

# APPROVED

WR-35  
Rev. 8/23/13

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

NAME: Chad A. [Signature]

DATE 1/3/18

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

API 47 - 017 - 06454 County Doddridge District Greenbrier  
Quad New Milton 7.5' Pad Name Trent Pad Field/Pool Name -----  
Farm name Clarence Trent, Jr. et al Well Number Nestor 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 4340089m Easting 532026m  
Landing Point of Curve Northing 4340461.190m Easting 532285.419m  
Bottom Hole Northing 4343309m Easting 531369m

Elevation (ft) 1409' 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 02/21/2014 Date drilling commenced 03/31/2014 Date drilling ceased 11/09/2014  
Date completion activities began 11/17/2014 Date completion activities ceased 7/18/2017  
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A  
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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug **WV Department of Environmental Protection**

Freshwater depth(s) ft 32', 77', 112' Open mine(s) (Y/N) depths No  
Salt water depth(s) ft None Identified Void(s) encountered (Y/N) depths No  
Coal depth(s) ft 1037', 1957' Cavern(s) encountered (Y/N) depths No  
Is coal being mined in area (Y/N) No

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

API 47-017 - 06454 Farm name Clarence Trent, Jr. et al Well number Nestor Unit 1H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	53'	New	133#, J-55	N/A	Y
Surface	17-1/2"	13-3/8"	366'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2499'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17865'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7719'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	150 sx	15.6	1.18	177	0'	8 Hrs.
Surface	Class A	435 sx	15.6	1.18	518	0'	8 Hrs.
Coal							
Intermediate 1	Class A	976 sx	15.6	1.18	1152	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1234 sx (Lead) 1606 sx (Tail)	14.5 (Lead), 15.2 (Tail)	1.3 (Lead), 1.86 (Tail)	4591	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 18140' MD, 7475' TVD (BHL & Deepest Point Drilled) Loggers TD (ft) 18089' MD

Deepest formation penetrated Marcellus Plug back to (ft) N/A

Plug back procedure N/A

Kick off depth (ft) 7226'

\*\* This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Bowen Unit 2H API #47-017-06167). Please reference the wireline logs submitted with Form WR-35 for Bowen Unit 2H. 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

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

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WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

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

API 47- 017 - 06454 Farm name Clarence Trent, Jr. et al Well number Nestor 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>								

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Please insert additional pages as applicable.

API 47- 017 - 06454 Farm name Clarence Trent, Jr. et al Well number Nestor Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>7383' (TOP)</u>	<u>TVD</u>	<u>7785' (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 3950 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 8240 mcfpd Oil 1 bpd NGL --- bpd Water 569 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>		<u>BOTTOM</u>		<u>DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H<sub>2</sub>S, ETC)</u>
	<u>DEPTH IN FT NAME TVD</u>	<u>DEPTH IN FT TVD</u>	<u>DEPTH IN FT MD</u>	<u>DEPTH IN FT MD</u>	

**\*PLEASE SEE ATTACHED EXHIBIT 3**


Please insert additional pages as applicable.

Drilling Contractor Precision Drilling Company, LP  
Address 2640 Reach Road City Williamsport State PA Zip 17701

Logging Company STRC  
Address 1560 Good Hope Pike City Clarksburg State WV Zip 26301

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

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 [Signature] Title Permitting Agent Date 11/03/2017

