

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

API 47-085-09963 County Ritchie District Clay
Quad Pennsboro 7.5' Pad Name Eddy Pad Field/Pool Name _____
Farm name Haymond, Annie (Life) Well Number Anna 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 4,353,852m Easting 506,898m
Landing Point of Curve Northing 4,353,910.79m Easting 506,720.65m
Bottom Hole Northing 4,355,404m Easting 505,546m

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

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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

Office of Oil and Gas
WV Dept. of Environmental Protection

Date permit issued 06/28/2012 Date drilling commenced 10/20/2012 Date drilling ceased 11/27/2012
Date completion activities began 12/04/2012 Date completion activities ceased 12/17/2012
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 No
Salt water depth(s) ft 1,697'; 2,099' Void(s) encountered (Y/N) depths None
Coal depth(s) ft 1,056' Cavern(s) encountered (Y/N) depths None
Is coal being mined in area (Y/N) No

Reviewed by:
JK
10/30/2015

API 47-085 - 09963 Farm name Haymond, Annie (Life) Well number Anna 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"	43'	New	94#; J-55	N/A	Yes
Surface	17 1/2"	13 3/8"	670'	New	48#; J-55	N/A	Yes
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,705'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	12,962'	New	20#; P-110	N/A	Yes
Tubing		2 3/8"	6,431'		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 ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	150 sx	15.6	1.18	41	0'	8 Hrs.
Surface	Class A	750 sx	15.6	1.18	465	0'	8 Hrs.
Coal							
Intermediate 1	Class A	970 sx	15.6	1.18	847	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	864 sx (Lead); 1,042 sx (Tail)	14.5 (Lead); 15.2 (Tail)	1.3 (Lead); 1.86 (Tail)	2,464	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 12,962' MD; 6,325' TVD Loggers TD (ft) 12,925'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5,706'

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 _____ *received*

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

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WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

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WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED RA: Chemical

API 47- 085 - 09963 Farm name Haymond, Annie (Life) Well number Anna Unit 2H

PERFORATION RECORD

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

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Please insert additional pages as applicable.

