

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

API 47-095-02188 County Tyler District McElroy
Quad Centerpoint 7.5' Pad Name Coastal 1 Pad Field/Pool Name -----
Farm name Coastal Lumber Company Well Number Berry 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 4363815m Easting 522871m
Landing Point of Curve Northing 4363609.03m Easting 522496.27m
Bottom Hole Northing 4361113m Easting 522913m

Elevation (ft) 1164' 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

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Date permit issued 08/19/2014 Date drilling commenced 09/18/2014 Date drilling ceased 1/15/2015
Date completion activities began 1/8/2016 Date completion activities ceased 4/5/2016
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 97' Open mine(s) (Y/N) depths No
Salt water depth(s) ft None Identified Void(s) encountered (Y/N) depths No
Coal depth(s) ft 1327' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:
APPROVED
NAME: [Signature] 10/28/2016
DATE: 9/2/16

API 47-095 - 02188 Farm name Coastal Lumber Company Well number Berry Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Usd	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	30"	20"	40'	New	133# J-55	N/A	Y
Surface	17-1/2"	13-3/8"	400'	New	48# H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2527'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	16060'	New	23# P-110	N/A	Y
Tubing		2-3/8"	7381'		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	100 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	453 sx	15.6	1.18	278	0'	8 Hrs.
Coal							
Intermediate 1	Class A	923 sx	15.6	1.18	791	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1027 sx (Lead) 1406 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.44 (Lead), 1.81 (Tail)	3215	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 18062' MD; 7065' TVD Loggers TD (ft) 15999'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6823'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Owo Unit 1H API #47-095-02179). Please reference the wireline logs submitted with Form WR-35 for Owo 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 _____

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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 _____

API 47- 095 - 02188 Farm name Coastal Lumber Company Well number Berry Unit 1H

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- 095 - 02188 Farm name Coastal Lumber Company Well number Berry Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6974' (TOP)</u> TVD	<u>7440' (TOP)</u> MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3550 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 13116 mcfpd Oil 48 bpd NGL --- bpd Water 379 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 ₂ 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 Precision Drilling Company, LP
Address 2640 Reach Rd. City Williamsport State PA Zip 17701

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

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 Dr. City Jane Lew State WV Zip 26378

Please insert additional pages as applicable.

Completed by Kara Quackenbush Telephone 303-357-7233
Signature [Signature] Title Permitting Agent Date 7/1/2016

