

APPROVED

WR-35
Rev. 8/23/13

NAME: J. L. W.
DATE: 10/18/17

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State of West Virginia

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

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API 47 - 017 - 06725 County Doddridge District West Union
Quad West Union 7.5' Pad Name Cofor Pad Field/Pool Name -----
Farm name Coastal Forest Resources Company Well Number Grape 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 4350016m Easting 517238m
Landing Point of Curve Northing 4350284.065m Easting 517310.595m
Bottom Hole Northing 4352549m Easting 516395m

Elevation (ft) 1220' 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 05/29/2015 Date drilling commenced 10/17/2015 Date drilling ceased 01/24/2016
Date completion activities began 09/17/2016 Date completion activities ceased 02/21/2017
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 69' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1005' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 367', 1247', 1727' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by: _____

01/05/2018

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API 47-017 - 06725 Farm name Coastal Forest Resources Company Well number Grape Unit 2H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/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"	354'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2520'	New	36#, H-40	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	15551'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6970'		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	72 sx	15.6	1.18	85	0'	8 Hrs.
Surface	Class A	420 sx	15.6	1.19	500	0'	8 Hrs.
Coal							
Intermediate 1	Class A	925 sx	15.6	1.18	1092	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	925 sx (Lead) 1375 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.44 (Lead), 1.84 (Tail)	3862	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15551' MD, 6762' TVD (BHL) & 6857' TVD (Deepest Point Drilled) Loggers TD (ft) 15501' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 6189'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Morton Unit 1H API #47-017-06559). Please reference the wireline logs submitted with Form WR-35 for Morton 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 _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

API 47-017 - 06725 Farm name Coastal Forest Resources Company Well number Grape Unit 2H

PERFORATION RECORD

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

Please insert additional pages as applicable.

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API 47- 017 - 06725 Farm name Coastal Forest Resources Company Well number Grape Unit 24

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6796' (TOP)</u>	<u>TVD</u>	<u>7092' (TOP)</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3600 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 15045 mcfpd Oil 200 bpd NGL --- bpd Water 611 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	

***PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Patterson - UTI Drilling Company LLC
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Allied Horizontal Wireline Services
Address 381 Colonial Manor Rd. City North Huntingdon State PA Zip 15642

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

Please insert additional pages as applicable.

Completed by Samantha Klaas Telephone 303-357-6759
Signature *Samantha Klaas* Title Permitting Agent Date 08/18/2017

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

01/05/2018

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	9/17/2016	15278	15416	60	Marcellus
2	10/4/2016	15080	15247	60	Marcellus
3	10/4/2016	14881	15048	60	Marcellus
4	10/4/2016	14682	14850	60	Marcellus
5	10/5/2016	14484	14651	60	Marcellus
6	10/5/2016	14285	14453	60	Marcellus
7	10/6/2016	14087	14254	60	Marcellus
8	10/6/2016	13888	14056	60	Marcellus
9	10/7/2016	13690	13857	60	Marcellus
10	10/7/2016	13491	13658	60	Marcellus
11	10/7/2016	13292	13460	60	Marcellus
12	10/8/2016	13094	13261	60	Marcellus
13	10/8/2016	12895	13063	60	Marcellus
14	10/9/2016	12697	12864	60	Marcellus
15	10/9/2016	12498	12666	60	Marcellus
16	10/9/2016	12300	12467	60	Marcellus
17	10/10/2016	12101	12268	60	Marcellus
18	10/10/2016	11902	12070	60	Marcellus
19	10/11/2016	11704	11871	60	Marcellus
20	10/11/2016	11505	11673	60	Marcellus
21	10/11/2016	11307	11474	60	Marcellus
22	10/12/2016	11108	11276	60	Marcellus
23	10/12/2016	10910	11077	60	Marcellus
24	10/12/2016	10711	10878	60	Marcellus
25	10/13/2016	10512	10680	60	Marcellus
26	10/13/2016	10314	10481	60	Marcellus
27	10/13/2016	10115	10283	60	Marcellus
28	10/14/2016	9917	10084	60	Marcellus
29	10/14/2016	9718	9886	60	Marcellus
30	10/14/2016	9520	9687	60	Marcellus
31	10/15/2016	9321	9488	60	Marcellus
32	10/15/2016	9122	9290	60	Marcellus
33	10/15/2016	8924	9091	60	Marcellus
34	10/16/2016	8725	8893	60	Marcellus
35	10/16/2016	8527	8694	60	Marcellus
36	10/17/2016	8328	8496	60	Marcellus
37	10/17/2016	8130	8297	60	Marcellus
38	10/17/2016	7931	8098	60	Marcellus
39	10/18/2016	7732	7900	60	Marcellus
40	10/18/2016	7534	7701	60	Marcellus
41	10/19/2016	7335	7503	60	Marcellus
42	10/19/2016	7137	7304	60	Marcellus

