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WR-35

Rev. 8/23/13 WV GEOLOGICAL SURVEY
MORGANTOWN, WV

Page ___ of ___

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

API 47-095-02156 County Tyler District McElroy
Quad Center Point 7.5' Pad Name Forest Pad Field/Pool Name _____
Farm name Moore, Forest & Brenda Well Number Silas 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 4,360,751m Easting 522,386m
Landing Point of Curve Northing 4,360,968.52m Easting 522,294.09m
Bottom Hole Northing 4,363,197m Easting 521,567m

Elevation (ft) 745' 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 03/11/2014 Date drilling commenced 04/18/2014 Date drilling ceased 10/06/2014
Date completion activities began 10/17/2014 Date completion activities ceased 03/01/2015
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 89', 329' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 535', 2,052' 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

Reviewed by: _____

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API 47-095 - 02156 Farm name Moore, Forest & Brenda Well number Silas Unit 2H

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	133#; J-55	N/A	Yes
Surface	17 1/2"	13 3/8"	401'	New	48#; H-40	N/A	Yes
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,508'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	14,654'	New	23#; P-110	N/A	Yes
Tubing		2 3/8"	6,761'		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	71 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	481 sx	15.6	1.18	279	0'	8 Hrs.
Coal							
Intermediate 1	Class A	940 sx	15.6	1.18	786	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1,014 sx (Lead); 1,229 sx (Tail)	14.5 (Lead); 15.2 (Tail)	1.3 (Lead); 1.86 (Tail)	2,897	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 14,654' MD; 6,600' TVD (BHL); 6,610' TVD (Deepest Point Drilled) Loggers TD (ft) 14,603'

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

Plug back procedure N/A

Kick off depth (ft) 6,357'

**This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Ed Arnold Unit 1H, API #47-095-02038). Please reference the wireline logs submitted with Form WR-35 for the Ed Arnold 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- 095 - 02156 Farm name Moore, Forest & Brenda Well number Silas Unit 2H

PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6,541' (top)</u> TVD	<u>6,734' (top)</u> 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 12,031 mcfpd Oil 17 bpd NGL _____ bpd Water 1 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	
	<u>0</u>		<u>0</u>		

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

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 Megan Darling Telephone 303-357-7230
Signature *Megan Darling* Title Permitting Agent Date 07/02/2015

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API 47-095-02156 Farm Name Moore, Forest & Brenda Well Number Silas Unit 2H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	17-Oct-14	14,393	14,562	60	Marcellus
2	18-Dec-14	14,193	14,362	60	Marcellus
3	18-Dec-14	13,992	14,161	60	Marcellus
4	19-Dec-14	13,792	13,961	60	Marcellus
5	19-Dec-14	13,592	13,761	60	Marcellus
6	19-Dec-14	13,391	13,560	60	Marcellus
7	20-Dec-14	13,191	13,360	60	Marcellus
8	20-Dec-14	12,991	13,160	60	Marcellus
9	21-Dec-14	12,790	12,959	60	Marcellus
10	21-Dec-14	12,590	12,759	60	Marcellus
11	22-Dec-14	12,389	12,558	60	Marcellus
12	22-Dec-14	12,189	12,358	60	Marcellus
13	22-Dec-14	11,989	12,158	60	Marcellus
14	23-Dec-14	11,788	11,957	60	Marcellus
15	23-Dec-14	11,588	11,757	60	Marcellus
16	23-Dec-14	11,388	11,557	60	Marcellus
17	26-Dec-14	11,187	11,356	60	Marcellus
18	26-Dec-14	10,987	11,156	60	Marcellus
19	26-Dec-14	10,786	10,955	60	Marcellus
20	27-Dec-14	10,586	10,755	60	Marcellus
21	27-Dec-14	10,386	10,555	60	Marcellus
22	27-Dec-14	10,185	10,354	60	Marcellus
23	28-Dec-14	9,985	10,154	60	Marcellus
24	28-Dec-14	9,785	9,954	60	Marcellus
25	28-Dec-14	9,584	9,753	60	Marcellus
26	29-Dec-14	9,384	9,553	60	Marcellus
27	29-Dec-14	9,184	9,352	60	Marcellus
28	30-Dec-14	8,983	9,152	60	Marcellus
29	30-Dec-14	8,783	8,952	60	Marcellus
30	30-Dec-14	8,582	8,751	60	Marcellus
31	30-Dec-14	8,382	8,551	60	Marcellus
32	31-Dec-14	8,182	8,351	60	Marcellus
33	31-Dec-14	7,981	8,150	60	Marcellus
34	31-Dec-14	7,781	7,950	60	Marcellus
35	1-Jan-15	7,581	7,750	60	Marcellus
36	2-Jan-15	7,380	7,549	60	Marcellus
37	2-Jan-15	7,180	7,349	60	Marcellus
38	2-Jan-15	6,979	7,148	60	Marcellus
39	2-Jan-15	6,779	6,948	60	Marcellus

