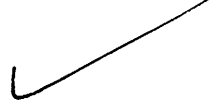


# APPROVED



WR-35  
Rev. 8/23/13

Page \_\_\_ of \_\_\_

NAME: John A. ...  
DATE: 5/25/16

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

API 47-017-06496 County Doddridge District Grant  
Quad West Union 7.5' Pad Name Melody Pad Field/Pool Name ---  
Farm name Brown, Melody Well Number Weinhold 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 4356594m Easting 520751m  
Landing Point of Curve Northing 4356336.92m Easting 520810.74m  
Bottom Hole Northing 4354395m Easting 521788m

Elevation (ft) 1135' 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 6/25/2014 Date drilling commenced 10/12/2014 Date drilling ceased 12/21/2014  
Date completion activities began 11/16/2015 Date completion activities ceased 1/22/2016  
Verbal plugging (Y/N) N/A Date permission granted RECEIVED Granted by N/A

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No

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug  
Freshwater depth(s) ft 46' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 865', 1509' Wells encountered (Y/N) depths No  
Coal depth(s) ft 1821' Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

Reviewed by:

AX 07/21/16

API 47- 017 - 06496 Farm name Brown, Melody Well number Weinhold 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	30"	20"	40'	New	94# H-40	N/A	Y
Surface	17- 1/2"	13- 3/8"	564'	New	48# H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2565'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5-1/2"	15984'	New	23# P-110	N/A	Y
Tubing		2-3/8"	6937'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	100 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	670 sx	15.6	1.18	392	0'	8 Hrs.
Coal							
Intermediate 1	Class A	937 sx	15.6	1.18	803	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1053 sx (Lead) 1392 sx (Tail)	14.5 Lead 15.2 Tail	1.30 Lead 1.86 Tail	3189	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15984' MD, 6932' TVD (BHL), 6966' (Deepest Point Drilled) Loggers TD (ft) 15984'  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6414'

\*\* This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Weinhold Unit 1H API #47-017-06495). Please reference the wireline logs submitted with Form WR-35 for Weinhold 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 \_\_\_\_\_

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API 47- 017 - 06496 Farm name Brown, Melody Well number Weinhold Unit 2H

PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6830' (TOP)</u> TVD	<u>6992' (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 4285 mcfpd Oil 31 bpd NGL --- bpd Water 7 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	<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 Well Site Servies  
 Address 600 Alpha Dr. City Canonsburg State PA Zip 15317

Cementing Company Nabors Completion & Production Services, Co.  
 Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

Stimulating Company C & J Energy Services  
 Address 1650 Hackers Creek Rd. City Jane Lew State WV Zip 26378

Please insert additional pages as applicable.

Completed by Kara Quackenbush Telephone 303-357-7233  
 Signature [Signature] Title Permit Representative Date 4/19/2016

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

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API 47-017-06496 Farm Name Brown, Melody Well Number Weinhold Unit 2H

**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	16-Nov-15	15,731	15,898	60	Marcellus
2	4-Dec-15	15,533	15,700	60	Marcellus
3	4-Dec-15	15,336	15,503	60	Marcellus
4	4-Dec-15	15,138	15,305	60	Marcellus
5	4-Dec-15	14,940	15,107	60	Marcellus
6	5-Dec-15	14,743	14,909	60	Marcellus
7	5-Dec-15	14,545	14,712	60	Marcellus
8	5-Dec-15	14,347	14,514	60	Marcellus
9	5-Dec-15	14,149	14,316	60	Marcellus
10	5-Dec-15	13,952	14,118	60	Marcellus
11	6-Dec-15	13,754	13,921	60	Marcellus
12	6-Dec-15	13,556	13,723	60	Marcellus
13	6-Dec-15	13,358	13,525	60	Marcellus
14	6-Dec-15	13,161	13,328	60	Marcellus
15	7-Dec-15	12,963	13,130	60	Marcellus
16	7-Dec-15	12,765	12,932	60	Marcellus
17	7-Dec-15	12,568	12,734	60	Marcellus
18	7-Dec-15	12,370	12,537	60	Marcellus
19	7-Dec-15	12,172	12,339	60	Marcellus
20	8-Dec-15	11,974	12,141	60	Marcellus
21	8-Dec-15	11,777	11,943	60	Marcellus
22	8-Dec-15	11,579	11,746	60	Marcellus
23	8-Dec-15	11,381	11,548	60	Marcellus
24	8-Dec-15	11,183	11,350	60	Marcellus
25	9-Dec-15	10,986	11,152	60	Marcellus
26	9-Dec-15	10,788	10,955	60	Marcellus
27	9-Dec-15	10,590	10,757	60	Marcellus
28	9-Dec-15	10,393	10,559	60	Marcellus
29	9-Dec-15	10,195	10,362	60	Marcellus
30	10-Dec-15	9,997	10,164	60	Marcellus
31	10-Dec-15	9,799	9,966	60	Marcellus
32	10-Dec-15	9,602	9,768	60	Marcellus
33	10-Dec-15	9,404	9,571	60	Marcellus
34	11-Dec-15	9,206	9,373	60	Marcellus
35	11-Dec-15	9,008	9,175	60	Marcellus
36	11-Dec-15	8,811	8,977	60	Marcellus
37	11-Dec-15	8,613	8,780	60	Marcellus
38	11-Dec-15	8,415	8,582	60	Marcellus
39	12-Dec-15	8,217	8,384	60	Marcellus
40	12-Dec-15	8,020	8,187	60	Marcellus
41	12-Dec-15	7,822	7,989	60	Marcellus
42	12-Dec-15	7,624	7,791	60	Marcellus
43	12-Dec-15	7,427	7,593	60	Marcellus
44	12-Dec-15	7,229	7,396	60	Marcellus
45	13-Dec-15	7,031	7,198	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	4-Dec-15	65.0	7,865	7,273	5,361	226,700	7,012	N/A
2	4-Dec-15	72.3	7,675	6,474	5,661	220,500	6,331	N/A
3	4-Dec-15	69.9	8,203	6,825	5,839	232,400	6,388	N/A
4	4-Dec-15	68.2	7,350	6,673	5,417	251,000	6,745	N/A
5	4-Dec-15	69.9	7,197	5,663	5,574	212,600	7,082	N/A
6	5-Dec-15	65.8	6,930	5,796	4,970	248,800	6,657	N/A
7	5-Dec-15	70.4	7,320	6,096	5,402	214,100	6,070	N/A
8	5-Dec-15	68.9	7,078	6,396	5,326	248,200	6,366	N/A
9	5-Dec-15	68.9	6,950	6,571	5,174	249,800	6,450	N/A
10	5-Dec-15	68.3	7,046	6,679	4,525	191,200	6,711	N/A
11	6-Dec-15	68.2	6,856	5,574	5,231	247,900	6,428	N/A
12	6-Dec-15	71.0	7,047	6,270	5,057	248,100	6,421	N/A
13	6-Dec-15	68.9	6,978	6,273	5,075	247,300	6,355	N/A
14	6-Dec-15	69.3	6,811	5,476	5,190	246,300	6,350	N/A
15	7-Dec-15	71.5	6,853	5,793	5,337	248,700	6,333	N/A
16	7-Dec-15	72.4	6,940	5,903	5,032	247,800	6,315	N/A
17	7-Dec-15	69.1	6,959	6,401	4,722	248,800	6,310	N/A
18	7-Dec-15	69.7	6,780	5,603	5,010	250,600	6,342	N/A
19	7-Dec-15	68.7	6,886	5,940	5,413	252,000	6,414	N/A
20	8-Dec-15	68.6	6,739	5,522	5,208	243,800	6,235	N/A
21	8-Dec-15	66.7	6,974	6,201	4,597	233,200	6,650	N/A
22	8-Dec-15	68.3	6,956	5,535	4,995	217,500	6,194	N/A
23	8-Dec-15	68.8	6,790	5,991	5,415	247,100	6,168	N/A
24	8-Dec-15	68.5	6,582	5,932	4,962	248,000	6,141	N/A
25	9-Dec-15	68.4	6,710	6,440	5,431	233,500	6,029	N/A
26	9-Dec-15	69.0	6,588	6,315	5,165	247,000	6,192	N/A
27	9-Dec-15	68.2	6,705	5,980	4,589	245,900	6,131	N/A
28	9-Dec-15	67.2	6,907	6,086	4,983	213,200	6,029	N/A
29	9-Dec-15	72.3	6,521	5,374	5,199	247,000	6,121	N/A
30	10-Dec-15	69.6	6,729	5,761	5,283	233,400	6,148	N/A
31	10-Dec-15	68.9	6,844	6,606	5,105	248,900	6,146	N/A
32	10-Dec-15	71.3	6,794	6,503	5,455	236,800	6,016	N/A
33	10-Dec-15	72.8	6,522	5,932	5,207	248,300	6,113	N/A
34	11-Dec-15	72.9	6,825	5,874	5,125	232,200	5,931	N/A
35	11-Dec-15	70.6	6,622	6,175	4,563	241,300	5,998	N/A
36	11-Dec-15	69.5	6,884	6,425	4,937	211,700	6,330	N/A
37	11-Dec-15	72.4	6,500	6,050	5,332	248,900	6,073	N/A
38	11-Dec-15	68.6	6,464	6,649	5,422	245,700	6,038	N/A
39	12-Dec-15	70.6	6,488	6,825	5,411	164,500	6,380	N/A
40	12-Dec-15	67.8	6,776	5,887	5,046	240,000	6,015	N/A
41	12-Dec-15	69.3	6,285	5,681	4,743	249,600	6,011	N/A
42	12-Dec-15	67.5	6,639	6,328	4,997	243,700	5,923	N/A
43	12-Dec-15	68.7	6,533	6,217	4,956	223,400	5,926	N/A
44	12-Dec-15	68.9	6,620	5,565	5,088	246,300	6,071	N/A
45	13-Dec-15	68.9	6,278	8,290	4,332	246,100	5,959	N/A
AVG=		69.3	6,867	6,174	5,130	10,669,800	282,048	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
Freshwater	46'	N/A	46'	N/A
Silt	0	81	0	81
Sandstone	81	281	81	281
Siltstone (Trace Coal)	281	401	281	401
Silty Sandstone	401	581	401	581
Sandy siltstone	581	761	581	761
Limestone	761	781	761	781
Sandy siltstone	781	861	781	861
Limey Siltstone	861	961	861	961
Sandy shale	961	1281	961	1281
Sandstone	1281	1401	1281	1401
Sandy shale	1401	1561	1401	1561
Silty Sandstone (Trace Coal)	1561	1761	1561	1761
Sandstone	1761	1821	1761	1821
Coal	1821	2001	1821	2001
Limey Siltstone	2001	2069	2001	2069
Big Lime	2069	2190	2069	2192
Big Injun	2190	2614	2192	2616
Gantz Sand	2614	2752	2616	2754
Fifty Foot Sandstone	2752	2827	2754	2829
Gordon	2827	3170	2829	3172
Fifth Sandstone	3170	3208	3172	3211
Bayard	3208	3570	3211	3572
Warren	3570	3973	3572	3975
Speechley	3973	4200	3975	4202
Baltown	4200	4679	4202	4682
Bradford	4679	5150	4682	5152
Benson	5150	5402	5152	5404
Alexander	5402	5599	5404	5602
Elk	5599	6109	5602	6111
Rhinestreet	6109	6438	6111	6441
Sycamore	6438	6616	6441	6633
Middlesex	6616	6749	6633	6818
Burkett	6749	6778	6818	6869
Tully	6778	6830	6869	6992
Marcellus	6830	NA	6992	NA

