

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

RECEIVED

FEB 12 2016

WV GEOLOGICAL SURVEY
MORGANTOWN, WV

API 47-085-10143 County Ritchie District Clay
Quad Pennsboro 7.5' Pad Name Annie Horizontal Pad Field/Pool Name ----
Farm name Eddy F. Landrum Well Number Ericson 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 4353115m Easting 506429m
Landing Point of Curve Northing 4352905.29m Easting 506296.52m
Bottom Hole Northing 4349882m Easting 507515m

Elevation (ft) 1004' 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 11/14/2014 Date drilling commenced 2/25/2015 Date drilling ceased 7/8/2015
Date completion activities began 7/30/2015 Date completion activities ceased 9/24/2015
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 216' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 2210', 5202' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 176', 316', 516', 976', 1056', 1716' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

API 47-085 - 10143 Farm name Eddy F. Landrum Well number Ericson 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	30"	20"	40'	New	94#/J-55	N/A	Y
Surface	17-1/2"	13-3/8"	365'	New	48#/H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2525'	New	36#/J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17,595'	New	23#/P-110	N/A	Y
Tubing		2-3/8"	6498'		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 ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	193 sx	15.6	1.20	38 Cu. Ft.	0'	8 Hrs.
Surface	Class A	990 sx	15.6	1.18	254 Cu. Ft.	0'	8 Hrs.
Coal							
Intermediate 1	Class A	988 sx	15.6	1.18	791 Cu. Ft.	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	927 sx (Lead), 1800 sx (Tail)	13.7 (Lead), 14.79 (Tail)	1.24 (Lead), 1.81 (Tail)	3567 Cu. Ft.	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17,595' MD, 6348' TVD (BHL), 6349' (Deepest Point Drilled) Loggers TD (ft) 17,545' MD
 Deepest formation penetrated Marcellus Shale Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5516'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Belle Unit 3H API# 47-085-10029). Please reference the wireline logs submitted with Form WR-35 for the Belle Unit 3H. 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

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- 085 - 10143 Farm name Eddy F. Landrum Well number Ericson Unit 2H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
			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)
			SEE ATTACHED EXHIBIT 2					

Please insert additional pages as applicable.

API 47- 085 - 10143 Farm name Eddy F. Landrum Well number Ericson Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6290' (Top)</u>	<u>TVD</u>	<u>6694' (Top)</u> MD
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3000 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 5935 mcfpd Oil 185 bpd NGL --- bpd Water 213 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 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>		
					SEE ATTACHED EXHIBIT 3

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Company, LP
 Address 2640 Reach Road City Williamsport State PA Zip 17701

Logging Company Rush Wellsite Services
 Address 600 Alpha Drive City Canonsburg State PA Zip 15317

Cementing Company Nabors Completion & Production Services, Co. (bought Superior)
 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 Natalie Komp Telephone 303-357-6820
 Signature  Title Permitting Agent Date 2/5/2016