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

10/28/2016

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	8-Jan-16	15,373	15,540	60	Marcellus
2	22-Feb-16	15,176	15,342	60	Marcellus
3	22-Feb-16	14,978	15,145	60	Marcellus
4	23-Feb-16	14,781	14,947	60	Marcellus
5	23-Feb-16	14,584	14,750	60	Marcellus
6	23-Feb-16	14,386	14,553	60	Marcellus
7	23-Feb-16	14,189	14,355	60	Marcellus
8	24-Feb-16	13,992	14,158	60	Marcellus
9	24-Feb-16	13,794	13,961	60	Marcellus
10	24-Feb-16	13,597	13,763	60	Marcellus
11	24-Feb-16	13,399	13,566	60	Marcellus
12	25-Feb-16	13,202	13,369	60	Marcellus
13	25-Feb-16	13,005	13,171	60	Marcellus
14	25-Feb-16	12,807	12,974	60	Marcellus
15	25-Feb-16	12,610	12,776	60	Marcellus
16	26-Feb-16	12,413	12,579	60	Marcellus
17	26-Feb-16	12,215	12,382	60	Marcellus
18	26-Feb-16	12,018	12,184	60	Marcellus
19	26-Feb-16	11,820	11,987	60	Marcellus
20	26-Feb-16	11,623	11,790	60	Marcellus
21	27-Feb-16	11,426	11,592	60	Marcellus
22	27-Feb-16	11,228	11,395	60	Marcellus
23	27-Feb-16	11,031	11,197	60	Marcellus
24	27-Feb-16	10,834	11,000	60	Marcellus
25	27-Feb-16	10,636	10,803	60	Marcellus
26	28-Feb-16	10,439	10,605	60	Marcellus
27	28-Feb-16	10,242	10,408	60	Marcellus
28	28-Feb-16	10,044	10,211	60	Marcellus
29	28-Feb-16	9,847	10,013	60	Marcellus
30	29-Feb-16	9,649	9,816	60	Marcellus
31	29-Feb-16	9,452	9,618	60	Marcellus
32	29-Feb-16	9,255	9,421	60	Marcellus
33	29-Feb-16	9,057	9,224	60	Marcellus
34	29-Feb-16	8,860	9,026	60	Marcellus
35	1-Mar-16	8,663	8,829	60	Marcellus
36	1-Mar-16	8,465	8,632	60	Marcellus
37	1-Mar-16	8,268	8,434	60	Marcellus
38	1-Mar-16	8,070	8,237	60	Marcellus
39	1-Mar-16	7,873	8,040	60	Marcellus
40	1-Mar-16	7,676	7,842	60	Marcellus
41	2-Mar-16	7,478	7,645	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	22-Feb-16	72.0	7,507	5,440	6,266	247,750	6,571	N/A
2	22-Feb-16	72.0	7,286	5,622	6,276	247,900	7,430	N/A
3	22-Feb-16	71.0	7,336	5,683	5,761	247,250	6,432	N/A
4	23-Feb-16	69.6	7,215	6,047	5,654	246,450	6,470	N/A
5	23-Feb-16	70.0	7,550	5,565	6,126	247,800	7,214	N/A
6	23-Feb-16	72.0	7,320	5,522	5,980	247,050	6,363	N/A
7	23-Feb-16	70.6	7,114	5,540	5,583	245,520	6,346	N/A
8	24-Feb-16	71.0	7,248	5,533	5,493	246,450	6,333	N/A
9	24-Feb-16	73.0	7,366	5,583	5,708	240,900	6,222	N/A
10	24-Feb-16	71.0	7,292	5,307	5,744	247,600	6,305	N/A
11	24-Feb-16	70.1	7,183	6,208	5,511	248,040	6,365	N/A
12	25-Feb-16	72.7	7,249	5,432	5,665	244,960	6,333	N/A
13	25-Feb-16	73.0	7,232	5,629	5,854	248,750	6,287	N/A
14	25-Feb-16	72.0	7,464	5,443	5,550	229,850	7,045	N/A
15	25-Feb-16	71.5	7,328	5,429	5,604	246,050	7,345	N/A
16	26-Feb-16	69.5	7,127	5,411	5,683	247,640	6,323	N/A
17	26-Feb-16	71.0	7,530	5,364	6,005	247,050	6,879	N/A
18	26-Feb-16	72.0	7,120	5,432	5,450	247,600	6,206	N/A
19	26-Feb-16	71.5	7,188	5,307	5,375	247,200	7,051	N/A
20	26-Feb-16	70.7	7,138	5,533	5,461	248,800	6,180	N/A
21	27-Feb-16	69.0	6,843	5,075	5,507	248,800	6,168	N/A
22	27-Feb-16	70.0	6,861	5,590	4,445	248,850	6,197	N/A
23	27-Feb-16	71.0	7,008	5,268	6,112	250,300	6,143	N/A
24	27-Feb-16	70.6	6,848	5,636	6,330	250,680	6,132	N/A
25	27-Feb-16	67.2	6,758	5,740	5,364	247,040	6,118	N/A
26	28-Feb-16	71.0	6,993	5,822	5,500	248,550	6,104	N/A
27	28-Feb-16	72.0	6,955	5,783	5,794	248,700	6,092	N/A
28	28-Feb-16	71.6	6,901	5,629	5,597	247,760	6,081	N/A
29	28-Feb-16	66.9	7,023	5,440	5,193	248,000	6,140	N/A
30	29-Feb-16	70.2	7,164	5,629	5,239	246,810	6,057	N/A
31	29-Feb-16	73.0	7,048	5,440	5,676	246,950	6,043	N/A
32	29-Feb-16	73.0	7,295	5,715	6,416	247,100	6,111	N/A
33	29-Feb-16	69.5	7,310	5,536	5,225	239,000	6,102	N/A
34	29-Feb-16	70.8	6,914	5,701	5,436	247,600	6,134	N/A
35	1-Mar-16	69.4	6,891	5,575	5,811	247,600	6,122	N/A
36	1-Mar-16	70.9	6,681	5,897	5,744	252,100	5,978	N/A
37	1-Mar-16	70.5	6,604	5,740	5,443	248,500	5,966	N/A
38	1-Mar-16	70.5	6,712	5,744	5,686	248,300	5,954	N/A
39	1-Mar-16	73.2	6,820	5,676	5,254	247,550	5,944	N/A
40	1-Mar-16	72.8	6,684	6,495	5,479	247,450	5,932	N/A
41	2-Mar-16	71.7	7,019		5,225	247,650	5,936	N/A
AVG=		71.0	7,101	5,604	5,640	10,125,900	6,321	TOTAL