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

## EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	11/17/2014	17603	17771	40	Marcellus
2	6/22/2017	17403	17572	40	Marcellus
3	6/22/2017	17204	17372	40	Marcellus
4	6/23/2017	17004	17173	40	Marcellus
5	6/23/2017	16805	16973	40	Marcellus
6	6/23/2017	16605	16774	40	Marcellus
7	6/24/2017	16406	16574	40	Marcellus
8	6/24/2017	16206	16375	40	Marcellus
9	6/24/2017	16007	16175	40	Marcellus
10	6/24/2017	15808	15976	40	Marcellus
11	6/25/2017	15608	15776	40	Marcellus
12	6/25/2017	15409	15577	40	Marcellus
13	6/25/2017	15209	15377	40	Marcellus
14	6/25/2017	15010	15178	40	Marcellus
15	6/26/2017	14810	14978	40	Marcellus
16	6/26/2017	14611	14779	40	Marcellus
17	6/26/2017	14411	14579	40	Marcellus
18	6/26/2017	14212	14380	40	Marcellus
19	6/27/2017	14012	14180	40	Marcellus
20	6/27/2017	13813	13981	40	Marcellus
21	6/27/2017	13613	13781	40	Marcellus
22	6/27/2017	13414	13582	40	Marcellus
23	6/27/2017	13214	13382	40	Marcellus
24	6/28/2017	13015	13183	40	Marcellus
25	6/28/2017	12815	12984	40	Marcellus
26	6/28/2017	12616	12784	40	Marcellus
27	6/28/2017	12416	12585	40	Marcellus
28	6/29/2017	12217	12385	40	Marcellus
29	6/29/2017	12017	12186	40	Marcellus
30	6/29/2017	11818	11986	40	Marcellus
31	6/29/2017	11618	11787	40	Marcellus
32	6/29/2017	11419	11587	40	Marcellus
33	6/30/2017	11219	11388	40	Marcellus
34	6/30/2017	11020	11188	40	Marcellus
35	6/30/2017	10820	10989	40	Marcellus
36	6/30/2017	10621	10789	40	Marcellus
37	7/1/2017	10422	10590	40	Marcellus
38	7/1/2017	10222	10390	40	Marcellus
39	7/1/2017	10023	10191	40	Marcellus
40	7/1/2017	9823	9991	40	Marcellus
41	7/1/2017	9624	9792	40	Marcellus
42	7/2/2017	9424	9592	40	Marcellus
43	7/2/2017	9225	9393	40	Marcellus
44	7/2/2017	9025	9193	40	Marcellus
45	7/2/2017	8826	8994	40	Marcellus
46	7/2/2017	8626	8794	40	Marcellus
47	7/3/2017	8427	8595	40	Marcellus
48	7/3/2017	8227	8395	40	Marcellus
49	7/3/2017	8028	8196	40	Marcellus
50	7/3/2017	7828	7996	40	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	6/22/2017	65.1	7650	5210	3780	405600	10645	N/A
2	6/22/2017	63.3	7602	5668	4485	404970	9042	N/A
3	6/22/2017	69.8	8155	7191	4674	405500	8845	N/A
4	6/23/2017	70.9	8185	6344	5232	405330	11678	N/A
5	6/23/2017	65.8	7896	6584	4660	404760	8616	N/A
6	6/23/2017	73.1	8356	6384	4821	405750	8639	N/A
7	6/24/2017	75.0	8503	6577	5161	404000	8612	N/A
8	6/24/2017	75.8	8467	6294	4835	405060	8637	N/A
9	6/24/2017	71.8	8142	6584	4860	404120	11898	N/A
10	6/24/2017	72.0	8225	6663	5068	407500	10052	N/A
11	6/25/2017	74.0	8265	6455	5093	404000	8693	N/A
12	6/25/2017	70.2	8353	6455	5150	405130	8582	N/A
13	6/25/2017	69.5	8094	6287	5107	405700	8557	N/A
14	6/25/2017	74.7	8337	6877	5028	405410	8569	N/A
15	6/26/2017	74.0	8252	6738	5178	403500	8574	N/A
16	6/26/2017	72.7	8216	6527	5250	405900	8597	N/A
17	6/26/2017	74.6	8191	6487	4917	405750	8548	N/A
18	6/26/2017	74.3	7895	6276	4749	408050	8569	N/A
19	6/27/2017	76.0	8113	6695	5164	405500	8546	N/A
20	6/27/2017	73.1	8230	6638	5261	405300	8538	N/A
21	6/27/2017	74.4	8311	7010	5025	405900	8484	N/A
22	6/27/2017	76.4	8124	6133	4860	406400	8560	N/A
23	6/27/2017	76.0	8030	6391	5018	406000	8513	N/A
24	6/28/2017	76.0	8031	6337	5164	407000	8463	N/A
25	6/28/2017	69.9	8133	6809	5143	405700	8394	N/A
26	6/28/2017	70.9	8247	6984	5393	405600	8384	N/A
27	6/28/2017	76.1	8040	6673	5511	405660	8405	N/A
28	6/29/2017	76.0	8092	6920	5046	403500	8606	N/A
29	6/29/2017	69.7	8212	7145	4953	405300	8426	N/A
30	6/29/2017	71.1	8245	6920	5039	405100	8387	N/A
31	6/29/2017	72.6	8216	7020	4914	405550	8344	N/A
32	6/29/2017	72.0	8290	6952	4671	404500	9811	N/A
33	6/30/2017	74.0	8126	6663	5150	405000	8431	N/A
34	6/30/2017	72.0	8267	7042	4717	404700	8355	N/A
35	6/30/2017	75.3	8071	6766	5254	405400	8354	N/A
36	6/30/2017	73.1	7872	6419	5157	405300	8404	N/A
37	7/1/2017	74.0	8009	6087	4828	405500	9501	N/A
38	7/1/2017	75.5	7598	6895	5111	405600	8305	N/A
39	7/1/2017	75.1	7737	6849	4821	405200	8283	N/A
40	7/1/2017	71.3	7773	6734	5082	405700	8286	N/A
41	7/1/2017	70.0	7290	6469	4656	404000	8298	N/A
42	7/2/2017	74.0	7731	6309	5093	404500	8664	N/A
43	7/2/2017	69.9	8231	6648	5264	405500	8268	N/A
44	7/2/2017	73.9	8143	6670	4427	405750	9517	N/A
45	7/2/2017	74.8	7890	6999	5078	406150	8241	N/A
46	7/2/2017	76.0	7907	6655	5025	405500	8195	N/A
47	7/3/2017	71.0	8126	6849	5296	407000	8286	N/A
48	7/3/2017	74.6	8028	7238	4846	405400	8203	N/A
49	7/3/2017	76.4	7888	7178	5615	380500	8905	N/A
50	7/3/2017	71.7	7552	6520	4138	410720	9328	N/A
<b>AVG=</b>		<b>72.8</b>	<b>8067</b>	<b>6,624</b>	<b>4,975</b>	<b>20,250,460</b>	<b>439,039</b>	<b>TOTAL</b>