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API 47-095-02156 Farm Name Moore, Forest & Brenda Well Number Silas 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	18-Dec-14	68.4	7,430	N/A	5,821	249,300	6,699	N/A
2	18-Dec-14	67.0	7,205	6,265	5,528	249,960	6,640	N/A
3	18-Dec-14	69.1	7,460	6,050	5,727	249,580	6,625	N/A
4	19-Dec-14	66.8	7,402	6,009	5,667	247,900	6,651	N/A
5	19-Dec-14	66.1	7,304	6,302	5,714	247,800	6,613	N/A
6	19-Dec-14	68.6	7,377	5,515	5,802	248,720	6,591	N/A
7	20-Dec-14	61.3	7,328	5,782	5,627	127,200	6,823	N/A
8	20-Dec-14	67.2	7,416	5,842	5,812	249,400	6,905	N/A
9	21-Dec-14	70.1	7,305	5,883	5,675	247,000	6,580	N/A
10	21-Dec-14	70.0	7,269	5,994	5,800	249,380	6,484	N/A
11	22-Dec-14	68.4	7,273	6,013	5,624	249,300	6,469	N/A
12	22-Dec-14	70.0	7,278	5,811	5,811	250,440	6,469	N/A
13	22-Dec-14	69.8	7,301	5,704	5,755	250,040	6,457	N/A
14	23-Dec-14	70.1	7,169	5,666	5,550	249,700	6,407	N/A
15	23-Dec-14	70.0	6,933	5,639	5,522	251,800	6,451	N/A
16	23-Dec-14	71.6	7,063	5,733	5,114	247,370	6,382	N/A
17	26-Dec-14	70.4	6,924	5,652	5,431	249,000	6,376	N/A
18	26-Dec-14	70.5	6,995	5,732	5,344	249,290	6,374	N/A
19	26-Dec-14	70.4	6,920	5,608	5,768	249,910	6,359	N/A
20	27-Dec-14	70.8	6,826	5,748	5,469	250,100	6,332	N/A
21	27-Dec-14	70.8	6,829	5,705	5,567	250,000	6,285	N/A
22	27-Dec-14	70.6	6,764	5,622	5,476	250,150	6,279	N/A
23	28-Dec-14	70.5	6,741	5,639	5,489	250,300	6,281	N/A
24	28-Dec-14	70.8	6,691	5,554	5,399	250,500	6,259	N/A
25	28-Dec-14	72.6	6,934	5,708	5,584	233,080	6,876	N/A
26	29-Dec-14	71.0	6,646	5,613	5,411	250,180	6,255	N/A
27	29-Dec-14	73.5	6,710	5,671	5,516	250,660	6,215	N/A
28	30-Dec-14	73.6	6,634	5,473	5,428	219,660	6,478	N/A
29	30-Dec-14	71.8	7,155	5,825	5,368	253,600	6,237	N/A
30	30-Dec-14	72.9	6,892	5,602	5,670	248,890	6,233	N/A
31	30-Dec-14	74.7	6,976	5,903	5,778	214,540	6,208	N/A
32	31-Dec-14	66.5	6,754	5,700	5,510	232,160	6,654	N/A
33	31-Dec-14	74.2	6,615	5,454	5,301	249,900	6,118	N/A
34	31-Dec-14	74.7	6,653	5,467	5,604	249,460	6,057	N/A
35	1-Jan-15	72.8	6,543	5,352	5,518	249,940	6,066	N/A
36	2-Jan-15	74.9	6,536	5,342	5,469	249,310	6,102	N/A
37	2-Jan-15	72.5	6,353	5,182	5,291	249,260	6,020	N/A
38	2-Jan-15	71.4	6,612	5,426	4,904	249,040	6,002	N/A
39	2-Jan-15	74.0	6,479	5,366	5,225	248,830	6,014	N/A
	AVG=	70.5	6,967	5,699	5,540	9,512,650	249,326	TOTAL