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LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Fresh Water	97'	N/A	97'	N/A
Sandstone	0	267	0	267
Shale and Sandstone	est. 267	727	est. 267	727
Shale	est. 727	767	est. 727	767
Shale and Siltstone	est. 767	1,107	est. 767	1107
Shale	est. 1107	1187	est. 1107	1187
Sandstone	est. 1187	1327	est. 1187	1327
Coal	est. 1327	1347	est. 1327	1347
Sandstone	est. 1347	1627	est. 1347	1627
Shale/Sandstone/Siltstone	est. 1627	2165	est. 1627	2167
Big Lime	2165	2285	2167	2287
Big Injun	2285	2717	2287	2719
Gantz Sand	2717	2856	2719	2858
Fifty Foot Sandstone	2856	2931	2858	2933
Gordon	2931	3215	2933	3217
Fifth Sandstone	3215	3251	3217	3253
Bayard	3251	3659	3253	3661
Warren	3659	4027	3661	4030
Speechley	4027	4333	4030	4340
Baltown	4333	4801	4340	4839
Bradford	4801	5273	4839	5370
Benson	5273	5529	5370	5662
Alexander	5529	5729	5662	5885
Elk	5729	6224	5885	6438
Rhinestreet	6224	6597	6438	6858
Sycamore	6597	6754	6858	7047
Middlesex	6754	6886	7047	7246
Burkett	6886	6917	7246	7303
Tully	6917	6974	7303	7440
Marcellus	6974	NA	7440	NA

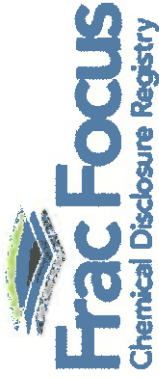
*Please note Antero determines formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	2/22/2016
Job End Date:	3/2/2016
State:	West Virginia
County:	Tyler
API Number:	47-095-02188-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Berry 1H
Latitude:	39.42347800
Longitude:	-80.73445600
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,097
Total Base Water Volume (gal):	11,257,830
Total Base Non Water Volume:	11,257,830



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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	89.86923	
Sand	J S Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	9.69223	
HCL Acid (12.6%-18.0%)	J.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.50000	0.16747	
LGC-15	J.S. Well Services	Gelling Agents	Hydrogen Chloride	7647-01-0	18.00000	0.04000	
			Guar Gum	9000-30-0	50.00000	0.06064	
			Petroleum Distillates	84742-47-8	60.00000	0.05743	
			Suspending agent (solid)	14808-60-7	3.00000	0.00927	
			Surfactant	68439-51-0	3.00000	0.00364	
WFRA-405	J.S. Well Services	Friction Reducer	Water	7732-18-5	60.00000	0.03714	
			2-Propanoic acid, polymer with 2-propenamide	9003-06-9	30.00000	0.01857	
			Hydrated light distillate (petroleum)	84742-47-8	30.00000	0.01495	