API 47-085-09963 Farm Name Haymond, Annie (Life) Well Number Anna Unit 2H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	4-Dec-12	12,654	12,898	60	Marcellus
2	7-Dec-12	12,315	12,560	60	Marcellus
3	7-Dec-12	11,977	12,221	60	Marcellus
4	8-Dec-12	11,638	11,883	60	Marcellus
5	8-Dec-12	11,300	11,544	60	Marcellus
6	8-Dec-12	10,961	11,206	60	Marcellus
7	8-Dec-12	10,623	10,867	60	Marcellus
8	9-Dec-12	10,284	10,529	60	Marcellus
9	9-Dec-12	9,946	10,190	60	Marcellus
10	9-Dec-12	9,607	9,852	60	Marcellus
11	9-Dec-12	9,269	9,513	60	Marcellus
12	10-Dec-12	8,931	9,175	60	Marcellus
13	10-Dec-12	8,592	8,837	60	Marcellus
14	10-Dec-12	8,254	8,498	60	Marcellus
15	10-Dec-12	7,915	8,160	60	Marcellus
16	10-Dec-12	7,577	7,821	60	Marcellus
17	10-Dec-12	7,238	7,483	60	Marcellus
18	11-Dec-12	6,900	7,144	60	Marcellus
19	11-Dec-12	6,561	6,806	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	7-Dec-12	64.0	7,673	7,053	4,625	190,100	7,278	N/A
2	7-Dec-12	67.9	6,744	5,955	3,226	261,200	6,955	N/A
3	7-Dec-12	68.6	6,846	5,609	3,230	257,300	7,258	N/A
4	8-Dec-12	68.9	6,543	5,403	3,158	263,200	7,591	N/A
5	8-Dec-12	63.2	6,920	5,647	4,402	234,000	7,170	N/A
6	8-Dec-12	66.7	6,803	5,226	3,700	246,000	7,841	N/A
7	8-Dec-12	68.4	6,947	5,801	3,044	261,500	7,128	N/A
8	9-Dec-12	69.5	6,327	4,847	3,402	259,300	7,113	N/A
9	9-Dec-12	65.6	6,438	5,398	4,883	203,500	7,624	N/A
10	9-Dec-12	67.8	6,548	5,200	3,435	253,200	7,692	N/A
11	9-Dec-12	69.0	6,599	5,244	3,027	262,200	7,060	N/A
12	10-Dec-12	69.3	6,251	4,519	4,460	251,000	7,080	N/A
13	10-Dec-12	68.6	6,324	5,493	4,470	257,500	6,875	N/A
14	10-Dec-12	68.2	6,343	5,771	3,156	261,000	6,962	N/A
15	10-Dec-12	67.9	6,200	5,963	2,932	261,200	6,813	N/A
16	10-Dec-12	68.5	5,896	4,882	2,799	256,900	6,672	N/A
17	10-Dec-12	68.9	6,283	6,037	3,154	258,900	6,836	N/A
18	11-Dec-12	47.6	7,935	5,596	3,145	55,600	6,882	N/A
19	11-Dec-12	67.4	5,875	5,449	2,644	262,300	6,762	N/A
	AVG=	66.6	6,605	5,531	3,521	4,555,900	135,592	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
Fresh Water	126'	N/A	126'	N/A
Fresh Water	307'	N/A	307'	N/A
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	1,815	est. 1696	1,815
Big Lime	1,815	1,960	1,815	1,960
Big Injun	1,960	2,374	1,960	2,374
Gantz Sand	2,374	2,729	2,374	2,729
Fifty Foot Sandstone	2,729	2,805	2,729	2,805
Gordon	2,805	3,149	2,805	3,149
Fifth Sandstone	3,149	3,231	3,149	3,231
Bayard	3,231	3,377	3,231	3,377
Warren	3,377	3,719	3,377	3,719
Speechley	3,719	3,969	3,719	3,969
Baltown	3,969	4,448	3,969	4,448
Bradford	4,448	4,828	4,448	4,828
Benson	4,828	5,056	4,828	5,056
Alexander	5,056	5,354	5,056	5,354
Elk	5,354	5,652	5,354	5,652
Rhinestreet	5,652	5,994	5,652	6,023
Sycamore	5,994	6,106	6,023	6,185
Middlesex	6,106	6,214	6,185	6,371
Burkett	6,214	6,244	6,371	6,444
Tully	6,244	6,268	6,444	6,519
Marcellus	6,268	NA	6,519	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.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Fracture Date:	12/7/2012
State:	West Virginia
County:	Ritchie
API Number:	47-085-09963
Operator Name:	Antero Resources
Well Name and Number:	Anna Unit 2H
Longitude:	-80.9201361
Latitude:	39.3339875
Long/Lat Projection:	NAD27
Production Type:	Gas
True Vertical Depth (TVD):	6,325
Total Water Volume (gal)*:	5,695,368

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
HCL Acid (12.5%-18.0%)	Nabors Completion and Production Services	Bulk Acid	Hydrogen Chloride	7641-01-1	18.00	0.028147	
HCL Acid (12.5%-18.0%)	Nabors Completion and Production Services	Bulk Acid	Water	7732-18-5	87.50	0.136827	
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production Services	Acid Corrosion Inhibitors	Ethoxylated Nonylphenol	68412-54-4	13.00	0.000038	
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production Services	Acid Corrosion Inhibitors	Glycol Ethers	11-76-2	20.00	0.000058	
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production Services	Acid Corrosion Inhibitors	Isopropyl Alcohol	67-63-0	15.00	0.000043	
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production Services	Acid Corrosion Inhibitors	Propargyl Alcohol	107-19-7	20.00	0.000058	
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production	Acid Corrosion Inhibitors	Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	10.00	0.000029	