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API 47-095-02156 Farm Name Moore, Forest & Brenda Well Number Silas Unit 2H

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	89'	N/A	89'	N/A
Fresh Water	329'	N/A	329'	N/A
Shale/ Sandstone	0	149	0	149
Sandstone/ Trace Coal	est. 149	209	est. 149	209
Sandstone/ Shale	est. 209	429	est. 209	429
Limestone	est. 429	449	est. 429	449
Sandstone	est. 449	569	est. 449	569
Sandstone/ Limestone	est. 569	689	est. 569	689
Sandstone	est. 689	789	est. 689	789
Sandstone/ Trace Coal	est. 789	829	est. 789	829
Shale/ Sandstone	est. 829	929	est. 829	929
Sandstone/ Trace Coal	est. 929	1,029	est. 929	1,029
Sandstone	est. 1029	1,069	est. 1029	1,069
Coal/ Sandstone	est. 1069	1,429	est. 1069	1,429
Sandstone	est. 1429	1,732	est. 1429	1,732
Big Lime	1,732	1,863	1,732	1,863
Big Injun	1,863	2,304	1,863	2,304
Gantz Sand	2,304	2,440	2,304	2,440
Fifty Foot Sandstone	2,440	2,510	2,440	2,510
Gordon	2,510	2,807	2,510	2,808
Fifth Sandstone	2,807	2,849	2,808	2,850
Bayard	2,849	3,263	2,850	3,266
Warren	3,263	3,632	3,266	3,636
Speechley	3,632	3,934	3,636	3,938
Baltown	3,934	4,401	3,938	4,405
Bradford	4,401	4,879	4,405	4,883
Benson	4,879	5,146	4,883	5,150
Alexander	5,146	5,362	5,150	5,368
Elk	5,362	5,876	5,368	5,907
Rhinstreet	5,876	6,160	5,907	6,212
Sycamore	6,160	6,321	6,212	6,388
Middlesex	6,321	6,455	6,388	6,563
Burkett	6,455	6,482	6,563	6,610
Tully	6,482	6,541	6,610	6,734
Marcellus	6,541	NA	6,734	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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MORGANTOWN, WV

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/18/2014
Job End Date:	1/2/2015
State:	West Virginia
County:	Tyler
API Number:	47-095-02156-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Sillas Unit 2H
Longitude:	-80.74002200
Latitude:	39.39596700
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,610
Total Base Water Volume (gal):	10,471,692
Total Base Non Water Volume:	479,152



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	89.86752	
Sand	J.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	9.78862	
LGC-15	J.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.05913	
			Petroleum Distillates	64742-47-8	60.00000	0.05600	
			Suspending agent (solid)	14808-60-7	3.00000	0.00904	
			Surfactant	68439-51-0	3.00000	0.00355	
HCL Acid (12.6%-18.0%)	J.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.08627	
			Hydrogen Chloride	7641-01-1	18.00000	0.02061	
WFRA-405	J.S. Well Services, LLC	Friction Reducer	Anionic Polyacrylamide	Proprietary		0.02517	
			Water	7732-18-5	40.00000	0.02517	
			Petroleum Distillates	64742-47-8	22.00000	0.02026	
			Crystalline Salt	12125-02-9	5.00000	0.00315	

SI-1100	U.S. Well Services	Scale Inhibitor	Ethoxylated alcohol blend	Proprietary	5.00000	0.00315
			Di Water	7732-18-5	80.00000	0.00983
			Ethylene Glycol	107-21-1	40.00000	0.00555
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	10.00000	0.00166
			2-Phosphonobutane 1,2,4 tricarboxylic salt	37971-36-1	10.00000	0.00159
			hexamethylenediamine tetra (methylene phosphonic acid)	38820-59-6	10.00000	0.00154
			Copolymer of Maleic and Acrylic acid	26677-99-6	10.00000	0.00145
			bis (hexamethylene) tramine penta (methylene phosphonic acid) - phosphate acid	40623-75-4	10.00000	0.00141
			Acrylic polymer	52255-49-9	5.00000	0.00061
K-BAC 1020	U.S. Well Services, LLC	Anti-Bacterial Agent				
			2,2-dibromo-3-nitropropionamide	10222-01-2	20.00000	0.00406
			Deionized Water	7732-18-5	28.00000	0.00232
AP One	U.S. Well Services, LLC	Gel Breakers				
			Ammonium Persulfate	7727-54-0	100.00000	0.00201
AI-301	U.S. Well Services, LLC	Acid Corrosion Inhibitors				
			Diethylene Glycol	111-46-6	30.00000	0.00013
			Methanamine	100-97-0	20.00000	0.00011
			Hydrogen Chloride	7647-01-0	10.00000	0.00005
			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)

