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WR-35  
Rev. 8/23/13

WV GEOLOGICAL SURVEY  
MORGANTOWN, WV

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

API 47 - 017 - 06278 County Doddridge District Greenbrier  
Quad Big Isaac 7.5' Pad Name Hughes Pad Field/Pool Name \_\_\_\_\_  
Farm name Nelson, Eric E. et al Well Number Belton Unit 1H  
Operator (as registered with the OOG) Antero Resources Corporation  
Address 1615 Wynkoop Street City Denver State CO Zip 80202

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,341,197m Easting 532,754m  
Landing Point of Curve Northing 4,341,043m Easting 532,739.23m  
Bottom Hole Northing 4,338,675m Easting 533,486m

Elevation (ft) 1,322' 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 07/30/2013 Date drilling commenced 12/27/2013 Date drilling ceased 04/08/2014  
Date completion activities began 04/16/2014 Date completion activities ceased 07/01/2014  
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 109', 112' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1,091'; 1,150' Void(s) encountered (Y/N) depths None  
Coal depth(s) ft 390' Cavern(s) encountered (Y/N) depths None  
Is coal being mined in area (Y/N) No

Reviewed by: \_\_\_\_\_

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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	24"	20"	40'	New	51#; H-40	N/A	Yes
Surface	17 1/2"	13 3/8"	563'	New	48#; H-40	N/A	Yes
Coal							
Intermediate 1	12 1/4"	9 5/8"	2,505'	New	36#; J-55	N/A	Yes
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	15,800'	New	20#; P-110	N/A	Yes
Tubing		2 3/8"	7,433'		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	200 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	685 sx	15.6	1.18	391	0'	8 Hrs.
Coal							
Intermediate 1	Class A	967 sx	15.8	1.18	785	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1,173 sx (Lead); 1,298 sx (Tail)	14.5 (Lead); 15.2 (Tail)	1.3 (Lead); 1.86 (Tail)	3,160	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15,800' MD; 7,305' TVD (BHL); 7,356' (Deepest Point Drilled) Loggers TD (ft) 15,745'  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6,714'

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 - 06278

Farm name Nelson, Eric E. et al

Well number Belton Unit 1H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		<b>* PLEASE SEE ATTACHED EXHIBIT 1</b>			

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)
		<b>* PLEASE SEE ATTACHED EXHIBIT 2</b>						

Please insert additional pages as applicable.

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API 47- 017 - 06278 Farm name Nelson, Eric E. et al Well number Belton Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>7,308' (top)</u> TVD	<u>7,474' (top)</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 3,950 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs

OPEN FLOW Gas 11,648 mcfpd Oil 1 bpd NGL \_\_\_\_\_ bpd Water 138 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)
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	0		0		

**\* PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling, LLC  
Address 562 Spring Run Road City Pennsboro State WV Zip 26415

Logging Company Cased hole Solutions  
Address 100 Arentzen Blvd. City Charleroi State PA Zip 15022

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

Stimulating Company Baker Hughes  
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

Please insert additional pages as applicable.

Completed by Megan Darling Telephone 303-357-7230  
Signature Megan C. Darling Title Permitting Agent Date 07/24/2015