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	Services						
Acid Inhibitor 2 (AI-2)	Nabors Completion and Production Services	Acid Corrosion Inhibitors	Water	7732-18-5	40.00	0.000116	
KR-153SL	Nabors Completion and Production Services	Biocides	2,2-dibromo-3-nitropropionamide	10222-01-2	20.00	0.002102	
KR-153SL	Nabors Completion and Production Services	Biocides	Water	7732-18-5	80.00	0.008406	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Ethoxylated alcohols	68551-12-2	15.00	0.008344	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Ethoxylated oleylamine	26635-93-8	5.00	0.002781	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Hydrotreated light distillates, non-aromatic, BTEX free	64742-47-8	50.00	0.027812	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Microparticle	Proprietary	1.00	0.000556	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Polyacrylamide	57-55-6	40.00	0.022250	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Propylene glycol	57-55-6	15.00	0.008344	
WFR-3B	Nabors Completion and Production Services	Friction Reducer	Water	7732-18-5	40.00	0.022250	
EB-4L	Nabors Completion and Production Services	Gel Breakers	Breaker Component	Proprietary	Proprietary	0.000610	
EB-4L	Nabors Completion and Production Services	Gel Breakers	Cellulase enzyme	Proprietary	Proprietary	0.000610	
EB-4L	Nabors Completion and	Gel Breakers	Demulsifier Base	Proprietary	Proprietary	0.000610	

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	Production Services						
EB-4L	Nabors Completion and Production Services	Gel Breakers	Ethylene Glycol	107-21-1	25.00	0.000153	
EB-4L	Nabors Completion and Production Services	Gel Breakers	Sugar	57-50-1	Proprietary	0.000610	
EB-4L	Nabors Completion and Production Services	Gel Breakers	Water	7732-18-5	Proprietary	0.000610	
OB-2	Nabors Completion and Production Services	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00	0.010320	
OB-2	Nabors Completion and Production Services	Gel Breakers	Silica, crystalline quartz	7631-86-9	10.00	0.001032	
OB-2	Nabors Completion and Production Services	Gel Breakers	vinylidene chloride-methyl acrylate copolymer	25038-72-6	20.00	0.002064	
LSG-100L	Nabors Completion and Production Services	Gelling Agents	guar gum	9000-30-0	50.00	0.029093	
LSG-100L	Nabors Completion and Production Services	Gelling Agents	Petroleum Distillates	64742-47-8	60.00	0.034912	
LSG-100L	Nabors Completion and Production Services	Gelling Agents	Surfactant	68439-51-0	2.00	0.001164	
LSG-100L	Nabors Completion and Production Services	Gelling Agents	Suspending agent (solid)	14808-60-7	2.00	0.001164	
Super TSC-LT	Nabors Completion and Production Services	Paraffin & Scale Additives	Proprietary	Proprietary	15.00	0.002062	
Super TSC-LT	Nabors Completion and Production Services	Paraffin & Scale Additives	Proprietary	Proprietary	15.00	0.002062	
Super TSC-LT	Nabors Completion	Paraffin & Scale Additives	Proprietary	Proprietary	15.00	0.002062	

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	and Production Services						
Super TSC-LT	Nabors Completion and Production Services	Paraffin & Scale Additives	Proprietary	Proprietary	50.00	0.006872	
Super TSC-LT	Nabors Completion and Production Services	Paraffin & Scale Additives	Water	7732-18-5	60.00	0.008247	
WV Local 100 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Aluminum Oxide	1344-28-1	1.10	0.014648	
WV Local 100 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Crystalline Silica, quartz	14808-60-7	99.90	1.330287	
WV Local 100 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Iron Oxide	1309-37-1	0.10	0.001332	
WV Local 100 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Titanium Oxide	13463-67-7	0.10	0.001332	
WV Specific 20/40 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Aluminum Oxide	1344-28-1	1.10	0.028314	
WV Specific 20/40 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Crystalline Silica, quartz	14808-60-7	99.90	2.571415	
WV Specific 20/40 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Iron Oxide	1309-37-1	0.10	0.002574	
WV Specific 20/40 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Titanium Oxide	13463-67-7	0.10	0.002574	
WV Specific 40/70 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Aluminum Oxide	1344-28-1	1.10	0.053013	
WV Specific 40/70 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Crystalline Silica, quartz	14808-60-7	99.90	4.814516	
WV Specific 40/70	Nabors	Sand - Bulk - West	Iron Oxide	1309-37-1	0.10	0.004819	

