

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

API 47-095-02159 County Tyler District McElroy  
Quad Center Point 7.5' Pad Name Forest Pad Field/Pool Name \_\_\_\_\_  
Farm name Moore, Forest & Brenda Well Number Glover 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 4,360,757m Easting 522,394m  
Landing Point of Curve Northing 4,361,325.76m Easting 522,606.42m  
Bottom Hole Northing 4,363,329m Easting 521,957m

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 09/06/2014  
Date completion activities began 10/16/2014 Date completion activities ceased 02/10/2015  
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 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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Reviewed by:  
SKC 7/24/15  
07/24/2015

API 47-095 - 02159 Farm name Moore, Forest & Brenda Well number Glover 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"	402'	New	48#; H-40	N/A	Yes
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,542'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	14,208'	New	20#; P-110	N/A	Yes
Tubing		2 3/8"	7,061'		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	50 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	937 sx	15.6	1.18	796	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	858 sx (Lead); 1,271 sx (Tail)	14.5 (Lead); 15.2 (Tail)	1.3 (Lead); 1.86 (Tail)	2,787	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 14,208' TMD; 6,573' TVD (BHL); 6,605' TVD (Deepest Point Drilled) Loggers TD (ft) 7,302'  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6,716'

\*\*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 - 02159 Farm name Moore, Forest & Brenda Well number Glover Unit 2H

PRODUCING FORMATION(S)		DEPTH(S)		
<u>Marcellus</u>		<u>6,555' (top)</u> TVD	<u>7,091' (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 11,523 mcfd Oil 16 bpd NGL \_\_\_\_\_ bpd Water 2 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	
	<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

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Please insert additional pages as applicable.  
 Completed by Megan Darling Telephone 303-357-7230  
 Signature Megan C. Darling Title Permitting Agent Date 07/02/2015

API 47-095-02159 Farm Name Moore, Forest & Brenda Well Number Glover Unit 2H

**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	16-Oct-14	13,947	14,116	60	Marcellus
2	17-Nov-14	13,747	13,916	60	Marcellus
3	18-Nov-14	13,547	13,716	60	Marcellus
4	19-Nov-14	13,346	13,515	60	Marcellus
5	21-Nov-14	13,146	13,315	60	Marcellus
6	21-Nov-14	12,946	13,115	60	Marcellus
7	21-Nov-14	12,745	12,914	60	Marcellus
8	21-Nov-14	12,545	12,714	60	Marcellus
9	22-Nov-14	12,345	12,514	60	Marcellus
10	22-Nov-14	12,144	12,313	60	Marcellus
11	23-Nov-14	11,944	12,113	60	Marcellus
12	23-Nov-14	11,744	11,913	60	Marcellus
13	23-Nov-14	11,543	11,712	60	Marcellus
14	24-Nov-14	11,343	11,512	60	Marcellus
15	24-Nov-14	11,143	11,312	60	Marcellus
16	24-Nov-14	10,942	11,111	60	Marcellus
17	25-Nov-14	10,742	10,911	60	Marcellus
18	25-Nov-14	10,542	10,711	60	Marcellus
19	25-Nov-14	10,341	10,510	60	Marcellus
20	26-Nov-14	10,141	10,310	60	Marcellus
21	26-Nov-14	9,941	10,110	60	Marcellus
22	26-Nov-14	9,740	9,909	60	Marcellus
23	26-Nov-14	9,540	9,709	60	Marcellus
24	27-Nov-14	9,340	9,509	60	Marcellus
25	27-Nov-14	9,139	9,308	60	Marcellus
26	28-Nov-14	8,939	9,108	60	Marcellus
27	28-Nov-14	8,739	8,908	60	Marcellus
28	29-Nov-14	8,538	8,707	60	Marcellus
29	29-Nov-14	8,338	8,507	60	Marcellus
30	29-Nov-14	8,138	8,307	60	Marcellus
31	30-Nov-14	7,937	8,106	60	Marcellus
32	1-Dec-14	7,737	7,906	60	Marcellus
33	1-Dec-14	7,537	7,706	60	Marcellus
34	1-Dec-14	7,336	7,505	60	Marcellus
35	2-Dec-14	7,136	7,305	60	Marcellus