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 MORGANTOWN, WV

LATITUDE 39°25'00"

9,003'

LATITUDE 39°27'30"

Antero Resources Corporation
Well No. Silas Unit 2H
47-095-02156 (AS DRILLED)

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
N: 328,719ft E: 1,649,522ft
LAT: 39°23'45.19" LON: 80°44'24.69"
BOTTOM HOLE INFORMATION:
N: 336,789ft E: 1,646,967ft
LAT: 39°25'04.60" LON: 80°44'58.66"
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: 4,360,751m E: 522,386m
BOTTOM HOLE INFORMATION:
N: 4,363,197m E: 521,567m

WV NORTH ZONE GRID NORTH

LONGITUDE 80°42'30"

7,569'

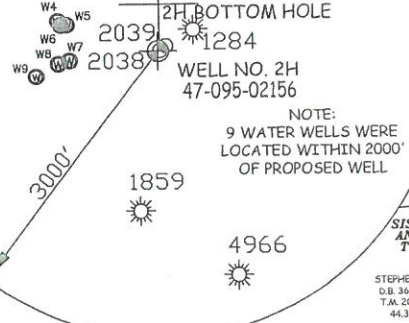
14,711' TO BOTTOM HOLE

LONGITUDE 80°42'30"

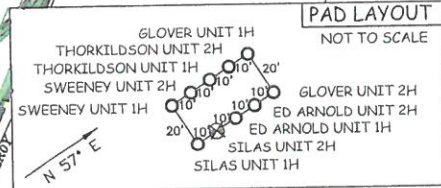
NOTE
1. NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,500) SQUARE FEET OR LARGER USED TO HOUSE OR SHELTER DAIRY CATTLE OR POULTRY HUSBANDRY ARE LOCATED WITHIN SIX HUNDRED TWENTY-FIVE (625) FEET OF THE CENTER OF THE WELL PAD.
2. TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, 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.
6. THIS WELL BORE IS SUBJECT TO THAT 60 FOOT STRIP OF LAND KNOWN AS THE OLD SISTERVILLE AND SALEM TURNPIKE WHICH MAY OR MAY NOT COINCIDE WITH THE CURRENT LOCATION OF WV STATE ROUTE 23 IN THIS AREA.

WELL NO. 2H TO WATER WELLS

LINE	BEARING	DIST.
W1	N 39°16' W	1580.6'
W2	N 48°27' W	1601.9'
W3	N 57°18' W	1622.6'
W4	N 72°07' W	1087.0'
W5	N 72°56' W	985.0'
W6	N 74°07' W	1043.5'
W7	S 86°43' W	967.2'
W8	S 83°23' W	1041.8'
W9	S 78°42' W	1292.8'



NOTE:
9 WATER WELLS WERE LOCATED WITHIN 2000' OF PROPOSED WELL



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

DATE 06/25/15
OPERATOR'S WELL # SILAS UNIT #2H

API WELL # 47 - 095 - 02156
STATE COUNTY PERMIT

QUADRANGLE CENTER POINT 7.5' DISTRICT McELROY COUNTY TYLER
SURFACE OWNER FOREST & BRENDA MOORE ACREAGE 26.478 ACRES +/-
OIL & GAS ROYALTY OWNER RALPH SWEENEY ET UX; RALPH SWEENEY ET UX; M.V.B. GEORGE; JAMES DOAN ET UX; ELIZA UNDERWOOD ET AL LEASE ACREAGE 25.668 ACRES±; 55.43 ACRES±; 263.67 ACRES±; 300 ACRES±; 216 ACRES±

PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE
PLUG OFF OLD FORMATION PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL
(SPECIFY) AS DRILLED PLUG & ABANDON CLEAN OUT & REPLUG
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,600' TVD 14,654' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

JOB # 13-096WA
DRAWING # SILAS2HAD
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

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 748' ORIGINAL - 745' AS DRILLED WATERSHED MCELROY CREEK

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