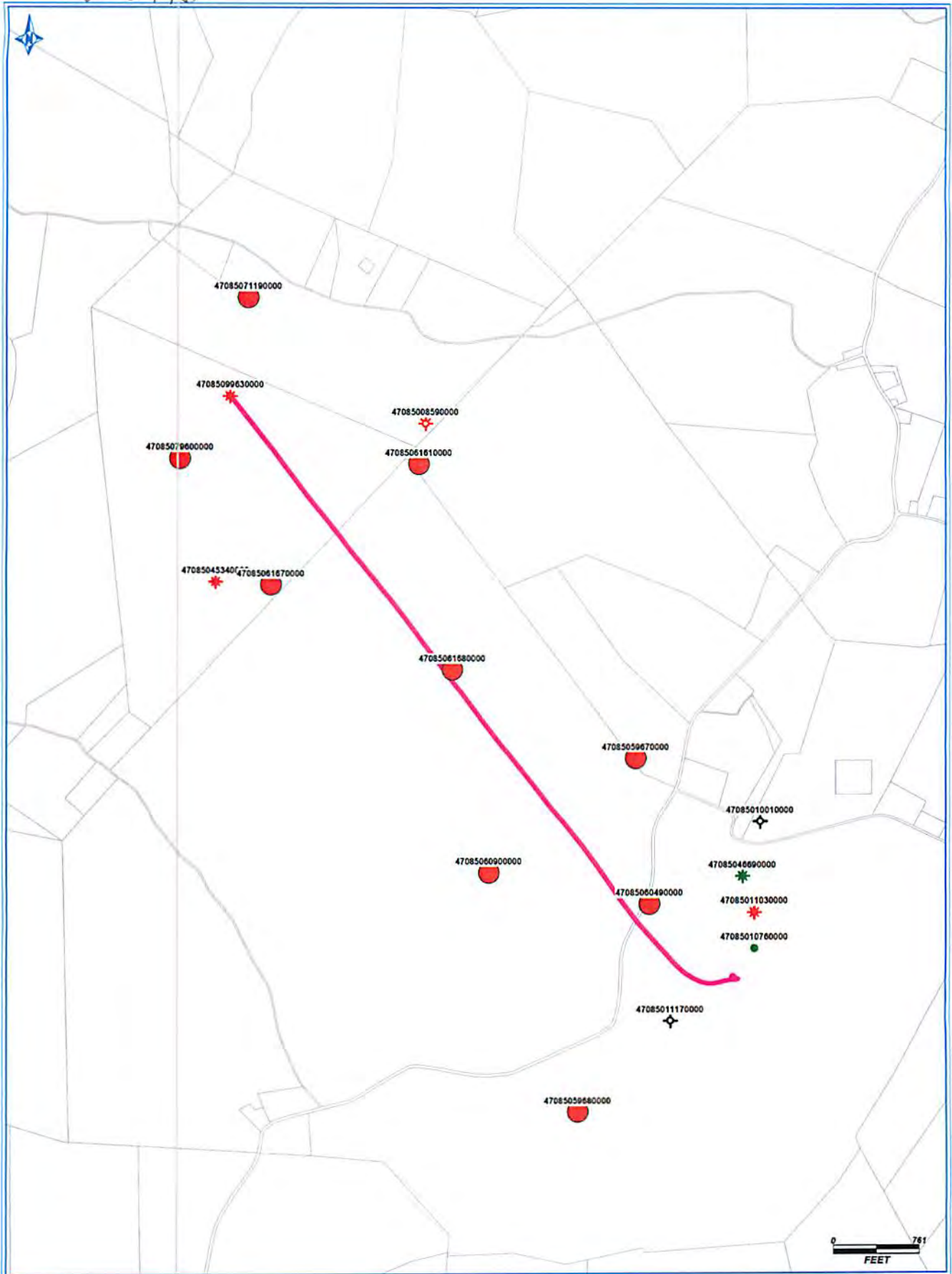
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mesh Sand	Completion and Production Services	Virginia					
WV Specific 40/70 mesh Sand	Nabors Completion and Production Services	Sand - Bulk - West Virginia	Titanium Oxide	13463-67-7	0.10	0.004819	
<p>* Total Water Volume sources may include fresh water, produced water, and/or recycled water ** Information is based on the maximum potential for concentration and thus the total may be over 100%</p> <p>Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)</p>							

