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

API 47 - 017 - 06274 County Doddridge District Grant
Quad Smithburg 7.5' Pad Name Chestnut Field/Pool Name ----------
Farm name Trustees Chestnut Grove Church Well Number Mishka Unit 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop Street 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 4,357,128m Easting 524,014m
Landing Point of Curve Northing 4,356,935.76m Easting 523,644.64m
Bottom Hole Northing 4,354,570m Easting 524,596m

Elevation (ft) 1,115' 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 07/25/2013 Date drilling commenced 01/09/2014 Date drilling ceased 05/01/2014
Date completion activities began 08/01/2014 Date completion activities ceased 01/24/2015
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 67', 122' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 900'; 1,143' Void(s) encountered (Y/N) depths None
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) No

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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	24"	20"	40'	New	94#; J-55	N/A	Yes
Surface	17 1/2"	13 3/8"	363'	New	48#; H-40	N/A	Yes*
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,516'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	15,958'	New	23#; P-110	N/A	Yes
Tubing		2 3/8"	7,363'		5.95#; N-80	N/A	
Packer type and depth set		N/A					

Comment Details *1st attempt to cement surface casing (432 sx) failed to bring returns to surface. Grout was performed (100 sx) which was successful in bringing returns to surface.

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	93 sx	17.5	1.18	38	0'	8 Hrs.
Surface	Class A	532 sx*	15.6	1.18	252	0'	8 Hrs.
Coal							
Intermediate 1	Class A	927 sx	15.6	1.18	788	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1,173 sx (Lead); 1,298 sx (Tail)	14.5 (Lead); 15.2 (Tail)	1.3 (Lead); 1.86 (Tail)	3,194'	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15,958' MD; 6,974' TVD (BHL); 7,015' (Deepest Point Drilled) Loggers TD (ft) 15,909'

Deepest formation penetrated Marcellus Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 6,806'

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

**This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Hoskinson Unit 2H, API #47-017-06400). Please reference the wireline logs submitted with Form WR-35 for the Hoskinson Unit 2H. A Cement Bond Log has been included with this submittal.

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 - 06274 Farm name Trustees Chestnut Grove Church Well number Mishka 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					

Please insert additional pages as applicable.

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API 47- 017 - 06274 Farm name Trustees Chestnut Grove Church Well number Mishka Unit 2H

PRODUCING FORMATION(S)	DEPTHS		
Marcellus	6,947' (top) TVD	7,352' (top) MD	

Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ■ Open Flow OIL TEST ☐ Flow ☐ Pump

SHUT-IN PRESSURE Surface 3,550 psi Bottom Hole ---------- psi DURATION OF TEST ---------- hrs

OPEN FLOW Gas 1,693 mcfpd Oil ---------- bpd NGL ---------- bpd Water ---------- bpd GAS MEASURED BY ☐ Estimated ■ Orifice ☐ Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H_2S, ETC)
	0		0		

*** PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling LLC
Address 562 spring Run Road City Pennsboro State WV Zip 26415

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 Baker Hughes
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

Please insert additional pages as applicable.

Completed by Megan Darling Telephone 303-357-7230
Signature Megan C. Darling Title Permitting Agent Date 07/10/2015