SI-1100	U.S. Well Services	Scale Inhibitor	Ethoxylated alcohol blend	88002-97-1	4.00000	0.00248
			Water	7732-18-5	80.00000	0.00998
			Ethylene Glycol	107-21-1	25.00000	0.00352
			Copolymer of Maleic and Acrylic acid	62255-49-9	10.00000	0.00147
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	7.50000	0.00126
			Hexamethylene tramine penta (methylene phosphonic acid)	34690-00-1	5.00000	0.00081
			Phosphino carboxylic acid polymer	71050-62-9	5.00000	0.00081
			Hexamethylene diamine penta (methylene phosphonic acid)	23605-74-5	2.00000	0.00032
X-BAC 1020	U.S. Well Services	Anti-Bacterial Agent				
			2,2-dibromo-3-nitropropanamide	10222-01-2	20.00000	0.00409
			Deionized Water	7732-18-5	28.00000	0.00234
AP One	U.S. Well Services	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00000	0.00191
AI-302	U.S. Well Services	Acid Corrosion Inhibitors	Water	7732-18-5	95.00000	0.00036
			2-Propyn-1-ol compound with methylcycirane	88172-91-7	15.00000	0.00006

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)

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LATITUDE 39°27'30"

7,380'

7,272' TO BOTTOM HOLE

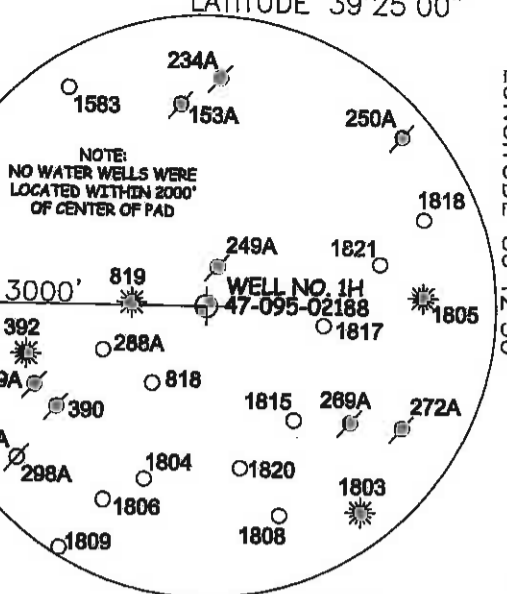
LATITUDE 39°25'00"

LONGITUDE 80°42'30"

12,696'

LONGITUDE 80°42'30"