ANNA UNIT 2H (EDDY PAD) - DATA COLLECTED ON OFFSET WELLS PER ADDENDUM

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ANNA UNIT 2H (EDDY PAD)- DATA COLLECTED ON OFFSET WELLS PER ADDENDUM

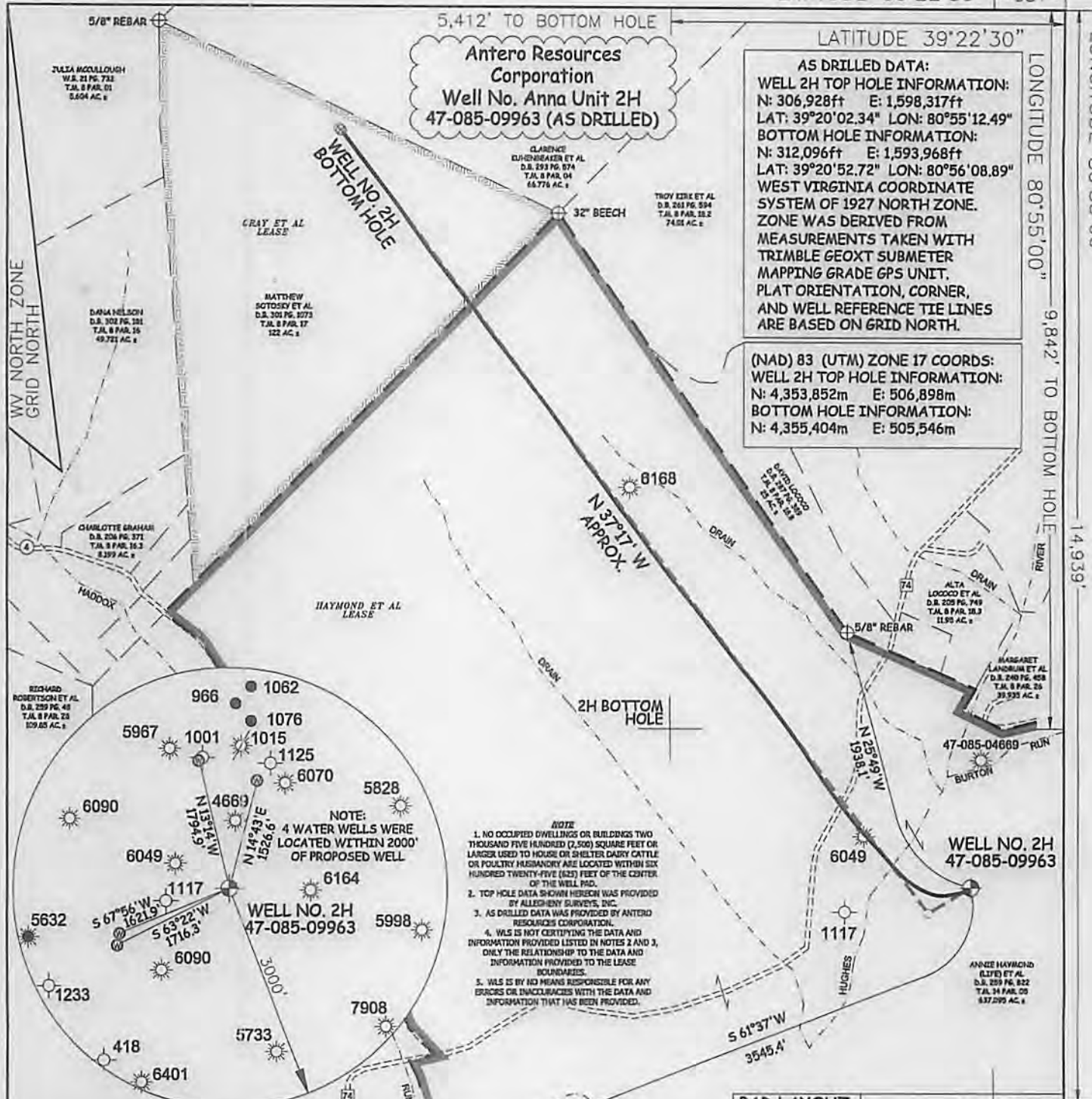
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UWI (APINum)	Well Name	Well Number	Operator	TD	Comments
47085071190000	PRATT W S ET AL	WK-355	KEPCO INCORPORATED	5999	
47085059670000	HAYMOND H K JR	WK-165	KEPCO INCORPORATED	5995	
47085059680000	HAYMOND H K JR	WK-166	KEPCO INCORPORATED	5995	
47085060490000	HAYMOND H K	WK-178	KEPCO INCORPORATED	5995	
47085060900000	HAYMOND H K JR	WK-207	KEPCO INCORPORATED	5995	
47085061610000	HAYMOND H K JR	WK-211	KEPCO INCORPORATED	5995	
47085061670000	HAYMOND H K JR	WK-209	KEPCO INCORPORATED	5995	
47085061680000	HAYMOND H K JR	WK-210	KEPCO INCORPORATED	5995	
47085079600000	GRAY WALTER 2		PARDEE GAS	5131	