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

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API 47-017-06274 Farm Name Trustees Chestnut Grove Church Well Number Mishka Unit 2H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	1-Aug-14	15,700	15,867	60	Marcellus
2	6-Sep-14	15,503	15,670	60	Marcellus
3	6-Sep-14	15,305	15,472	60	Marcellus
4	8-Sep-14	15,107	15,274	60	Marcellus
5	9-Sep-14	14,910	15,077	60	Marcellus
6	10-Sep-14	14,712	14,879	60	Marcellus
7	10-Sep-14	14,514	14,681	60	Marcellus
8	10-Sep-14	14,317	14,484	60	Marcellus
9	11-Sep-14	14,119	14,286	60	Marcellus
10	11-Sep-14	13,921	14,088	60	Marcellus
11	11-Sep-14	13,724	13,891	60	Marcellus
12	12-Sep-14	13,526	13,693	60	Marcellus
13	12-Sep-14	13,328	13,495	60	Marcellus
14	13-Sep-14	13,131	13,297	60	Marcellus
15	13-Sep-14	12,933	13,100	60	Marcellus
16	14-Sep-14	12,735	12,902	60	Marcellus
17	14-Sep-14	12,538	12,704	60	Marcellus
18	14-Sep-14	12,340	12,507	60	Marcellus
19	15-Sep-14	12,142	12,309	60	Marcellus
20	15-Sep-14	11,945	12,111	60	Marcellus
21	16-Sep-14	11,747	11,914	60	Marcellus
22	16-Sep-14	11,549	11,716	60	Marcellus
23	17-Sep-14	11,352	11,518	60	Marcellus
24	17-Sep-14	11,154	11,321	60	Marcellus
25	17-Sep-14	10,956	11,123	60	Marcellus
26	18-Sep-14	10,759	10,925	60	Marcellus
27	18-Sep-14	10,561	10,728	60	Marcellus
28	18-Sep-14	10,363	10,530	60	Marcellus
29	18-Sep-14	10,166	10,332	60	Marcellus
30	19-Sep-14	9,968	10,135	60	Marcellus
31	19-Sep-14	9,770	9,937	60	Marcellus
32	19-Sep-14	9,573	9,739	60	Marcellus
33	19-Sep-14	9,375	9,542	60	Marcellus
34	20-Sep-14	9,177	9,344	60	Marcellus
35	20-Sep-14	8,980	9,146	60	Marcellus
36	20-Sep-14	8,782	8,949	60	Marcellus
37	21-Sep-14	8,584	8,751	60	Marcellus
38	21-Sep-14	8,387	8,553	60	Marcellus
39	21-Sep-14	8,189	8,356	60	Marcellus
40	21-Sep-14	7,991	8,158	60	Marcellus
41	21-Sep-14	7,794	7,960	60	Marcellus
42	22-Sep-14	7,596	7,763	60	Marcellus
43	22-Sep-14	7,398	7,565	60	Marcellus

API 47-017-06274 **Farm Name** Trustees Chestnut Grove Church **Well Number** Mishka Unit 2H

