

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

API 47-095-02180 County Tyler District McElroy
Quad Centerpoint 7.5' Pad Name Fritz Field/Pool Name ---
Farm name Coastal Lumber Company Well Number Owo Unit 2H
Operator (as registered with the OOG) Antero Resources Corporation
Address 1615 Wynkoop St. 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 4363812m Easting 522880m
Landing Point of Curve Northing 4363619.31m Easting 523155.47m
Bottom Hole Northing 4360989m Easting 524007m

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 6/10/2014 Date drilling commenced 8/18/2014 Date drilling ceased 11/19/2014
Date completion activities began 1/7/2016 Date completion activities ceased 4/22/2016
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

APPROVED
NAME: [Signature]
DATE: 9/8/16

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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# H-40	N/A	Y
Surface	17- 1/2"	13- 3/8"	382'	New	48# H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2503'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5-1/2"	17118'	New	23# P-110	N/A	Y
Tubing		2-3/8"	7346'		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	185 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	487 sx	15.6	1.18	265	0'	8 Hrs.
Coal							
Intermediate 1	Class A	922 sx	15.6	1.18	784	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	955 sx (Lead) 1629 sx (Tail)	13.5 Lead 15.2 Tail	1.44 Lead 1.78 Tail	3463	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17118' MD, 7121' TVD (BHL), 7097' (Deepest Point Drilled) Loggers TD (ft) 17071'
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6365'

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 _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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API 47- 095 - 02180 Farm name Coastal Lumber Company Well number Owo 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**

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS		
	7013' (TOP)	TVD	7367' (TOP) MD
Marcellus			

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 13790 mcfpd Oil 70 bpd NGL -- bpd Water 241 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	
	0		0		

