

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

API 47-085-09962 County Ritchie District Clay
Quad Pennsboro 7.5' Pad Name Eddy Pad Field/Pool Name ---
Farm name Annie B. Haymond, et al Well Number Cairo-Anna 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 4,353,850m Easting 506,896m
Landing Point of Curve Northing 4,353,534.95m Easting 506,990.65m
Bottom Hole Northing 4,351,487m Easting 507,812m

Elevation (ft) 971' 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 8/13/2012 & 6/25/2014 Date drilling commenced 1/12/2013 Date drilling ceased 9/10/2014
Date completion activities began 1/14/2015 Date completion activities ceased 4/29/2015
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 126', 307' Open mine(s) (Y/N) depths N
Salt water depth(s) ft 653', 2099' Void(s) encountered (Y/N) depths N
Coal depth(s) ft 1056' Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

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Reviewed by:
TR
10/16/2015

API 47-085 - 09962

Farm name Annie B. Haymond, et al

Well number Cairo-Anna Unit 1H

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	94#/J-55	N/A	Y
Surface	17-1/2"	13-3/8"	650'	New	48#/H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2665'	New	36#/J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	13,975'	New	20#/P-110	N/A	Y
Tubing		2-3/8"	6508'		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	75 sx	15.6	1.18	38 Cu. Ft.	0'	8 Hrs.
Surface	Class A	765 sx	15.6	1.18	451 Cu. Ft.	0'	8 Hrs.
Coal							
Intermediate 1	Class A	979 sx	15.6	1.18	835 Cu. Ft.	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	869 sx (Lead), 1176 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.44 (Lead), 1.80 (Tail)	2706 Cu. Ft.	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 13,975 MD, 6328' TVD (BHL)

Loggers TD (ft) 13,927 MD

Deepest formation penetrated Marcellus

Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 608'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Anna Unit 2H API# 47-085-09963). Please reference the wireline logs submitted with Form WR-35 for the Anna Unit 2H. 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 _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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WERE TRACERS USED Yes No TYPE OF TRACER(S) USED N/A

API 47-085 - 09962 Farm name Annie B. Haymond, et al Well number Cairo-Anna Unit 1H

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					

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API 47- 085 - 09962 Farm name Annie B. Haymond, et al Well number Cairo-Anna Unit 1H

PRODUCING FORMATION(S)	DEPTHS	
Marcellus	6262' (Top) TVD	6500' (Top) 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 1863 mcfpd Oil --- bpd NGL --- bpd Water 49 bpd GAS MEASURED BY Estimated Orifice Pilot

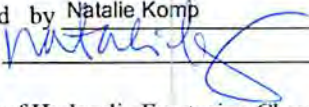
LITHOLOGY/ FORMATION	TOP		BOTTOM		DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
			SEE ATTACHED EXHIBIT 3		

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 Allied Oil & Gas Services, LLC
 Address 1036 East Main Street City Bridgeport State WV Zip 26330
 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 Natalie Komp Telephone 303-357-6820
 Signature  Title Permitting Agent Date 9/14/2015

