 ACRES +/-  
 DODDRIDGE

DATE: 05/29/15  
 OPERATOR'S WELL # MCGEE UNIT #1H  
 API WELL #



LONGITUDE 80°50'00"  
 LONGITUDE 80°50'00"  
 LONGITUDE 80°50'00"  
 LONGITUDE 80°50'00"

WV NORTH ZONE GRID NORTH

10/23/2015

4,529' 8.544' 4,741' TO BOTTOM HOLE  
 12,764' TO BOTTOM HOLE  
 4,741' TO BOTTOM HOLE  
 39.1500" LATITUDE  
 39.1500" LATITUDE