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**EXHIBIT 3**

<b>LITHOLOGY/ FORMATION</b>	<b>TOP DEPTH (TVD) From Surface</b>	<b>BOTTOM DEPTH (TVD) From Surface</b>	<b>TOP DEPTH (MD) From Surface</b>	<b>BOTTOM DEPTH (MD) From Surface</b>
Fresh Water	32'	N/A	32'	N/A
Fresh Water	77'	N/A	77'	N/A
Fresh Water	112'	N/A	112'	N/A
Sandstone	est. 0	77	est. 0	77
Shale	est. 77	632	est. 77	632
Sandstone	est. 632	697	est. 632	697
Shale and Limestone	est. 697	877	est. 697	877
Sandstone	est. 877	907	est. 877	907
Shale	est. 907	1037	est. 907	1037
Sandstone and Coal	est. 1037	1087	est. 1037	1087
Shale	est. 1087	1237	est. 1087	1237
Sandstone	est. 1237	1267	est. 1237	1267
Shale	est. 1267	1767	est. 1267	1767
Sandstone	est. 1767	1897	est. 1767	1897
Shale	est. 1897	1957	est. 1897	1957
Sandstone and Coal	est. 1957	1987	est. 1957	1987
Shale	est.1987	2077	est.1987	2077
Sandstone	est. 2077	2147	est. 2077	2147
Shale	est. 2147	2395	est. 2147	2395
Big Lime	2395	2564	2395	2564
Big Injun	2564	2792	2564	2792
Gantz Sand	2792	3004	2792	3004
Fifty Foot Sandstone	3004	3187	3004	3187
Gordon	3187	3536	3187	3536
Fifth Sandstone	3536	3612	3536	3612
Bayard	3612	3828	3612	3828
Warren	3828	4146	3828	4146
Speechley	4146	4346	4146	4346
Baltown	4346	7865	4346	4872
Bradford	7865	5345	4872	5367
Benson	5345	5606	5367	5655
Alexander	5606	5845	5655	5925
Elk	5845	6365	5925	6507
Rhinestreet	6365	6903	6507	7103
Sycamore	6903	7074	7103	7295
Middlesex	7074	7228	7295	7483
Burkett	7228	7257	7483	7524
Tully	7257	7383	7524	7785
Marcellus	7383	NA	7785	NA

\*Please note Antero determines formation tops based on mud logs that are only run on one well on a multi-well pad. The measured depth (MD) data on subsequent wells may be slightly different due to the well's unique departure.