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

API 47-085-09962 Farm Name Annie B. Haymond, et al Well Number Cairo-Anna Unit 1H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	14-Jan-15	13,715	13,883	60	Marcellus
2	15-Feb-15	13,516	13,684	60	Marcellus
3	16-Feb-15	13,317	13,485	60	Marcellus
4	17-Feb-15	13,118	13,286	60	Marcellus
5	17-Feb-15	12,919	13,087	60	Marcellus
6	18-Feb-15	12,720	12,888	60	Marcellus
7	18-Feb-15	12,521	12,699	60	Marcellus
8	19-Feb-15	12,322	12,490	60	Marcellus
9	19-Feb-15	12,123	12,291	60	Marcellus
10	19-Feb-15	11,924	12,092	60	Marcellus
11	20-Feb-15	11,725	11,893	60	Marcellus
12	20-Feb-15	11,526	11,694	60	Marcellus
13	20-Feb-15	11,327	11,495	60	Marcellus
14	21-Feb-15	11,128	11,296	60	Marcellus
15	21-Feb-15	10,929	11,097	60	Marcellus
16	22-Feb-15	10,730	10,898	60	Marcellus
17	22-Feb-15	10,531	10,699	60	Marcellus
18	22-Feb-15	10,332	10,500	60	Marcellus
19	22-Feb-15	10,133	10,301	60	Marcellus
20	23-Feb-15	9,934	10,102	60	Marcellus
21	23-Feb-15	9,735	9,903	60	Marcellus
22	23-Feb-15	9,536	9,704	60	Marcellus
23	24-Feb-15	9,337	9,505	60	Marcellus
24	24-Feb-15	9,138	9,306	60	Marcellus
25	24-Feb-15	8,939	9,107	60	Marcellus
26	24-Feb-15	8,740	8,908	60	Marcellus
27	25-Feb-15	8,541	8,709	60	Marcellus
28	25-Feb-15	8,342	8,510	60	Marcellus
29	25-Feb-15	8,143	8,311	60	Marcellus
30	25-Feb-15	7,944	8,112	60	Marcellus
31	26-Feb-15	7,745	7,913	60	Marcellus
32	26-Feb-15	7,546	7,714	60	Marcellus
33	26-Feb-15	7,347	7,515	60	Marcellus
34	27-Feb-15	7,148	7,316	60	Marcellus
35	27-Feb-15	6,949	7,117	60	Marcellus
36	27-Feb-15	6,750	6,918	60	Marcellus
37	27-Feb-15	6,551	6,719	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	15-Feb-15	50.3	8,111	N/A	4,820	800	6,558	N/A
2	16-Feb-15	58.5	7,167	5,540	4,776	174,500	7,163	N/A
3	17-Feb-15	61.5	6,901	5,503	3,988	242,080	6,850	N/A
4	17-Feb-15	54.7	6,648	5,430	4,614	62,400	5,863	N/A
5	17-Feb-15	60.4	7,059	5,405	4,692	225,000	6,562	N/A
6	18-Feb-15	52.6	6,873	5,336	5,270	113,160	8,362	N/A
7	18-Feb-15	61.0	7,148	6,246	3,854	203,800	6,955	N/A
8	19-Feb-15	57.0	6,821	5,279	4,460	242,420	6,590	N/A
9	19-Feb-15	64.0	7,269	5,667	3,951	242,660	6,491	N/A
10	19-Feb-15	62.7	7,303	5,618	4,437	243,200	6,492	N/A
11	20-Feb-15	62.4	7,017	5,300	4,859	241,640	6,427	N/A
12	20-Feb-15	62.9	7,039	5,495	4,783	239,580	6,990	N/A
13	20-Feb-15	62.1	6,986	5,199	4,712	242,800	6,358	N/A
14	21-Feb-15	64.4	7,060	5,194	4,716	242,400	6,334	N/A
15	21-Feb-15	64.6	6,775	5,307	4,263	243,500	6,353	N/A
16	22-Feb-15	64.8	6,848	5,442	4,362	242,400	6,337	N/A
17	22-Feb-15	63.0	6,708	5,359	4,874	242,560	6,689	N/A
18	22-Feb-15	64.0	6,774	5,412	4,882	231,560	6,114	N/A