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**Antero**  
**Weinhold Unit 2H**  
**Doddridge County WV**  
**Northing: 14292545.46**  
**Easting: 1708450.27**  
**As Drilled**

**WELL DETAILS: Weinhold Unit 2H**  
 Ground Level: 1135.0  
 +N/-S +E/-W Northing Easting Latitude Longitude Slot  
 0.0 0.0 14292545.46 1708450.27 39° 21' 30.494 N 80° 45' 33.519 W

**PROJECT DETAILS: Doddridge County WV**  
 Geodetic System: Universal Transverse Mercator (US Survey Feet)  
 Datum: NAD 1983 (NADCON CONUS)  
 Ellipsoid: Clarke 1866  
 Zone: Zone 17N (84 W to 78 W)  
 System Datum: Mean Sea Level



Genie Lightfoot  
 15:27, December 22 2014

Scientific Drilling  
 11220 NW 10th Street  
 Yukon, OK

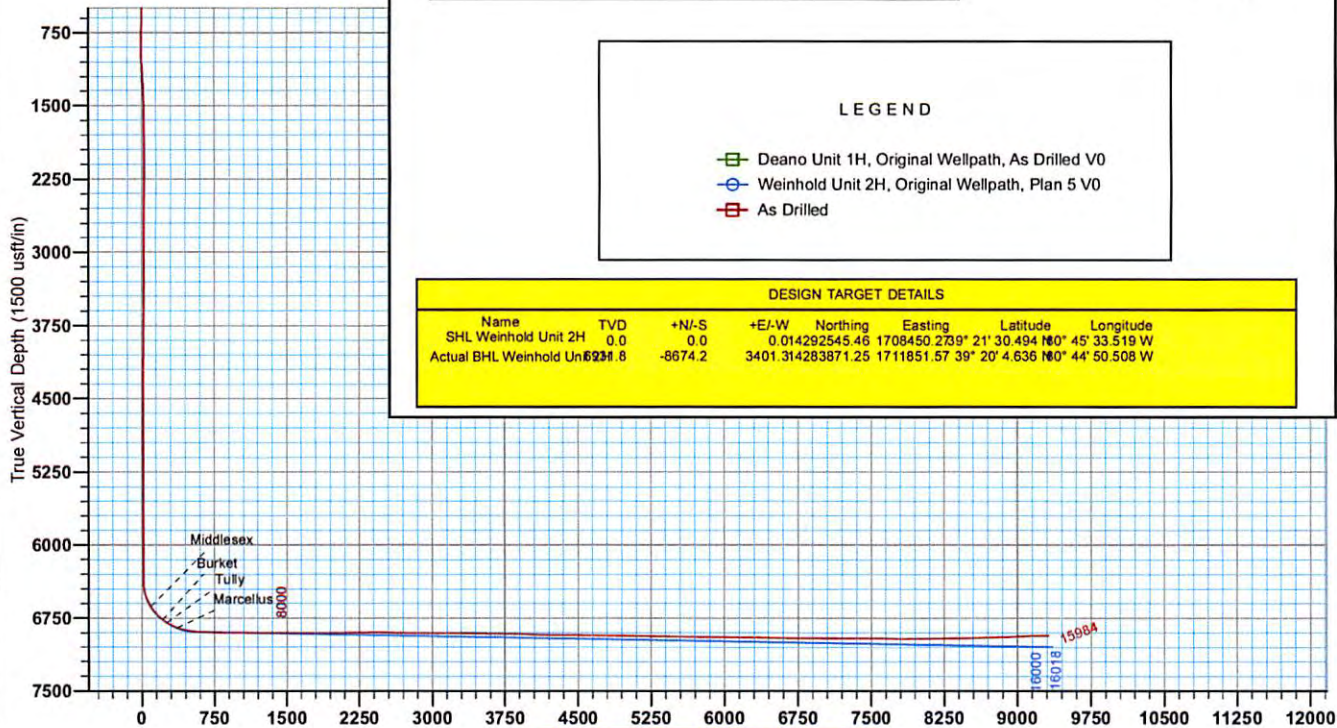
**REFERENCE INFORMATION**  
 Co-ordinate (N/E) Reference: Well Weinhold Unit 2H, Grid North  
 Vertical (TVD) Reference: Precision 555, GL 1135' + KB 19' @ 1154' Oust  
 Section (VS) Reference: Slot - (P.0N, 0.0D)  
 Measured Depth Reference: Precision 555, GL 1135' + KB 19' @ 1154' Oust  
 Calculation Method: Minimum Curvature

**LEGEND**

- Deano Unit 1H, Original Wellpath, As Drilled V0
- Weinhold Unit 2H, Original Wellpath, Plan 5 V0
- As Drilled

**DESIGN TARGET DETAILS**

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Weinhold Unit 2H	0.0	0.0	0.0	0.014292545.46	1708450.27	39° 21' 30.494 N	80° 45' 33.519 W
Actual BHL Weinhold Un	6939.8	-8674.2	3401.31428387	1.25	1711851.57	39° 20' 4.636 N	80° 44' 50.508 W

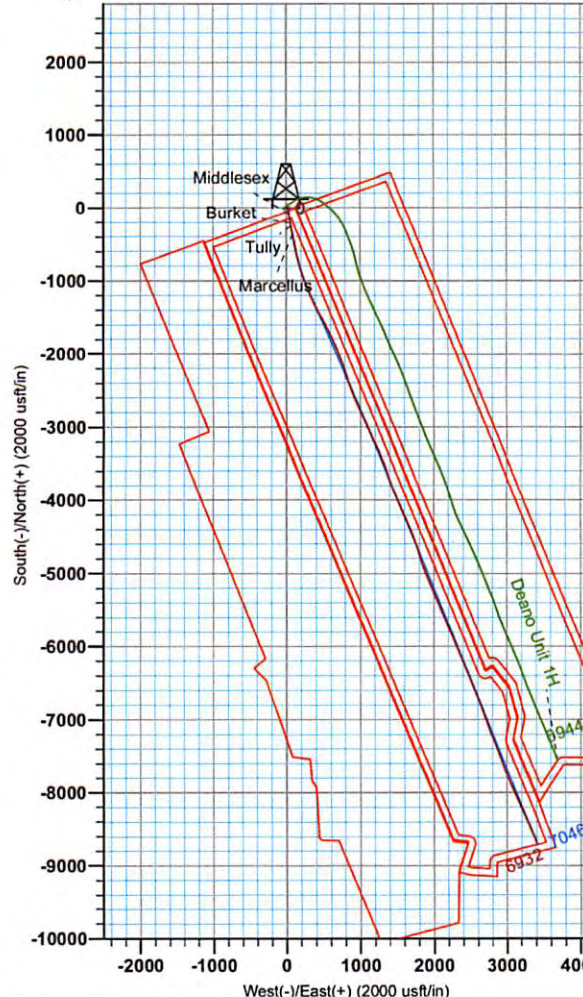


Vertical Section at 158.01° (1500 usft/in)

To convert Magnetic North to Grid, Subtract 8.66°  
 To convert True North to Grid, Subtract 0.15°

Azimuths to Grid North  
 True North: -0.15°  
 Magnetic North: -8.66°

Magnetic Field  
 Strength: 52249.9nT  
 Dip Angle: 66.85°  
 Date: 10/8/2014  
 Model: BGGM2014







# Antero

Doddridge County WV  
Melody Pad  
Weinhold Unit 2H  
Original Wellpath

Design: As Drilled

## EOW Completion Report

22 December, 2014



Scientific Drilling

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<b>Company:</b> Antero	<b>Local Co-ordinate Reference:</b> Well Weinhold Unit 2H
<b>Project:</b> Doddridge County WV	<b>TVD Reference:</b> Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b> Melody Pad	<b>MD Reference:</b> Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b> Weinhold Unit 2H	<b>North Reference:</b> Grid
<b>Wellbore:</b> Original Wellpath	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> As Drilled	<b>Database:</b> Oklahoma District

