

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

RECEIVED  
Office of Oil and Gas  
AUG 28 2017  
WV Department of  
Environmental Protection

API 47-095-02337 County Tyler District Centerville  
Quad Middlebourne 7.5' Pad Name Estlack Pad Field/Pool Name ---  
Farm name Edna Monroe Well Number Melvin Unit 1H  
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 4362770m Easting 510501m  
Landing Point of Curve Northing 4362604.191m Easting 509842.351m  
Bottom Hole Northing 4385566m Easting 508792m

Elevation (ft) 1142' 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 01/29/2016 Date drilling commenced 02/19/2016 Date drilling ceased 04/10/2016  
Date completion activities began 09/01/2016 Date completion activities ceased 12/01/2016  
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 46', 98' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 748', 1222' Void(s) encountered (Y/N) depths No  
Coal depth(s) ft 228', 1128', 1628' Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

**APPROVED**

NAME: Sen M. H.  
DATE: 9-19-17

Reviewed by: DmH

02/16/2018

API 47-095 - 02337 Farm name Edna Monroe Well number Melvin Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	72'	New	94#, H-40	N/A	Y
Surface	17- 1/2"	13- 3/8"	411'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2623'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"	5-1/2"	17695'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7082'		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	143 sx	15.6	1.18	169	0	8 Hrs.
Surface	Class A	495 sx	15.6	1.19	589	0	8 Hrs.
Coal							
Intermediate 1	Class A	1029 sx	15.6	1.80	1852	0	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1012 sx (Lead), 1660 sx (Tail)	14.5 (Lead), 15.2 (Tail)	1.33 (Lead), 1.83 (Tail)	4384	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17695' MD, 6592' TVD (BHL); & 6597' TVD (Deepest point drilled) Loggers TD (ft) 17667' MD  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6423'

\*\* This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Lucy Unit 1H API# 47-095-02276). Please reference the wireline logs submitted with Form WR-35 for the Lucy 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 N/A

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API 47- 095 - 02337 Farm name Edna Monroe Well number Melvin Unit 1H

PRODUCING FORMATION(S)	DEPTHS		
<u>Marcellus</u>	<u>6520' (Top)</u>	<u>TVD</u>	<u>7145' (Top)</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 4100 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 11982 mcfpd Oil 245 bpd NGL --- bpd Water 853 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>		
<b>* PLEASE SEE ATTACHED EXHIBIT 3</b>					

Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling LLC  
Address 562 Spring Run Rd City Pennsboro State WV Zip 26415

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

Cementing Company C&J Energy Services  
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company Halliburton  
Address 121 Champion Way Suite 200 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Samantha Klaas Telephone 303-357-6759  
Signature *Samantha Klaas* Title Permitting Agent Date 08/25/2017