19	22-Feb-15	65.1	6,854	5,392	3,609	242,000	6,271	N/A
20	23-Feb-15	64.3	6,729	5,579	4,626	239,040	6,231	N/A
21	23-Feb-15	64.7	6,831	5,290	4,107	242,000	6,206	N/A
22	23-Feb-15	65.6	6,896	5,441	4,693	243,400	6,245	N/A
23	24-Feb-15	65.7	6,823	5,243	4,534	235,400	6,254	N/A
24	24-Feb-15	64.5	6,651	5,003	3,580	242,700	6,493	N/A
25	24-Feb-15	65.2	6,598	5,112	4,052	242,700	6,154	N/A
26	24-Feb-15	64.7	6,725	5,336	4,840	213,300	6,160	N/A
27	25-Feb-15	65.6	6,619	5,058	3,698	242,700	6,100	N/A
28	25-Feb-15	63.9	6,570	4,985	4,259	242,900	6,076	N/A
29	25-Feb-15	65.3	6,570	5,115	4,979	242,700	6,055	N/A
30	25-Feb-15	65.7	6,495	5,148	4,978	242,700	6,068	N/A
31	26-Feb-15	61.7	6,320	5,290	4,669	142,900	6,348	N/A
32	26-Feb-15	64.0	6,461	5,252	4,711	241,900	6,003	N/A
33	26-Feb-15	65.7	6,510	5,755	4,755	241,700	6,025	N/A
34	27-Feb-15	65.6	6,476	5,419	4,920	214,800	6,541	N/A
35	27-Feb-15	64.4	6,413	5,059	3,220	241,400	5,976	N/A
36	27-Feb-15	65.8	6,480	4,896	4,120	242,100	5,943	N/A
37	27-Feb-15	65.5	6,419	5,236	4,108	241,000	6,085	N/A
	AVG=	62.8	6,809	5,343	4,453	8,113,800	236,722	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Freshwater	126	NA	126	NA
Freshwater	307	NA	307	NA
Sandstone	0	256	0	256
Sandstone/Trace Coal	est. 256	316	est. 256	316
Sandstone/Siltstone	est. 316	596	est. 316	596
Limestone	est. 596	636	est. 596	636
Siltstone/Sandstone	est. 636	736	est. 636	736
Limestone/Siltstone	est. 736	796	est. 736	796
Siltstone	est. 796	896	est. 796	896
Limestone/Sandstone	est. 896	1,056	est. 896	1,056
Coal	est. 1056	1,076	est. 1056	1,076
Sandstone	est. 1076	1,136	est. 1076	1,136
Siltstone	est. 1136	1,196	est. 1136	1,196
Shale	est. 1196	1,256	est. 1196	1,256
Sandstone	est. 1256	1,316	est. 1256	1,316
Sandstone/Trace Coal	est. 1316	1,336	est. 1316	1,336
Sandstone	est. 1336	1,376	est. 1336	1,376
Siltstone	est. 1376	1,396	est. 1376	1,396
Sandstone/Trace Coal	est. 1396	1,696	est. 1396	1,696
Siltstone	est. 1696	1,809	est. 1696	1,809
Big Lime	1,809	1,983	1,809	1,983
Big Injun	1,983	2,361	1,983	2,361
Gantz Sand	2,361	2,760	2,361	2,760
Fifty Foot Sandstone	2,760	2,832	2,760	2,832
Gordon	2,832	3,192	2,832	3,192
Fifth Sandstone	3,192	3,247	3,192	3,247
Bayard	3,247	3,395	3,247	3,395
Warren	3,395	3,748	3,395	3,748
Speechley	3,748	3,980	3,748	3,980
Baltown	3,980	4,445	3,980	4,454
Bradford	4,445	4,819	4,454	4,843
Benson	4,819	5,062	4,843	5,098
Alexander	5,062	5,358	5,098	5,414
Elk	5,358	5,661	5,414	5,735
Rhinestreet	5,661	5,995	5,735	6,089
Sycamore	5,995	6,101	6,089	6,218
Middlesex	6,101	6,208	6,218	6,383
Burkett	6,208	6,237	6,383	6,441
Tully	6,237	6,262	6,441	6,500
Marcellus	6,262	NA	6,500	NA