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	5-Sep-14	69.9	7,565	N/A	5,366	96,725	6,936	N/A
2	6-Sep-14	75.1	7,456	5,826	5,189	252,540	6,724	N/A
3	6-Sep-14	78.7	7,758	5,953	4,952	227,516	6,919	N/A
4	8-Sep-14	71.5	7,416	5,710	5,021	220,144	6,807	N/A
5	9-Sep-14	72.0	7,414	5,660	5,448	216,795	6,868	N/A
6	10-Sep-14	72.0	7,414	5,603	5,489	214,904	6,992	N/A
7	10-Sep-14	76.0	7,493	5,456	4,608	231,752	6,679	N/A
8	10-Sep-14	76.0	7,493	5,728	5,183	204,877	6,980	N/A
9	11-Sep-14	77.5	7,746	5,532	5,571	185,319	6,250	N/A
10	11-Sep-14	76.0	7,405	5,777	4,647	232,377	6,684	N/A
11	11-Sep-14	81.0	7,672	5,533	5,693	246,555	6,676	N/A
12	12-Sep-14	80.0	7,610	5,587	4,795	232,113	6,446	N/A
13	12-Sep-14	83.0	7,705	5,515	5,244	232,063	6,390	N/A
14	13-Sep-14	80.0	7,412	5,731	5,367	233,431	6,381	N/A
15	13-Sep-14	79.0	7,350	5,518	5,000	236,679	6,448	N/A
16	14-Sep-14	81.0	7,437	5,451	4,461	233,448	6,352	N/A
17	14-Sep-14	81.0	7,482	5,703	5,091	253,761	6,487	N/A
18	14-Sep-14	79.0	7,340	5,578	5,336	234,111	6,455	N/A
19	15-Sep-14	79.0	7,451	5,547	5,004	236,430	6,342	N/A
20	15-Sep-14	80.0	7,482	5,759	5,438	236,775	6,305	N/A
21	16-Sep-14	82.0	7,369	5,843	5,618	236,374	6,407	N/A
22	16-Sep-14	81.0	7,242	5,712	5,526	237,514	6,441	N/A
23	17-Sep-14	78.0	7,167	5,494	5,174	235,297	6,262	N/A
24	17-Sep-14	80.0	7,223	5,446	5,107	240,040	6,291	N/A
25	17-Sep-14	82.0	7,321	5,813	5,755	238,501	6,308	N/A
26	18-Sep-14	80.0	7,240	5,578	5,071	240,365	6,347	N/A
27	18-Sep-14	80.0	7,228	5,634	5,304	240,348	6,179	N/A
28	18-Sep-14	80.0	7,379	5,587	5,551	237,734	6,185	N/A
29	18-Sep-14	82.0	7,278	5,925	5,408	235,841	6,214	N/A
30	19-Sep-14	78.0	6,962	5,430	5,007	236,882	6,182	N/A
31	19-Sep-14	77.0	6,974	5,670	4,878	232,838	6,216	N/A
32	19-Sep-14	82.0	7,029	5,766	5,396	232,277	6,069	N/A
33	19-Sep-14	82.0	7,091	5,705	5,427	233,893	6,450	N/A
34	20-Sep-14	75.0	6,685	5,743	4,984	237,363	6,201	N/A
35	20-Sep-14	78.0	6,816	5,594	440	239,499	6,089	N/A
36	20-Sep-14	82.0	7,010	5,980	4,409	232,301	6,084	N/A
37	21-Sep-14	78.0	6,888	5,745	4,605	237,977	6,066	N/A
38	21-Sep-14	79.0	6,911	5,505	4,540	233,296	5,829	N/A
39	21-Sep-14	80.0	6,819	6,051	5,150	235,095	5,998	N/A
40	21-Sep-14	80.0	6,806	5,512	4,705	240,793	6,076	N/A
41	21-Sep-14	77.0	6,834	5,555	5,584	237,657	6,020	N/A
42	22-Sep-14	78.0	6,744	5,018	5,198	225,094	5,968	N/A
43	22-Sep-14	79.0	6,884	6,600	5,107	237,679	6,151	N/A
	AVG=	**78.6**	**7,256**	**5,668**	**5,043**	**9,892,973**	**274,157**	TOTAL

API 47-017-06274 Farm Name Trustees Chestnut Grove Church Well Number Mishka Unit 2H				
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	67'	N/A	67'	N/A
Fresh Water	122'	N/A	122'	N/A
Shale/Siltstone	0	257	0	257
Shale w/ Coal	est. 257	347	est. 257	347
Shale and Siltstone	est. 347	377	est. 347	377
Shale/Sandstone/Siltstone	est. 377	1,457	est. 377	1,457
Shale and Siltstone w/trace coal	est. 1457	1,487	est. 1457	1,487
Shale/Sandstone/Siltstone	est. 1487	1,637	est. 1487	1,637
Sandstone	est. 1637	1,757	est. 1637	1,757
Sandstone w/trace coal	est. 1757	1,787	est. 1757	1,787
Shale/Sandstone/Siltstone	est. 1787	2,061	est. 1787	2,061
Big Lime	2,061	2,205	2,061	2,205
Big Injun	2,205	2,634	2,205	2,634
Gantz Sand	2,634	2,780	2,634	2,780
Fifty Foot Sandstone	2,780	2,846	2,780	2,846
Gordon	2,846	3,211	2,846	3,211
Fifth Sandstone	3,211	3,250	3,211	3,250
Bayard	3,250	3,586	3,250	3,587
Warren	3,586	3,961	3,587	3,975
Speechley	3,961	4,211	3,975	4,247
Baltown	4,211	4,718	4,247	4,800
Bradford	4,718	5,210	4,800	5,333
Benson	5,210	5,448	5,333	5,592
Alexander	5,448	5,654	5,592	5,819
Elk	5,654	6,215	5,819	6,440
Rhinestreet	6,215	6,534	6,440	6,793
Sycamore	6,534	6,720	6,793	7,011
Middlesex	6,720	6,857	7,011	7,194
Burkett	6,857	6,885	7,194	7,237
Tully	6,885	6,947	7,237	7,352
Marcellus	6,947	NA	7,352	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.

