

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

API 47-095-02364 County Tyler District Centerville  
Quad Shirley 7.5' Pad Name Dawson Pad Field/Pool Name -----  
Farm name Gary D. Dawson et ux Well Number Bounty Unit 3H  
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 4359041m Easting 510882m  
Landing Point of Curve Northing 4359432.43m Easting 511182.11m  
Bottom Hole Northing 4362563m Easting 510064m

Elevation (ft) 1009' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine

Mud Type(s) and Additive(s)  
Air - Foam & 4% KCL

Mud - Polymer

Date permit issued 8/19/2016 Date drilling commenced 7/1/2017 Date drilling ceased 1/26/2018  
Date completion activities began 3/20/2018 Date completion activities ceased 9/5/2018  
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 N/A Open mine(s) (Y/N) depths No  
Salt water depth(s) ft N/A 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:

\_\_\_\_\_

API 47-095 - 02364 Farm name Gary D. Dawson et ux Well number Bounty Unit 3H

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"	80'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	584'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2619'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17997'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6849'		4.7#, N-80		
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	204 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	480 sx	15.6	1.18	826	0'	8 Hrs.
Coal							
Intermediate 1	Class A	813 sx	15.6	1.18	1181	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	740 sx (Lead) 1660 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.45 (Lead), 1.94 (Tail)		-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 18017' MD, 6454' TVD (BHL), 6453' (Deepest Point Drilled) Loggers TD (ft) 18017' MD  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 5428'

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 N/A



API 47- 095 - 02364 Farm name Gary D. Dawson et ux Well number Bounty Unit 3H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
Marcellus	6477' (TOP)	TVD	6888' (TOP) MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 2800 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 12625 mcfpd Oil 126 bpd NGL --- bpd Water N/A bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	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	

**\*PLEASE SEE ATTACHED EXHIBIT 3**


Please insert additional pages as applicable.

Drilling Contractor Patterson - UTI Drilling Company LLC  
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Allied Horizontal Wireline Services  
Address 381 Colonial Manor Road City North Huntington State PA Zip 15642

Cementing Company BJ Services  
Address 1036 East Main Street City Bridgeport State WV Zip 26330

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

Please insert additional pages as applicable.

Completed by Megan Griffith Telephone 303-357-7223  
Signature  Title Permitting Agent Date 10/4/2018

API 47-095-02364 Farm Name Gary D. Dawson Well Number Bounty Unit 3H

**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	3/20/2018	17797		60	Marcellus
2	3/20/2018	17595	17765	60	Marcellus
3	3/20/2018	17394	17564	60	Marcellus
4	3/21/2018	17192	17362	60	Marcellus
5	3/21/2018	16991	17161	60	Marcellus
6	3/21/2018	16790	16959	60	Marcellus
7	3/22/2018	16588	16758	60	Marcellus
8	3/22/2018	16387	16557	60	Marcellus
9	3/22/2018	16185	16355	60	Marcellus
10	3/23/2018	15984	16154	60	Marcellus
11	3/23/2018	15783	15952	60	Marcellus
12	3/23/2018	15581	15751	60	Marcellus
13	3/23/2018	15380	15550	60	Marcellus
14	3/24/2018	15178	15348	60	Marcellus
15	3/24/2018	14977	15147	60	Marcellus
16	3/24/2017	14776	14945	60	Marcellus
17	3/25/2018	14574	14744	60	Marcellus
18	3/25/2018	14373	14543	60	Marcellus
19	3/25/2018	14171	14341	60	Marcellus
20	3/25/2018	13970	14140	60	Marcellus
21	3/26/2018	13769	13938	60	Marcellus
22	3/26/2018	13567	13737	60	Marcellus
23	3/26/2018	13366	13536	60	Marcellus
24	3/27/2018	13164	13334	60	Marcellus
25	3/27/2018	12963	13133	60	Marcellus
26	3/27/2018	12762	12931	60	Marcellus
27	3/27/2018	12560	12730	60	Marcellus
28	3/28/2018	12359	12529	60	Marcellus
29	3/28/2018	12157	12327	60	Marcellus
30	3/28/2018	11956	12126	60	Marcellus
31	3/29/2018	11755	11924	60	Marcellus
32	3/29/2018	11553	11723	60	Marcellus
33	3/29/2018	11352	11522	60	Marcellus
34	3/29/2018	11150	11320	60	Marcellus
35	3/30/2018	10949	11119	60	Marcellus
36	3/30/2018	10748	10917	60	Marcellus
37	3/30/2018	10546	10716	60	Marcellus
38	3/30/2018	10345	10515	60	Marcellus
39	3/31/2018	10143	10313	60	Marcellus
40	3/31/2018	9942	10112	60	Marcellus
41	4/1/2018	9741	9910	60	Marcellus
42	4/1/2018	9539	9709	60	Marcellus
43	4/1/2018	9338	9508	60	Marcellus
44	4/1/2018	9136	9306	60	Marcellus
45	4/2/2018	8935	9105	60	Marcellus
46	4/2/2018	8734	8903	60	Marcellus
47	4/2/2018	8532	8702	60	Marcellus
48	4/3/2018	8331	8501	60	Marcellus
49	4/3/2018	8129	8299	60	Marcellus
50	4/3/2018	7928	8098	60	Marcellus
51	4/4/2018	7727	7896	60	Marcellus
52		7525	7695	60	Marcellus
53	4/4/2018	7324	7494	60	Marcellus
54	4/4/2018	7122	7292	60	Marcellus
55	4/5/2018	6921	7091	60	Marcellus