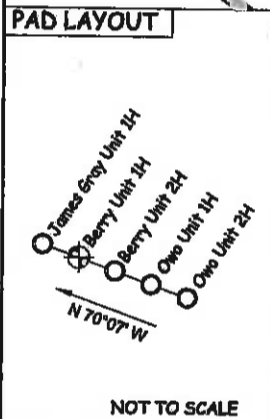
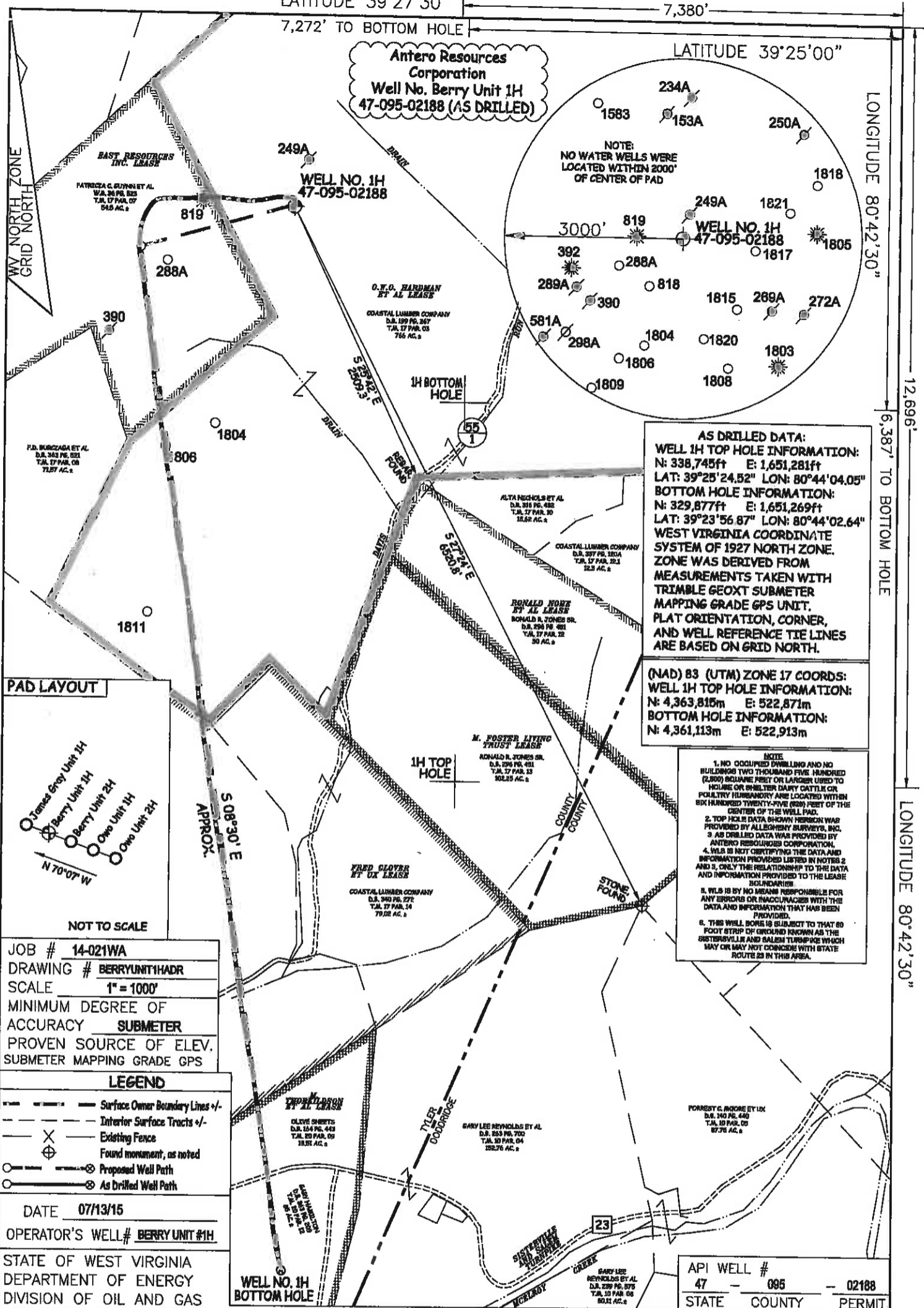
Antero Resources Corporation
Well No. Berry Unit 1H
47-095-02188 (AS DRILLED)



AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 338,745ft E: 1,651,281ft
LAT: 39°25'24.52" LON: 80°44'04.05"
BOTTOM HOLE INFORMATION:
N: 329,877ft E: 1,651,269ft
LAT: 39°23'56.87" LON: 80°44'02.64"
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: 4,363,815m E: 522,871m
BOTTOM HOLE INFORMATION:
N: 4,361,113m E: 522,913m

- NOTE**
- 1. NO OCCUPIED DWELLING AND NO BUILDING TWO THOUSAND FIVE HUNDRED (2,000) 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 PERSON 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.
 - 6. THIS WELL BORE IS SUBJECT TO THAT 80 FOOT STRIP OF GROUND KNOWN AS THE SUTHERVILLE AND GALEN TURNPIRE WHICH MAY OR MAY NOT COINCIDE WITH STATE ROUTE 23 IN THIS AREA.



JOB # 14-021WA
DRAWING # BERRYUNIT1HADR
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND

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

DATE 07/13/15
OPERATOR'S WELL # BERRY UNIT #1H

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 1,168' ORIGINAL - 1,164' AS DRILLED WATERSHED MCELROY CREEK
QUADRANGLE CENTERPOINT 7.5 DISTRICT MCELROY COUNTY TYLER

SURFACE OWNER COASTAL LUMBER COMPANY ACREAGE 766 ACRES +/-
OIL & GAS ROYALTY OWNER O.W.O. HARDMAN ET AL; EAST RESOURCES INC.;
FRED GLOVER ET UX; M. THORKILDSON ET AL