<b>Project</b>	Doddridge County WV, McClellan District		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 (NADCON CONUS)		
<b>Map Zone:</b>	Zone 17N (84 W to 78 W)		

<b>Site</b>	Melody Pad				
<b>Site Position:</b>		<b>Northing:</b>	14,292,537.54 usft	<b>Latitude:</b>	39° 21' 30.416 N
<b>From:</b>	Map	<b>Easting:</b>	1,708,455.40 usft	<b>Longitude:</b>	80° 45' 33.453 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	0.15 °

<b>Well</b>	Weinhold Unit 2H, Marcellus					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,292,545.46 usft	<b>Latitude:</b>	39° 21' 30.494 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,708,450.27 usft	<b>Longitude:</b>	80° 45' 33.519 W
<b>Position Uncertainty</b>		2.0 usft	<b>Wellhead Elevation:</b>	1,154.0 usft	<b>Ground Level:</b>	1,135.0 usft

<b>Wellbore</b>	Original Wellpath				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	BGGM2014	10/8/2014	-8.51	66.89	52,250

<b>Design</b>	As Drilled				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>		<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
		0.0	0.0	0.0	158.01

<b>Survey Program</b>	Date 12/22/2014				
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
106.0	6,211.0	Survey #4 Final Gyro (Original Wellpath)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
6,211.0	15,984.0	Survey #5 MWD survey (Original Wellpath)	MWD SDI	MWD - Standard ver 1.0.1	

<b>Survey</b>									
<b>MD (usft)</b>	<b>Inc (°)</b>	<b>Azi (azimuth) (°)</b>	<b>TVD (usft)</b>	<b>N/S (usft)</b>	<b>E/W (usft)</b>	<b>V. Sec (usft)</b>	<b>DLeg (°/100usft)</b>		
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00		
106.0	0.46	223.85	106.0	-0.3	-0.3	0.2	0.43		
131.0	0.41	240.46	131.0	-0.4	-0.4	0.2	0.54		
156.0	0.24	222.29	156.0	-0.5	-0.6	0.3	0.79		
181.0	0.18	231.42	181.0	-0.6	-0.6	0.3	0.27		
206.0	0.13	240.27	206.0	-0.6	-0.7	0.3	0.22		
231.0	0.14	192.53	231.0	-0.7	-0.7	0.3	0.44		
256.0	0.15	219.84	256.0	-0.7	-0.7	0.4	0.28		
281.0	0.15	210.84	281.0	-0.8	-0.8	0.4	0.09		
306.0	0.12	217.95	306.0	-0.8	-0.8	0.4	0.14		
331.0	0.07	279.80	331.0	-0.8	-0.8	0.5	0.43		





EOW Completion Report



<b>Company:</b> Antero	<b>Local Co-ordinate Reference:</b> Well Weinhold Unit 2H
<b>Project:</b> Doddridge County WV	<b>TVD Reference:</b> Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b> Melody Pad	<b>MD Reference:</b> Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b> Weinhold Unit 2H	<b>North Reference:</b> Grid
<b>Wellbore:</b> Original Wellpath	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> As Drilled	<b>Database:</b> Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
356.0	0.03	301.47	356.0	-0.8	-0.9	0.4	0.17
381.0	0.02	24.57	381.0	-0.8	-0.9	0.4	0.14
406.0	0.12	315.68	406.0	-0.8	-0.9	0.4	0.46
431.0	0.06	250.71	431.0	-0.8	-0.9	0.4	0.44
456.0	0.15	289.57	456.0	-0.8	-1.0	0.4	0.44
481.0	0.18	285.29	481.0	-0.7	-1.0	0.3	0.13
506.0	0.08	259.90	506.0	-0.7	-1.1	0.3	0.45
531.0	0.10	265.06	531.0	-0.7	-1.1	0.3	0.09
556.0	0.09	304.58	556.0	-0.7	-1.2	0.3	0.26
581.0	0.49	51.05	581.0	-0.7	-1.1	0.2	2.09
606.0	1.08	50.25	606.0	-0.4	-0.8	0.1	2.36
631.0	1.45	51.25	631.0	-0.1	-0.4	-0.1	1.48
656.0	1.75	48.72	656.0	0.4	0.1	-0.3	1.23
681.0	2.43	45.95	681.0	1.0	0.8	-0.6	2.75
706.0	2.98	45.55	705.9	1.8	1.7	-1.1	2.20
731.0	3.54	45.52	730.9	2.8	2.7	-1.6	2.24
756.0	3.68	45.13	755.8	3.9	3.8	-2.2	0.57
781.0	3.74	46.46	780.8	5.0	4.9	-2.8	0.42
806.0	3.80	45.42	805.7	6.2	6.1	-3.4	0.36
831.0	3.78	45.62	830.7	7.3	7.3	-4.1	0.10
856.0	3.80	52.57	855.6	8.4	8.6	-4.6	1.84
881.0	3.99	57.86	880.6	9.4	9.9	-5.0	1.63
906.0	4.25	69.42	905.5	10.2	11.6	-5.1	3.47
931.0	4.38	70.67	930.4	10.8	13.3	-5.0	0.64
956.0	4.68	84.89	955.4	11.2	15.2	-4.7	4.64
981.0	4.88	90.18	980.3	11.3	17.3	-4.0	1.94
1,006.0	5.22	100.50	1,005.2	11.1	19.5	-3.0	3.87
1,031.0	5.54	105.80	1,030.1	10.6	21.8	-1.6	2.36
1,056.0	5.72	111.88	1,054.9	9.8	24.1	0.0	2.49
1,081.0	5.88	113.68	1,079.8	8.8	26.4	1.7	0.97
1,106.0	5.79	114.80	1,104.7	7.7	28.7	3.6	0.58
1,131.0	5.64	115.45	1,129.6	6.7	31.0	5.4	0.65
1,156.0	5.54	115.82	1,154.4	5.6	33.2	7.2	0.43
1,181.0	5.06	115.77	1,179.3	4.6	35.3	8.9	1.92
1,206.0	4.64	114.85	1,204.2	3.7	37.2	10.5	1.71
1,231.0	4.16	115.05	1,229.2	2.9	38.9	11.9	1.92
1,256.0	3.87	115.42	1,254.1	2.2	40.5	13.2	1.16
1,281.0	3.34	114.11	1,279.1	1.5	41.9	14.3	2.15
1,306.0	3.05	115.76	1,304.0	0.9	43.2	15.3	1.22
1,331.0	2.88	114.74	1,329.0	0.4	44.4	16.3	0.71
1,356.0	2.58	116.95	1,354.0	-0.1	45.4	17.1	1.27
1,381.0	2.45	118.08	1,378.9	-0.7	46.4	18.0	0.56
1,406.0	2.17	119.43	1,403.9	-1.1	47.3	18.8	1.14
1,431.0	2.03	122.37	1,428.9	-1.6	48.1	19.3	0.71

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

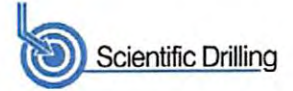
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
1,456.0	1.87	122.61	1,453.9	-2.1	48.8	20.2	0.64
1,481.0	1.57	124.16	1,478.9	-2.5	49.4	20.8	1.21
1,506.0	1.58	125.06	1,503.9	-2.9	50.0	21.4	0.11
1,531.0	1.27	123.04	1,528.9	-3.2	50.5	21.9	1.26
1,556.0	1.15	122.80	1,553.9	-3.5	50.9	22.3	0.48
1,581.0	1.06	121.43	1,578.8	-3.8	51.4	22.7	0.38
1,606.0	0.97	122.93	1,603.8	-4.0	51.7	23.1	0.38
1,631.0	0.92	121.68	1,628.8	-4.2	52.1	23.4	0.22
1,656.0	0.88	120.37	1,653.8	-4.4	52.4	23.7	0.18
1,681.0	0.76	118.00	1,678.8	-4.6	52.7	24.0	0.50
1,706.0	0.86	114.69	1,703.8	-4.7	53.0	24.3	0.44
1,731.0	0.71	110.16	1,728.8	-4.9	53.4	24.5	0.65
1,756.0	0.44	92.27	1,753.8	-4.9	53.6	24.6	1.28
1,781.0	0.43	100.80	1,778.8	-5.0	53.8	24.7	0.26
1,806.0	0.29	74.77	1,803.8	-5.0	53.9	24.8	0.85
1,831.0	0.32	89.00	1,828.8	-4.9	54.1	24.8	0.32
1,856.0	0.27	85.24	1,853.8	-4.9	54.2	24.9	0.21
1,881.0	0.15	64.32	1,878.8	-4.9	54.3	24.9	0.56
1,906.0	0.16	33.46	1,903.8	-4.9	54.3	24.9	0.33
1,931.0	0.14	54.35	1,928.8	-4.8	54.4	24.8	0.23
1,956.0	0.09	39.54	1,953.8	-4.8	54.4	24.8	0.23
1,981.0	0.06	15.08	1,978.8	-4.8	54.4	24.8	0.17
2,006.0	0.05	348.04	2,003.8	-4.7	54.4	24.8	0.11
2,031.0	0.04	292.08	2,028.8	-4.7	54.4	24.8	0.17
2,056.0	0.05	120.56	2,053.8	-4.7	54.4	24.8	0.36
2,081.0	0.06	103.53	2,078.8	-4.7	54.4	24.8	0.08
2,106.0	0.10	106.62	2,103.8	-4.7	54.5	24.8	0.16
2,131.0	0.11	95.59	2,128.8	-4.8	54.5	24.8	0.09
2,156.0	0.06	39.52	2,153.8	-4.8	54.6	24.8	0.37
2,181.0	0.05	358.91	2,178.8	-4.7	54.6	24.8	0.16
2,206.0	0.04	106.60	2,203.8	-4.7	54.6	24.8	0.29
2,231.0	0.12	24.76	2,228.8	-4.7	54.6	24.8	0.48
2,256.0	0.03	163.67	2,253.8	-4.7	54.6	24.8	0.58
2,281.0	0.15	306.20	2,278.8	-4.7	54.6	24.8	0.70
2,306.0	0.09	283.77	2,303.8	-4.6	54.5	24.7	0.30
2,331.0	0.10	226.63	2,328.8	-4.7	54.5	24.7	0.37
2,356.0	0.08	211.64	2,353.8	-4.7	54.5	24.7	0.12
2,381.0	0.05	240.81	2,378.8	-4.7	54.5	24.8	0.18
2,406.0	0.06	356.86	2,403.8	-4.7	54.4	24.7	0.37
2,431.0	0.08	311.36	2,428.8	-4.7	54.4	24.7	0.23
2,456.0	0.13	288.58	2,453.8	-4.7	54.4	24.7	0.26
2,481.0	0.05	93.28	2,478.8	-4.6	54.4	24.7	0.71
2,506.0	0.22	266.38	2,503.8	-4.6	54.3	24.7	1.08
2,531.0	0.12	312.10	2,528.8	-4.6	54.3	24.6	0.64
2,556.0	0.17	280.90	2,553.8	-4.6	54.2	24.6	0.37