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**EXHIBIT 2**

Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	14-Nov-14	51.8	7,577	6,311	4,776	63,420	7,267	N/A
2	17-Nov-14	56.0	7,436	6,258	5,580	140,100	5,941	N/A
3	18-Nov-14	59.8	6,995	6,190	4,861	208,120	6,112	N/A
4	19-Nov-14	61.2	7,463	6,821	4,846	137,290	7,245	N/A
5	21-Nov-14	62.9	7,301	6,191	5,205	207,350	6,391	N/A
6	21-Nov-14	63.5	7,442	5,906	3,938	244,900	7,173	N/A
7	21-Nov-14	63.3	7,258	6,172	5,193	177,220	7,144	N/A
8	21-Nov-14	63.9	7,158	5,839	5,292	245,870	6,461	N/A
9	22-Nov-14	62.3	7,925	5,971	5,156	115,540	6,453	N/A
10	22-Nov-14	64.4	7,198	5,647	5,481	185,360	7,069	N/A
11	23-Nov-14	70.9	7,439	5,939	5,172	247,040	6,993	N/A
12	23-Nov-14	61.2	7,310	5,710	5,330	165,700	6,343	N/A
13	23-Nov-14	57.9	7,335	5,621	5,242	222,400	6,948	N/A
14	24-Nov-14	64.8	7,127	5,682	4,646	238,840	6,885	N/A
15	24-Nov-14	60.9	7,059	5,689	4,839	216,080	6,377	N/A
16	24-Nov-14	63.9	7,086	5,826	5,077	191,100	6,288	N/A
17	25-Nov-14	63.9	7,444	5,980	4,836	247,800	6,386	N/A
18	25-Nov-14	62.4	7,011	5,661	4,951	223,980	6,344	N/A
19	25-Nov-14	64.4	6,992	5,962	4,701	217,800	6,720	N/A
20	26-Nov-14	67.8	7,142	5,928	4,102	249,100	6,369	N/A
21	26-Nov-14	67.2	7,043	5,789	5,287	187,760	6,403	N/A
22	26-Nov-14	63.8	7,046	5,799	5,452	198,200	5,929	N/A
23	26-Nov-14	70.2	6,969	5,810	5,018	250,200	6,238	N/A
24	27-Nov-14	70.6	6,920	5,201	5,586	249,000	6,343	N/A
25	27-Nov-14	69.2	7,154	5,898	5,647	203,700	5,668	N/A
26	28-Nov-14	70.9	7,010	5,846	5,126	249,020	6,311	N/A
27	28-Nov-14	70.9	6,360	5,328	5,858	250,600	6,164	N/A
28	29-Nov-14	67.3	7,099	5,650	4,448	104,520	6,140	N/A
29	29-Nov-14	70.3	6,866	6,144	5,306	251,200	6,227	N/A
30	29-Nov-14	70.8	6,756	5,507	5,083	239,600	6,040	N/A
31	30-Nov-14	69.9	6,997	6,142	4,257	249,600	6,089	N/A
32	1-Dec-14	70.3	7,159	5,873	5,085	211,000	6,649	N/A
33	1-Dec-14	71.0	6,526	5,988	5,058	247,150	6,457	N/A
34	1-Dec-14	69.3	6,417	5,639	5,552	251,100	6,214	N/A
35	2-Dec-14	70.1	6,412	5,813	5,410	247,460	6,302	N/A
	AVG=	65.4	7,098	5,878	5,068	7,335,120	226,083	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	89'	N/A	89'	N/A
Fresh Water	329'	N/A	329'	N/A
Shale/ Sandstone	0	149	0	149
Sandstone/ Trace Coal	149	209	149	209
Sandstone/ Shale	209	429	209	429
Limestone	429	449	429	449
Sandstone	449	569	449	569
Sandstone/ Limestone	569	689	569	689
Sandstone	689	789	689	789
Sandstone/ Trace Coal	789	829	789	829
Shale/ Sandstone	829	929	829	929
Sandstone/ Trace Coal	929	1,029	929	1,029
Sandstone	1,029	1,069	1,029	1,069
Coal/ Sandstone	1,069	1,429	1,069	1,429
Sandstone	1,429	1,741	1,429	1,741
Big Lime	1,741	1,883	1,741	1,883
Big Injun	1,883	2,310	1,883	2,310
Gantz Sand	2,310	2,467	2,310	2,467
Fifty Foot Sandstone	2,467	2,533	2,467	2,533
Gordon	2,533	2,823	2,533	2,824
Fifth Sandstone	2,823	2,881	2,824	2,883
Bayard	2,881	3,262	2,883	3,270
Warren	3,262	3,623	3,270	3,641
Speechley	3,623	3,930	3,641	3,959
Baltown	3,930	4,384	3,959	4,471
Bradford	4,384	4,901	4,471	5,061
Benson	4,901	5,167	5,061	5,360
Alexander	5,167	5,357	5,360	5,572
Elk	5,357	5,913	5,572	6,215
Rhinestreet	5,913	6,170	6,215	6,519
Sycamore	6,170	6,325	6,519	6,699
Middlesex	6,325	6,467	6,699	6,900
Burkett	6,467	6,495	6,900	6,949
Tully	6,495	6,555	6,949	7,091
Marcellus	6,555	NA	7,091	NA