LATITUDE 39°22'30" -981'

LONGITUDE 80°55'00"

14,939'

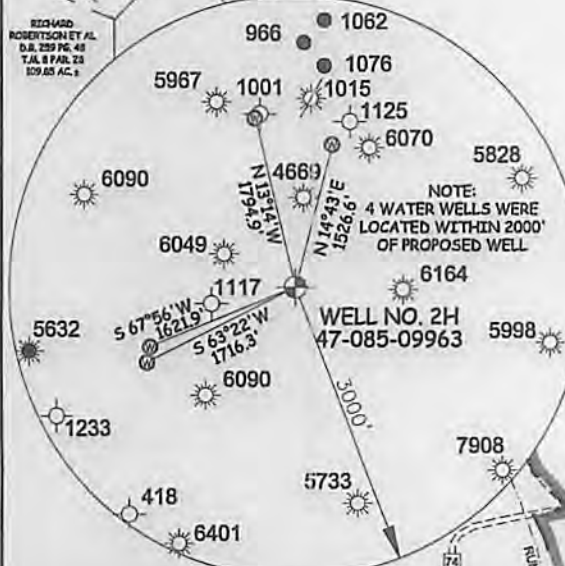


Antero Resources Corporation
Well No. Anna Unit 2H
47-085-09963 (AS DRILLED)

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
 N: 306,928ft E: 1,598,317ft
 LAT: 39°20'02.34" LON: 80°55'12.49"
BOTTOM HOLE INFORMATION:
 N: 312,096ft E: 1,593,968ft
 LAT: 39°20'52.72" LON: 80°56'08.89"
 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.

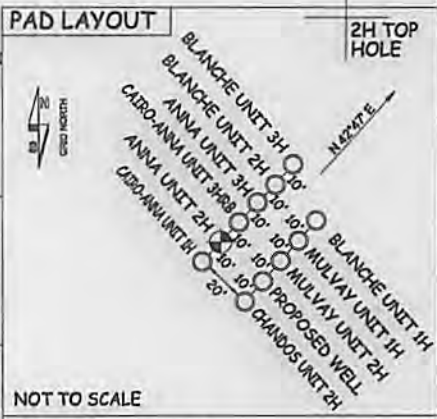
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 2H TOP HOLE INFORMATION:
 N: 4,353,852m E: 506,898m
BOTTOM HOLE INFORMATION:
 N: 4,355,404m E: 505,546m

- 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 INCONGRUENCES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.



LEGEND

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



JOB # 12-001
 DRAWING # ANNAUNIT2HAD
 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
 266 HUSHERS RUN RD PENNSBORO WEST VIRGINIA 26415

DATE 09/11/15
 OPERATOR'S WELL# ANNA UNIT #2H
 API WELL # 47-085-09963
 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 992' ORIGINAL - 971' AS DRILLED WATERSHED NORTH FORK HUGHES RIVER
 QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY RITCHIE

SURFACE OWNER ANNIE HAYMOND (LIFE) ACREAGE 637.095 ACRES +/-
 OIL & GAS ROYALTY OWNER ANNIE HAYMOND ET AL; WALTER C. GRAY ET AL LEASE ACREAGE 604 ACRES +/-; 122 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 ___ ESTIMATED DEPTH 6,326' TVD 12,962' MD
 TARGET FORMATION MARCELLUS

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

10/30/2015