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

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	30-Jul-15	17,334	17,503	60	Marcellus
2	2-Sep-15	17,134	17,303	60	Marcellus
3	2-Sep-15	16,934	17,103	60	Marcellus
4	3-Sep-15	16,734	16,903	60	Marcellus
5	3-Sep-15	16,534	16,703	60	Marcellus
6	3-Sep-15	16,334	16,503	60	Marcellus
7	4-Sep-15	16,134	16,303	60	Marcellus
8	4-Sep-15	15,934	16,103	60	Marcellus
9	4-Sep-15	15,734	15,903	60	Marcellus
10	5-Sep-15	15,534	15,703	60	Marcellus
11	5-Sep-15	15,334	15,503	60	Marcellus
12	5-Sep-15	15,134	15,303	60	Marcellus
13	5-Sep-15	14,934	15,103	60	Marcellus
14	5-Sep-15	14,734	14,903	60	Marcellus
15	6-Sep-15	14,534	14,703	60	Marcellus
16	6-Sep-15	14,334	14,503	60	Marcellus
17	6-Sep-15	14,134	14,303	60	Marcellus
18	6-Sep-15	13,934	14,103	60	Marcellus
19	7-Sep-15	13,734	13,903	60	Marcellus
20	7-Sep-15	13,534	13,703	60	Marcellus
21	7-Sep-15	13,334	13,503	60	Marcellus
22	7-Sep-15	13,134	13,303	60	Marcellus
23	7-Sep-15	12,934	13,103	60	Marcellus
24	8-Sep-15	12,734	12,903	60	Marcellus
25	8-Sep-15	12,534	12,703	60	Marcellus
26	8-Sep-15	12,334	12,503	60	Marcellus
27	8-Sep-15	12,134	12,303	60	Marcellus
28	9-Sep-15	11,934	12,103	60	Marcellus
29	9-Sep-15	11,734	11,903	60	Marcellus
30	9-Sep-15	11,534	11,703	60	Marcellus
31	9-Sep-15	11,334	11,503	60	Marcellus
32	9-Sep-15	11,134	11,303	60	Marcellus
33	10-Sep-15	10,934	11,102	60	Marcellus
34	10-Sep-15	10,734	10,902	60	Marcellus
35	10-Sep-15	10,534	10,702	60	Marcellus
36	10-Sep-15	10,334	10,502	60	Marcellus
37	10-Sep-15	10,134	10,302	60	Marcellus
38	11-Sep-15	9,934	10,102	60	Marcellus
39	11-Sep-15	9,734	9,902	60	Marcellus
40	11-Sep-15	9,534	9,702	60	Marcellus
41	11-Sep-15	9,334	9,502	60	Marcellus
42	12-Sep-15	9,134	9,302	60	Marcellus
43	12-Sep-15	8,934	9,102	60	Marcellus
44	12-Sep-15	8,734	8,902	60	Marcellus
45	12-Sep-15	8,534	8,702	60	Marcellus
46	13-Sep-15	8,334	8,502	60	Marcellus
47	13-Sep-15	8,134	8,302	60	Marcellus
48	13-Sep-15	7,934	8,102	60	Marcellus
49	13-Sep-15	7,734	7,902	60	Marcellus
50	13-Sep-15	7,534	7,702	60	Marcellus
51	13-Sep-15	7,334	7,502	60	Marcellus
52	14-Sep-15	7,134	7,302	60	Marcellus
53	14-Sep-15	6,933	7,102	60	Marcellus
54	14-Sep-15	6,733	6,902	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	2-Sep-15	59.3	6,995	6,001	4,393	105,860	6,559	N/A
2	2-Sep-15	61.8	7,082	6,305	3,826	97,880	6,110	N/A
3	2-Sep-15	56.1	6,719	5,316	4,503	234,100	6,308	N/A
4	3-Sep-15	56.6	6,799	5,920	3,779	234,580	6,237	N/A
5	3-Sep-15	58.2	6,733	5,156	2,822	186,540	6,586	N/A
6	3-Sep-15	56.8	6,743	5,399	3,975	234,620	6,229	N/A
7	4-Sep-15	55.7	6,467	5,367	4,611	233,260	6,232	N/A
8	4-Sep-15	62.5	6,269	5,226	4,011	228,600	6,088	N/A
9	4-Sep-15	60.1	6,592	5,214	3,385	234,470	6,052	N/A
10	5-Sep-15	57.0	6,837	5,582	3,602	153,410	6,256	N/A
11	5-Sep-15	61.5	6,321	5,136	4,455	234,690	6,015	N/A
12	5-Sep-15	62.4	6,620	5,391	4,165	186,530	6,457	N/A
13	5-Sep-15	62.0	6,327	5,307	4,482	234,680	6,170	N/A
14	5-Sep-15	58.0	6,260	5,714	3,884	234,260	6,087	N/A
15	6-Sep-15	56.5	6,089	5,143	4,082	227,710	6,004	N/A
16	6-Sep-15	57.9	6,218	5,701	4,353	126,710	6,494	N/A
17	6-Sep-15	59.0	6,330	5,627	3,378	200,680	6,463	N/A
18	6-Sep-15	58.0	6,579	5,570	3,362	195,850	6,474	N/A
19	7-Sep-15	58.4	6,271	5,376	3,454	234,500	5,915	N/A
20	7-Sep-15	57.7	6,374	5,164	4,292	180,040	5,567	N/A
21	7-Sep-15	59.8	6,218	5,273	3,444	234,020	5,900	N/A
22	7-Sep-15	58.0	6,605	5,429	3,062	234,080	5,945	N/A
23	7-Sep-15	59.0	6,767	5,415	4,425	167,330	6,408	N/A
24	8-Sep-15	58.8	6,768	5,332	3,593	176,660	6,401	N/A
25	8-Sep-15	61.9	6,399	5,350	3,783	234,680	5,873	N/A
26	8-Sep-15	57.0	6,705	5,582	3,524	191,420	5,784	N/A
27	8-Sep-15	58.0	6,744	5,436	3,842	187,650	6,377	N/A
28	9-Sep-15	57.0	6,395	5,442	3,451	233,000	5,864	N/A
29	9-Sep-15	59.6	6,320	5,578	3,400	234,200	5,843	N/A
30	9-Sep-15	59.0	6,414	5,744	3,898	201,200	6,365	N/A
31	9-Sep-15	60.0	6,615	5,225	3,119	234,550	6,017	N/A
32	9-Sep-15	58.0	6,283	5,303	3,205	234,220	5,795	N/A
33	10-Sep-15	60.0	6,358	5,556	3,626	234,540	5,879	N/A
34	10-Sep-15	59.9	6,377	5,433	3,686	225,200	6,316	N/A
35	10-Sep-15	60.3	6,224	5,495	4,061	234,280	5,786	N/A
36	10-Sep-15	59.0	6,222	5,781	3,385	234,330	5,762	N/A
37	10-Sep-15	58.0	6,065	5,396	4,312	227,390	6,214	N/A
38	11-Sep-15	58.6	6,333	5,636	3,919	226,600	5,721	N/A
39	11-Sep-15	60.2	6,273	5,516	4,603	234,140	5,876	N/A
40	11-Sep-15	59.0	6,012	5,508	4,771	234,740	5,731	N/A
41	11-Sep-15	59.0	6,027	5,860	3,154	234,960	5,721	N/A
42	12-Sep-15	55.6	5,904	6,282	5,028	142,920	5,913	N/A
43	12-Sep-15	60.3	6,025	6,888	4,529	233,760	5,702	N/A
44	12-Sep-15	61.0	6,308	6,046	4,165	177,000	5,685	N/A
45	12-Sep-15	59.0	6,303	6,212	3,328	234,430	5,705	N/A
46	13-Sep-15	59.0	6,728	5,728	4,235	159,600	6,180	N/A
47	13-Sep-15	60.3	5,911	5,513	4,079	234,940	5,675	N/A
48	13-Sep-15	58.6	6,270	6,271	4,272	202,240	5,918	N/A
49	13-Sep-15	63.0	6,017	6,072	3,599	235,260	6,121	N/A
50	13-Sep-15	59.0	6,228	5,883	4,080	197,920	5,507	N/A
51	13-Sep-15	61.0	5,863	5,440	3,202	234,770	5,654	N/A
52	14-Sep-15	58.4	5,870	6,847	3,206	240,680	5,725	N/A
53	14-Sep-15	57.7	6,022	5,827	4,156	225,080	6,073	N/A
54	14-Sep-15	62.2	5,693	5,648	3,182	235,130	5,533	N/A
	AVG=	59.1	6,368	5,622	3,854	11,401,890	325,272	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	216'	N/A	216'	N/A
Silty Shale	0	176	0	176
Coal	est 176	236	est 176	236
Sandstone	est 236	316	est 236	316
Coal	est 316	376	est 316	376
Sandstone	est 376	396	est 376	396
Silty Shale	est 396	416	est 396	416
Sandstone	est 416	516	est 416	516
Coal	est 516	576	est 516	576
Sandstone	est 576	616	est 576	616
Sandy Shale	est 616	736	est 616	736
Shale	est 736	776	est 736	776
Sandy Siltstone	est 776	876	est 776	876
Shale	est 876	926	est 876	926
Sandstone	est 926	976	est 926	976
Coal	est 976	1,036	est 976	1,036
Shale	est 1036	1,056	est 1036	1,056
Coal	est 1056	1,246	est 1056	1,246
Shale	est 1246	1,336	est 1246	1,336
Sandstone	est 1336	1,416	est 1336	1,416
Shale	est 1416	1,516	est 1416	1,516
Sandy Siltstone/Coal	est 1516	1,596	est 1516	1,596
Silty Sandstone	est 1596	1,716	est 1596	1,716
Coal	est 1716	1,776	est 1716	1,776
Sandy Shale/Coal	est 1776	1,877	est 1776	1,880
Big Lime	1,877	2,018	1,880	2,021
Big Injun	2,018	2,744	2,021	2,747
Fifty Foot Sandstone	2,744	2,861	2,747	2,864
Gordon	2,861	3,301	2,864	3,304
Bayard	3,301	4,040	3,304	4,043
Baltown	4,040	4,512	4,043	4,515
Bradford	4,512	4,889	4,515	4,892
Benson	4,889	5,130	4,892	5,133
Alexander	5,130	6,033	5,133	6,128
Sycamore	6,033	6,130	6,128	6,288
Middlesex	6,130	6,237	6,288	6,507
Burkett	6,237	6,268	6,507	6,600
Tully	6,268	6,290	6,600	6,694
Marcellus	6,290	NA	6,694	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:	9/2/2015
Job End Date:	9/14/2015
State:	West Virginia
County:	Ritchie
API Number:	47-085-10143-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Ericson 2H
Longitude:	-80.92541100
Latitude:	39.32742500
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,349
Total Base Water Volume (gal):	14,394,748
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	Antero Resources	Base Fluid	Water	7732-18-5	100.00000	90.72801	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	8.61684	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.29200	
LGC-15	U.S. Well Services	Gelling Agents	Hydrogen Chloride	7647-01-0	18.00000	0.06975	
			Guar Gum	9000-30-0	50.00000	0.08377	
			Petroleum Distillates	64742-47-8	60.00000	0.07933	
			Suspending agent (solid)	14808-60-7	3.00000	0.01281	
			Surfactant	68439-51-0	3.00000	0.00503	
WFRA-405	U.S. Well Services	Friction Reducer	Water	7732-18-5	40.00000	0.02793	
			Anionic Polyacrylamide	Proprietary	40.00000	0.02793	
			Sodium Chloride	7647-14-5	20.00000	0.01397	
			Petroleum Distillates	64742-47-8	20.00000	0.01124	
			Ethoxylated alcohol blend	Proprietary	5.00000	0.00349	