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/5/2014
Job End Date:	9/22/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06274-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Mishka Unit 2H
Longitude:	-80.72124400
Latitude:	39.36327500
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,979
Total Base Water Volume (gal):	12,277,020
Total Base Non Water Volume:	0

FracFocus Chemical Disclosure Registry

GROUNDWATER PROTECTION COUNCIL

Interstate Oil & Gas Compact Commission

Hydraulic Fracturing Fluid Composition:

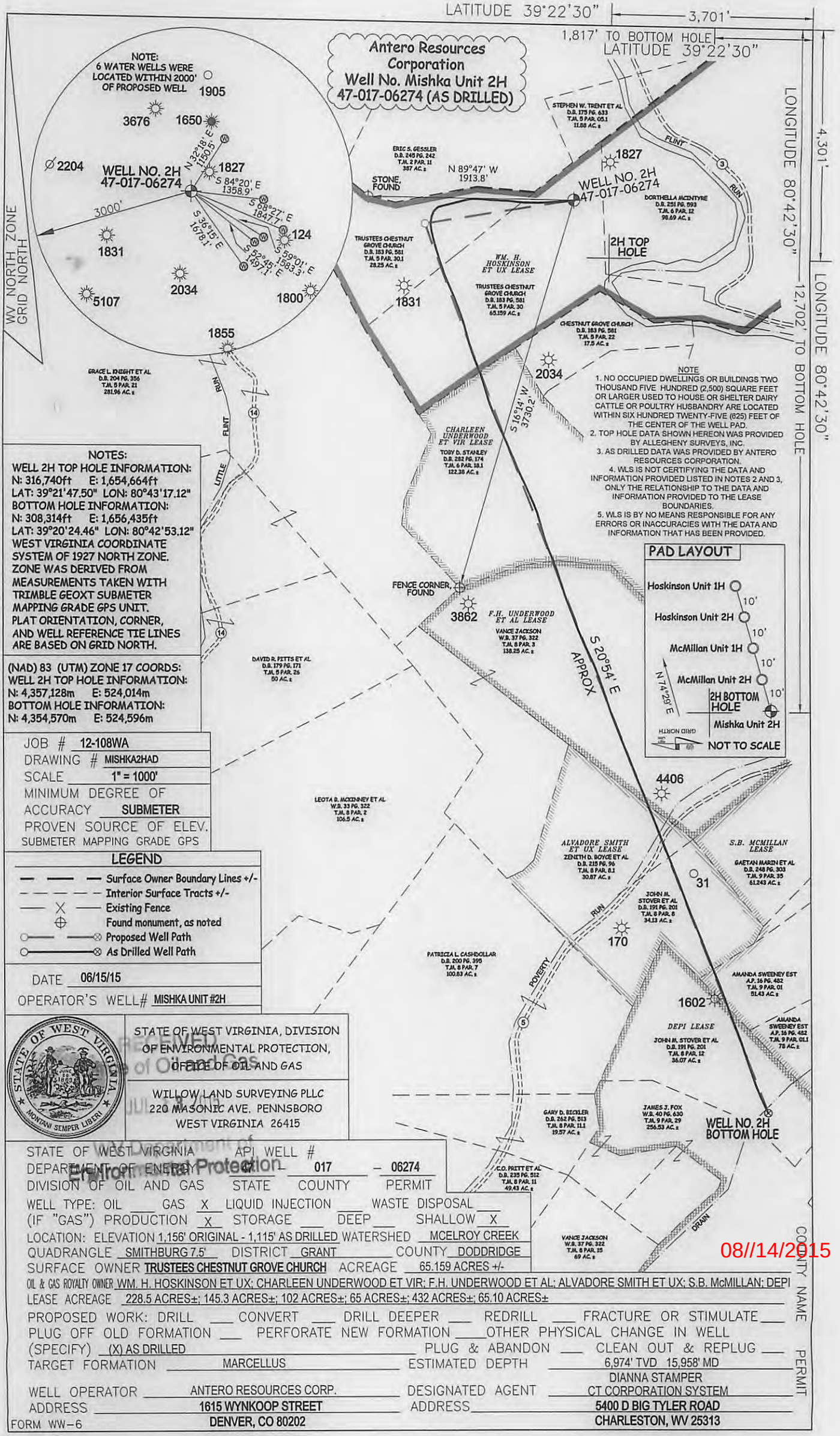
Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Operator	Carrier					
			Water	7732-18-5	100.00000	90.72039	
Sand, White, 40/70	Baker Hughes	Proppant					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		4.92304	
Sand, White, 20/40	Baker Hughes	Proppant					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		3.18204	
Sand, White, 100 mesh	Baker Hughes	Proppant					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.64657	
HCl, 10.1 - 15%	Baker Hughes	Acidizing					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.20547	SmartCare Product
GW-3LDF	Baker Hughes	Gelling Agent					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.10826	SmartCare Product
FRW-18	Baker Hughes	Friction Reducer					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.05734	SmartCare Product
Scaletrol 720	Baker Hughes	Scale Inhibitor					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.01455	SmartCare Product