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

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**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	16-Apr-14	15,543	15,712	60	Marcellus
2	26-May-14	15,342	15,511	60	Marcellus
3	26-May-14	15,142	15,311	60	Marcellus
4	27-May-14	14,941	15,110	60	Marcellus
5	27-May-14	14,740	14,910	60	Marcellus
6	27-May-14	14,540	14,709	60	Marcellus
7	28-May-14	14,339	14,508	60	Marcellus
8	28-May-14	14,139	14,308	60	Marcellus
9	28-May-14	13,938	14,107	60	Marcellus
10	29-May-14	13,737	13,907	60	Marcellus
11	29-May-14	13,537	13,706	60	Marcellus
12	29-May-14	13,336	13,505	60	Marcellus
13	29-May-14	13,136	13,305	60	Marcellus
14	30-May-14	12,935	13,104	60	Marcellus
15	30-May-14	12,734	12,903	60	Marcellus
16	30-May-14	12,534	12,703	60	Marcellus
17	31-May-14	12,333	12,502	60	Marcellus
18	31-May-14	12,132	12,302	60	Marcellus
19	31-May-14	11,932	12,101	60	Marcellus
20	1-Jun-14	11,731	11,900	60	Marcellus
21	1-Jun-14	11,531	11,700	60	Marcellus
22	1-Jun-14	11,330	11,499	60	Marcellus
23	1-Jun-14	11,129	11,299	60	Marcellus
24	2-Jun-14	10,929	11,098	60	Marcellus
25	2-Jun-14	10,728	10,897	60	Marcellus
26	2-Jun-14	10,528	10,697	60	Marcellus
27	2-Jun-14	10,327	10,496	60	Marcellus
28	2-Jun-14	10,126	10,296	60	Marcellus
29	3-Jun-14	9,926	10,095	60	Marcellus
30	3-Jun-14	9,725	9,894	60	Marcellus
31	4-Jun-14	9,525	9,694	60	Marcellus
32	4-Jun-14	9,324	9,493	60	Marcellus
33	4-Jun-14	9,123	9,292	60	Marcellus
34	4-Jun-14	8,923	9,092	60	Marcellus
35	5-Jun-14	8,722	8,891	60	Marcellus
36	5-Jun-14	8,521	8,691	60	Marcellus
37	5-Jun-14	8,321	8,490	60	Marcellus
38	5-Jun-14	8,120	8,289	60	Marcellus
39	6-Jun-14	7,920	8,089	60	Marcellus
40	6-Jun-14	7,719	7,888	60	Marcellus
41	6-Jun-14	7,518	7,688	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	26-May-14	64.0	7,941	N/A	5,076	264,954	7,024	N/A
2	26-May-14	75.0	7,938	6,831	5,457	242,371	6,914	N/A
3	26-May-14	77.0	7,971	7,021	5,987	251,208	6,617	N/A
4	27-May-14	76.0	7,647	6,431	6,082	249,567	6,592	N/A
5	27-May-14	76.0	7,673	6,121	6,026	260,269	5,645	N/A
6	27-May-14	77.0	7,767	6,137	5,818	181,799	6,987	N/A
7	28-May-14	77.0	7,944	6,209	6,005	253,492	6,586	N/A
8	28-May-14	74.0	7,737	4,861	5,820	257,470	5,574	N/A
9	28-May-14	79.0	7,905	6,434	6,298	259,503	6,558	N/A
10	29-May-14	78.0	7,668	6,175	6,116	259,072	6,524	N/A
11	29-May-14	77.0	7,447	6,068	5,898	258,790	3,060	N/A
12	29-May-14	78.0	7,508	6,167	6,068	255,462	1,101	N/A
13	29-May-14	80.0	7,570	5,875	6,026	255,895	6,424	N/A
14	30-May-14	79.0	7,581	5,998	5,939	256,618	5,418	N/A
15	30-May-14	75.0	7,552	5,815	5,809	244,789	4,921	N/A
16	30-May-14	78.0	7,598	5,818	5,458	255,902	6,386	N/A
17	31-May-14	85.0	7,635	6,048	5,951	258,857	6,463	N/A
18	31-May-14	78.0	7,399	5,705	5,999	258,569	5,190	N/A
19	31-May-14	83.0	7,344	5,732	5,853	257,841	6,420	N/A
20	1-Jun-14	80.0	7,290	4,600	5,928	260,664	6,356	N/A
21	1-Jun-14	81.0	6,927	6,172	6,056	261,210	6,432	N/A
22	1-Jun-14	84.0	7,459	6,371	5,422	261,172	6,743	N/A
23	1-Jun-14	83.0	7,116	5,831	5,568	255,581	6,273	N/A
24	2-Jun-14	82.0	7,218	6,214	5,843	255,550	6,290	N/A
25	2-Jun-14	79.0	7,109	6,430	5,768	432,013	6,351	N/A
26	2-Jun-14	81.0	7,312	5,616	5,996	260,217	6,326	N/A
27	2-Jun-14	80.0	7,330	6,180	5,908	256,778	6,247	N/A
28	2-Jun-14	80.0	6,158	5,814	6,029	261,885	6,296	N/A
29	3-Jun-14	81.0	7,285	5,677	5,677	261,236	6,284	N/A
30	3-Jun-14	80.0	7,143	5,693	5,417	259,822	6,288	N/A
31	4-Jun-14	77.0	7,156	6,174	5,616	158,640	6,752	N/A
32	4-Jun-14	80.0	7,251	5,967	5,408	225,293	6,484	N/A
33	4-Jun-14	77.0	7,292	6,281	4,944	259,849	6,269	N/A
34	4-Jun-14	79.0	6,927	6,253	5,063	258,806	6,223	N/A
35	5-Jun-14	78.0	6,864	6,158	5,167	260,590	6,158	N/A
36	5-Jun-14	77.0	6,740	6,194	5,498	259,517	6,168	N/A
37	5-Jun-14	79.0	6,877	6,097	5,372	263,247	6,212	N/A
38	5-Jun-14	80.0	6,696	6,340	5,877	258,103	6,085	N/A
39	6-Jun-14	79.0	6,927	6,170	5,262	258,205	6,097	N/A
40	6-Jun-14	78.0	6,822	6,532	5,795	248,098	5,922	N/A
41	6-Jun-14	75.0	6,868	6,860	5,886	133,715	6,343	N/A
AVG=		<b>78.4</b>	<b>7,332</b>	<b>6,077</b>	<b>5,736</b>	<b>10,392,619</b>	<b>249,003</b>	TOTAL