LEASE ACREAGE 952.3 AC±; 100 AC±; 263.67 AC±; 125.91 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 7,065' TVD 16,062' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT CT CORPORATION SYSTEM-DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313



API WELL # 47 - 095 - 02188
STATE COUNTY PERMIT
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
10/28/2015
WILLOW LAND SURVEYING PLLC
P.O. BOX 17
PENNSBORO, WV 26415

COUNTY NAME

PERMIT

LATITUDE 39°27'30"

7,380'

7,272' TO BOTTOM HOLE

LATITUDE 39°25'00"

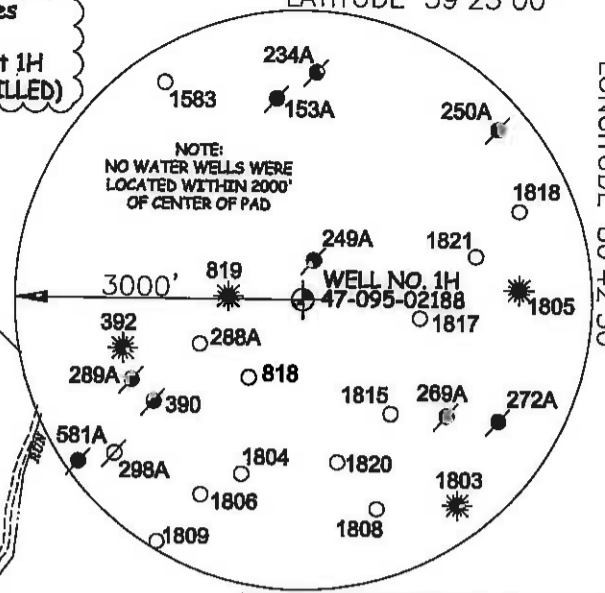
LONGITUDE 80°42'30"

12,696'

6,387' TO BOTTOM HOLE

LONGITUDE 80°42'30"

