



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

API 47 - 095 - 02187 County Tyler District McElroy
Quad Centerpoint 7.5' Pad Name Coastal 1 Pad Field/Pool Name ---
Farm name Coastal Lumber Company Well Number James Gray 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 4363816m Easting 522869m
Landing Point of Curve Northing 4363575.12m Easting 522295.01m
Bottom Hole Northing 4362283m Easting 522503m

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

Date permit issued 8/19/2014 Date drilling commenced 9/4/2014 Date drilling ceased 2/4/2015
Date completion activities began 1/6/2016 Date completion activities ceased 4/26/2016
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

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No
JUL 18 2016
No

WV Department of
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APPROVED
NAME: [Signature]
DATE: 9/8/16 10/28/2016

API 47-095 - 02187

Farm name Coastal Lumber Company

Well number James Gray 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# H-40	N/A	Yes
Surface	17- 1/2"	13- 3/8"	363'	New	48# H-40	N/A	Yes
Coal							
Intermediate 1	12-1/4"	9-5/8"	2526'	New	36# J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5-1/2"	12420'	New	20# P-110	N/A	Yes
Tubing		2-3/8"	7487'		4.7# N-80	N/A	
Packer type and depth set		N/A					

Comment Details Kickoff/Sidetrack at 6910'

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	430 sx	15.6	1.18	252	0'	8 Hrs.
Coal							
Intermediate 1	Class A	932 sx	15.6	1.18	791	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1085 sx (Lead) 826 sx (Tail)	13.5 Lead 15.2 Tail	1.44 Lead 1.8 Tail	2381	-500 into intermediate casing	8 Hrs.
Tubing							

Drillers TD (ft) 12420' MD, 7035' TVD (BHL), 7036' (Deepest Point Drilled)

Loggers TD (ft) 12420' MD

Deepest formation penetrated Marcellus

Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 6881'

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

Check all wireline logs run caliper density deviated/directional induction temperature sonic
 neutron resistivity gamma ray

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

WV Department of
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10/28/2016

API 47- 095 02187 Farm name Coastal Lumber Company Well number James Gray 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**

Please insert additional pages as applicable.

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API 47- 095 - 02187 Farm name Coastal Lumber Company Well number James Gray Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
	<u>6875' (TOP) TVD</u>	<u>7608' (TOP) MD</u>
<u>Marcellus</u>		

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 12392 mcfpd Oil 15 bpd NGL --- bpd Water 211 bpd GAS MEASURED BY Estimated Orifice Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H₂S, ETC)</u>
	<u>DEPTH IN FT</u>	<u>DEPTH IN FT</u>	<u>DEPTH IN FT</u>	<u>DEPTH IN FT</u>	
	<u>NAME TVD</u>	<u>TVD</u>	<u>MD</u>	<u>MD</u>	
	<u>0</u>		<u>0</u>		

***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 St. 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 303-357-7323
Signature *Kara Quackenbush* Title Permitting Representative Date 7/15/2016

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Submittal of Hydraulic Fracturing Chemical Disclosure Information