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

WV Department of Environmental Protection  
02/16/2018

API 47-095-02337 Farm Name Edna Monroe Well Number Melvin Unit 1H

**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	9/1/2016	17424	17593	60	Marcellus
2	9/2/2016	17223	17392	60	Marcellus
3	9/3/2016	17022	17192	60	Marcellus
4	9/3/2016	16822	16991	60	Marcellus
5	9/4/2016	16621	16791	60	Marcellus
6	9/5/2016	16421	16590	60	Marcellus
7	9/5/2016	16220	16389	60	Marcellus
8	9/6/2016	16020	16189	60	Marcellus
9	9/7/2016	15819	15988	60	Marcellus
10	9/8/2016	15619	15788	60	Marcellus
11	9/8/2016	15418	15587	60	Marcellus
12	9/9/2016	15218	15387	60	Marcellus
13	9/9/2016	15017	15186	60	Marcellus
14	9/10/2016	14817	14986	60	Marcellus
15	9/10/2016	14616	14785	60	Marcellus
16	9/11/2016	14416	14585	60	Marcellus
17	9/11/2016	14215	14384	60	Marcellus
18	9/12/2016	14015	14184	60	Marcellus
19	9/12/2016	13814	13983	60	Marcellus
20	9/13/2016	13614	13783	60	Marcellus
21	9/13/2016	13413	13582	60	Marcellus
22	9/14/2016	13213	13382	60	Marcellus
23	9/14/2016	13012	13181	60	Marcellus
24	9/14/2016	12812	12981	60	Marcellus
25	9/15/2016	12611	12780	60	Marcellus
26	9/15/2016	12411	12580	60	Marcellus
27	9/16/2016	12210	12379	60	Marcellus
28	9/16/2016	12009	12179	60	Marcellus
29	9/17/2016	11809	11978	60	Marcellus
30	9/17/2016	11608	11778	60	Marcellus
31	9/18/2016	11408	11577	60	Marcellus
32	9/18/2016	11207	11376	60	Marcellus
33	9/19/2016	11007	11176	60	Marcellus
34	9/20/2016	10806	10975	60	Marcellus
35	9/20/2016	10606	10775	60	Marcellus
36	9/21/2016	10405	10574	60	Marcellus
37	9/21/2016	10205	10374	60	Marcellus
38	9/21/2016	10004	10173	60	Marcellus
39	9/22/2016	9804	9973	60	Marcellus
40	9/23/2016	9603	9772	60	Marcellus
41	9/23/2016	9403	9572	60	Marcellus
42	9/23/2016	9202	9371	60	Marcellus
43	9/24/2016	9002	9171	60	Marcellus
44	9/24/2016	8801	8970	60	Marcellus
45	9/25/2016	8601	8770	60	Marcellus
46	9/25/2016	8400	8569	60	Marcellus
47	9/26/2016	8200	8369	60	Marcellus
48	9/26/2016	7999	8168	60	Marcellus
49	9/26/2016	7799	7968	60	Marcellus
50	9/27/2016	7598	7767	60	Marcellus
51	9/27/2016	7398	7567	60	Marcellus
52	9/28/2016	7197	7366	60	Marcellus

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02/16/2018

**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	9/2/2016	70.0	7344	4945	4962	305855	8731.0	N/A
2	9/2/2016	73.5	7483	5703	4268	305855	7848.0	N/A
3	9/3/2016	71.2	7500	6141	4721	302775	9434.0	N/A
4	9/3/2016	68.6	7625	5689	3991	303676	10130.0	N/A
5	9/4/2016	74.2	8126	5653	4568	304251	9904.0	N/A
6	9/5/2016	72.9	7532	5465	5092	303685	7849.0	N/A
7	9/5/2016	75.0	7185	5570	3596	306057	7844.0	N/A
8	9/6/2016	72.3	8012	5646	7153	258830	10311.0	N/A
9	9/7/2016	73.7	7384	5374	4486	306099	7816.0	N/A
10	9/8/2016	70.5	7151	5681	3486	304794	8923.0	N/A
11	9/8/2016	75.4	7382	5771	3620	303829	9037.0	N/A
12	9/9/2016	75.0	7264	5696	3198	303176	7950.0	N/A
13	9/9/2016	76.5	7345	5695	3183	303797	7729.0	N/A
14	9/10/2016	71.4	7161	6176	0	286670	8114.0	N/A
15	9/10/2016	76.3	7484	5806	4503	284635	7683.0	N/A
16	9/11/2016	78.3	7632	6128	3492	304194	7863.0	N/A
17	9/11/2016	73.1	7235	5706	4728	286942	7819.0	N/A
18	9/12/2016	73.7	7289	5985	4307	304554	7876.0	N/A
19	9/12/2016	75.5	7332	5720	3745	304373	8023.0	N/A
20	9/13/2016	76.0	7260	5749	4251	304240	7778.0	N/A
21	9/13/2016	76.6	7465	5634	4405	304942	7641.0	N/A
22	9/14/2016	76.0	7311	5266	3348	305437	8956.0	N/A
23	9/14/2016	77.5	7576	5624	3441	304561	8927.0	N/A
24	9/14/2016	77.7	7304	5926	4415	303775	7841.0	N/A
25	9/15/2016	77.9	7543	5608	4148	306019	7830.0	N/A
26	9/15/2016	76.3	7461	5656	4192	304477	8716.0	N/A
27	9/16/2016	76.8	7702	5660	3758	306598	7703.0	N/A
28	9/16/2016	77.5	7367	5519	4917	303805	7861.0	N/A
29	9/17/2016	77.6	7433	5431	3996	304619	7731.0	N/A
30	9/17/2016	73.9	7081	5794	3895	305676	7815.0	N/A
31	9/18/2016	75.9	7536	5664	3693	304201	8341.0	N/A
32	9/18/2016	75.6	7023	5504	4680	304970	7934.0	N/A
33	9/19/2016	75.6	7129	5484	3607	305033	7761.0	N/A
34	9/20/2016	73.9	7365	5501	3705	303738	7643.0	N/A
35	9/20/2016	55.7	8028	5602	5284	133555	6858.0	N/A
36	9/21/2016	79.8	7513	4696	4182	303988	7690.0	N/A
37	9/21/2016	77.0	6843	5442	4013	305532	7682.0	N/A
38	9/21/2016	75.2	6909	5488	3297	305377	7764.0	N/A
39	9/22/2016	76.6	6905	5767	4589	306439	7623.0	N/A
40	9/23/2016	80.7	6358	5293	5293	304196	7651.0	N/A
41	9/23/2016	75.9	7293	5789	3669	304518	7700.0	N/A
42	9/23/2016	77.4	6680	5387	3334	304641	7601.0	N/A
43	9/24/2016	76.7	6897	5716	3714	304841	7633.0	N/A
44	9/24/2016	77.3	6973	5504	3151	305438	7685.0	N/A
45	9/25/2016	74.0	6873	5629	3177	305017	7674.0	N/A
46	9/25/2016	74.0	6886	5573	3243	303367	7511.0	N/A
47	9/26/2016	75.9	7195	5676	4124	304166	7618.0	N/A
48	9/26/2016	75.8	7195	5584	3398	307331	7575.0	N/A
49	9/26/2016	77.7	6952	5528	3414	304968	7472.0	N/A
50	9/27/2016	77.2	6946	5996	3524	305191	7547.0	N/A
51	9/27/2016	77.3	6901	6000	3555	303791	7592.0	N/A
52	9/28/2016	77.5	6733	6516	3178	300377	7591.0	N/A
<b>AVG=</b>		<b>75.1</b>	<b>7,271</b>	<b>5,649</b>	<b>3,956</b>	<b>15,568,871</b>	<b>417,829</b>	<b>TOTAL</b>