***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 303-357-7200
Signature *Kara Quackenbush* Title Permit Representative Date 7/14/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry
WV Department of Environmental Protection
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EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	7-Jan-16	16,876	17,042	60	Marcellus
2	14-Jan-16	16,679	16,845	60	Marcellus
3	15-Jan-16	16,481	16,648	60	Marcellus
4	15-Jan-16	16,284	16,450	60	Marcellus
5	15-Jan-16	16,087	16,253	60	Marcellus
6	16-Jan-16	15,889	16,056	60	Marcellus
7	16-Jan-16	15,692	15,859	60	Marcellus
8	16-Jan-16	15,495	15,661	60	Marcellus
9	17-Jan-16	15,298	15,464	60	Marcellus
10	17-Jan-16	15,100	15,267	60	Marcellus
11	17-Jan-16	14,903	15,069	60	Marcellus
12	17-Jan-16	14,706	14,872	60	Marcellus
13	18-Jan-16	14,509	14,675	60	Marcellus
14	18-Jan-16	14,311	14,478	60	Marcellus
15	18-Jan-16	14,114	14,280	60	Marcellus
16	18-Jan-16	13,917	14,083	60	Marcellus
17	19-Jan-16	13,719	13,886	60	Marcellus
18	19-Jan-16	13,522	13,689	60	Marcellus
19	19-Jan-16	13,325	13,491	60	Marcellus
20	19-Jan-16	13,128	13,294	60	Marcellus
21	20-Jan-16	12,930	13,097	60	Marcellus
22	20-Jan-16	12,733	12,899	60	Marcellus
23	24-Jan-16	12,536	12,702	60	Marcellus
24	25-Jan-16	12,339	12,505	60	Marcellus
25	25-Jan-16	12,141	12,308	60	Marcellus
26	25-Jan-16	11,944	12,110	60	Marcellus
27	25-Jan-16	11,747	11,913	60	Marcellus
28	25-Jan-16	11,549	11,716	60	Marcellus
29	25-Jan-16	11,352	11,519	60	Marcellus
30	26-Jan-16	11,155	11,321	60	Marcellus
31	26-Jan-16	10,958	11,124	60	Marcellus
32	26-Jan-16	10,760	10,927	60	Marcellus
33	26-Jan-16	10,563	10,729	60	Marcellus
34	26-Jan-16	10,366	10,532	60	Marcellus
35	26-Jan-16	10,168	10,335	60	Marcellus
36	27-Jan-16	9,971	10,138	60	Marcellus
37	27-Jan-16	9,774	9,940	60	Marcellus
38	27-Jan-16	9,577	9,743	60	Marcellus
39	28-Jan-16	9,379	9,546	60	Marcellus
40	28-Jan-16	9,182	9,349	60	Marcellus
41	28-Jan-16	8,985	9,151	60	Marcellus
42	28-Jan-16	8,788	8,954	60	Marcellus
43	28-Jan-16	8,590	8,757	60	Marcellus
44	29-Jan-16	8,393	8,559	60	Marcellus
45	29-Jan-16	8,196	8,362	60	Marcellus
46	29-Jan-16	7,998	8,165	60	Marcellus
47	30-Jan-16	7,801	7,968	60	Marcellus
48	30-Jan-16	7,604	7,770	60	Marcellus
49	30-Jan-16	7,407	7,573	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 (bbbls)	Amount of Nitrogen/ other (units)
1	14-Jan-16	63.0	7,592	5,890	5,089	249,450	6,772	N/A
2	14-Jan-16	65.5	7,552	5,697	5,872	201,610	7,068	N/A
3	15-Jan-16	64.0	7,745	5,668	5,096	185,050	7,452	N/A
4	15-Jan-16	64.0	7,683	5,926	4,910	249,050	6,634	N/A
5	15-Jan-16	67.5	7,531	5,672	5,454	217,200	7,092	N/A
6	16-Jan-16	67.0	7,291	5,683	5,540	244,800	6,507	N/A
7	16-Jan-16	70.0	7,561	5,844	5,683	247,250	6,578	N/A
8	16-Jan-16	67.2	7,227	5,425	5,758	163,020	7,301	N/A
9	17-Jan-16	67.0	7,530	5,429	5,568	247,650	6,563	N/A
10	17-Jan-16	70.0	7,474	5,568	5,575	247,250	6,394	N/A
11	17-Jan-16	70.0	7,464	5,654	5,586	248,600	6,413	N/A
12	17-Jan-16	69.7	7,196	5,561	5,597	244,450	6,326	N/A
13	18-Jan-16	70.6	7,251	5,608	4,960	249,700	6,652	N/A
14	18-Jan-16	71.0	7,419	5,472	5,661	248,650	6,358	N/A
15	18-Jan-16	69.4	7,705	5,374	5,059	184,260	6,571	N/A
16	18-Jan-16	71.6	7,328	5,851	5,141	248,510	6,298	N/A
17	19-Jan-16	70.0	7,205	5,615	5,518	248,050	6,285	N/A
18	19-Jan-16	72.0	7,298	5,518	6,126	248,200	6,281	N/A
19	19-Jan-16	71.9	7,288	5,337	5,140	234,710	6,119	N/A
20	19-Jan-16	73.7	7,215	5,314	5,671	248,580	6,235	N/A