Attach copy of FRACFOCUS Registry

WV Department of Environmental Protection
10/28/2016

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	6-Jan-16	12,182	12,348	60	Marcellus
2	3-Mar-16	11,985	12,151	60	Marcellus
3	3-Mar-16	11,787	11,954	60	Marcellus
4	3-Mar-16	11,590	11,757	60	Marcellus
5	3-Mar-16	11,393	11,559	60	Marcellus
6	4-Mar-16	11,196	11,362	60	Marcellus
7	4-Mar-16	10,999	11,165	60	Marcellus
8	4-Mar-16	10,801	10,968	60	Marcellus
9	4-Mar-16	10,604	10,770	60	Marcellus
10	4-Mar-16	10,407	10,573	60	Marcellus
11	4-Mar-16	10,210	10,376	60	Marcellus
12	5-Mar-16	10,012	10,179	60	Marcellus
13	5-Mar-16	9,815	9,982	60	Marcellus
14	5-Mar-16	9,618	9,784	60	Marcellus
15	5-Mar-16	9,421	9,587	60	Marcellus
16	6-Mar-16	9,224	9,390	60	Marcellus
17	6-Mar-16	9,026	9,193	60	Marcellus
18	6-Mar-16	8,829	8,995	60	Marcellus
19	6-Mar-16	8,632	8,798	60	Marcellus
20	6-Mar-16	8,435	8,601	60	Marcellus
21	6-Mar-16	8,237	8,404	60	Marcellus
22	7-Mar-16	8,040	8,207	60	Marcellus
23	7-Mar-16	7,843	8,009	60	Marcellus
24	7-Mar-16	7,646	7,812	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	2-Mar-16	67.1	7,524	N/A	5,504	214,800	7,021	N/A
2	3-Mar-16	63.7	8,005	5,683	4,492	106,250	7,348	N/A
3	3-Mar-16	64.0	7,009	5,829	5,579	245,600	6,285	N/A
4	3-Mar-16	67.0	6,992	5,701	5,912	249,750	6,089	N/A
5	3-Mar-16	68.3	6,762	5,654	5,300	248,330	6,086	N/A
6	4-Mar-16	66.7	6,889	5,597	5,028	247,400	6,010	N/A
7	4-Mar-16	66.0	6,524	5,329	5,994	248,800	6,084	N/A
8	4-Mar-16	67.0	6,757	5,854	5,490	248,700	6,174	N/A
9	4-Mar-16	69.0	6,756	5,565	5,447	249,250	6,203	N/A
10	4-Mar-16	67.5	6,927	5,683	5,497	246,200	6,374	N/A
11	4-Mar-16	68.4	7,065	5,665	5,533	248,700	6,403	N/A
12	5-Mar-16	69.0	6,707	5,854	5,693	249,850	6,220	N/A
13	5-Mar-16	70.0	6,914	5,865	5,701	249,350	6,611	N/A
14	5-Mar-16	69.5	6,709	5,525	5,336	247,850	6,217	N/A
15	5-Mar-16	68.1	6,793	5,611	5,289	250,420	6,212	N/A
16	6-Mar-16	68.3	6,507	6,033	4,864	249,600	6,273	N/A
17	6-Mar-16	70.0	6,564	6,148	5,561	248,800	6,160	N/A
18	6-Mar-16	70.0	6,414	5,829	6,001	249,550	6,197	N/A
19	6-Mar-16	70.0	6,631	5,876	5,504	246,700	6,136	N/A
20	6-Mar-16	72.8	6,793	5,811	5,704	247,680	6,302	N/A
21	6-Mar-16	73.1	6,826	6,155	5,379	248,500	6,304	N/A
22	7-Mar-16	74.7	6,768	6,123	5,951	249,350	6,820	N/A
23	7-Mar-16	72.9	6,842	6,262	5,304	250,370	6,178	N/A
24	7-Mar-16	74.0	6,810	6,745	4,685	253,630	6,225	N/A
	AVG=	69.0	6,854	5,843	5,448	5,795,430	6,331	TOTAL

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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	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	1107	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	2173	est. 1627	2173
Big Lime	2168	2286	2168	2286
Big Injun	2286	2721	2286	2722
Gantz Sand	2721	2849	2722	2851
Fifty Foot Sandstone	2849	2932	2851	2935
Gordon	2932	3217	2935	3232
Fifth Sandstone	3217	3251	3232	3269
Bayard	3251	3715	3269	3715
Warren	3715	4028	3715	4136
Speechley	4028	4333	4136	4479
Baltown	4333	4799	4479	4995
Bradford	4799	5269	4995	5526
Benson	5269	5525	5526	5816
Alexander	5525	5719	5816	6036
Elk	5719	6215	6036	6596
Rhinestreet	6215	6590	6596	7015
Sycamore	6590	6748	7015	7197
Middlesex	6748	6881	7197	7383
Burkett	6881	6909	7383	7434
Tully	6909	6965	7434	7608
Marcellus	6965	NA	7608	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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10/28/2016

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	3/2/2016
Job End Date:	3/7/2016
State:	West Virginia
County:	Tyler
API Number:	47-095-02187-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	James Gray 1H
Latitude:	39.42356900
Longitude:	-80.73430800
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,036
Total Base Water Volume (gal):	6,523,018
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					
Sand	U.S. Well Services, LLC	Proppant		7732-18-5	100.00000	89.95038	
HCL Acid (12.5% - 18.0%)	U.S. Well Services, LLC	Bulk Acid	Crystalline Silica, quartz	14808-60-7	100.00000	9.58239	
			Water	7732-18-5	87.50000	0.18684	
			Hydrogen Chloride	7647-01-0	18.00000	0.04463	
	U.S. Well Services	Gelling Agents					
			Guar Gum	9000-30-0	50.00000	0.06345	
			Petroleum Distillates	64742-47-8	60.00000	0.06009	
			Suspending agent (solid)	14808-60-7	3.00000	0.00970	
			Surfactant	68439-51-0	3.00000	0.00381	
WFRA-405	U.S. Well Services	Friction Reducer					
			Water	7732-18-5	60.00000	0.03583	
			2-Propenoic acid, polymer with 2-propenamide	29003-06-9	30.00000	0.01792	
			Hydrated light distillate (petroleum)	64742-47-8	30.00000	0.01442	