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
2,581.0	0.14	244.18	2,578.8	-4.6	54.2	24.6	0.41	
2,606.0	0.20	272.48	2,603.8	-4.6	54.1	24.5	0.41	
2,631.0	0.23	285.80	2,628.8	-4.6	54.0	24.5	0.23	
2,656.0	0.22	280.61	2,653.8	-4.6	53.9	24.4	0.09	
2,681.0	0.23	269.62	2,678.8	-4.6	53.8	24.4	0.18	
2,706.0	0.21	274.04	2,703.8	-4.6	53.7	24.4	0.10	
2,731.0	0.25	275.17	2,728.8	-4.6	53.6	24.3	0.16	
2,756.0	0.30	260.88	2,753.8	-4.6	53.5	24.3	0.34	
2,781.0	0.24	257.53	2,778.8	-4.6	53.4	24.2	0.25	
2,806.0	0.30	277.84	2,803.8	-4.6	53.3	24.2	0.45	
2,831.0	0.37	289.59	2,828.8	-4.6	53.1	24.1	0.39	
2,856.0	0.33	267.14	2,853.8	-4.5	53.0	24.0	0.57	
2,881.0	0.33	243.20	2,878.8	-4.6	52.8	24.0	0.55	
2,906.0	0.37	266.56	2,903.8	-4.6	52.7	24.0	0.59	
2,931.0	0.40	263.81	2,928.8	-4.6	52.5	24.0	0.14	
2,956.0	0.43	277.58	2,953.8	-4.6	52.3	23.9	0.42	
2,981.0	0.53	285.22	2,978.8	-4.6	52.1	23.8	0.47	
3,006.0	0.48	272.91	3,003.8	-4.5	51.9	23.7	0.48	
3,031.0	0.45	259.79	3,028.8	-4.6	51.7	23.6	0.44	
3,056.0	0.46	264.10	3,053.8	-4.6	51.5	23.5	0.14	
3,081.0	0.47	274.19	3,078.8	-4.6	51.3	23.5	0.33	
3,106.0	0.49	266.52	3,103.8	-4.6	51.1	23.4	0.27	
3,131.0	0.53	279.53	3,128.8	-4.6	50.9	23.3	0.49	
3,156.0	0.48	267.28	3,153.8	-4.6	50.7	23.2	0.47	
3,181.0	0.48	264.03	3,178.8	-4.6	50.5	23.1	0.11	
3,206.0	0.53	271.33	3,203.8	-4.6	50.2	23.1	0.33	
3,231.0	0.53	278.47	3,228.8	-4.6	50.0	23.0	0.26	
3,256.0	0.54	269.88	3,253.8	-4.5	49.8	22.9	0.32	
3,281.0	0.50	268.41	3,278.8	-4.6	49.5	22.8	0.17	
3,306.0	0.55	283.95	3,303.8	-4.5	49.3	22.7	0.60	
3,331.0	0.58	276.26	3,328.8	-4.5	49.1	22.5	0.33	
3,356.0	0.57	279.83	3,353.8	-4.4	48.8	22.4	0.15	
3,381.0	0.52	270.45	3,378.8	-4.4	48.6	22.3	0.41	
3,406.0	0.56	274.21	3,403.8	-4.4	48.4	22.2	0.21	
3,431.0	0.57	279.09	3,428.8	-4.4	48.1	22.1	0.20	
3,456.0	0.55	275.47	3,453.8	-4.4	47.9	22.0	0.16	
3,481.0	0.55	274.25	3,478.8	-4.3	47.6	21.9	0.05	
3,506.0	0.57	271.30	3,503.8	-4.3	47.4	21.8	0.14	
3,531.0	0.60	276.70	3,528.8	-4.3	47.1	21.6	0.25	
3,556.0	0.57	281.92	3,553.8	-4.3	46.9	21.5	0.24	
3,581.0	0.61	271.54	3,578.8	-4.2	46.6	21.4	0.46	
3,606.0	0.57	275.75	3,603.8	-4.2	46.4	21.3	0.24	
3,631.0	0.57	275.65	3,628.8	-4.2	46.1	21.2	0.00	
3,656.0	0.56	270.45	3,653.8	-4.2	45.9	21.1	0.21	

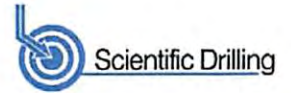
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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
3,681.0	0.65	281.74	3,678.8	-4.2	45.6	20.9	0.60	
3,706.0	0.65	271.28	3,703.8	-4.1	45.3	20.8	0.47	
3,731.0	0.58	273.33	3,728.8	-4.1	45.1	20.7	0.29	
3,756.0	0.62	273.98	3,753.8	-4.1	44.8	20.6	0.16	
3,781.0	0.65	277.73	3,778.8	-4.1	44.5	20.4	0.20	
3,806.0	0.60	272.66	3,803.8	-4.0	44.3	20.3	0.30	
3,831.0	0.57	266.34	3,828.8	-4.0	44.0	20.2	0.28	
3,856.0	0.58	271.80	3,853.8	-4.0	43.8	20.1	0.22	
3,881.0	0.63	280.10	3,878.8	-4.0	43.5	20.0	0.40	
3,906.0	0.62	269.11	3,903.8	-4.0	43.2	19.9	0.48	
3,931.0	0.61	267.83	3,928.8	-4.0	43.0	19.8	0.07	
3,956.0	0.64	273.87	3,953.8	-4.0	42.7	19.7	0.29	
3,981.0	0.58	269.48	3,978.8	-4.0	42.4	19.6	0.30	
4,006.0	0.61	269.81	4,003.8	-4.0	42.2	19.5	0.12	
4,031.0	0.67	277.17	4,028.8	-4.0	41.9	19.4	0.41	
4,056.0	0.64	273.26	4,053.8	-3.9	41.6	19.2	0.22	
4,081.0	0.66	280.28	4,078.8	-3.9	41.3	19.1	0.33	
4,106.0	0.67	273.07	4,103.8	-3.9	41.0	19.0	0.34	
4,131.0	0.66	269.63	4,128.8	-3.9	40.7	18.8	0.16	
4,156.0	0.68	276.94	4,153.8	-3.9	40.4	18.7	0.35	
4,181.0	0.66	275.08	4,178.8	-3.8	40.2	18.6	0.12	
4,206.0	0.66	277.02	4,203.8	-3.8	39.9	18.4	0.09	
4,231.0	0.70	275.90	4,228.8	-3.8	39.6	18.3	0.17	
4,256.0	0.66	277.97	4,253.8	-3.7	39.3	18.2	0.19	
4,281.0	0.61	274.95	4,278.8	-3.7	39.0	18.0	0.24	
4,306.0	0.64	276.09	4,303.7	-3.7	38.7	17.9	0.13	
4,331.0	0.63	283.22	4,328.7	-3.6	38.5	17.8	0.32	
4,356.0	0.65	273.42	4,353.7	-3.6	38.2	17.6	0.44	
4,381.0	0.67	261.40	4,378.7	-3.6	37.9	17.5	0.56	
4,406.0	0.59	279.67	4,403.7	-3.6	37.6	17.4	0.86	
4,431.0	0.59	272.91	4,428.7	-3.6	37.4	17.3	0.28	
4,456.0	0.54	272.86	4,453.7	-3.6	37.1	17.2	0.20	
4,481.0	0.51	279.07	4,478.7	-3.5	36.9	17.1	0.26	
4,506.0	0.47	275.25	4,503.7	-3.5	36.7	17.0	0.21	
4,531.0	0.50	269.50	4,528.7	-3.5	36.5	16.9	0.23	
4,556.0	0.46	265.30	4,553.7	-3.5	36.3	16.8	0.21	
4,581.0	0.45	278.88	4,578.7	-3.5	36.1	16.7	0.43	
4,606.0	0.42	262.22	4,603.7	-3.5	35.9	16.7	0.52	
4,631.0	0.45	271.50	4,628.7	-3.5	35.7	16.6	0.31	
4,656.0	0.38	281.24	4,653.7	-3.5	35.5	16.5	0.40	
4,681.0	0.47	268.70	4,678.7	-3.5	35.3	16.4	0.52	
4,706.0	0.44	270.49	4,703.7	-3.5	35.1	16.4	0.13	
4,731.0	0.48	273.64	4,728.7	-3.5	34.9	16.3	0.19	
4,756.0	0.51	260.47	4,753.7	-3.5	34.7	16.2	0.47	