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API 47-017-06725 Farm Name Coastal Forest Resources Company Well Number Grape Unit 2H

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	10/3/2016	75.5	7679	0	4874	402100	9319	N/A
2	10/4/2016	78.0	7338	5443	5111	400700	8764	N/A
3	10/4/2016	77.0	7367	5543	5068	402900	8722	N/A
4	10/4/2016	71.5	7259	5769	4814	402800	8762	N/A
5	10/5/2016	76.0	7350	5368	4152	401100	8696	N/A
6	10/5/2016	73.0	7404	5254	4052	401800	8743	N/A
7	10/6/2016	78.0	7255	5393	5232	402100	10124	N/A
8	10/6/2016	74.0	7138	5601	3948	400900	8738	N/A
9	10/7/2016	73.4	7030	5221	4542	401600	8685	N/A
10	10/7/2016	77.6	7061	5465	4181	402150	8675	N/A
11	10/7/2016	75.3	7527	5794	4349	401400	8695	N/A
12	10/8/2016	75.3	7163	5293	4792	402450	8670	N/A
13	10/8/2016	77.7	7474	5329	4098	400300	8688	N/A
14	10/9/2016	75.9	7091	5139	3905	400900	8616	N/A
15	10/9/2016	76.6	6908	5490	4456	401650	8621	N/A
16	10/9/2016	78.6	7347	5322	4907	401100	8656	N/A
17	10/10/2016	75.0	7511	5357	4681	400800	10171	N/A
18	10/10/2016	74.6	7258	5521	3566	400290	8580	N/A
19	10/11/2016	74.5	7069	5607	4478	400965	8587	N/A
20	10/11/2016	76.0	7191	5429	4964	400900	8691	N/A
21	10/11/2016	74.6	6941	5094	4903	401280	8556	N/A
22	10/12/2016	74.4	7008	5258	4208	401415	8555	N/A
23	10/12/2016	75.2	6842	5250	4299	401800	8544	N/A
24	10/12/2016	75.0	7105	5224	4537	402373	8442	N/A
25	10/13/2016	77.4	7052	5278	4127	401900	8443	N/A
26	10/13/2016	76.2	6880	5271	4810	401900	8428	N/A
27	10/13/2016	77.8	7054	5172	4478	401590	9268	N/A
28	10/14/2016	76.5	6884	5202	4113	400225	8402	N/A
29	10/14/2016	73.7	6740	5100	4342	401100	8397	N/A
30	10/14/2016	76.8	6967	5211	4723	401185	8403	N/A
31	10/15/2016	76.0	7020	5094	4152	401630	8388	N/A
32	10/15/2016	74.3	6896	5225	3870	401400	8368	N/A
33	10/15/2016	73.5	6956	5407	3955	401380	8356	N/A
34	10/16/2016	74.5	6987	5261	4828	401600	8400	N/A
35	10/16/2016	75.2	7059	5229	4124	400330	9027	N/A
36	10/17/2016	75.7	7062	5314	4119	402010	8919	N/A
37	10/17/2016	75.3	6966	5161	3895	400100	8351	N/A
38	10/17/2016	74.4	7258	5379	3927	401600	9130	N/A
39	10/18/2016	75.6	6855	5214	4520	400900	8310	N/A
40	10/18/2016	72.5	6906	5318	4846	400800	8334	N/A
41	10/19/2016	74.9	6875	5379	4163	401200	8290	N/A
42	10/19/2016	74.6	6686	5504	3440	402200	8315	N/A
AVG=		75.4	7,105	5,212	4,394	16,858,823	364,829	TOTAL