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/14/2014
Job End Date:	12/2/2014
State:	West Virginia
County:	Tyler
API Number:	47-095-02159-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Glover Unit 2H
Longitude:	-80.73992800
Latitude:	39.39601100
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,581
Total Base Water Volume (gal):	9,495,486
Total Base Non Water Volume:	384,530

## 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	91.12272	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	8.44016	
UGC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.08599	
			Petroleum Distillates	64742-47-8	60.00000	0.08144	
			Suspending agent (solid)	14808-60-7	3.00000	0.01315	
			Surfactant	68439-51-0	3.00000	0.00516	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.09752	
			Hydrogen Chloride	7641-01-1	18.00000	0.02329	
WFRRA-405	U.S. Well Services, LLC	Friction Reducer	Anionic Polyacrylamide	Proprietary		0.03140	
			Water	7732-18-5	40.00000	0.03140	
			Petroleum Distillates	64742-47-8	22.00000	0.02528	
			Crystalline Salt	12125-02-9	5.00000	0.00393	



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SI-1100	U.S. Well Services	Scale Inhibitor	Ethoxylated alcohol blend	Proprietary	5.00000	0.00393
			Di Water	7732-18-5	80.00000	0.01040
			Ethylene Glycol	107-21-1	40.00000	0.00588
			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	0.00153
			bis (hexamethylene) triamine 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, LLC	Anti-Bacterial Agent				
			2,2-dibromo-3- nitropropionamide	10222-01-2	20.00000	0.00432
			Deionized Water	7732-18-5	28.00000	0.00247
AP One	U.S. Well Services, LLC	Gel Breakers				
			Ammonium Persulfate	7727-54-0	100.00000	0.00243
AI-301	U.S. Well Services, LLC	Acid Corrosion Inhibitors				
			Diethylene Glycol	111-46-6	30.00000	0.00015
			Methenamine	100-97-0	20.00000	0.00012
			Hydrogen Chloride	7647-01-0	10.00000	0.00005
			Polyethylene polyamine	68603-67-8	10.00000	0.00005
			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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LATITUDE 39°25'00"

8,979'

10,387' TO BOTTOM HOLE

LATITUDE 39°27'30"

LONGITUDE 80°42'30"

7,552'

LONGITUDE 80°42'30"

LONGITUDE 80°42'30"

Antero Resources Corporation  
Well No. Glover Unit 2H  
47-095-02159 (AS DRILLED)