Enzyme G-NE	Baker Hughes	Breaker					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.01396	SmartCare Product
Alpha 1427	Baker Hughes	Biocide					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.01231	SmartCare Product
Ferrotrol 300L	Baker Hughes	Iron Control					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00142	SmartCare Product
CI-14	Baker Hughes	Corrosion Inhibitor					
			MSDS and Non-MSDS Ingredients Listed Below	N/A		0.00033	SmartCare Product
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.							
Ingredients in Additive (s) (MSDS and non-MSDS)	Baker Hughes	See Trade Name(s) List					
			Crystalline Silica (Quartz)	14808-60-7	100.00000	8.74065	
			Water	7732-18-5	95.00000	0.22593	
			Mineral Oil	8042-47-5	70.00000	0.07569	
			Guar Gum	9000-30-0	60.00000	0.06487	
			Paraffinic Petroleum Distillate	64742-55-8	30.00000	0.03244	
			Petroleum Distillates	64742-47-8	30.00000	0.03244	
			Hydrochloric Acid	7647-01-0	15.00000	0.03078	
			Hydrotreated Light Distillate	64742-47-8	30.00000	0.01718	
			Poly (acrylamide-co-acrylic acid) partial sodium salt	62649-23-4	30.00000	0.01718	
			Ethylene Glycol	107-21-1	45.00000	0.00654	
			Crystalline Silica: Quartz	14808-60-7	5.00000	0.00541	
			1-butoxy-2-propanol	5131-66-8	5.00000	0.00541	
			Isotridecanol, ethoxylated	9043-30-5	5.00000	0.00541	
			Glutaraldehyde	111-30-8	30.00000	0.00369	
			Sodium Chloride	7647-14-5	5.00000	0.00301	
			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9	20.00000	0.00291	
			Ammonium Chloride	12125-02-9	3.00000	0.00172	
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10.00000	0.00123	
			Oleamide DEA	93-83-4	2.00000	0.00115	
			Alcohols, C12-16, ethoxylated	68551-12-2	2.00000	0.00115	
			Citric Acid	77-92-9	60.00000	0.00085	
			Calcium Chloride	10043-52-4	5.00000	0.00073	
			Hemicellulase Enzyme Concentrate	9025-56-3	5.00000	0.00070	
			Quaternary Ammonium Compound	68424-85-1	5.00000	0.00061	
			Ethanol	64-17-5	5.00000	0.00061	
			Methanol	67-56-1	100.00000	0.00033	
			Sorbitan Monooleate	1338-43-8	0.50000	0.00029	
			Polyoxythylene Sorbitan Monooleate	9005-65-6	0.50000	0.00029	