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

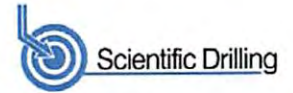
Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)		
4,781.0	0.44	258.32	4,778.7	-3.5	34.5	16.2	0.29		
4,806.0	0.50	262.38	4,803.7	-3.6	34.3	16.1	0.27		
4,831.0	0.45	267.07	4,828.7	-3.6	34.1	16.1	0.25		
4,856.0	0.46	263.65	4,853.7	-3.6	33.9	16.0	0.12		
4,881.0	0.44	256.01	4,878.7	-3.6	33.7	16.0	0.25		
4,906.0	0.41	258.97	4,903.7	-3.7	33.5	16.0	0.15		
4,931.0	0.42	257.89	4,928.7	-3.7	33.4	15.9	0.05		
4,956.0	0.49	251.89	4,953.7	-3.7	33.2	15.9	0.34		
4,981.0	0.40	250.94	4,978.7	-3.8	33.0	15.9	0.36		
5,006.0	0.45	242.55	5,003.7	-3.9	32.8	15.9	0.32		
5,031.0	0.45	247.43	5,028.7	-4.0	32.6	15.9	0.15		
5,056.0	0.50	241.74	5,053.7	-4.1	32.4	15.9	0.27		
5,081.0	0.44	241.24	5,078.7	-4.2	32.3	15.9	0.24		
5,106.0	0.42	255.45	5,103.7	-4.2	32.1	15.9	0.43		
5,131.0	0.44	256.11	5,128.7	-4.3	31.9	15.9	0.08		
5,156.0	0.41	253.38	5,153.7	-4.3	31.7	15.9	0.14		
5,181.0	0.36	263.49	5,178.7	-4.4	31.6	15.9	0.34		
5,206.0	0.44	258.80	5,203.7	-4.4	31.4	15.8	0.35		
5,231.0	0.44	254.67	5,228.7	-4.4	31.2	15.8	0.13		
5,256.0	0.46	261.81	5,253.7	-4.5	31.0	15.8	0.24		
5,281.0	0.43	261.50	5,278.7	-4.5	30.8	15.7	0.12		
5,306.0	0.45	254.83	5,303.7	-4.5	30.6	15.7	0.22		
5,331.0	0.49	256.81	5,328.7	-4.6	30.4	15.6	0.17		
5,356.0	0.40	263.17	5,353.7	-4.6	30.2	15.6	0.41		
5,381.0	0.46	261.24	5,378.7	-4.6	30.1	15.6	0.25		
5,406.0	0.45	261.19	5,403.7	-4.7	29.9	15.5	0.04		
5,431.0	0.45	258.02	5,428.7	-4.7	29.7	15.5	0.10		
5,456.0	0.48	260.57	5,453.7	-4.7	29.5	15.4	0.15		
5,481.0	0.45	269.49	5,478.7	-4.8	29.3	15.4	0.31		
5,506.0	0.55	258.06	5,503.7	-4.8	29.1	15.3	0.56		
5,531.0	0.48	263.02	5,528.7	-4.8	28.8	15.3	0.33		
5,556.0	0.41	262.69	5,553.7	-4.9	28.6	15.2	0.28		
5,581.0	0.42	252.09	5,578.7	-4.9	28.5	15.2	0.31		
5,606.0	0.48	253.28	5,603.7	-4.9	28.3	15.2	0.24		
5,631.0	0.47	256.15	5,628.7	-5.0	28.1	15.2	0.10		
5,656.0	0.45	260.84	5,653.7	-5.0	27.9	15.1	0.17		
5,681.0	0.44	268.26	5,678.7	-5.1	27.7	15.1	0.23		
5,706.0	0.45	261.33	5,703.7	-5.1	27.5	15.0	0.22		
5,731.0	0.42	262.34	5,728.7	-5.1	27.3	14.9	0.12		
5,756.0	0.43	263.75	5,753.7	-5.1	27.1	14.9	0.06		
5,781.0	0.44	257.72	5,778.7	-5.2	26.9	14.9	0.19		
5,806.0	0.40	261.04	5,803.7	-5.2	26.8	14.8	0.19		
5,831.0	0.41	257.71	5,828.7	-5.2	26.6	14.8	0.10		
5,856.0	0.47	253.90	5,853.7	-5.3	26.4	14.8	0.27		

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey									
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (%/100usft)		
5,881.0	0.27	264.42	5,878.7	-5.3	26.2	14.7	0.84		
5,906.0	0.36	253.81	5,903.7	-5.3	26.1	14.7	0.43		
5,931.0	0.32	241.10	5,928.7	-5.4	26.0	14.7	0.34		
5,956.0	0.33	253.19	5,953.7	-5.4	25.8	14.7	0.28		
5,981.0	0.46	259.59	5,978.7	-5.5	25.7	14.7	0.55		
6,006.0	0.28	252.48	6,003.7	-5.5	25.5	14.7	0.74		
6,031.0	0.35	244.48	6,028.7	-5.6	25.4	14.7	0.33		
6,056.0	0.37	256.70	6,053.7	-5.6	25.2	14.7	0.32		
6,081.0	0.50	255.84	6,078.7	-5.7	25.1	14.6	0.52		
6,106.0	0.35	271.44	6,103.7	-5.7	24.9	14.6	0.75		
6,131.0	0.33	220.65	6,128.7	-5.7	24.8	14.6	1.17		
6,156.0	0.32	247.43	6,153.7	-5.8	24.6	14.6	0.60		
6,181.0	0.48	261.35	6,178.7	-5.9	24.5	14.6	0.74		
6,206.0	0.52	266.28	6,203.7	-5.9	24.3	14.5	0.23		
6,211.0	0.52	267.16	6,208.7	-5.9	24.2	14.5	0.16		
6,279.0	0.61	266.94	6,276.7	-5.9	23.5	14.3	0.13		
6,324.0	0.55	288.00	6,321.7	-5.9	23.1	14.1	0.49		
6,369.0	0.57	230.11	6,366.7	-6.0	22.7	14.0	1.21		
6,414.0	5.04	169.43	6,411.6	-8.0	22.9	16.0	10.64		
6,458.0	10.41	167.75	6,455.2	-13.8	24.1	21.9	12.21		
6,503.0	15.49	167.73	6,499.0	-23.7	26.2	31.8	11.29		
6,548.0	20.68	169.02	6,541.8	-37.4	29.0	45.5	11.57		
6,593.0	25.76	171.05	6,583.2	-54.8	32.1	62.9	11.43		
6,638.0	30.56	171.97	6,622.8	-75.8	35.2	83.5	10.71		
6,652.0	32.36	171.58	6,634.8	-83.1	36.2	90.6	12.96		
<b>Middlesex</b>									
6,682.0	36.23	170.85	6,659.5	-99.8	38.8	107.1	12.96		
6,727.0	42.16	170.34	6,694.4	-127.8	43.5	134.8	13.20		
6,772.0	47.20	169.34	6,726.4	-158.9	49.1	165.8	11.31		
6,817.0	51.48	169.44	6,755.7	-192.5	55.4	199.2	9.51		
6,837.0	53.05	169.52	6,767.9	-208.0	58.2	214.7	7.87		
<b>Burket</b>									
6,862.0	55.02	169.61	6,782.6	-227.9	61.9	234.5	7.87		
6,888.0	57.88	169.04	6,797.0	-249.2	65.9	255.8	11.17		
<b>Tully</b>									
6,907.0	59.98	168.64	6,806.8	-265.2	69.1	271.8	11.17		
6,952.0	65.45	168.24	6,827.4	-304.4	77.1	311.1	12.18		
6,997.0	70.05	168.49	6,844.4	-345.1	85.5	352.0	10.24		
7,011.0	71.07	168.33	6,849.1	-358.1	88.1	365.0	7.40		
<b>Marcellus</b>									
7,041.0	73.27	167.99	6,858.3	-386.0	94.0	393.1	7.40		
7,086.0	75.94	167.74	6,870.2	-428.4	103.1	485.9	5.96		
7,131.0	80.39	168.98	6,879.5	-471.6	112.0	479.2	10.25		
7,176.0	83.07	169.66	6,885.9	-515.3	120.3	522.9	6.14		
7,201.0	85.47	169.67	6,888.4	-539.8	124.7	547.2	9.60		