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## Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/30/2016
Job End Date:	9/30/2016
State:	West Virginia
County:	Tyler
API Number:	47-095-02337-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Melvin 1H
Latitude:	39.41430278
Longitude:	-80.87819167
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,592
Total Base Water Volume (gal):	18,475,237
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	90.65049	Density = 8.330
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.15552	

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HCL >10%	Halliburton	Solvent					
				Listed Below			
FR-76	Halliburton	Friction Reducer					
				Listed Below			
SAND-COMMON WHITE - 100 MESH, 3307 LB BAG	Halliburton	Proppant					
				Listed Below			
MC B-8614	Halliburton	Biocide					
				Listed Below			
SP Breaker	Halliburton	Breaker					
				Listed Below			
SAND- PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					
				Listed Below			
FDP-M1075-12	Halliburton	Scale Inhibitor					
				Listed Below			
HAI-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor					
				Listed Below			

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WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				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	9.16900	
			Hydrochloric acid	7647-01-0	30.00000	0.04666	
			Guar gum	9000-30-0	100.00000	0.02455	
			Telomer	Proprietary	10.00000		
			Ethylene Glycol	107-21-1	60.00000		
			Olefins	Proprietary	5.00000		
			Hydrotreated light petroleum distillate	64742-47-8	30.00000		
			Acrylic acid	79-10-7	0.01000		
			Ethoxylated alcohols	Proprietary	30.00000		
			Propargyl alcohol	107-19-7	10.00000		
			Sodium polyacrylate	9003-04-7	1.00000		
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30.00000		
			Methanol	67-56-1	60.00000		
			Fatty acids, tall oil	Proprietary	30.00000		
			Acrylamide acrylate copolymer	Proprietary	30.00000		Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Inorganic salt	Proprietary	30.00000		

\* 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)