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API 47-017-06278 Farm Name Nelson, Eric E. et al Well Number Belton Unit 1H

**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	109'	N/A	109'	N/A
Fresh Water	112'	N/A	112'	N/A
Shale	0	188	0	188
Sandy siltstone	est. 188	390	est. 188	390
Coal	est. 390	408	est. 390	408
Shale	est. 408	488	est. 408	488
Siltstone	est. 488	828	est. 488	828
Shale	est. 828	908	est. 828	908
Sandstone	est. 908	943	est. 908	943
Shale	est. 943	964	est. 943	964
Trace coal	est. 964	986	est. 964	986
Sandy siltstone	est. 986	1,348	est. 986	1,348
Shale	est. 1348	1,588	est. 1348	1,588
Sandy shale	est. 1588	1,648	est. 1588	1,648
Trace coal	est. 1648	1,668	est. 1648	1,668
Shale	est. 1668	1,708	est. 1668	1,708
Sandstone	est. 1708	1,808	est. 1708	1,808
Silty sandstone	est. 1808	1,948	est. 1808	1,948
Trace coal	est. 1948	1,988	est. 1948	1,988
Silty sandstone	est. 1988	2,248	est. 1988	2,248
Shale	est. 2248	2,303	est. 2248	2,303
Big Lime	2,303	2,462	2,303	2,462
Big Injun	2,462	2,783	2,462	2,783
Weir	2,783	2,907	2,783	2,907
Fifty Foot Sandstone	2,907	2,993	2,907	2,993
Gordon	2,993	3,168	2,993	3,168
Fifth Sandstone	3,168	3,210	3,168	3,210
Bayard	3,210	3,978	3,210	3,978
Speechley	3,978	4,459	3,978	4,459
Baltown	4,459	4,755	4,459	4,755
Bradford	4,755	5,077	4,755	5,077
Riley	5,077	5,297	5,077	5,297
Benson	5,297	5,567	5,297	5,567
Alexander	5,567	6,845	5,567	6,846
Sycamore	6,845	7,012	6,846	7,023
Middlesex	7,012	7,155	7,023	7,194
Burkett	7,155	7,187	7,194	7,236
Tully	7,187	7,308	7,236	7,474
Marcellus	7,308	NA	7,474	NA

\*Please note Antero determines shallow 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:	5/26/2014
Job End Date:	6/6/2014
State:	West Virginia
County:	Doddridge
API Number:	47-017-06278-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Belton Unit 1H
Longitude:	-80.62075000
Latitude:	39.21934700
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	7,356
Total Base Water Volume (gal):	11,564,490
Total Base Non Water Volume:	0

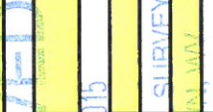


## Hydraulic Fracturing Fluid Composition:

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	Operator	Carrier	Water	7732-18-5	100.00000	89.95499	
Sand, White, 40/70	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A		5.65795	
Sand, White, 20/40	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A		3.26739	
Sand, White, 100 mesh	Baker Hughes	Proppant	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.62105	
HCl, 10.1 - 15%	Baker Hughes	Acidizing	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.21897	SmartCare Product
GW-3LDF	Baker Hughes	Gelling Agent	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.09441	SmartCare Product
FRW-18	Baker Hughes	Friction Reducer	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.06472	SmartCare Product
Scaletrol 720	Baker Hughes	Scale Inhibitor	MSDS and Non-MSDS Ingredients Listed Below	N/A		0.01607	SmartCare Product