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**Nestor Unit 1H**  
**Doddridge County WV**  
 Northing: 14238393.78  
 Easting: 1745440.54  
 As Drilled



To convert Magnetic North to Grid, Subtract 8.79°  
 To convert True North to Grid, Subtract 0.23°

Azimuths to Grid North  
 True North: -0.23°  
 Magnetic North: -8.79°

Magnetic Field  
 Strength: 52262.6snT  
 Dip Angle: 66.75°  
 Date: 3/20/2014  
 Model: IGRF2010

WELL DETAILS Nestor Unit 1H						
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Ground Level
0.0	0.0	14238393.78	1745440.54	39° 12' 33.830 N	80° 37' 45.241 W	1407.0

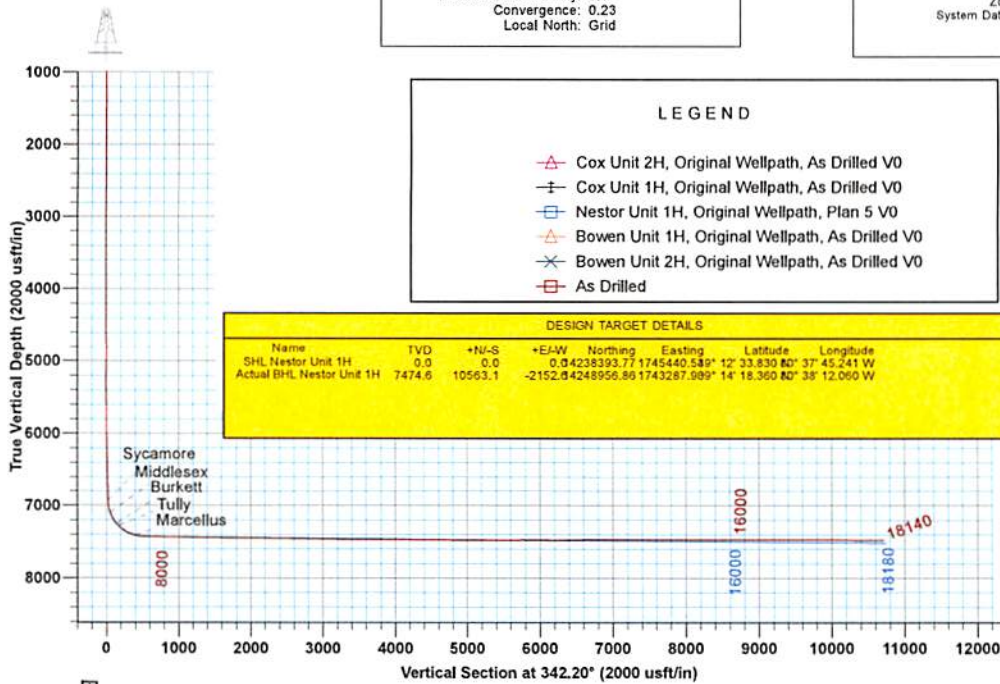
Genie Lightfoot  
 11:24, November 21 2014

Scientific Drilling  
 421 South Eagle Lane  
 Oklahoma City, OK 73128

SITE DETAILS: Trent Pad:Bowen/Cox/Life/Baker/Nestor	
Site Center: Cox Unit 2H	
Site Centre Northing: 14238330.29	
Easting: 1745410.61	
Positional Uncertainty: 0.0	
Convergence: 0.23	
Local North: Grid	

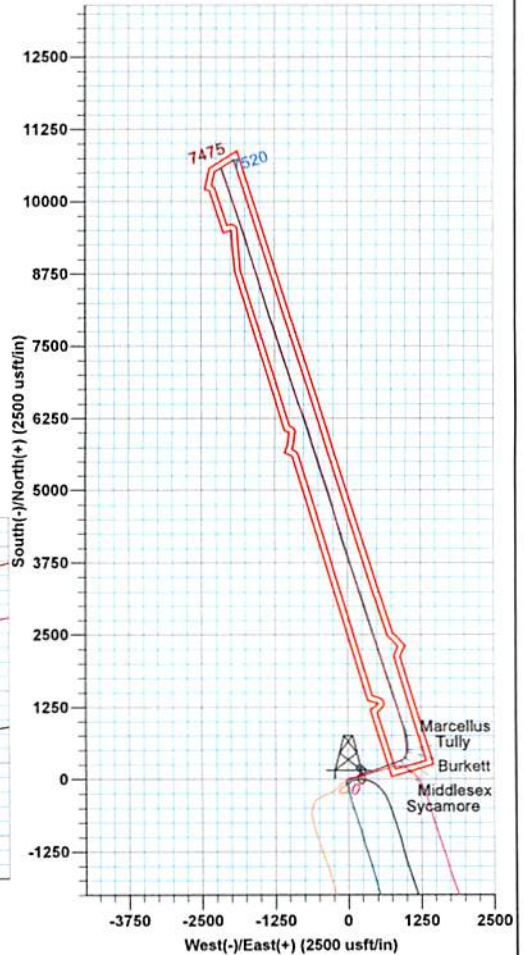
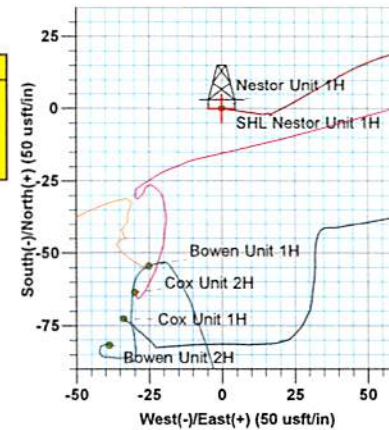
PROJECT DETAILS: Doddridge County WV	
Geodetic System: Universal Transverse Mercator (US Survey Feet)	
Datum: NAD 1927 (NADCON CONUS)	
Ellipsoid: Clarke 1866	
Zone: Zone 17N (84 W to 78 W)	
System Datum: Mean Sea Level	