			Potassium Chloride	7447-40-7	1.00000	0.00015	
			2-butoxy-1-propanol	15821-83-7	0.10000	0.00011	
			Polyoxyalkylenes	68951-67-7	30.00000	0.00010	
			Fatty Acids	61790-12-3	10.00000	0.00003	
			Modified Thiourea Polymer	68527-49-1	7.00000	0.00002	
			Olefin	64743-02-8	5.00000	0.00002	
			Propargyl Alcohol	107-19-7	5.00000	0.00002	
			Formaldehyde	50-00-0	1.00000	0.00000	

* 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)


LATITUDE 39°22'30"
3,701'
1,817' TO BOTTOM HOLE
LATITUDE 39°22'30"
LONGITUDE 80°42'30"
4,301'
LONGITUDE 80°42'30"
12,702' TO BOTTOM HOLE
Antero Resources Corporation
Well No. Mishka Unit 2H
47-017-06274 (AS DRILLED)
NOTE:
6 WATER WELLS WERE LOCATED WITHIN 2000' OF PROPOSED WELL
WELL NO. 2H
47-017-06274
N 32°18' E 1150.5'
S 84°20' E 1358.9'
S 68°27' E 1847.7'
S 36°15' E 1678.1'
S 52°45' E 1497.1'
S 59°01' E 1583.3'
3000'
1905
3676
1650
2204
1827
1831
2034
5107
1800
124
1855
WV NORTH ZONE
GRID NORTH
STONE, FOUND
N 89°47' W 1913.8'
ERIC S. GESSLER
D.B. 245 PG. 242
T.M. 2 PAR. 11
387 AC. ±
STEPHEN W. TRENT ET AL
D.B. 175 PG. 633
T.M. 5 PAR. 05.1
11.68 AC. ±
DORTHELLA MCINTYRE
D.B. 251 PG. 593
T.M. 6 PAR. 12
98.69 AC. ±
FLINT RUN
2H TOP HOLE
TRUSTEES CHESTNUT GROVE CHURCH
D.B. 183 PG. 581
T.M. 5 PAR. 30.1
28.25 AC. ±
WM. H. HOSKINSON ET UX LEASE
TRUSTEES CHESTNUT GROVE CHURCH
D.B. 183 PG. 581
T.M. 5 PAR. 30
65.159 AC. ±
CHESTNUT GROVE CHURCH
D.B. 183 PG. 581
T.M. 5 PAR. 22
17.5 AC. ±
GRACE L. KNIGHT ET AL
D.B. 204 PG. 356
T.M. 5 PAR. 21
281.96 AC. ±
LITTLE FLINT RUN
S 16°14' W 3730.2'
CHARLEEN UNDERWOOD ET VIR LEASE
TOBY D. STANLEY
D.B. 282 PG. 174
T.M. 6 PAR. 18.1
122.38 AC. ±
FENCE CORNER, FOUND
3862
F.H. UNDERWOOD ET AL LEASE
VANCE JACKSON
W.B. 37 PG. 322
T.M. 8 PAR. 3
138.25 AC. ±
S 20°54' E APPROX
DAVID R. PITTS ET AL
D.B. 179 PG. 171
T.M. 5 PAR. 26
50 AC. ±
LEOTA B. MCKINNEY ET AL
W.B. 33 PG. 322
T.M. 8 PAR. 2
106.5 AC. ±
4406
ALVADORE SMITH ET UX LEASE
ZENITH D. BOYCE ET AL
D.B. 215 PG. 96
T.M. 8 PAR. 8.1
30.87 AC. ±
S.B. MCMILLAN LEASE
GAETAN MARIN ET AL
D.B. 248 PG. 303
T.M. 9 PAR. 35
61.243 AC. ±
31
JOHN M. STOVER ET AL
D.B. 191 PG. 201
T.M. 8 PAR. 8
34.13 AC. ±
170
PATRICIA L. CASHDOLLAR