## 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	3/20/2018	56.2	6499	4239	3053	13791	6837	N/A
2	3/20/2018	74.6	7646	5367	3387	16400	8591	N/A
3	3/20/2018	77.8	7673	5590	3506	16769	8665	N/A
4	3/21/2018	76.5	7732	5522	3485	16739	8722	N/A
5	3/21/2018	78	7795	5541	3319	16655	8700	N/A
6	3/21/2018	79	7690	5400	3698	16788	8628	N/A
7	3/22/2018	79.6	7823	6267	3804	17894	9419	N/A
8	3/22/2018	79.9	7703	6114	3676	17493	8575	N/A
9	3/22/2018	78.5	7396	6159	3668	17223	8527	N/A
10	3/23/2018	77.7	7425	6092	3771	17288	8754	N/A
11	3/23/2018	79.7	7387	5933	3438	16758	8618	N/A
12	3/23/2018	79.9	7421	5656	3654	16731	8421	N/A
13	3/23/2018	79.4	7402	6038	3521	16961	8572	N/A
14	3/24/2018	79.9	7523	5702	3484	16709	8601	N/A
15	3/24/2018	80.1	7114	5959	3585	16658	8612	N/A
16	3/24/2017	79.3	7276	5823	3536	16635	8396	N/A
17	3/25/2018	78	7201	6003	3595	16799	8428	N/A
18	3/25/2018	80.2	7405	5549	3611	16565	8324	N/A
19	3/25/2018	80.5	7210	5709	3757	16676	8292	N/A
20	3/25/2018	78.9	7229	5833	3521	16583	8459	N/A
21	3/26/2018	80.4	7396	5439	3582	16417	8337	N/A
22	3/26/2018	80.1	7297	5812	3565	16674	8497	N/A
23	3/26/2018	76.9	7174	5968	4051	17193	10082	N/A
24	3/27/2018	78.5	7215	5807	3667	16689	8352	N/A
25	3/27/2018	80.6	7420	5928	3647	16995	8316	N/A
26	3/27/2018	79.9	7361	6222	3640	17223	8269	N/A
27	3/27/2018	76.9	6740	5878	3786	16404	8405	N/A
28	3/28/2018	80	7078	5979	3760	16817	8613	N/A
29	3/28/2018	80.7	7311	5955	3467	16733	9836	N/A
30	3/28/2018	78	7948	5519	3593	17060	9288	N/A
31	3/29/2018	78.6	6902	5587	3624	16113	8442	N/A
32	3/29/2018	80.4	6997	5893	3911	16801	8436	N/A
33	3/29/2018	80.2	6892	5994	3668	16554	8386	N/A
34	3/29/2018	79.9	6795	5593	3823	16211	8458	N/A
35	3/30/2018	79.7	6526	6032	3937	16495	8338	N/A
36	3/30/2018	80.6	6888	5603	3580	16071	8347	N/A
37	3/30/2018	79.4	6492	5683	3686	15861	8444	N/A
38	3/30/2018	78.1	6603	5706	3779	16088	8088	N/A
39	3/31/2018	80.2	6910	4994	3771	15675	8706	N/A
40	3/31/2018	79.1	6879	6170	3893	16942	8708	N/A
41	4/1/2018	79	6947	6145	4896	17988	8490	N/A
42	4/1/2018	80.4	7216	6195	4599	18010	8511	N/A
43	4/1/2018	74.3	7694	6127	4158	17979	12802	N/A
44	4/1/2018	78.2	7124	6585	4416	18125	8383	N/A
45	4/2/2018	79.9	7144	6384	4140	17668	8207	N/A
46	4/2/2018	67.2	7624	5133	3742	16499	10090	N/A
47	4/2/2018	76.4	6586	5876	4011	16473	8275	N/A
48	4/3/2018	79.1	6611	6120	3841	16572	8310	N/A
49	4/3/2018	80.5	6533	6032	3783	16348	8197	N/A
50	4/3/2018	78.6	6515	6239	3878	16632	9331	N/A
51	4/4/2018	79	6497	6294	3944	16735	8190	N/A
52		80.4	6806	5347	3856	16009	8251	N/A
53	4/4/2018	80.4	6375	5436	3692	15503	8086	
54	4/4/2018	79.6	6467	5791	3524	15782	8212	
55	4/5/2018	80	6233	6332	3944	16509	8291	N/A
		<b>78.5</b>	<b>7,123</b>	<b>5,824</b>	<b>3,744</b>	<b>917,963</b>	<b>474,115</b>	TOTAL