P525: Nestor 1H 1407 GL + 19 KB @ 1426.0usft  
 Gr. 1407.0



LEGEND	
△	Cox Unit 2H, Original Wellpath, As Drilled V0
+	Cox Unit 1H, Original Wellpath, As Drilled V0
□	Nestor Unit 1H, Original Wellpath, Plan 5 V0
△	Bowen Unit 1H, Original Wellpath, As Drilled V0
×	Bowen Unit 2H, Original Wellpath, As Drilled V0
■	As Drilled

DESIGN TARGET DETAILS							
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
SHL Nestor Unit 1H	0.0	0.0	0.0	14238393.77	1745440.54	39° 12' 33.830 N	80° 37' 45.241 W
Actual BHL Nestor Unit 1H	7474.6	10563.1	-2152.6	4248956.86	1743287.99	14° 18.360 N	35° 12.060 W



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Survey Report - Geographic



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Nestor Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	P525: Nestor 1H 1407 GL + 19 KB @ 1426.0usft
<b>Site:</b>	Trent Pad: Bowen/Cox/Life/Baker/Nestor	<b>MD Reference:</b>	P525: Nestor 1H 1407 GL + 19 KB @ 1426.0usft
<b>Well:</b>	Nestor Unit 1H	<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>	Trent Pad: Bowen/Cox/Life/Baker/Nestor		
-------------	--	--	--

<b>Site Position:</b>		<b>Northing:</b>	14,238,330.29 usft	<b>Latitude:</b>	39° 12' 33.204 N
<b>From:</b>	Map	<b>Easting:</b>	1,745,410.61 usft	<b>Longitude:</b>	80° 37' 45.625 W
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	0.23 °

<b>Well</b>	Nestor Unit 1H, Marcellus		
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<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	14,238,393.77 usft	<b>Latitude:</b>	39° 12' 33.830 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	1,745,440.54 usft	<b>Longitude:</b>	80° 37' 45.241 W
<b>Position Uncertainty</b>		2.0 usft	<b>Wellhead Elevation:</b>	1,426.0 usft	<b>Ground Level:</b>	1,407.0 usft

<b>Wellbore</b>	Original Wellpath		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/20/2014	-8.55	66.75	52,263

<b>Design</b>	As Drilled		
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<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	342.20

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Survey Program	Date	11/10/2014		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
106.0	7,226.0	Survey #6 Final Gyro (Original Wellpath)	SDI Standard Keeper	Scientific Drilling Intl. Standard Wireline Keeper
7,271.0	18,140.0	Survey #7 SDI MWD (Original Wellpath)	SDI MWD	Scientific Drilling Intl. MWD - Standard ver 1.0.1