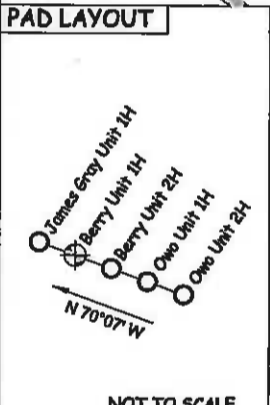
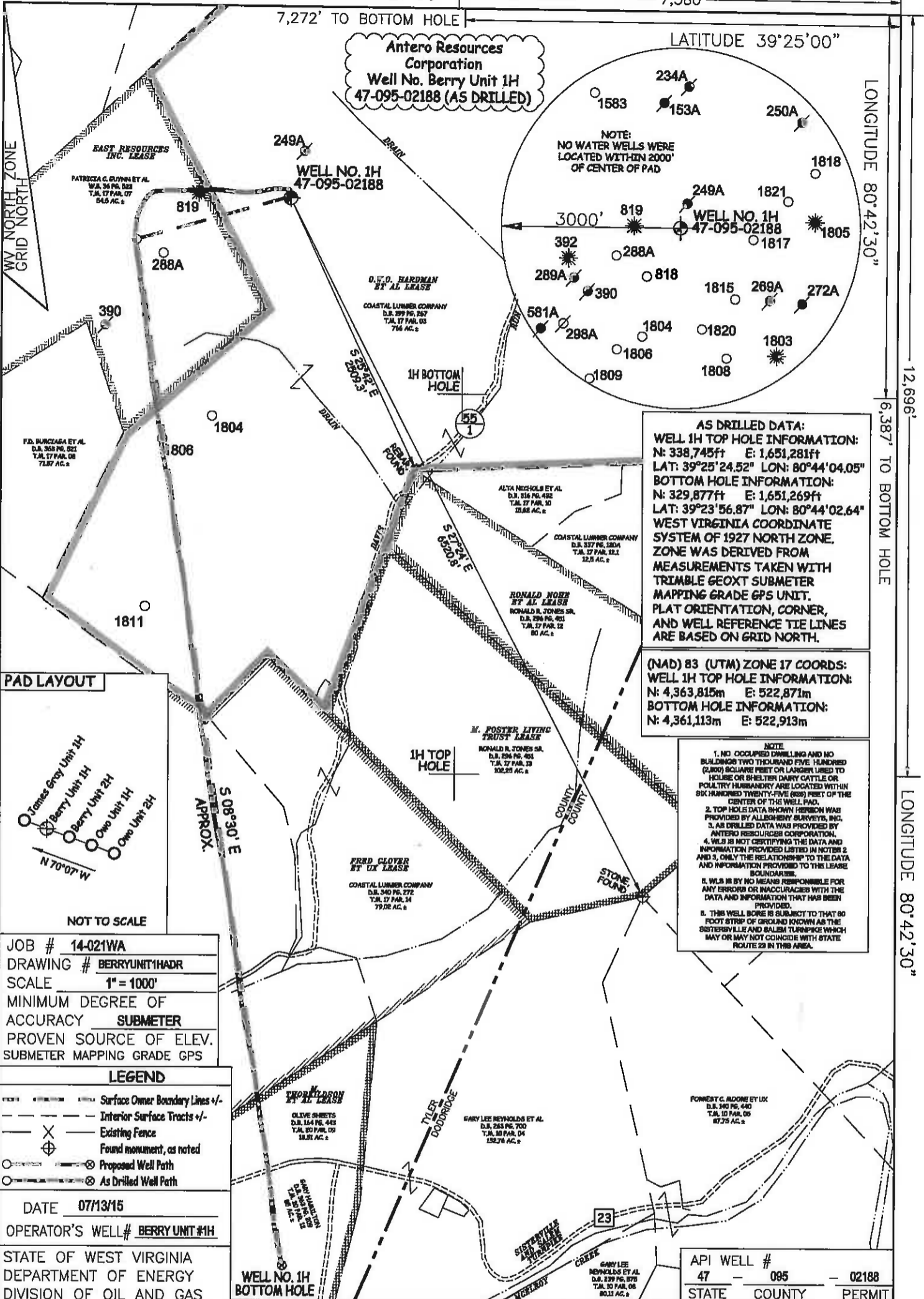
Antero Resources Corporation
Well No. Berry Unit 1H
47-095-02188 (AS DRILLED)



AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 338,745ft E: 1,651,281ft
LAT: 39°25'24.52" LON: 80°44'04.05"
BOTTOM HOLE INFORMATION:
N: 329,877ft E: 1,651,269ft
LAT: 39°23'56.87" LON: 80°44'02.64"
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: 4,363,815m E: 522,871m
BOTTOM HOLE INFORMATION:
N: 4,361,113m E: 522,913m

NOTE
1. NO OCCUPIED DWELLING AND NO 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 MISCELLANEOUS WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.
6. THIS WELL BORE IS SUBJECT TO THAT 80 FOOT STRIP OF GROUND KNOWN AS THE SISTERSVILLE AND SALEM TURNPIKE WHICH MAY OR MAY NOT COINCIDE WITH STATE ROUTE 23 IN THIS AREA.



JOB # 14-021WA
DRAWING # BERRYUNIT1HADR
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND
--- Surface Owner Boundary Lines +/-
--- Interior Surface Tracts +/-
X Existing Fence
⊕ Found monument, as noted
○ Proposed Well Path
⊗ As Drilled Well Path

DATE 07/13/15
OPERATOR'S WELL# BERRY UNIT #1H

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 1,160' ORIGINAL - 1,164' AS DRILLED WATERSHED MCELROY CREEK
QUADRANGLE CENTERPOINT 7.5' DISTRICT MCELROY COUNTY TYLER
SURFACE OWNER COASTAL LUMBER COMPANY ACREAGE 766 ACRES +/-
OIL & GAS ROYALTY OWNER O.W.O. HARDMAN ET AL; EAST RESOURCES INC.;
FRED GLOVER ET UX; M. THORKILDSON ET AL
LEASE ACREAGE 952.3 AC±; 100 AC±; 283.87 AC±; 125.91 AC±

PROPOSED WORK: DRILL ___ CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___
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