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	69'	N/A	69'	N/A
Sandstone	0	107	0	107
Shale	est. 107	147	est. 107	147
Sandstone	est. 147	205	est. 147	205
Shale	est. 205	367	est. 205	367
Sandstone and Coal	est. 367	447	est. 367	447
Shale	est. 447	485	est. 447	485
Sandstone	est. 485	507	est. 485	507
Shale	est. 507	567	est. 507	567
Coal & Shale	est. 567	587	est. 567	587
Shale	est. 587	687	est. 587	687
Sandstone/siltstone	est. 687	827	est. 687	827
Shale	est. 827	1007	est. 827	1007
Sandstone	est. 1007	1025	est. 1007	1025
Shale	est. 1025	1107	est. 1025	1107
Sandstone	est. 1107	1147	est. 1107	1147
Shale	est. 1147	1247	est. 1147	1247
Shale and Trace Coal	est. 1247	1267	est. 1247	1267
Shale	est. 1267	1327	est. 1267	1327
Sandstone	est. 1327	1346	est. 1327	1346
Shale	est. 1346	1467	est. 1346	1467
Sandstone/siltstone	est. 1467	1567	est. 1467	1567
Siltstone/shale/tr coal	est. 1567	1666	est. 1567	1666
Sandstone	est. 1666	1727	est. 1666	1727
Shale/sandstone/tr coal	est. 1727	1846	est. 1727	1846
Shale	est. 1846	1988	est. 1846	1988
Siltstone/shale/sandstone	est. 1988	2125	est. 1988	2125
Shale/limestone	est. 2125	2215	est. 2125	2221
Big Lime	2215	2667	2221	2673
Gantz Sand	2667	2797	2673	2803
Fifty Foot Sandstone	2797	2871	2803	2877
Gordon	2871	3203	2877	3209
Fifth Sandstone	3203	3996	3209	4002
Speechley	3996	4274	4002	4280
Baltown	4274	4721	4280	4727
Bradford	4721	5160	4727	5166
Benson	5160	5443	5166	5449
Alexander	5443	5600	5449	5606
Elk	5600	6108	5606	6114
Rhinestreet	6108	6419	6114	6437
Sycamore	6419	6595	6437	6666
Middlesex	6595	6724	6666	6889
Burkett	6724	6754	6889	6959
Tully	6754	6796	6959	7092
Marcellus	6796	NA	7092	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.

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	10/3/2016
Job End Date:	10/19/2016
State:	West Virginia
County:	Doddridge
API Number:	47-017-06725-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Grape 2H
Latitude:	39.29927200
Longitude:	-80.80025300
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,857
Total Base Water Volume (gal):	15,835,246
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	Carrier/Base Fluid	Water	7732-18-5	100.00000	88.45176	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	11.29127	
HCL Acid (12.6%-17.5%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.40000	0.11949	
			Hydrogen Chloride	7647-01-0	17.50000	0.02778	
LGC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.03083	
			Petroleum Distillates	64742-47-8	60.00000	0.02920	
			Suspending agent (solid)	14808-60-7	3.00000	0.00472	
			Surfactant	68439-51-0	3.00000	0.00185	
WFRA-405	U.S. Well Services, LLC	Friction Reducer	2-Propenoic acid, polymer with 2	9003-06-9	30.00000	0.01785	
			propenamide	64742-47-8	30.00000	0.01437	
			Hydrated light distillate (petroleum)				

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Bioclear 2000	J.S. Well Services, LLC	Anti-Bacterial Agent					
			2,2-dibromo-3-nitrilopropionamide	10222-01-2	20.00000	0.00410	
			Deionized Water	7732-18-5	28.00000	0.00234	
SI-1100s	J.S. Well Services, LLC	Scale Inhibitor					
			Copolymer of Maleic and Acrylic acid	52255-49-9	10.00000	0.00150	
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	3.00000	0.00052	
			Hexamethylene tramine penta (methylene phosphonic acid)	34690-00-1	3.00000	0.00050	
			Phosphino carboxylic acid polymer	71050-62-9	3.00000	0.00050	
AP One	J.S. Well Services, LLC	Gel Breakers					
			Ammonium Persulfate	7727-54-0	100.00000	0.00112	
AI-302	J.S. Well Services, LLC	Acid Corrosion Inhibitors					
			Water	7732-18-5	95.00000	0.00026	
			2-Propyn-1-olcompound with methyloxirane	38172-91-7	15.00000	0.00004	