## 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	227'	N/A	227'	N/A
Sandstone	0	N/A	0	N/A
Silty Sandstone	300	N/A	300	N/A
Sandy Siltsone	440	N/A	440	N/A
Sandstone	600	N/A	600	N/A
Sandy Marlstone	700	N/A	700	N/A
Calcarious Sandstone	880	N/A	880	N/A
Silty Marlstone	1,070	N/A	1,070	N/A
Sandstone w/interbedded coal	1,280	N/A	1,280	N/A
Sandstone w/trace coal	1,440	N/A	1,440	N/A
Calcarious Shale	1,590	N/A	1,590	N/A
Coal/Shale	1,650	N/A	1,650	N/A
Calcarious Shale	1,670	N/A	1,670	N/A
Calcarious Sandstone	1,840	N/A	1,840	N/A
Big Lime	1,907	N/A	1,937	N/A
Big Injun	2,028	N/A	2,063	N/A
Gantz Sand	2,567	N/A	2,619	N/A
Fifty Foot Sandstone	2,681	N/A	2,736	N/A
Gordon	2,783	N/A	2,841	N/A
Fifth Sandstone	2,968	N/A	3,033	N/A
Bayard	3,149	N/A	3,219	N/A
Warren	3,467	N/A	3,547	N/A
Speechley	3,839	N/A	3,933	N/A
Balltown	4,261	N/A	4,373	N/A
Bradford	4,528	N/A	4,650	N/A
Benson	4,780	N/A	4,910	N/A
Alexander	5,182	N/A	5,323	N/A
Rhinestreet	5,775	N/A	5,942	N/A
Sycamore	6,137	N/A	6,340	N/A
Middlesex	6,303	N/A	6,552	N/A
Burkett	6,413	N/A	6,729	N/A
Tully	6,451	N/A	6,814	N/A
Marcellus	6,477	N/A	6,888	N/A

\*Please note Antero determines 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:	3/20/2018
Job End Date:	4/5/2018
State:	West Virginia
County:	Tyler
API Number:	47-095-02364-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Bounty Unit 3H
Latitude:	39.38069400
Longitude:	-80.87381900
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,454
Total Base Water Volume (gal):	20,684,368
Total Base Non Water Volume:	0



## 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	Supplied by Operator	Base Fluid					
			Water	7732-18-5	70.00000	88.42450	
Hydrochloric Acid	CWS	Clean Perforations					
				Listed Below			





					Listed Below			
Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.								
					Crystalline silica (Quartz)	14808-60-7	100.00000	11.24088
					Calcite	471-34-1	1.00000	0.08300
					Hydrochloric acid	7647-01-0	37.00000	0.05524
					Illite	12173-60-3	1.00000	0.02940
					Polymer	26100-47-0	45.00000	0.02783
					Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.02183
					Guar gum	9000-30-0	60.00000	0.02183
					Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.01855
					Goethite	1310-14-1	0.10000	0.01124
					Biotite	1302-27-8	0.10000	0.01124
					Apatite	64476-38-6	0.10000	0.01124
					Ammonium chloride	12125-02-9	11.00000	0.00680
					2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000	0.00619
					Polyethylene glycol mixture	25322-68-3	54.50000	0.00611
					Ammonium Persulfate	64742-47-8	100.00000	0.00593
					Ilmenite	98072-94-7	0.10000	0.00294
					Sorbitan monooleate	1338-43-8	4.00000	0.00247
					2,2-Dibromo-3-Nitripropionamide	10222-01-2	20.00000	0.00224
					Polyethylene glycol monooleate	9004-96-0	3.00000	0.00186
					Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00182
					1,2-Propanediol	57-55-6	10.00000	0.00155
					Sorbitol tetraoleate	61723-83-9	2.00000	0.00124