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey								
MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	
7,246.0	87.85	169.32	6,891.0	-584.0	132.9	591.2	5.35	
7,336.0	85.74	166.77	6,896.1	-671.9	151.5	679.7	3.67	
7,426.0	87.93	165.19	6,901.0	-759.0	173.3	768.7	3.00	
7,515.0	92.33	165.63	6,900.8	-845.1	195.7	856.9	4.97	
7,605.0	88.20	160.27	6,900.4	-931.1	222.1	946.5	7.52	
7,695.0	90.31	160.62	6,901.6	-1,015.9	252.2	1,036.5	2.38	
7,784.0	89.43	157.19	6,901.8	-1,099.0	284.2	1,125.4	3.98	
7,874.0	90.92	156.49	6,901.5	-1,181.7	319.6	1,215.4	1.83	
7,964.0	89.16	154.64	6,901.5	-1,263.6	356.8	1,305.3	2.84	
8,054.0	90.75	155.70	6,901.5	-1,345.3	394.6	1,395.2	2.12	
8,143.0	88.81	150.51	6,901.9	-1,424.6	434.9	1,483.8	6.23	
8,233.0	90.40	151.48	6,902.5	-1,503.4	478.5	1,573.2	2.07	
8,323.0	89.96	151.39	6,902.2	-1,582.4	521.5	1,662.6	0.50	
8,412.0	89.16	152.80	6,902.9	-1,661.0	563.2	1,751.1	1.82	
8,502.0	89.43	154.82	6,904.0	-1,741.8	602.9	1,840.8	2.26	
8,592.0	92.86	155.70	6,902.2	-1,823.5	640.6	1,930.7	3.93	
8,681.0	90.66	159.12	6,899.5	-1,905.6	674.7	2,019.6	4.57	
8,771.0	88.72	156.93	6,900.0	-1,989.1	708.4	2,109.6	3.25	
8,861.0	90.48	158.77	6,900.6	-2,072.4	742.3	2,199.6	2.83	
8,950.0	90.66	160.35	6,899.7	-2,155.8	773.4	2,288.6	1.79	
9,039.0	90.75	162.38	6,898.6	-2,240.1	801.8	2,377.4	2.28	
9,129.0	90.31	162.81	6,897.8	-2,326.0	828.8	2,467.1	0.68	
9,218.0	88.90	160.62	6,898.4	-2,410.5	856.7	2,555.9	2.93	
9,308.0	88.29	161.85	6,900.6	-2,495.7	885.6	2,645.8	1.53	
9,397.0	88.64	158.24	6,903.0	-2,579.3	916.0	2,734.6	4.07	
9,487.0	89.43	155.78	6,904.5	-2,662.1	951.1	2,824.6	2.87	
9,577.0	90.40	155.26	6,904.6	-2,744.0	988.4	2,914.5	1.22	
9,671.0	91.01	157.72	6,903.5	-2,830.2	1,025.9	3,008.5	2.70	
9,764.0	88.81	155.26	6,903.6	-2,915.5	1,063.0	3,101.4	3.55	
9,859.0	89.78	157.98	6,904.8	-3,002.7	1,100.7	3,196.4	3.04	
9,954.0	89.34	155.08	6,905.5	-3,089.8	1,138.5	3,291.3	3.09	
10,048.0	88.37	152.97	6,907.4	-3,174.3	1,179.7	3,385.1	2.47	
10,143.0	89.60	155.34	6,909.1	-3,259.8	1,221.1	3,479.9	2.81	
10,237.0	89.16	157.19	6,910.1	-3,345.8	1,258.9	3,573.8	2.02	
10,331.0	88.72	156.40	6,911.8	-3,432.2	1,296.0	3,667.8	0.96	
10,425.0	90.48	160.97	6,912.5	-3,519.7	1,330.1	3,761.7	5.21	
10,520.0	88.46	160.44	6,913.4	-3,609.4	1,361.5	3,856.6	2.20	
10,614.0	87.76	161.32	6,916.5	-3,698.2	1,392.3	3,950.4	1.20	
10,708.0	87.32	158.68	6,920.5	-3,786.4	1,424.4	4,044.3	2.84	
10,798.0	88.99	158.07	6,923.4	-3,870.0	1,457.5	4,134.2	1.98	
10,887.0	88.72	155.96	6,925.2	-3,951.9	1,492.3	4,223.2	2.39	
10,977.0	89.34	157.37	6,926.7	-4,034.6	1,527.9	4,313.2	1.71	
11,067.0	90.48	157.10	6,926.8	-4,117.5	1,562.8	4,403.1	1.30	
11,157.0	90.57	157.19	6,926.0	-4,200.5	1,597.7	4,493.1	0.14	

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
11,246.0	88.55	155.78	6,926.7	-4,282.1	1,633.2	4,582.1	2.77
11,336.0	89.43	158.24	6,928.3	-4,364.9	1,668.4	4,672.1	2.90
11,426.0	89.60	159.30	6,929.1	-4,448.8	1,700.9	4,762.0	1.19
11,515.0	88.72	158.77	6,930.4	-4,531.9	1,732.8	4,851.0	1.15
11,605.0	88.37	162.02	6,932.6	-4,616.6	1,763.0	4,940.9	3.63
11,695.0	89.25	162.99	6,934.5	-4,702.4	1,790.0	5,030.6	1.46
11,785.0	89.87	164.22	6,935.2	-4,788.8	1,815.4	5,120.2	1.53
11,874.0	88.02	160.62	6,936.8	-4,873.6	1,842.3	5,208.9	4.55
11,964.0	89.60	158.24	6,938.7	-4,957.8	1,873.9	5,298.8	3.17
12,054.0	89.60	158.51	6,939.3	-5,041.5	1,907.1	5,388.8	0.30
12,143.0	89.16	157.54	6,940.3	-5,124.0	1,940.4	5,477.8	1.20
12,233.0	88.46	155.87	6,942.2	-5,206.7	1,976.0	5,567.8	2.01
12,323.0	89.43	157.80	6,943.8	-5,289.4	2,011.3	5,657.7	2.40
12,413.0	89.43	157.10	6,944.7	-5,372.5	2,045.9	5,747.7	0.78
12,502.0	88.72	157.10	6,946.2	-5,454.5	2,080.5	5,836.7	0.80
12,592.0	89.52	157.80	6,947.5	-5,537.6	2,115.0	5,926.7	1.18
12,682.0	89.34	157.63	6,948.4	-5,620.9	2,149.1	6,016.7	0.28
12,772.0	89.08	156.40	6,949.7	-5,703.7	2,184.3	6,106.6	1.40
12,861.0	89.78	156.84	6,950.6	-5,785.4	2,219.6	6,195.6	0.93
12,951.0	89.16	154.90	6,951.4	-5,867.5	2,256.4	6,285.5	2.26
13,041.0	89.69	157.54	6,952.3	-5,949.9	2,292.7	6,375.5	2.99
13,130.0	90.13	158.95	6,952.4	-6,032.5	2,325.6	6,464.5	1.66
13,220.0	88.02	158.33	6,953.9	-6,116.3	2,358.4	6,554.5	2.44
13,310.0	88.11	156.93	6,956.9	-6,199.5	2,392.6	6,644.4	1.56
13,399.0	90.75	158.24	6,957.8	-6,281.8	2,426.6	6,733.4	3.31
13,489.0	91.10	157.63	6,956.4	-6,365.2	2,460.4	6,823.4	0.78
13,579.0	88.81	156.05	6,956.4	-6,447.9	2,495.8	6,913.3	3.09
13,669.0	89.16	157.45	6,958.0	-6,530.6	2,531.3	7,003.3	1.60
13,758.0	89.78	158.77	6,958.9	-6,613.2	2,564.5	7,092.3	1.64
13,848.0	89.34	158.24	6,959.5	-6,696.9	2,597.5	7,182.3	0.77
13,937.0	89.78	158.68	6,960.2	-6,779.7	2,630.1	7,271.3	0.70
14,027.0	90.48	159.83	6,960.0	-6,863.8	2,662.0	7,361.3	1.50
14,117.0	89.78	159.74	6,959.8	-6,948.3	2,693.1	7,451.2	0.78
14,206.0	89.96	160.88	6,960.0	-7,032.1	2,723.1	7,540.1	1.30
14,296.0	89.69	161.06	6,960.3	-7,117.2	2,752.4	7,630.0	0.36
14,385.0	86.88	157.01	6,963.0	-7,200.2	2,784.3	7,718.9	5.54
14,475.0	89.69	156.57	6,965.7	-7,282.9	2,819.7	7,808.9	3.16
14,565.0	91.36	159.21	6,964.8	-7,366.3	2,853.6	7,898.9	3.47
14,655.0	90.22	158.33	6,963.6	-7,450.1	2,886.2	7,988.8	1.60
14,744.0	91.45	160.53	6,962.3	-7,533.4	2,917.4	8,077.8	2.83
14,834.0	90.13	159.83	6,961.1	-7,618.1	2,947.9	8,167.7	1.66
14,924.0	90.75	159.56	6,960.4	-7,702.5	2,979.2	8,257.7	0.75
15,014.0	90.92	157.54	6,959.1	-7,786.3	3,012.1	8,347.7	2.25
15,103.0	91.45	155.78	6,957.2	-7,868.0	3,047.3	8,436.6	2.06

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EOW Completion Report



<b>Company:</b>	Antero	<b>Local Co-ordinate Reference:</b>	Well Weinhold Unit 2H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Site:</b>	Melody Pad	<b>MD Reference:</b>	Precision 525: GL 1135' + KB 19' @ 1154.0usft
<b>Well:</b>	Weinhold Unit 2H	<b>North Reference:</b>	Grid
<b>Wellbore:</b>	Original Wellpath	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	As Drilled	<b>Database:</b>	Oklahoma District

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)
15,193.0	91.36	157.10	6,955.0	-7,950.4	3,083.3	8,526.6	1.47
15,282.0	91.63	155.26	6,952.7	-8,031.8	3,119.2	8,615.5	2.09
15,372.0	91.63	154.99	6,950.1	-8,113.4	3,157.1	8,705.3	0.30
15,461.0	91.80	156.22	6,947.5	-8,194.4	3,193.8	8,794.2	1.39
15,551.0	92.33	155.61	6,944.2	-8,276.6	3,230.5	8,884.1	0.90
15,641.0	91.80	156.49	6,941.0	-8,358.8	3,267.0	8,974.0	1.14
15,731.0	92.15	156.84	6,937.9	-8,441.3	3,302.6	9,063.9	0.55
15,820.0	92.24	156.66	6,934.5	-8,523.1	3,337.8	9,152.8	0.23
15,910.0	90.84	157.89	6,932.0	-8,606.0	3,372.5	9,242.8	2.07
15,925.0	90.13	157.01	6,931.9	-8,619.9	3,378.3	9,257.8	7.54
15,984.0	90.13	157.01	6,931.8	-8,674.2	3,401.3	9,316.7	0.00