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SI-1100	U.S. Well Services	Scale Inhibitor	Ethoxylated alcohol blend	58002-97-1	4.00000	0.00239
			Water	7732-18-5	80.00000	0.01024
			Ethylene Glycol	107-21-1	25.00000	0.00362
			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	0.00130
			Phosphino carboxylic acid polymer	71050-62-9	5.00000	0.00083
			Hexamethylene tramine penta (methylene phosphonic acid)	34690-00-1	5.00000	0.00083
			Hexamethylene diamine penta (methylene phosphonic acid)	23605-74-5	2.00000	0.00033
K-BAC 1020	U.S. Well Services	Anti-Bacterial Agent	2,2-dibromo-3-nitropropionamide	10222-01-2	20.00000	0.00452
			Deionized Water	7732-18-5	28.00000	0.00258
AP One	U.S. Well Services	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00000	0.00192
AI-302	U.S. Well Services	Acid Corrosion Inhibitors	Water	7732-18-5	95.00000	0.00041
			2-Propyn-1-ol compound with methyloxirane	38172-91-7	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"

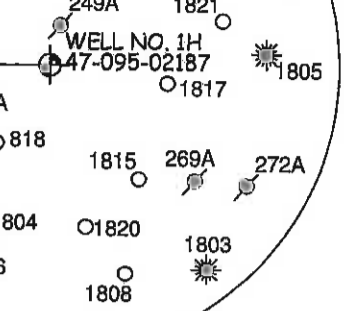
7,389'

8,605' TO BOTTOM HOLE

LATITUDE 39°25'00"

Antero Resources Corporation
Well No. James Gray Unit 1H
47-017-02187 (AS DRILLED)