*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.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	2/15/2015
Job End Date:	2/27/2015
State:	West Virginia
County:	Ritchie
API Number:	47-085-09962-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Cairo-Anna Unit 1H
Longitude:	-80.91998300
Latitude:	39.33404400
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,328
Total Base Water Volume (gal):	9,942,324
Total Base Non Water Volume:	430,888



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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	90.61906	
Sand	U.S. Well Services, LLC	Proppant					
			Crystalline Silica, quartz	14808-60-7	100.00000	8.86727	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid					
			Water	7732-18-5	87.50000	0.17528	
			Hydrogen Chloride	7641-01-1	18.00000	0.04187	
LGC-15	U.S. Well Services, LLC	Gelling Agents					
			Guar Gum	9000-30-0	50.00000	0.08087	
			Petroleum Distillates	64742-47-8	60.00000	0.07659	
			Suspending agent (solid)	14808-60-7	3.00000	0.01237	
			Surfactant	68439-51-0	3.00000	0.00485	
WFRA-405	U.S. Well Services, LLC	Friction Reducer					
			Water	7732-18-5	40.00000	0.02847	
			Anionic Polyacrylamide	Proprietary		0.02847	
			Petroleum Distillates	64742-47-8	22.00000	0.02292	
			Crystalline Salt	12125-02-9	5.00000	0.00356	

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			Ethoxylated alcohol blend	Proprietary	5.00000	0.00356	Received Office of Oil & Gas SEP 21 2015
SI-1100	U.S. Well Services	Scale Inhibitor					
			Di Water	7732-18-5	80.00000	0.01054	
			Ethylene Glycol	107-21-1	40.00000	0.00595	
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	10.00000	0.00178	
			2-Phosphonobutane 1,2,4 tricarboxylic salt	37971-36-1	10.00000	0.00170	
			hexamethylenediamine tetra (methylene phosphonic acid)	38820-59-6	10.00000	0.00165	
			Copolymer of Maleic and Acrylic acid	26677-99-6	10.00000	0.00155	
			bis (hexamethylene) tramine penta (methylene phosphonic acid) - phosphate acid	40623-75-4	10.00000	0.00151	
			Acrylic polymer	52255-49-9	5.00000	0.00066	
K-BAC 1020	U.S. Well Services, LLC	Anti-Bacterial Agent					
			2,2-dibromo-3-nitropropionamide	10222-01-2	20.00000	0.00449	
			Deionized Water	7732-18-5	28.00000	0.00256	
AP One	U.S. Well Services, LLC	Gel Breakers					
			Ammonium Persulfate	7727-54-0	100.00000	0.00215	
AI-301	U.S. Well Services, LLC	Acid Corrosion Inhibitors					
			Diethylene Glycol	111-46-6	30.00000	0.00013	
			Methenamine	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)

85-09962

LATITUDE 39°22'30" — 988'

LONGITUDE 80°55'00"

LATITUDE 39°20'00"

LONGITUDE 80°52'30"

14,947'