SI-1100	J.S. Well Services	Scale Inhibitor						
			Water	732-18-5		80.00000		0.01021
			Ethylene Glycol	107-21-1		25.00000		0.00360
			Copolymer of Maleic and Acrylic acid	52255-49-9		10.00000		0.00151
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8		7.50000		0.00129
			Phosphino carboxylic acid polymer	71050-62-9		5.00000		0.00083
			Hexamethylene triamine penta (methylene phosphonic acid)	34890-00-1		5.00000		0.00083
			Hexamethylene diamine penta (methylene phosphonic acid)	23605-74-5		2.00000		0.00033
K-BAC 1020	J.S. Well Services	Anti-Bacterial Agent						
			2,2-dibromo-3-nitropropionamide	10222-01-2		20.00000		0.00418
			Deionized Water	7732-18-5		28.00000		0.00239
AP One	J.S. Well Services	Gel Breakers						
			Ammonium Persulfate	7727-54-0		100.00000		0.00215
AI-301	J.S. Well Services	Acid Corrosion Inhibitors						
			Diethylene Glycol	111-46-6		30.00000		0.00022
			Methanamine	100-97-0		20.00000		0.00018
			Hydrogen Chloride	7647-01-0		10.00000		0.00008
			Polyethylene polyamine	68603-67-8		10.00000		0.00007
			Coco amine	61791-14-8		5.00000		0.00003
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.								