Alpha 1427	Baker Hughes	Biocide	MSDS and Non-MSDS Ingredients Listed Below	N/A			0.01438	SmartCare Product
Enzyme G-NE	Baker Hughes	Breaker	MSDS and Non-MSDS Ingredients Listed Below	N/A			0.01213	SmartCare Product
Ferrotrol 300L	Baker Hughes	Iron Control	MSDS and Non-MSDS Ingredients Listed Below	N/A			0.00147	SmartCare Product
CI-14	Baker Hughes	Corrosion Inhibitor	MSDS and Non-MSDS Ingredients Listed Below	N/A			0.00032	SmartCare Product
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.								
Ingredients in Additive (s) (MSDS and non- MSDS)	Baker Hughes	See Trade Name(s) List						
			Crystalline Silica (Quartz)	14808-60-7	100.00000		9.53832	
			Water	7732-18-5	95.00000		0.24073	
			Mineral Oil	8042-47-5	70.00000		0.06603	
			Guar Gum	9000-30-0	60.00000		0.05660	
			Hydrochloric Acid	7647-01-0	15.00000		0.03282	
			Paraffinic Petroleum Distillate	64742-55-8	30.00000		0.02830	
			Hydrotreated Light Distillate	64742-47-8	30.00000		0.01940	
			Poly (acrylamide-co-acrylic acid) partial sodium salt	82649-23-4	30.00000		0.01940	
			Ethylene Glycol	107-21-1	45.00000		0.00723	
			Isotridecanol, ethoxylated	9043-30-5	5.00000		0.00472	
			Crystalline Silica: Quartz	14808-60-7	5.00000		0.00472	
			1-butoxy-2-propanol	5131-66-8	5.00000		0.00472	
			Glutaraldehyde	111-30-8	30.00000		0.00431	
			Sodium Chloride	7647-14-5	5.00000		0.00339	
			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9	20.00000		0.00321	
			Ammonium Chloride	12125-02-9	3.00000		0.00194	
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10.00000		0.00144	
			Oleamide DEA	93-83-4	2.00000		0.00129	
			Alcohols, C12-16, ethoxylated	68551-12-2	2.00000		0.00129	
			Citric Acid	77-92-9	60.00000		0.00088	
			Calcium Chloride	10043-52-4	5.00000		0.00080	
			Quaternary Ammonium Compound	68424-85-1	5.00000		0.00072	
			Ethanol	64-17-5	5.00000		0.00072	
			Hemicellulase Enzyme Concentrate	9025-56-3	5.00000		0.00061	
			Methanol	67-56-1	100.00000		0.00032	
			Sorbitan Monooleate	1338-43-8	0.50000		0.00032	
			Polyoxyethylene Sorbitan Monooleate	9005-65-6	0.50000		0.00032	
			Potassium Chloride	7447-40-7	1.00000		0.00016	

  
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	Polyoxyalkylenes	68951-67-7	30.00000	0.00010		
	2-butoxy-1-propanol	15821-83-7	0.10000	0.00009		
	Fatty Acids	61790-12-3	10.00000	0.00003		
	Modified Thiourea Polymer	68527-49-1	7.00000	0.00002		
	Propargyl Alcohol	107-19-7	5.00000	0.00002		
	Olefin	64743-02-8	5.00000	0.00002		
	Formaldehyde	50-00-0	1.00000	0.00000		

\* 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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JUL 27 2015

WV GEOLOGICAL SURVEY  
MORGANTOWN, WV

LATITUDE 39°15'00"

10,602'