21	20-Jan-16	73.0	7,075	5,432	6,065	248,250	6,241	N/A
22	20-Jan-16	72.0	7,174	5,600	5,661	248,450	6,222	N/A
23	24-Jan-16	75.2	7,391	5,228	5,587	241,190	6,211	N/A
24	25-Jan-16	73.8	7,425	5,418	5,191	248,030	6,199	N/A
25	25-Jan-16	72.9	7,537	5,622	5,422	246,800	6,224	N/A
26	25-Jan-16	72.9	7,436	5,840	4,771	246,950	6,179	N/A
27	25-Jan-16	72.9	7,269	5,407	5,207	246,750	6,176	N/A
28	25-Jan-16	73.9	7,213	5,668	5,010	246,680	6,154	N/A
29	25-Jan-16	73.6	7,001	5,325	5,254	247,680	6,149	N/A
30	26-Jan-16	75.3	6,996	5,186	5,568	246,890	6,138	N/A
31	26-Jan-16	71.3	7,663	5,908	5,368	221,250	6,676	N/A
32	26-Jan-16	70.3	7,366	5,440	5,618	245,750	6,097	N/A
33	26-Jan-16	71.4	7,106	5,479	5,175	246,700	6,088	N/A
34	26-Jan-16	72.0	7,139	5,733	5,071	247,800	6,074	N/A
35	26-Jan-16	72.0	7,122	5,661	5,114	245,610	6,021	N/A
36	27-Jan-16	70.4	6,842	5,593	5,325	248,750	6,045	N/A
37	27-Jan-16	71.3	6,878	5,111	5,565	251,000	6,034	N/A
38	27-Jan-16	67.0	7,076	5,536	5,228	245,240	5,961	N/A
39	28-Jan-16	67.0	7,293	5,625	5,525	203,660	6,557	N/A
40	28-Jan-16	72.3	7,029	5,318	5,926	248,000	5,989	N/A
41	28-Jan-16	70.9	7,058	5,625	5,862	248,700	6,065	N/A
42	28-Jan-16	72.8	7,268	5,586	5,518	227,700	5,856	N/A
43	28-Jan-16	66.7	6,777	5,375	5,697	227,500	6,847	N/A
44	29-Jan-16	73.0	6,756	5,422	5,854	250,000	5,947	N/A
45	29-Jan-16	73.0	6,741	5,736	5,522	250,080	5,935	N/A
46	29-Jan-16	72.2	6,796	5,840	5,643	248,800	6,743	N/A
47	30-Jan-16	75.2	6,824	5,547	5,976	247,680	5,998	N/A
48	30-Jan-16	71.8	7,138	6,076	5,736	249,000	5,869	N/A
49	30-Jan-16	74.7	6,919	6,244	4,359	234,800	6,305	N/A
AVG=		70.7	7,242	5,585	5,445	11,711,730	6,343	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	2163	est. 1627	2163
Big Lime	2163	2284	2163	2284
Big Injun	2284	2715	2284	2715
Gantz Sand	2715	2853	2715	2853
Fifty Foot Sandstone	2853	2931	2853	2931
Gordon	2931	3219	2931	3219
Fifth Sandstone	3219	3251	3219	3251
Bayard	3251	3664	3251	3664
Warren	3664	4034	3664	4034
Speechley	4034	4334	4034	4334
Baltown	4334	4805	4334	4805
Bradford	4805	5285	4805	5285
Benson	5285	5541	5285	5541
Alexander	5541	5736	5541	5736
Elk	5736	6239	5736	6239
Rhinestreet	6239	6621	6239	6646
Sycamore	6621	6784	6646	6910
Middlesex	6784	6923	6910	7169
Burkett	6923	6950	7169	7224
Tully	6950	7013	7224	7367
Marcellus	7013	NA	7367	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:	1/14/2016
Job End Date:	1/30/2016
State:	West Virginia
County:	Tyler
API Number:	47-095-02180-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Owo 2H
Latitude:	39.42353300
Longitude:	-80.73418100
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,121
Total Base Water Volume (gal):	13,517,422
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	J.S. Well Services, LLC	Proppant			100.00000	90.21015	
HCL Acid (12.6%-18.0%)	J.S. Well Services, LLC	Bulk Acid	Crystalline Silica, quartz	14808-60-7	100.00000	9.37166	
LGC-15	J.S. Well Services	Gelling Agents					
			Water	7732-18-5	87.50000	0.16334	
			Hydrogen Chloride	7647-01-0	18.00000	0.03902	
			Guar Gum	9000-30-0	50.00000	0.05498	
			Petroleum Distillates	64742-47-8	60.00000	0.05207	
			Suspending agent (solid)	14808-60-7	3.00000	0.00841	
			Surfactant	68439-51-0	3.00000	0.00330	
WFR-405	J.S. Well Services	Friction Reducer					
			Water	7732-18-5	60.00000	0.03527	
			2-Propanoic acid, polymer with 2-propenamide	29003-06-9	30.00000	0.01764	
			Hydrated light distillate (petroleum)	64742-47-8	30.00000	0.01420	