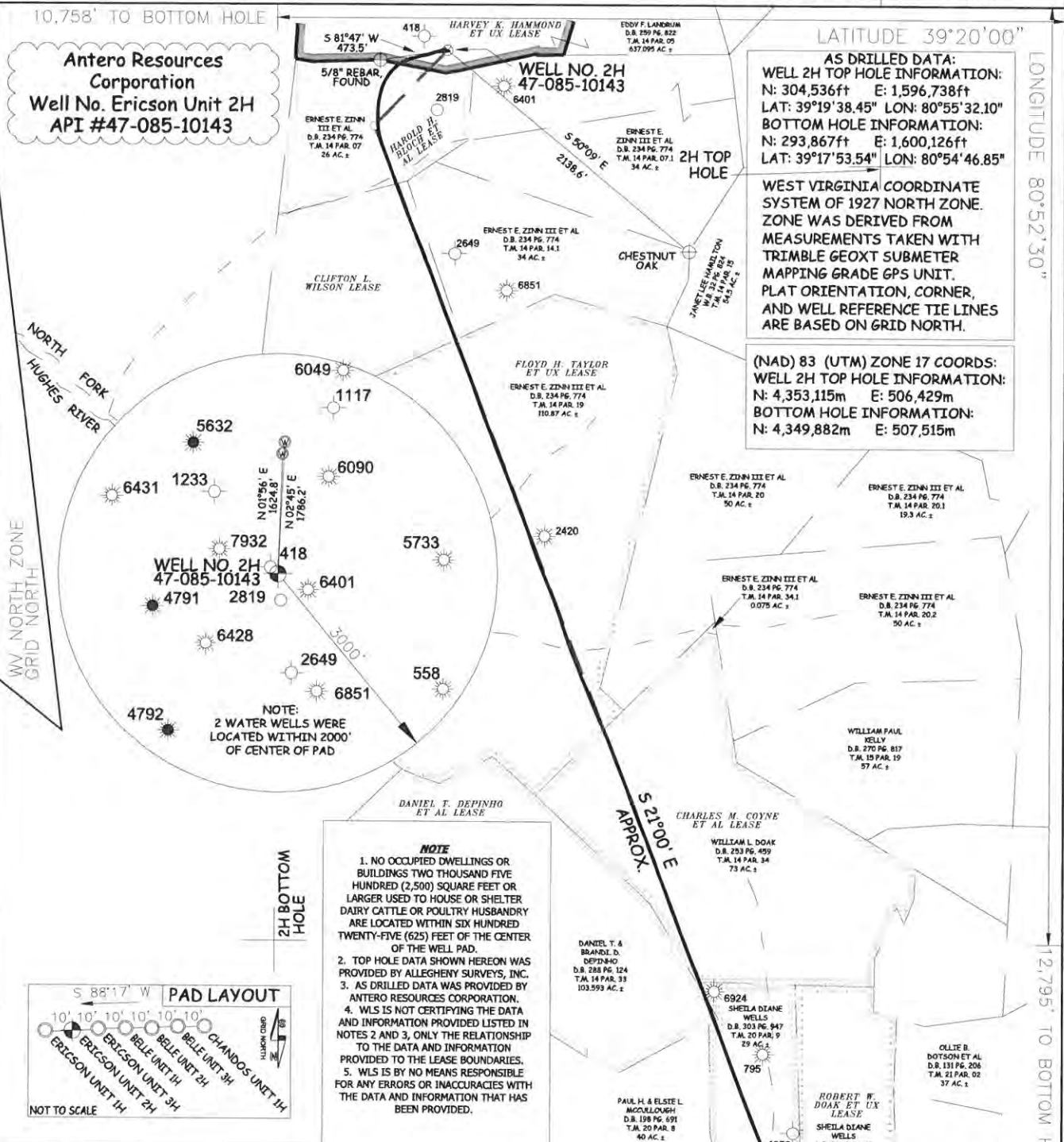
* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** 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)