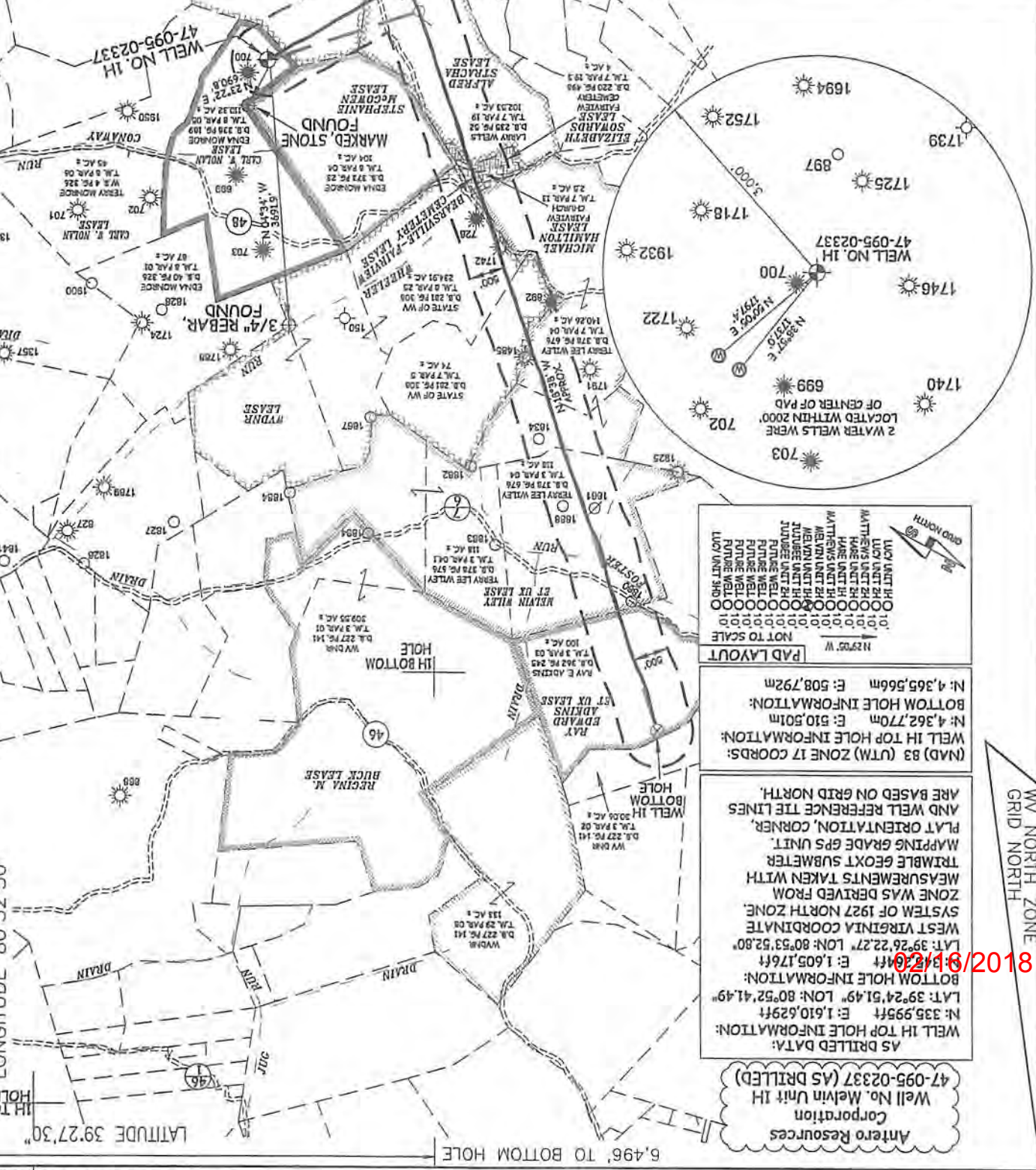
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WASTE DISPOSAL 47 095 02337 PERMIT  
 COUNTY NAME STATE COUNTY PERMIT  
 QUADRANGLE MIDDLE ISLAND CREEK DISTRICT CENTERVILLE COUNTY TYLER  
 SURFACE OWNER EDNA MONROE ACREAGE 110.32 ACRES +/-  
 OIL & GAS ROYALTY OWNER CARL W. NOLAN, E. THOMAS ESTACK ET UX, ALFRED STRACHA, LEASE ACREAGE 116 AC. ±, 85.5 AC. ±, 101.2 AC. ±  
 ELIZABETH SOMARDS, MICHAEL HAMILTON, BEARVILLE-FAIRVIEW CEMETERY, MELVIN WILEY ET UX, WYDNR, RAY EDWARD ADKINS ET UX  
 4 AC. ±, 18 AC. ±, 2 AC. ±, 378 AC. ±, 553.16 AC. ±, 100 AC. ±  
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE  
 PLUG OFF OLD FORMATION PERFORMATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL  
 (SPECIFY) (X) AS DRILLED PLUG & ABANDON  
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,592' TVD 17,695' MD  
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM  
 ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202  
 FORM WW-6