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

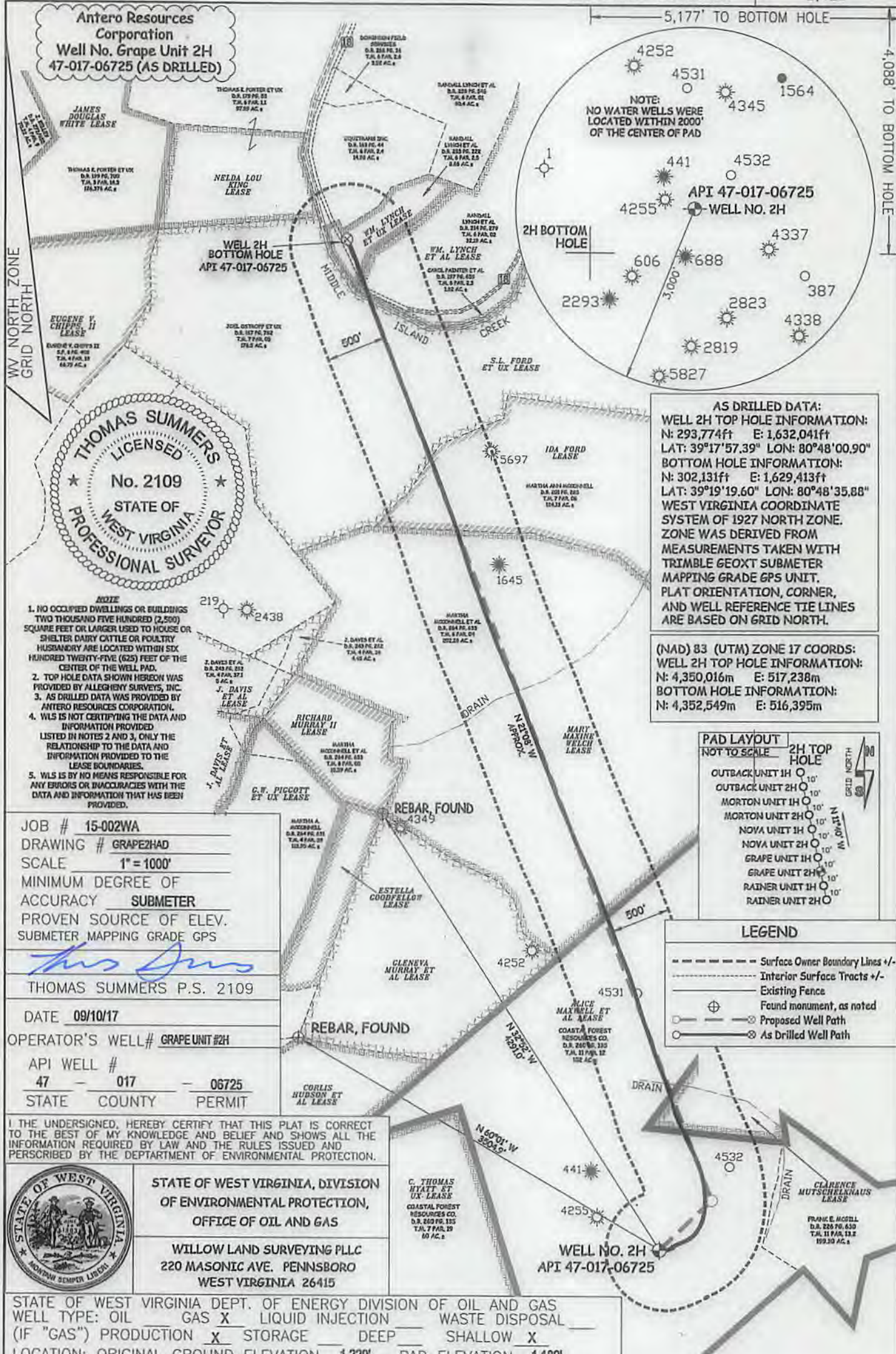
** Information is based on the maximum potential for concentration and thus the total may be over 100%

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)

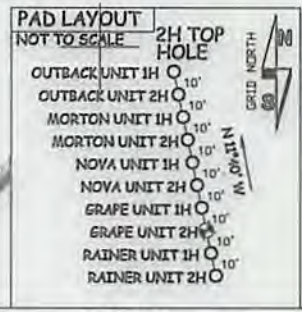
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LATITUDE 39°20'00" 2,429' 5,177' TO BOTTOM HOLE 4,088' TO BOTTOM HOLE



AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
 N: 293,774ft E: 1,632,041ft
 LAT: 39°17'57.39" LON: 80°48'00.90"
BOTTOM HOLE INFORMATION:
 N: 302,131ft E: 1,629,413ft
 LAT: 39°19'19.60" LON: 80°48'35.88"
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE 6EOXT 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: 4,350,016m E: 517,238m
BOTTOM HOLE INFORMATION:
 N: 4,352,549m E: 516,395m



LEGEND

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

JOB # 15-002WA
 DRAWING # GRAPEZHAD
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY SUBMETER
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

Thomas Summers
 THOMAS SUMMERS P.S. 2109

DATE 09/10/17

OPERATOR'S WELL# GRAPE UNIT #2H
 API WELL # 47 - 017 - 06725
 STATE COUNTY PERMIT

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



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 DEPT. 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: ORIGINAL GROUND ELEVATION 1,220' PAD ELEVATION 1,189'
 WATERSHED HEADWATERS MIDDLE ISLAND CREEK QUADRANGLE WEST UNION 7.5' DISTRICT WEST UNION COUNTY DODDRIDGE
 SURFACE OWNER COASTAL FOREST RESOURCES COMPANY ACREAGE 102 ACRES +/-
 OIL & GAS ROYALTY OWNER ALICE MAXWELL ET AL; CLARENCE MUTSCHELKNAUS; LEASE ACREAGE 420 AC±; 108.85 AC±; MARY MAXINE WELCH; IDA FORD; S. L. FORD ET UX; W.M. LYNCH ET AL; W.M. LYNCH ET UX 202 AC±; 124.5 AC±; 180 AC±; 32.15 AC±; 8.66 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 6,762' TVD 15,551' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
 FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

LONGITUDE 80°47'30" COUNTY NAME PERMIT

01/05/2018

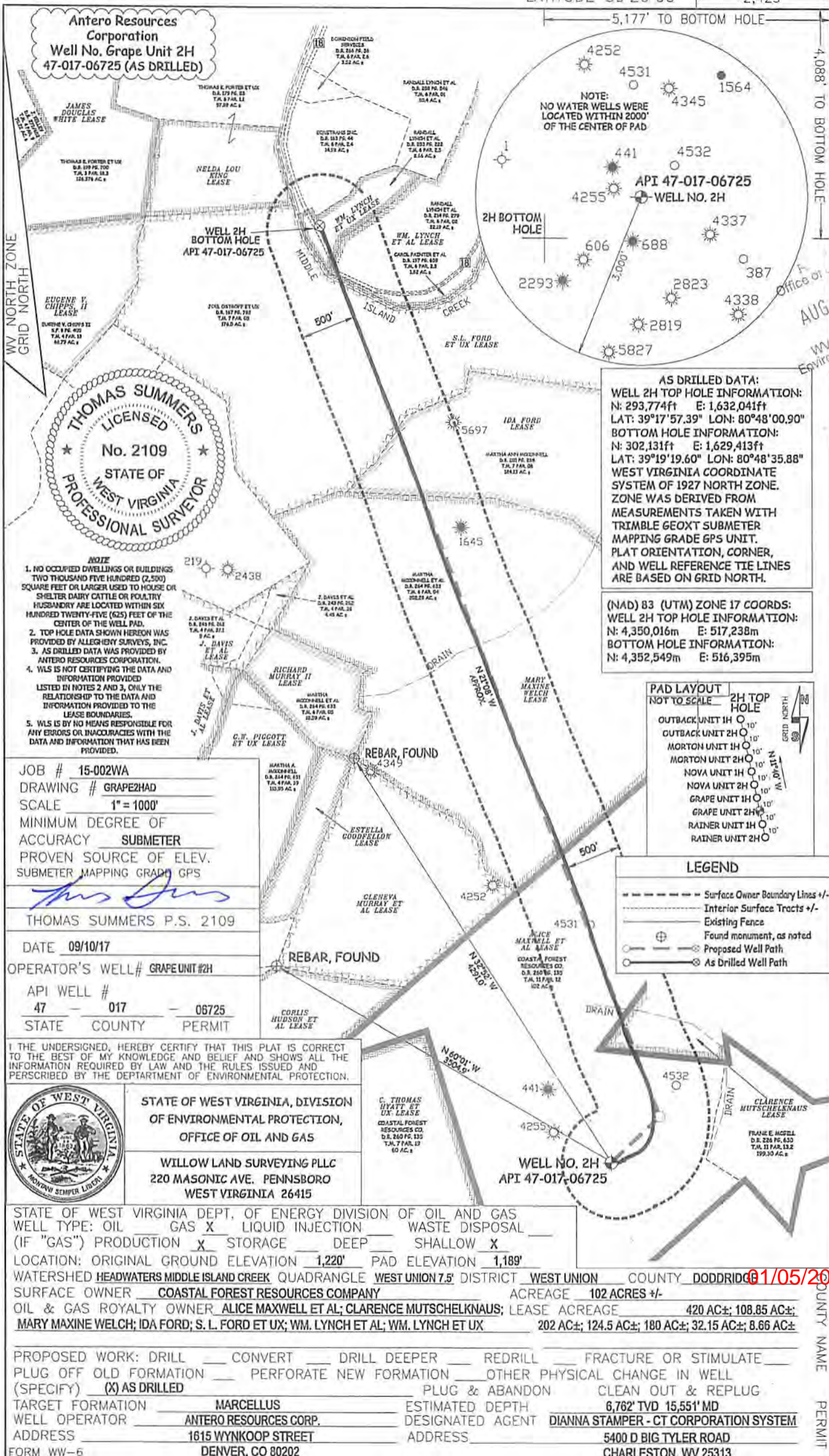
LATITUDE 39°20'00" 2,429'