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
6,652.0	6,634.8	-83.1	36.2	Middlesex
6,837.0	6,767.9	-208.0	58.2	Burket
6,888.0	6,797.0	-249.2	65.9	Tully
7,011.0	6,849.1	-358.1	88.1	Marcellus

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_

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07/22/2016



# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/4/2015
Job End Date:	12/13/2015
State:	West Virginia
County:	Doddridge
API Number:	47-017-06496-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Weinhold Unit 2H
Longitude:	-80.87300800
Latitude:	39.27335300
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	6,928
Total Base Water Volume (gal):	11,819,640
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	Water					
			Water	7732-18-5	100.00000	89.82554	
Sand	C&J Well Services	Sand - Bulk - West Virginia					
			Crystalline Silica, quartz	14808-60-7	99.90000	5.41387	
			Aluminum Oxide	1344-28-1	1.10000	0.05961	
			Iron Oxide	1309-37-1	0.10000	0.00542	
			Titanium Oxide	13463-67-7	0.10000	0.00542	
Sand	C&J Well Services	Sand - Bulk - West Virginia					
			Crystalline Silica, quartz	14808-60-7	99.90000	3.43328	
			Aluminum Oxide	1344-28-1	1.10000	0.03780	
			Iron Oxide	1309-37-1	0.10000	0.00344	
			Titanium Oxide	13463-67-7	0.10000	0.00344	
Sand	C&J Well Services	Sand - Bulk - West Virginia					
			Crystalline Silica, quartz	14808-60-7	99.90000	0.86581	
			Aluminum Oxide	1344-28-1	1.10000	0.00953	
			Titanium Oxide	13463-67-7	0.10000	0.00087	
			Iron Oxide	1309-37-1	0.10000	0.00087	

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GA-6A	C&J Well Services	Gelling Agents				
			Guar Gum	9000-30-0	60.00000	0.05446
			Petroleum Distillates	64742-47-8	60.00000	0.05446
			Surfactants	Proprietary	10.00000	0.00908
HC-15	C&J Well Services	Bulk Acid				
			Hydrochloric Acid	7647-01-0	15.00000	0.03409
FR-16	C&J Well Services	Friction Reducer				
			Distillates (Petroleum), Hydrotreated Light	64742-47-8	45.00000	0.02960
			Ethylene Glycol	107-21-1	5.00000	0.00329
BR-11	C&J Well Services	Gel Breakers				
			Ammonium Persulfate	7727-54-0	92.00000	0.02635
			Silica, Crystalline-Quartz	14808-60-7	1.00000	0.00029
SI-6	C&J Well Services	Paraffin & Scale Additives				
			Methanol	67-56-1	100.00000	0.01188
			Phosphonic Acid Salt	Proprietary	6.00000	0.00071
			Monoethanolamine hydrochloride	2002-24-6	2.00000	0.00024
			Ammonium Chloride	12125-02-9		
AQUCAR DB 20	C&J Well Services	Biocides				
			Polyethylene glycol	25322-68-3	54.50000	0.00632
			2,2-Dibromo-3-nitrilopropionamide (DBNPA)	10222-01-2	20.00000	0.00232
			Sodium bromide	7647-15-6	4.00000	0.00046
			Dibromoacetonitrile	3252-43-5	3.00000	0.00035
SV-1	C&J Well Services	Paraffin & Scale Additives				
			Alkanes, C10-24 branched and linear	848301-67-7	90.00000	0.00243
			Dodecane	112-40-3	40.00000	0.00108
			Undecane	1120-21-4	30.00000	0.00081
			Tridecane	Proprietary	30.00000	0.00081
			Tetradecane	629-59-4	30.00000	0.00081
			Hydrocarbons	Proprietary	25.00000	0.00068
SI-4	C&J Well Services	Paraffin & Scale Additives				
			Bis(hexamethylene triaminepenta (methylenephosphonic acid))	Proprietary	10.00000	0.00126
CI-3	C&J Well Services	Acid Corrosion Inhibitors				
			Ethylene Glycol	107-21-1	40.00000	0.00022
			Dimethylformamide	68-12-2	20.00000	0.00011
			2-Butoxyethanol	111-76-2	15.00000	0.00008
			Cinnamaldehyde	104-55-2	15.00000	0.00008
			Tar bases, quinoline derivs, benzyl chloride-quaternized	72480-70-7	15.00000	0.00008
			1-DECANOL	112-30-1	5.00000	0.00003

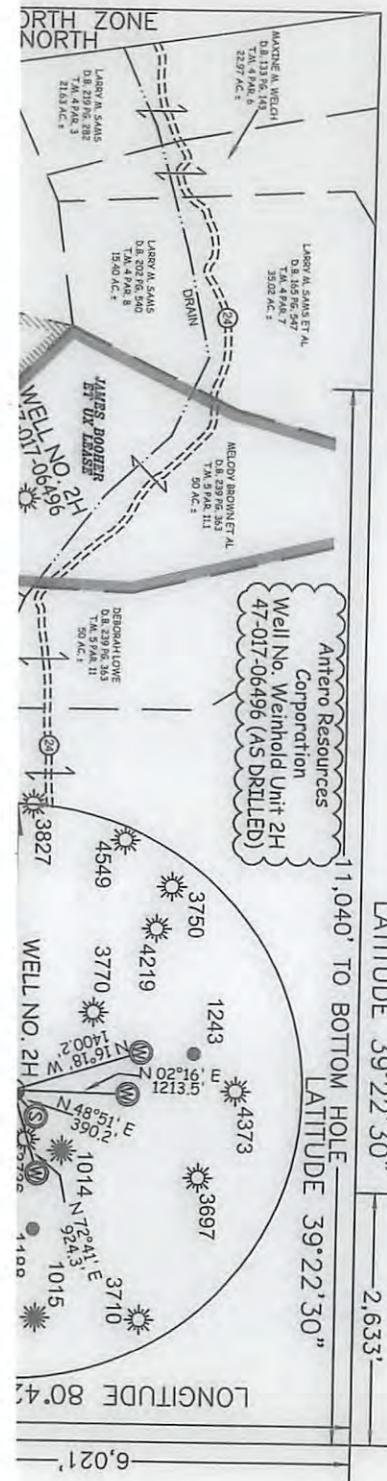


			Nonyphenol (branched), ethoxylated	127087-87-0	5.00000	0.00003
			Isopropyl Alcohol	67-63-0	2.50000	0.00001
			1-OCTANOL	111-87-5	2.50000	0.00001
			Triethyl Phosphate	78-40-0	2.50000	0.00001
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.						
Other Ingredients	C&J Well Services	Other Ingredients				
			Water	7732-18-5	85.00000	0.19315
			Copolymer	Proprietary	35.00000	0.02303
			Water	7732-18-5	31.00000	0.02039
			Water	7732-18-5	96.00000	0.01211
			Water	7732-18-5	96.00000	0.01141
			Surfactant	Proprietary	5.00000	0.00454
			Organo Clay	Proprietary	5.00000	0.00454
			Water	7732-18-5	32.00000	0.00371
			Proprietary	Proprietary	12.80000	0.00367
			Poly(oxy-1,2-ethanediyl), a-hydro-w-hydroxy-, mono-C10-14-alkyl esthers, phosphates	68585-36-4	3.00000	0.00197
			Surfactant Blend	Proprietary	3.00000	0.00197
			Alcohols, C12-18, ethoxylated propoxylated	69227-21-0	2.00000	0.00132
			Surfactant Blend	Proprietary	1.00000	0.00066
			Proprietary	Proprietary	1.00000	0.00029
			Proprietary	Proprietary	0.70000	0.00020
			Sodium Hydroxide	1310-73-2	1.00000	0.00013
			Monobromo-3-nitrilopropionamide	1113-55-9	1.00000	0.00012
			2,2-Dibromomalonamide	73003-80-2	1.00000	0.00012
			2-Propenamide as residual	79-06-1	0.10000	0.00007