LATITUDE 39°20'00" 2,522'

LONGITUDE 80°52'30" LONGITUDE 80°55'00"



Antero Resources Corporation
Well No. Ericson Unit 2H
API #47-085-10143

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
 N: 304,536ft E: 1,596,738ft
 LAT: 39°19'38.45" LON: 80°55'32.10"
BOTTOM HOLE INFORMATION:
 N: 293,867ft E: 1,600,126ft
 LAT: 39°17'53.54" LON: 80°54'46.85"

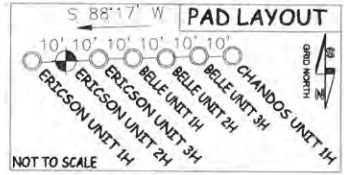
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
 N: 4,353,115m E: 506,429m
BOTTOM HOLE INFORMATION:
 N: 4,349,882m E: 507,515m

NOTE:
 2 WATER WELLS WERE LOCATED WITHIN 2000' OF CENTER OF PAD

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 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.



DATE 01/20/16

OPERATOR'S WELL# ERICSON UNIT #2H

API WELL # 47 085 10143

STATE COUNTY PERMIT

JOB # 12-129WA

DRAWING # ERICSON2HAD

SCALE 1" = 1000'

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

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS") PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,005' ORIGINAL - 1,004' AS-DRILLED WATERSHED NORTH FORK HUGHES RIVER
 QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE

SURFACE OWNER EDDY F. LANDRUM ACREAGE 637.095 ACRES +/-

OIL & GAS ROYALTY OWNER HARVEY K. HAMMOND ET UX; HAROLD H. BLOCH ET AL; CLIFTON L. WILSON; FLOYD H. TAYLOR ET UX; CHARLES M. COYNE ET AL; ROBERT W. DOAK ET UX; DANIEL T. DEPINHO ET AL; CAROLYN D. TAYLOR ET UX; JOHN H. POOLE ET AL LEASE ACREAGE 33 AC.±; 26 AC.±; 71 AC.±; 150 AC.±; 73 AC.±; 29 AC.±; 112 AC.±; 13 AC.±; 75 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 6,348' TVD 17,595' MD

WELL OPERATOR ANTERO RESOURCES CORPORATION DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 1615 WYNKOOP ST. ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

LEGEND

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



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

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