AS DRILLED DATA:  
WELL 2H TOP HOLE INFORMATION:  
N: 328,736ft E: 1,649,546ft  
LAT: 39°23'45.36" LON: 80°44'24.38"  
BOTTOM HOLE INFORMATION:  
N: 337,201ft E: 1,648,252ft  
LAT: 39°25'08.84" LON: 80°44'42.36"  
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: 4,360,757m E: 522,394m  
BOTTOM HOLE INFORMATION:  
N: 4,363,329m E: 521,957m

WV NORTH ZONE GRID NORTH

ELIZA UNDERWOOD ET AL LEASE

MVRA H. PARKER D.B. 366 PG. 478 T.M. 17 PAR. 09 176 AC.±

H. HUMM LEASE  
F.D. BURCIAGA ET AL  
D.B. 363 PG. 521  
T.M. 17 PAR. 08  
7157 AC.±

COASTAL LUMBER CO.  
D.B. 359 PG. 267  
T.M. 17 PAR. 03  
766 AC.±

LLOYD PITTS  
D.B. 303 PG. 372  
T.M. 17 PAR. 16  
59 AC.±

COASTAL LUMBER CO.  
D.B. 340 PG. 272  
T.M. 17 PAR. 14  
79.02 AC.±

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.

2H TOP HOLE

WELL 2H BOTTOM HOLE

N 19°44' W APPROX.

M.V.B. GEORGE LEASE

LLOYD E. PITTS  
D.B. 353 PG. 372  
T.M. 20 PAR. 06  
47.3 AC.±

JAMES DOAN ET UX LEASE

JAMES D. TENNANT  
D.B. 08 PG. 374  
T.M. 17 PAR. 15  
184.65 AC.±

GARNET SWIGGER  
W.B. 38 PG. 759  
T.M. 20 PAR. 07  
2.22 AC.±

CORNELIUS BOSTON  
D.B. 337 PG. 82A  
T.M. 20 PAR. 06.1  
20.41 AC.±

RALPH SWEENEY ET UX LEASE

RALPH SWEENEY  
D.B. 15 PG. 29  
T.M. 20 PAR. 13  
55.43 AC.±

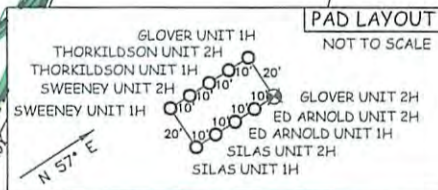
B.B. JONES SR ET AL  
D.B. 296 PG. 451  
T.M. 20 PAR. 12  
50 AC.±

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



WELL NO. 2H TO WATER WELLS

LINE	BEARING	DIST.
W1	N 40°21' W	1584.1'
W2	N 49°29' W	1610.0'
W3	N 58°16' W	1635.1'
W4	N 73°20' W	1106.1'
W5	N 74°15' W	1004.5'
W6	N 75°21' W	1063.4'
W7	S 85°52' W	993.4'
W8	S 82°40' W	1068.7'
W9	S 78°13' W	1320.7'



JOB # 13-097WA  
DRAWING # GLOVER2HAD  
SCALE 1" = 1000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WILLOW LAND SURVEYING PLLC  
220 MASONIC AVE. PENNSBORO  
WEST VIRGINIA 26415

LEGEND  
--- Surface Owner Boundary  
--- Interior Surface Tract  
X Existing Feasibility  
⊕ Found monument, as noted  
○ Proposed Well Path  
⊗ As Drilled Well Path

DATE 06/25/15  
OPERATOR'S WELL # GLOVER UNIT #2H  
API WELL # 47 - 095 - 02159  
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS  
WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X \_\_\_  
LOCATION: ELEVATION 748' ORIGINAL - 745' AS DRILLED WATERSHED MCELROY CREEK  
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; H. HUMM LEASE ACREAGE 25.688 ACRES±; 55.43 ACRES±; 300 ACRES±; 263.67 ACRES±; 216 ACRES±; 77.26 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 6,573' TVD 14,208' MD  
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER  
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD  
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

RECEIVED  
Office of Oil and Gas  
JUL 06 2015

07/24/2015

COUNTY NAME PERMIT