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SI-1100	U.S. Well Services	Scale Inhibitor	Ethoxylated alcohol blend	68002-97-1	4.00000	0.00235
			Water	7732-18-5	80.00000	0.01012
			Ethylene Glycol	107-21-1	25.00000	0.00357
			Copolymer of Maleic and Acrylic acid	52255-49-9	10.00000	0.00149
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	7.50000	0.00128
			Hexamethylene tramine penta (methylene phosphonic acid)	34690-00-1	5.00000	0.00082
			Phosphino carboxylic acid polymer	71050-62-9	5.00000	0.00082
			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	0.00439
			Deionized Water	7732-18-5	28.00000	0.00251
AP One	U.S. Well Services	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00000	0.00186
AI-302	U.S. Well Services	Acid Corrosion Inhibitors	Water	7732-18-5	95.00000	0.00036
			2-Propyn-1-ol compound with methylloxirane	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"

7,352'

3,683' TO BOTTOM HOLE

LATITUDE 39°25'00"

LONGITUDE 80°42'30"

12,706'

LONGITUDE 80°42'30"

Antero Resources Corporation
Well No. Owo Unit 2H
47-095-02180 (AS DRILLED)

249A
WELL NO. 2H
47-095-02180

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

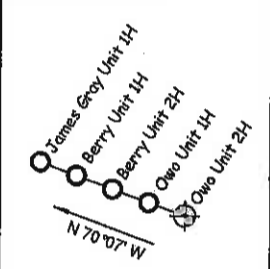
WELL NO 2H
47-095-02180

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
N: 338,735ft E: 1,651,309ft
LAT: 39°25'24.42" LON: 80°44'03.68"
BOTTOM HOLE INFORMATION:
N: 329,408ft E: 1,654,852ft
LAT: 39°23'52.72" LON: 80°43'16.92"
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: 4,363,812m E: 522,880m
BOTTOM HOLE INFORMATION:
N: 4,360,989m E: 524,007m

- 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 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 SISTERSVILLE AND SALEM TURNPIKE WHICH MAY OR MAY NOT COINCIDE WITH STATE ROUTE 23 IN THIS AREA.

PAD LAYOUT



NOT TO SCALE

JOB # 13-115WA
DRAWING # OWOUNIT2HAD
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 06/23/15
OPERATOR'S WELL# OWO UNIT #2H



STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS
API WELL # 47 - 095 - 02180
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 75' DISTRICT MCELROY COUNTY TYLER
SURFACE OWNER COASTAL LUMBER COMPANY ACREAGE 766 ACRES +/-
OIL & GAS ROYALTY OWNER O.W.O. HARDMAN ET AL; P. NICHOLAS ET AL; RONALD NOHE ET AL;
M. FOSTER LIVING TRUST; S.A. SMITH ET AL; R. SMITH; R. ROBEY

LEASE ACREAGE: 952.3 AC±; 14.43 AC±; 50 AC±; 101,549 AC±; 443.68 AC±; 87.75 AC±; 12,099 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 7,120' TVD 17,118' 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

FORM WW-6

DENVER, CO 80202

CHARLESTON, WV 25313

WV NORTH ZONE
GRID NORTH

PATRICIA C. GUYNN ET AL.
W.S. 34 PG. 323
T.M. 17 PAR. 07
54.5 AC. ±

O.W.O. HARDMAN
ET AL LEASE
COASTAL LUMBER COMPANY
D.B. 199 PG. 267
T.M. 17 PAR. 03
766 AC. ±

P. NICHOLAS
ET AL LEASE
ALTA NICHOLAS ET AL
D.B. 314 PG. 492
T.M. 17 PAR. 30
35.62 AC. ±

RONALD NOHE
ET AL LEASE
RONALD R. JONES SR.
D.B. 206 PG. 481
T.M. 17 PAR. 12
50 AC. ±

M. FOSTER LIVING
TRUST LEASE
RONALD R. JONES SR.
D.B. 206 PG. 481
T.M. 17 PAR. 13
102.25 AC. ±

JAMES DOAN
ET AL LEASE
COASTAL LUMBER COMPANY
D.B. 340 PG. 272
T.M. 17 PAR. 14
79.02 AC. ±

S.A. SMITH
ET AL LEASE
GARY LEE REYNOLDS ET AL
D.B. 263 PG. 700
T.M. 10 PAR. 04
192.76 AC. ±

R. SMITH
LEASE
FORREST C. MOORE ET AL
D.B. 140 PG. 440
T.M. 10 PAR. 05
57.75 AC. ±

P. ROBEY
LEASE
KENNETH
MASON ET AL
D.B. 202 PG. 610
T.M. 10 PAR. 06
2.5 AC. ±

GARY LEE
REYNOLDS ET AL
D.B. 239 PG. 573
T.M. 10 PAR. 08
80.11 AC. ±

GARY LEE
REYNOLDS ET AL
D.B. 239 PG. 573
T.M. 10 PAR. 09
80.11 AC. ±

ELTON WINE
D.B. 269 PG. 129
T.M. 11 PAR. 30
75 AC. ±

COUNTY NAME

PERMIT

10/28/2016

LATITUDE 39°27'30"

7,352'

3,683' TO BOTTOM HOLE

LATITUDE 39°25'00"