JOB # 14-063WA	DRAWING # MELVINHADR	SCALE 1" = 2000'	MINIMUM DEGREE OF ACCURACY SUBMETER	PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS	STATE OF WEST VIRGINIA	THOMAS SUMMERS P.S. 2109	DATE 06/28/17	OPERATOR'S WELL # MELVIN UNIT 1H
DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS								

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION,  
 OFFICE OF OIL AND GAS  
 WILLOW LAND SURVEYING PLLC  
 WEST VIRGINIA 26415





**THOMAS SUMMERS**  
**NO. 2109**  
**LICENSED**  
**STATE OF WEST VIRGINIA**  
**PROFESSIONAL SURVEYOR**

**LEGEND**

	Surface Owner Boundary Lines +/-
	Interior Surface Tracts +/-
	Found monument, as noted
	Proposed Well Path
	As Drilled Well Path

AS DRILLED DATA:  
 WELL 1H TOP HOLE INFORMATION:  
 N: 335.959ft E: 1,610.629ft  
 LAT: 39°24'51.49" LON: 80°52'41.49"  
 BOTTOM HOLE INFORMATION:  
 N: 335.959ft E: 1,605.176ft  
 LAT: 39°26'22.27" LON: 80°53'52.80"  
 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 1H TOP HOLE INFORMATION:  
 N: 4,362.770m E: 510.501m  
 BOTTOM HOLE INFORMATION:  
 N: 4,365.566m E: 508.792m

ANTERO RESOURCES CORPORATION  
 Well No. Melvin Unit 1H  
 47-095-02337 (AS DRILLED)

LONGITUDE 80°52'30"  
 LONGITUDE 80°52'30"  
 LATITUDE 39°27'30"  
 LATITUDE 39°25'00"

6,496' TO BOTTOM HOLE  
 198'

LATITUDE 39°25'00" -902'

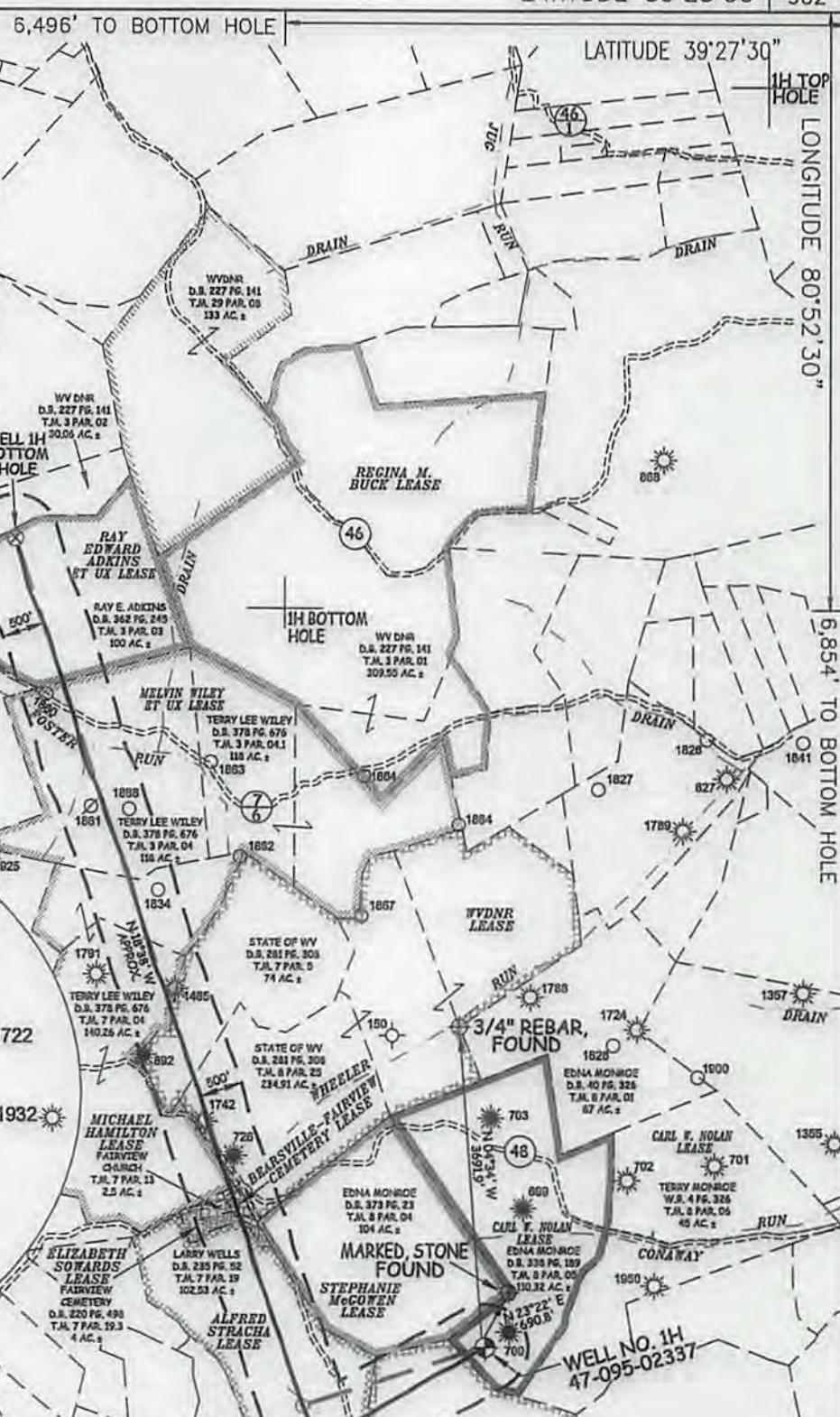
Antero Resources Corporation  
Well No. Melvin Unit 1H  
47-095-02337 (AS DRILLED)