					69418-26-4	20.00000	0.00119	
				Vinylidene chloride-methyl acrylate copolymer				
				Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00062	
				Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00055	
				Citric acid	77-92-9	60.00000	0.00050	
				Sodium bromide	7647-15-6	4.00000	0.00045	
				Dibromoacetone	3252-43-5	3.00000	0.00034	
				Alkylloxypolyethyleneoxy ethanol	84133-50-6	0.50000	0.00031	
				Acrylamide	79-06-1	0.10000	0.00006	
				Ethylene glycol	107-21-1	40.00000	0.00003	
				Diethylene glycol (mono) methyl ether	34590-94-8	20.00000	0.00002	
				Diethylene glycol	111-46-6	1.00000	0.00001	
				Formic Acid	64-18-6	10.00000	0.00001	
				Tar bases, quinolone derivs	68513-87-1	1.00000	0.00001	
				Isopropanol	67-63-0	5.00000	0.00001	
				Ethoxylated alcohols	Proprietary	10.00000	0.00001	Proprietary CAS
				Tar bases, quinolone derivs, benzyl chloride- quaternized	72480-70-7	10.00000	0.00001	
				Cinnamaldehyde	104-55-2	10.00000	0.00001	

\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water  
\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%  
\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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°25'00"

11,444'

LATITUDE 39°25'00"

Antero Resources Corporation  
Well No. Bounty Unit 3H  
A.P.I 47-095-02364

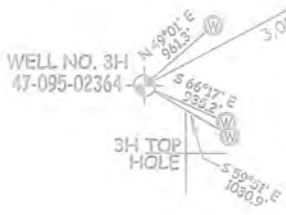
NOTES:  
WELL 3H TOP HOLE INFORMATION:  
N: 323,736ft E: 1,611,677ft  
LAT: 39°22'50.50" LON: 80°52'25.75"  
BOTTOM HOLE INFORMATION:  
N: 335,341ft E: 1,609,186ft  
LAT: 39°24'44.82" LON: 80°52'59.74"  
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE.  
ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE 6EOXT 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 3H TOP HOLE INFORMATION:  
N: 4,359,041m E: 510,882m  
BOTTOM HOLE INFORMATION:  
N: 4,362,563m E: 510,064m

PAD LAYOUT  
NOT TO SCALE



3 WATER WELLS WERE LOCATED WITHIN 2000' OF CENTER OF PAD



2,334' TO BOTTOM HOLE

3H BOTTOM HOLE

A = DAVID MCCARTNEY, D.B. 348 PG. 102, T.M. 12 PAR. 14.5, 1.81 AC.  
B = GARY DAWSON, D.B. 125 PG. 335, T.M. 12 PAR. 14.3, 0.14 AC.  
C = NATHANIEL HENDRICKS, D.B. 284 PG. 544, T.M. 12 PAR. 14.2, 0.14 AC.  
D = GARY DAWSON, D.B. 216 PG. 419, T.M. 12 PAR. 14.1, 2.2 AC.  
E = GARY DAWSON, D.B. 205 PG. 626, T.M. 12 PAR. 14.4, 1.05 AC.



WV NORTH ZONE GRID NORTH

1,537' TO BOTTOM HOLE  
LONGITUDE 80°52'30"

13,102'

LONGITUDE 80°50'00"

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION



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

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

JOB # 16-033WA  
DRAWING # BOUNTY2HAD  
SCALE 1" = 2000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS  
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

LEGEND  
--- Surface Owner Boundary Lines +/-  
--- Interior Surface Tracts +/-  
--- Proposed Well Path  
--- As Drilled Well Path  
DOUGLAS R. ROWE P.S. 2202  
DATE 08/29/2010  
OPERATOR'S WELL# BOUNTY UNIT #3H

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.

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL 47 - 095 - 02364  
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X STATE COUNTY PERMIT  
LOCATION: ELEVATION 1,009' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK COUNTY NAME  
QUADRANGLE SHIRLEY 7.5' (TH) MIDDLEBOURNE 7.5' (BH) DISTRICT CENTERVILLE COUNTY TYLER  
SURFACE OWNER GARY D. DAWSON ET UX ACREAGE 104.27 ACRES +/- PERMIT  
OIL & GAS ROYALTY OWNER GARY D. DAWSON ET UX; WVDNR; PATTY L. BUTERBAUGH; CARL ASH; ROBERT C. DEAN; CARL ASH; LEASE ACREAGE 104.27 AC.; 84.78 AC.; 103.61 AC.; 21 AC.; 50.7 AC.; 37 AC.;  
LARRY F. HADLEY; DAVID E. BOWYER; HARRY ASH & JESSIE D. ASH ET AL; WILMA J. HOWARD ET AL; PEGGY E. WINCE; 102.5 AC.; 138 AC.; 291 AC.; 239 AC.; 65 AC.;  
CARL W. ASH; E. THOMAS ESTLACK ET UX; JOHN W. MULLETT ET UX; E. THOMAS ESTLACK ET UX; ALFRED STRACHA 362.8 AC.; 60 AC.; 45 AC.; 85.5 AC.; 101.2 AC.;  
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 6,454' TVD 18,017' MD  
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM  
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD  
DENVER, CO 80202 CHARLESTON, WV 25313