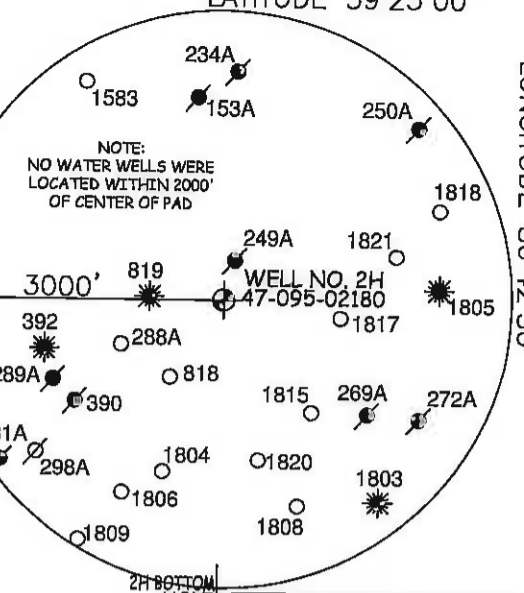
LONGITUDE 80°42'30"

12,706'

6,807' TO BOTTOM HOLE

LONGITUDE 80°42'30"

Antero Resources Corporation
Well No. Owo Unit 2H
47-095-02180 (AS DRILLED)



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

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
N: 338,735ft E: 1,651,309ft
LAT: 39°25'24.42" LON: 80°44'03.68"
BOTTOM HOLE INFORMATION:
N: 329,408ft E: 1,654,852ft
LAT: 39°23'52.72" LON: 80°43'16.92"
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: 4,363,812m E: 522,880m
BOTTOM HOLE INFORMATION:
N: 4,360,989m E: 524,007m

WV NORTH ZONE
GRID NORTH

PATRICIA C. GUYNN ET AL
W.B. 36 PG. 523
T.M. 17 PAR. 07
545 AC. ±

O.W.O. HARDMAN
ET AL LEASE

COASTAL LUMBER COMPANY
D.B. 199 PG. 267
T.M. 17 PAR. 03
766 AC. ±

P. NICHOLAS
ET AL LEASE
ALTA NICHOLS ET AL
D.B. 316 PG. 432
T.M. 17 PAR. 10
15.62 AC. ±

COASTAL LUMBER COMPANY
D.B. 337 PG. 120A
T.M. 17 PAR. 12.1
12.9 AC. ±

RONALD NOHE
ET AL LEASE
RONALD R. JONES SR.
D.B. 294 PG. 451
T.M. 17 PAR. 12
30 AC. ±

M. FOSTER LIVING
TRUST LEASE
RONALD R. JONES SR.
D.B. 296 PG. 451
T.M. 17 PAR. 13
102.29 AC. ±

JAMES DOAN
ET UX LEASE
COASTAL LUMBER COMPANY
D.B. 340 PG. 272
T.M. 17 PAR. 14
79.02 AC. ±

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ET AL LEASE
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D.B. 263 PG. 700
T.M. 10 PAR. 04
182.76 AC. ±

R. SMITH
LEASE
FOREST C. MOORE ET UX
D.B. 140 PG. 440
T.M. 10 PAR. 05
87.75 AC. ±

GARY LEE REYNOLDS ET AL
D.B. 259 PG. 979
T.M. 10 PAR. 06
60.11 AC. ±

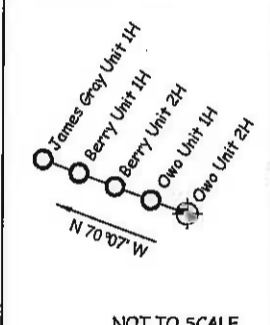
R. ROBAY
LEASE
MASON ET AL
D.B. 282 PG. 610
T.M. 10 PAR. 05
12.5 AC. ±

GARY LEE REYNOLDS ET AL
D.B. 269 PG. 129
T.M. 11 PAR. 30
76 AC. ±

ELTON WINE
D.B. 269 PG. 129
T.M. 11 PAR. 30
76 AC. ±

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 INACCURACIES WITH THE DATA AND INFORMATION THAT HAS BEEN PROVIDED.
6. THIS WELL BORE IS SUBJECT TO THAT 60 FOOT STRIP OF GROUND KNOWN AS THE SISTERSVILLE AND SALEM TURNPIKE WHICH MAY OR MAY NOT COINCIDE WITH STATE ROUTE 23 IN THIS AREA.

PAD LAYOUT



JOB # 13-115WA
DRAWING # OWOUNIT2HAD
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

- LEGEND
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 - Interior Surface Tracts +/-
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