\* 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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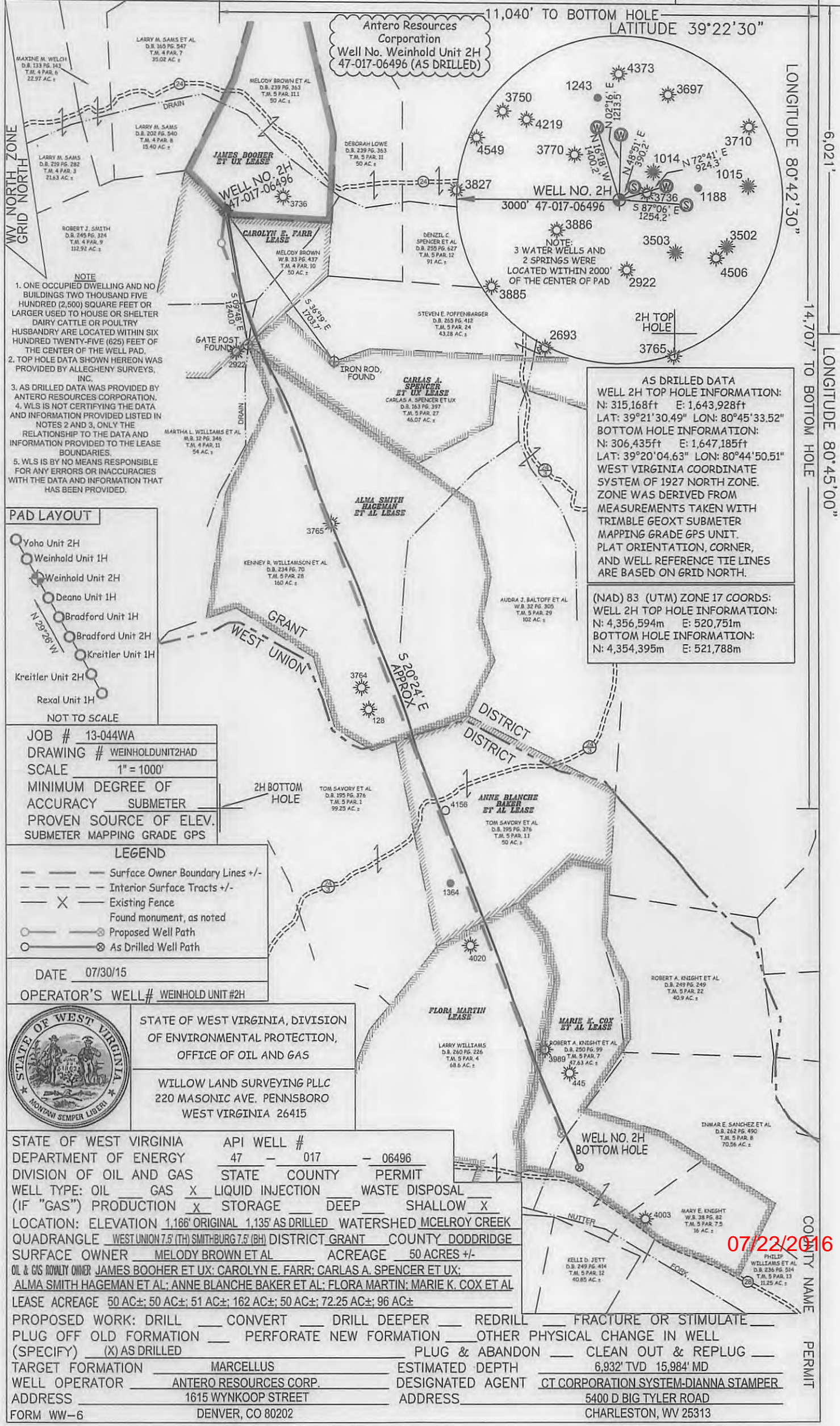




LATITUDE 39°22'30" 2,633'

LONGITUDE 80°42'30"

LONGITUDE 80°45'00"

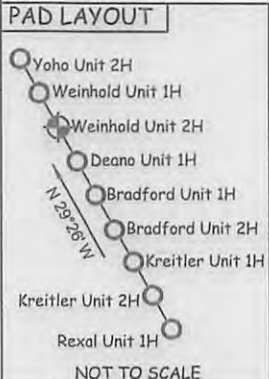


NOTE

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- TOP HOLE DATA SHOWN HEREON WAS PROVIDED BY ALLEGHENY SURVEYS, INC.
- AS DRILLED DATA WAS PROVIDED BY ANTERO RESOURCES CORPORATION.
- 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.
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AS DRILLED DATA  
WELL 2H TOP HOLE INFORMATION:  
N: 315,168ft E: 1,643,928ft  
LAT: 39°21'30.49" LON: 80°45'33.52"  
BOTTOM HOLE INFORMATION:  
N: 306,435ft E: 1,647,185ft  
LAT: 39°20'04.63" LON: 80°44'50.51"  
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: 4,356,594m E: 520,751m  
BOTTOM HOLE INFORMATION:  
N: 4,354,395m E: 521,788m



JOB # 13-044WA  
DRAWING # WEINHOLDUNIT2HAD  
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 07/30/15  
OPERATOR'S WELL# WEINHOLD 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 - 017 - 06496  
STATE COUNTY PERMIT  
WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
(IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
LOCATION: ELEVATION 1,166' ORIGINAL 1,135' AS DRILLED WATERSHED MCELROY CREEK  
QUADRANGLE WEST UNION 7.5 (TH) SMITHBURG 7.5 (BH) DISTRICT GRANT COUNTY DODDRIDGE  
SURFACE OWNER MELODY BROWN ET AL ACREAGE 50 ACRES +/-  
OIL & GAS ROVAILTY OWNER JAMES BOOHER ET UX; CAROLYN E. FARR; CARLAS A. SPENCER ET UX;  
ALMA SMITH HAGEMAN ET AL; ANNE BLANCHE BAKER ET AL; FLORA MARTIN; MARIE K. COX ET AL  
LEASE ACREAGE 50 AC±; 50 AC±; 51 AC±; 162 AC±; 50 AC±; 72.25 AC±; 96 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 6,932' TVD 15,984' 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

07/22/2016



LATITUDE 39°22'30"

2,633'

11,040' TO BOTTOM HOLE

LATITUDE 39°22'30"

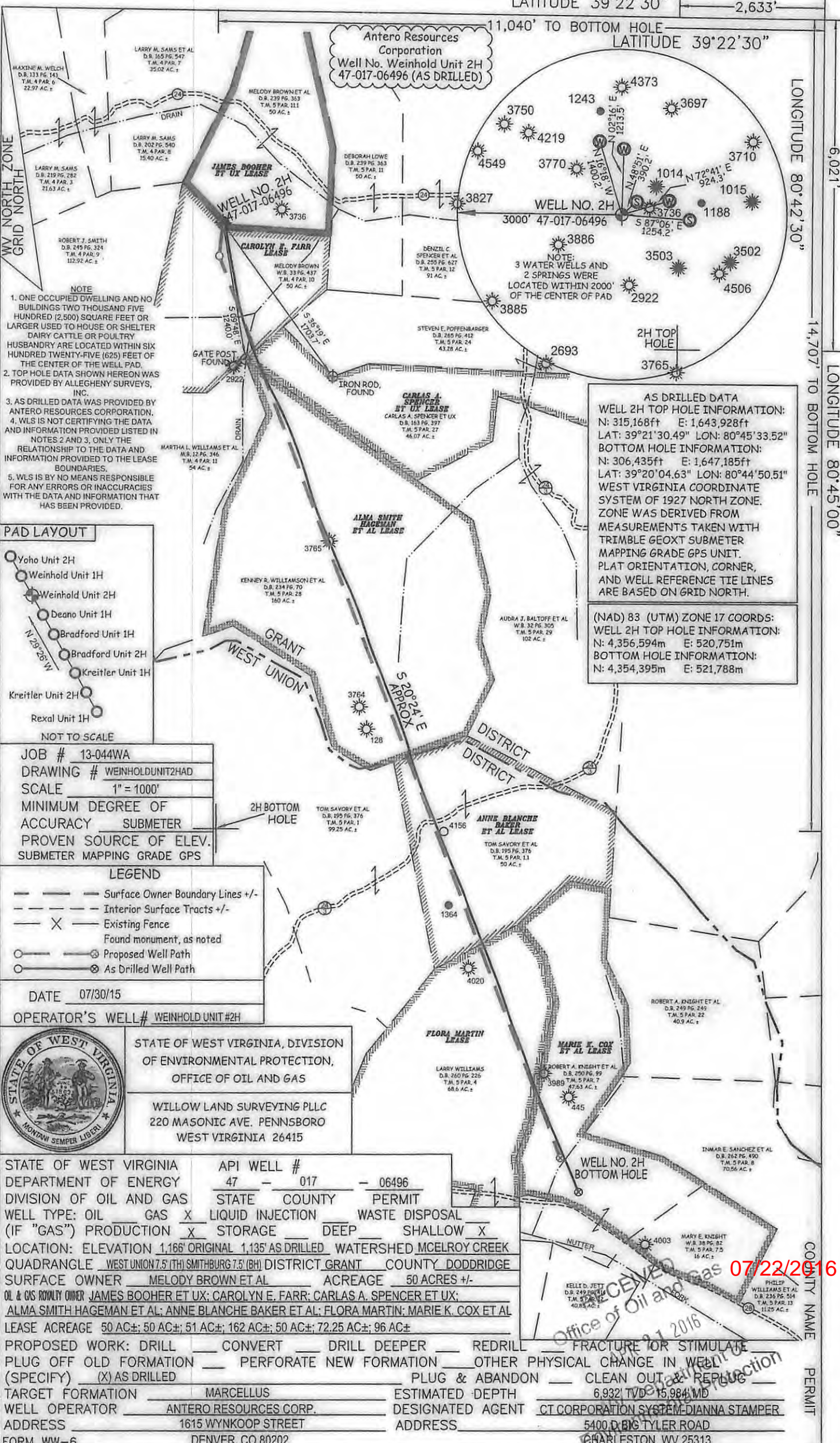
LONGITUDE 80°42'30"

6,021'

14,707' TO BOTTOM HOLE

LONGITUDE 80°45'00"

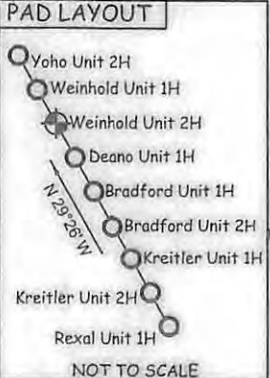
Antero Resources Corporation  
Well No. Weinhold Unit 2H  
47-017-06496 (AS DRILLED)



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LEGEND  
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X Existing Fence  
o Found monument, as noted  
o Proposed Well Path  
o As Drilled Well Path

DATE 07/30/15  
OPERATOR'S WELL# WEINHOLD UNIT#2H



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WILLOW LAND SURVEYING PLLC  
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

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COUNTY NAME PERMIT