5,177' TO BOTTOM HOLE

4,088' TO BOTTOM HOLE

LONGITUDE 80°47'30"

Antero Resources Corporation
Well No. Grape Unit 2H
47-017-06725 (AS DRILLED)



THOMAS E. PORTER ET UX
D.S. 177 PG. 23
T.A. 87 PAR. 11
97.29 AC ±

EUGENE V. CHIPPS, II
LEASE
D.S. 177 PG. 200
T.A. 3 PAR. 18.3
124.379 AC ±

THOMAS SUMMERS
LICENSED
No. 2109
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

- 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 # 15-002WA
DRAWING # GRAPE2HAD
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

THOMAS SUMMERS P.S. 2109

DATE 09/10/17

OPERATOR'S WELL # GRAPE UNIT #2H

API WELL # 47 - 017 - 06725
STATE COUNTY PERMIT

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PERSCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.



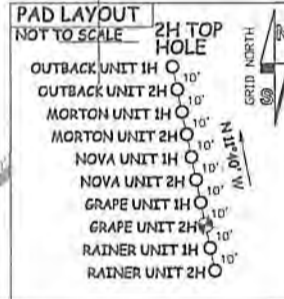
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

STATE OF WEST VIRGINIA DEPT. 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: ORIGINAL GROUND ELEVATION 1,220' PAD ELEVATION 1,189'
WATERSHED HEADWATERS MIDDLE ISLAND CREEK QUADRANGLE WEST UNION 7.5' DISTRICT WEST UNION COUNTY DODDRIDGE
SURFACE OWNER COASTAL FOREST RESOURCES COMPANY ACREAGE 102 ACRES +/-
OIL & GAS ROYALTY OWNER ALICE MAXWELL ET AL; CLARENCE MUTSCHELKNAUS; LEASE ACREAGE 420 AC±; 108.85 AC±; MARY MAXINE WELCH; IDA FORD; S. L. FORD ET UX; WM. LYNCH ET AL; WM. LYNCH ET UX 202 AC±; 124.5 AC±; 180 AC±; 32.15 AC±; 8.66 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 6,762' TVD 15,551' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313

AS DRILLED DATA:
WELL 2H TOP HOLE INFORMATION:
N: 293,774ft E: 1,632,041ft
LAT: 39°17'57.39" LON: 80°48'00.90"
BOTTOM HOLE INFORMATION:
N: 302,131ft E: 1,629,413ft
LAT: 39°19'19.60" LON: 80°48'35.88"
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: 4,350,016m E: 517,238m
BOTTOM HOLE INFORMATION:
N: 4,352,549m E: 516,395m



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

Office of Environmental Protection
AUG 21 2017

01/05/2018