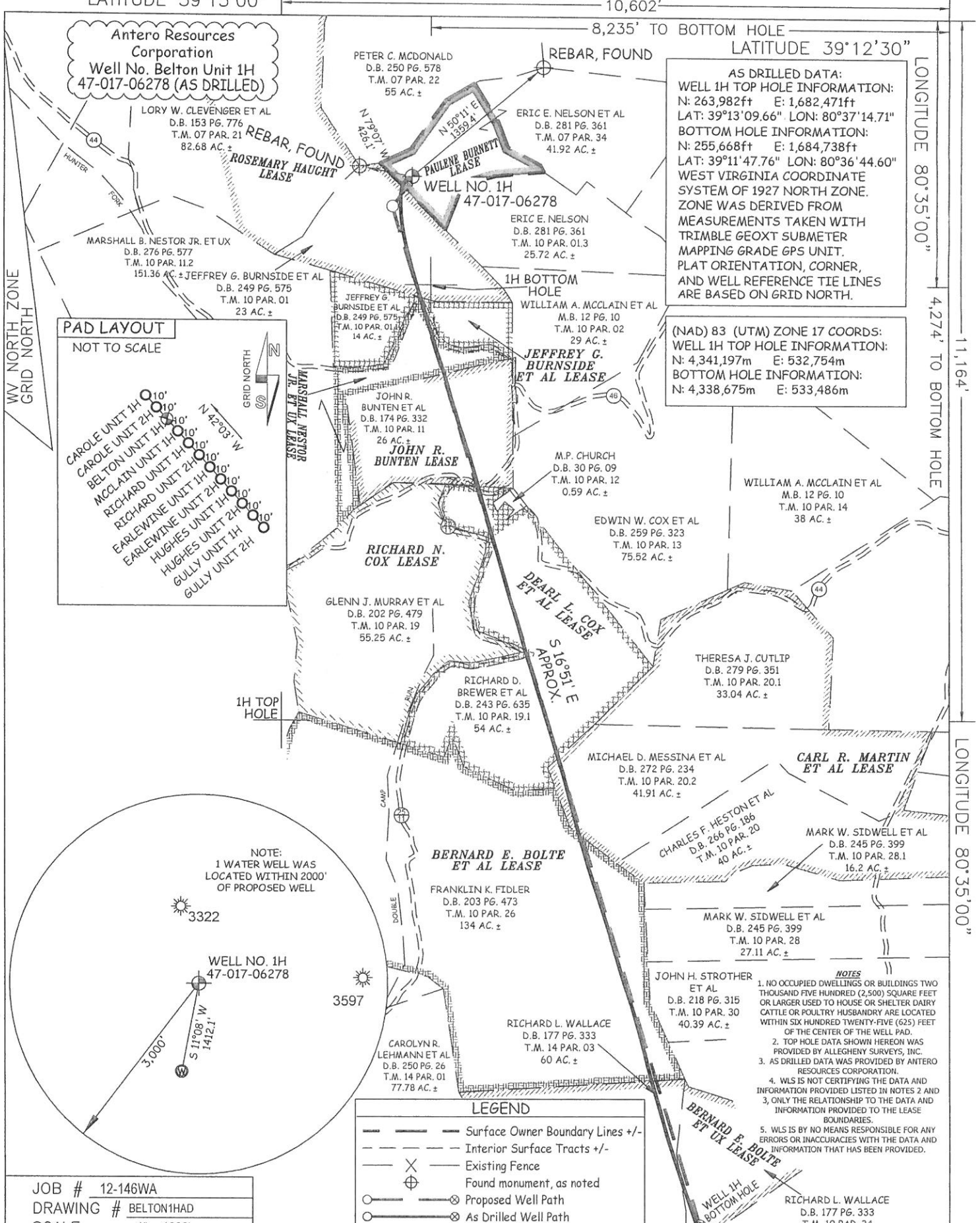
8,235' TO BOTTOM HOLE

LATITUDE 39°12'30"

LONGITUDE 80°35'00"

11,164'

LONGITUDE 80°35'00"



AS DRILLED DATA:  
 WELL 1H TOP HOLE INFORMATION:  
 N: 263,982ft E: 1,682,471ft  
 LAT: 39°13'09.66" LON: 80°37'14.71"  
 BOTTOM HOLE INFORMATION:  
 N: 255,668ft E: 1,684,738ft  
 LAT: 39°11'47.76" LON: 80°36'44.60"  
 WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:  
 WELL 1H TOP HOLE INFORMATION:  
 N: 4,341,197m E: 532,754m  
 BOTTOM HOLE INFORMATION:  
 N: 4,338,675m E: 533,486m

PAD LAYOUT  
 NOT TO SCALE



NOTE:  
 1 WATER WELL WAS LOCATED WITHIN 2000' OF PROPOSED WELL

LEGEND

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

- NOTES
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 # 12-146WA  
 DRAWING # BELTON1HAD  
 SCALE 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY SUBMETER  
 PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS



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

DATE 04/14/15  
 OPERATOR'S WELL # BELTON UNIT 1H

STATE OF WEST VIRGINIA DEPARTMENT 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: ELEVATION 1,354' ORIGINAL - 1,332' AS-DRILLED WATERSHED HEADWATERS MIDDLE ISLAND CREEK  
 QUADRANGLE BIG ISSAC 7.5' DISTRICT GREENBRIER COUNTY DODDRIDGE  
 SURFACE OWNER ERIC E. NELSON, ET AL ACREAGE 41.92 ACRES +/-  
 OIL & GAS ROYALTY OWNER PAULENE BURNETT; ROSEMARY HAUGHT; JEFFREY G. BURNSIDE ET AL; LEASE ACREAGE 14.29 ACRES±; 115 ACRES±; 14 ACRES±;  
 MARSHALL NESTOR JR ET UX; JOHN R. BUNTEN; DEARL L. COX ET AL; CARL R. MARTIN ET AL; BERNARD E. BOLTE ET AL; BERNARD BOLTE ET UX 13.326 ACRES±; 26 ACRES±; 39.33 ACRES±; 115 ACRES±; 134 ACRES±; 80 ACRES±  
 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 7,305' TVD 15,800' MD  
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER  
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD  
 CT CORPORATION SYSTEM  
 DENVER, CO 80202 CHARLESTON, WV 25313