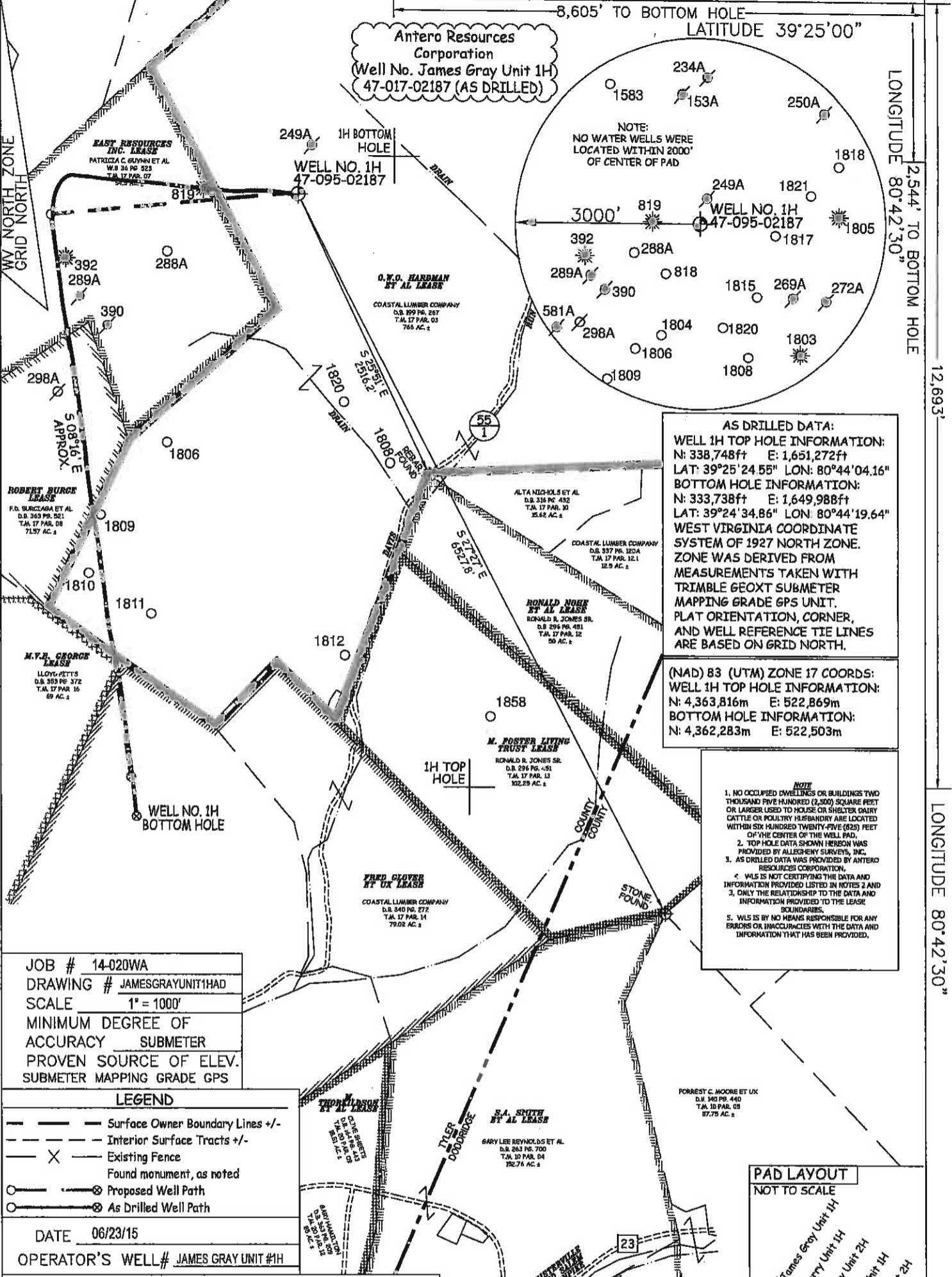
NOTE:
NO WATER WELLS WERE
LOCATED WITHIN 2000'
OF CENTER OF PAD



AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 338,748ft E: 1,651,272ft
LAT: 39°25'24.55" LON: 80°44'04.16"
BOTTOM HOLE INFORMATION:
N: 333,738ft E: 1,649,988ft
LAT: 39°24'34.86" LON: 80°44'19.64"
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: 4,363,816m E: 522,869m
BOTTOM HOLE INFORMATION:
N: 4,362,283m E: 522,503m

- 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 SICHAN HUBSON 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 # 14-020WA
DRAWING # JAMESGRAYUNIT1HAD
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND

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

DATE 06/23/15

OPERATOR'S WELL # JAMES GRAY UNIT #1H

STATE OF WEST VIRGINIA API WELL #
DEPARTMENT OF ENERGY 47 - 095 - 02187
DIVISION OF OIL AND GAS STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1,171' 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, EAST RESOURCES INC.; ROBERT BURGE; M.V.B. GEORGE, FRED GLOVER ET UX

LEASE ACREAGE 952.3 AC±; 100 AC±; 77.26 AC±; 300 AC±; 263.67 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

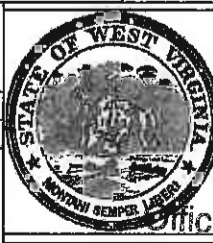
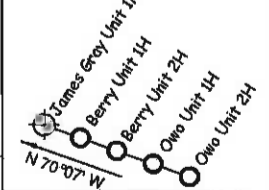
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,035' TVD 12,420' MD

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

PAD LAYOUT

NOT TO SCALE



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

RECEIVED
Office of Oil and Gas
10/28/2015
WILLOW LAND SURVEYING PLLC
PENNSBORO, WV 26415

COUNTY NAME PERMIT

LATITUDE 39°27'30"

7,389'

8,605' TO BOTTOM HOLE

LATITUDE 39°25'00"

LONGITUDE 80°42'30"

12,693'

LONGITUDE 80°42'30"

Antero Resources Corporation
Well No. James Gray Unit 1H
47-017-02187 (AS DRILLED)

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OF CENTER OF PAD

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SYSTEM OF 1927 NORTH ZONE.
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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 INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.

JOB # 14-020WA
DRAWING # JAMESGRAYUNIT1HAD
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND

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

DATE 06/23/15

OPERATOR'S WELL# JAMES GRAY UNIT #1H

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS
API WELL # 47-095-02187
STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1,171' 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; ANTERO RESOURCES INC.; ROBERT BURGE; M.V.B. GEORGE; FRED GLOVER ET UX

LEASE ACREAGE 952.3 AC±; 100 AC±; 77.26 AC±; 300 AC±; 263.67 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

TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,035' TVD 12,420' 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



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
10/28/2016
WILLOW LAND SURVEYING PLLC
P.O. BOX 17
PENNSBORO, WV 26415

COUNTY NAME

PERMIT