AS DRILLED DATA:  
WELL 1H TOP HOLE INFORMATION:  
N: 335,995ft E: 1,610,629ft  
LAT: 39°24'51.49" LON: 80°52'41.49"  
BOTTOM HOLE INFORMATION:  
N: 345,264ft E: 1,605,176ft  
LAT: 39°26'22.27" LON: 80°53'52.80"  
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 1H TOP HOLE INFORMATION:  
N: 4,362,770m E: 510,501m  
BOTTOM HOLE INFORMATION:  
N: 4,365,566m E: 508,792m



WV NORTH ZONE  
GRID NORTH

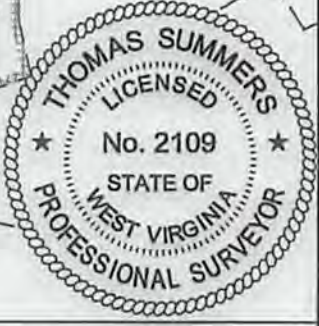


LONGITUDE 80°52'30"

6,854' TO BOTTOM HOLE



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 # 14-063WA  
DRAWING # MELVIN1HADR  
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 +/-  
⊕ Found monument, as noted  
○ Proposed Well Path  
○ As Drilled Well Path  
  
THOMAS SUMMERS P.S. 2109  
DATE 06/28/17  
OPERATOR'S WELL# MELVIN UNIT #1H

NOTES  
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 - 02337  
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X STATE COUNTY PERMIT  
LOCATION: ELEVATION 1,142' -AS-DRILLED WATERSHED HEADWATERS MIDDLE ISLAND CREEK  
QUADRANGLE MIDDLEBOURNE 7.5 DISTRICT CENTERTVILLE COUNTY TYLER  
SURFACE OWNER EDNA MONROE ACREAGE 110.32 ACRES +/-  
OIL & GAS ROYALTY OWNER CARL W. NOLAN; E. THOMAS ESTLACK ET UX; ALFRED STRACHA; LEASE ACREAGE 116 AC.±; 85.5 AC.±; 101.2 AC.±; ELIZABETH SOWARDS; MICHAEL HAMILTON; BEARSVILLE-FAIRVIEW CEMETERY; MELVIN WILEY ET UX; WVDNR; RAY EDWARD ADKINS ET UX 4 AC.±; 1.8 AC.±; 2 AC.±; 378 AC.±; 553.16 AC.±; 100 AC.±  
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 6,592' TVD 17,695' 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

02/16/2018