D.B. 200 PG. 395
T.M. 8 PAR. 7
100.83 AC. ±
POVERTY RUN
1602
AMANDA SWEENEY EST
A.P. 16 PG. 482
T.M. 9 PAR. 01
51.43 AC. ±
DEPI LEASE
JOHN M. STOVER ET AL
D.B. 191 PG. 201
T.M. 8 PAR. 12
36.07 AC. ±
AMANDA SWEENEY EST
A.P. 16 PG. 482
T.M. 9 PAR. 01.1
78 AC. ±
GARY D. BICKLER
D.B. 262 PG. 513
T.M. 8 PAR. 11.1
19.57 AC. ±
JAMES J. FOX
W.B. 40 PG. 630
T.M. 9 PAR. 29
256.53 AC. ±
WELL NO. 2H
BOTTOM HOLE
C.O. PRITT ET AL
D.B. 235 PG. 512
T.M. 8 PAR. 11
49.43 AC. ±
VANCE JACKSON
W.B. 37 PG. 322
T.M. 8 PAR. 25
69 AC. ±
DRAIN
COUNTY NAME PERMIT
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.
PAD LAYOUT
Hoskinson Unit 1H
10'
Hoskinson Unit 2H
10'
McMillan Unit 1H
10'
McMillan Unit 2H
10'
2H BOTTOM HOLE
Mishka Unit 2H
N 74°29' E
GRID NORTH
NOT TO SCALE
NOTES:
WELL 2H TOP HOLE INFORMATION:
N: 316,740ft E: 1,654,664ft
LAT: 39°21'47.50" LON: 80°43'17.12"
BOTTOM HOLE INFORMATION:
N: 308,314ft E: 1,656,435ft
LAT: 39°20'24.46" LON: 80°42'53.12"
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: 4,357,128m E: 524,014m
BOTTOM HOLE INFORMATION:
N: 4,354,570m E: 524,596m
JOB # 12-108WA
DRAWING # MISHKA2HAD
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS
LEGEND
Surface Owner Boundary Lines +/-
Interior Surface Tracts +/-
Existing Fence
Found monument, as noted
Proposed Well Path
As Drilled Well Path
DATE 06/15/15
OPERATOR'S WELL# MISHKA UNIT #2H
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO
WEST VIRGINIA 26415
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS
API WELL # 47 - 017 - 06274
STATE COUNTY PERMIT
WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1,156' ORIGINAL - 1,115' AS DRILLED WATERSHED MCELROY CREEK
QUADRANGLE SMITHBURG 7.5' DISTRICT GRANT COUNTY DODDRIDGE
SURFACE OWNER TRUSTEES CHESTNUT GROVE CHURCH ACREAGE 65.159 ACRES +/-
OIL & GAS ROYALTY OWNER WM. H. HOSKINSON ET UX; CHARLEEN UNDERWOOD ET VIR; F.H. UNDERWOOD ET AL; ALVADORE SMITH ET UX; S.B. McMILLAN; DEPI
LEASE ACREAGE 228.5 ACRES±; 145.3 ACRES±; 102 ACRES±; 65 ACRES±; 432 ACRES±; 65.10 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 6,974' TVD 15,958' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313
FORM WW-6
08//14/2015