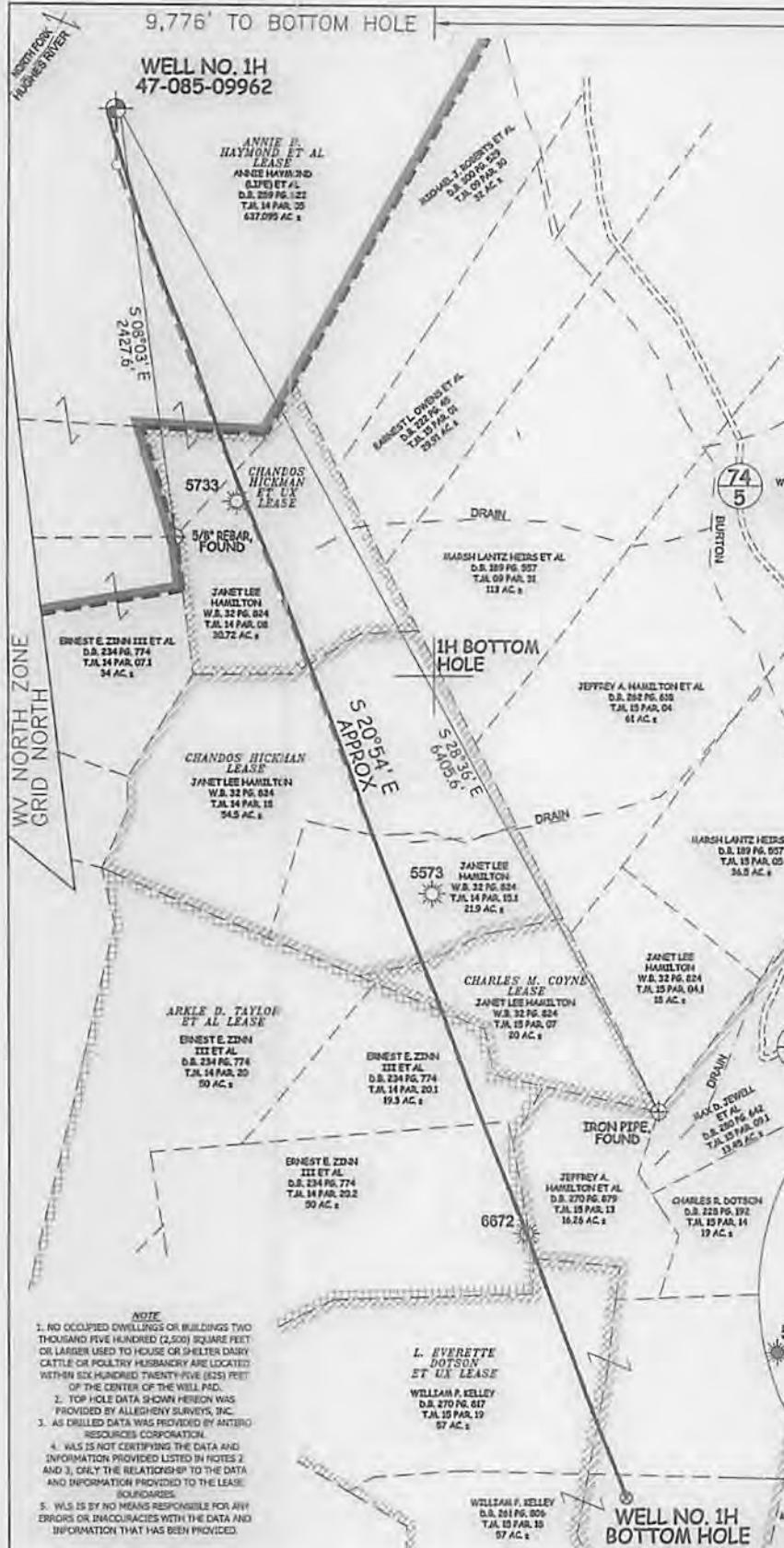
7,529' TO BOTTOM HOLE

Antero Resources Corporation
Well No. Cairo-Anna Unit 1H
47-085-09962 (AS DRILLED)

AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 306,921ft E: 1,598,311ft
LAT: 39°20'02.26" LON: 80°55'12.57"
BOTTOM HOLE INFORMATION:
N: 299,117ft E: 1,601,189ft
LAT: 39°18'45.59" LON: 80°54'34.38"
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: 4,353,850m E: 506,896m
BOTTOM HOLE INFORMATION:
N: 4,351,487m E: 507,812m

PAD LAYOUT
NOT TO SCALE



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 SHOW POSITION 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.

JOB # 12-127WA
DRAWING # CAIRO-ANNA-1HAD
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 992' ORIGINAL - 971' AS DRILLED
QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE
SURFACE OWNER ANNIE B. HAYMOND, ET AL ACREAGE 637.095 ACRES +/-
OIL & GAS ROYALTY OWNER ANNIE B. HAYMOND, ET AL; CHANDOS HICKMAN ET UX; CHANDOS HICKMAN; CHARLES M. COYNE; ARKLE D. TAYLOR ET AL; CHARLES U. COSTILOW ET UX; L. EVERETTE DOTSON ET UX 18.5 ACRES+; 120 ACRES+; 200 ACRES+; 75 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
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,327' TVD 13,975' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 CHARLESTON, WV 25313



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
266 HUSHERS RUN RD PENNSBORO WEST VIRGINIA 26415

LEGEND
--- Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
x x x Existing Fence
⊕ Found monument, as noted
⊙ Proposed Well Path
⊙ As Drilled Well Path
DATE 07/27/15
OPERATOR'S WELL# CAIRO-ANNA UNIT #1H
API WELL # 47 - 085 - 09962
STATE COUNTY PERMIT
10/16/2015