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<b>Survey</b>										
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Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	14,238,393.77	1,745,440.54	39° 12' 33.830 N	80° 37' 45.241 W
106.0	0.03	98.50	106.0	0.0	0.0	14,238,393.77	1,745,440.57	39° 12' 33.830 N	80° 37' 45.240 W
206.0	0.06	98.50	206.0	0.0	0.1	14,238,393.76	1,745,440.65	39° 12' 33.830 N	80° 37' 45.239 W
306.0	0.09	98.50	306.0	0.0	0.2	14,238,393.74	1,745,440.78	39° 12' 33.830 N	80° 37' 45.238 W
406.0	0.12	98.50	406.0	-0.1	0.4	14,238,393.71	1,745,440.96	39° 12' 33.830 N	80° 37' 45.235 W
506.0	0.14	98.50	506.0	-0.1	0.6	14,238,393.68	1,745,441.18	39° 12' 33.829 N	80° 37' 45.233 W
606.0	0.17	98.50	606.0	-0.1	0.9	14,238,393.64	1,745,441.45	39° 12' 33.829 N	80° 37' 45.229 W
706.0	0.20	98.50	706.0	-0.2	1.2	14,238,393.59	1,745,441.77	39° 12' 33.828 N	80° 37' 45.225 W
806.0	0.23	98.50	806.0	-0.2	1.6	14,238,393.54	1,745,442.14	39° 12' 33.828 N	80° 37' 45.220 W



<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Nestor Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	P525: Nestor 1H 1407 GL + 19 KB @ 1426.0usft
<b>Site:</b>	Trent Pad:Bowen/Cox/Life/Baker/Nestor	<b>MD Reference:</b>	P525: Nestor 1H 1407 GL + 19 KB @ 1426.0usft
<b>Well:</b>	Nestor Unit 1H	<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**

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
6,206.0	26.45	70.24	6,096.1	176.7	533.9	14,238,570.50	1,745,974.40	39° 12' 35.556 N	80° 37' 38.447 W
6,306.0	25.97	69.14	6,185.8	192.0	575.3	14,238,585.82	1,746,015.82	39° 12' 35.706 N	80° 37' 37.920 W
6,406.4	25.46	69.02	6,276.2	207.6	616.0	14,238,601.38	1,746,056.51	39° 12' 35.858 N	80° 37' 37.402 W
6,463.0	25.45	68.40	6,327.3	216.4	638.6	14,238,610.21	1,746,079.18	39° 12' 35.944 N	80° 37' 37.113 W
6,553.0	25.03	68.63	6,408.7	230.5	674.3	14,238,624.27	1,746,114.89	39° 12' 36.082 N	80° 37' 36.659 W
6,643.0	25.58	68.09	6,490.1	244.7	710.1	14,238,638.46	1,746,150.64	39° 12' 36.221 N	80° 37' 36.203 W
6,732.0	24.95	68.68	6,570.6	258.7	745.4	14,238,652.45	1,746,185.96	39° 12' 36.358 N	80° 37' 35.754 W
6,822.0	24.80	69.15	6,652.2	272.3	780.7	14,238,666.07	1,746,221.28	39° 12' 36.491 N	80° 37' 35.304 W
6,912.0	24.99	70.25	6,733.9	285.4	816.3	14,238,679.21	1,746,256.81	39° 12' 36.619 N	80° 37' 34.852 W
7,002.0	25.69	69.61	6,815.2	298.7	852.4	14,238,692.43	1,746,292.99	39° 12' 36.749 N	80° 37' 34.392 W
7,091.0	27.33	69.27	6,894.9	312.6	889.6	14,238,706.39	1,746,330.18	39° 12' 36.885 N	80° 37' 33.918 W
7,126.0	27.00	69.13	6,926.0	318.3	904.6	14,238,712.06	1,746,345.12	39° 12' 36.941 N	80° 37' 33.728 W
<b>Sycamore</b>									
7,136.0	26.91	69.09	6,934.9	319.9	908.8	14,238,713.68	1,746,349.36	39° 12' 36.956 N	80° 37' 33.674 W
7,181.0	26.70	63.82	6,975.1	328.0	927.4	14,238,721.77	1,746,367.94	39° 12' 37.036 N	80° 37' 33.437 W
7,226.0	27.07	50.91	7,015.3	338.9	944.4	14,238,732.70	1,746,384.98	39° 12' 37.143 N	80° 37' 33.220 W
7,271.0	27.83	40.70	7,055.2	353.4	959.2	14,238,747.13	1,746,399.78	39° 12' 37.285 N	80° 37' 33.031 W
7,315.0	29.20	30.93	7,093.9	370.4	971.5	14,238,764.13	1,746,412.00	39° 12' 37.453 N	80° 37' 32.875 W
7,318.0	29.29	30.49	7,096.5	371.6	972.2	14,238,765.39	1,746,412.75	39° 12' 37.465 N	80° 37' 32.866 W
<b>Middlesex</b>									
7,360.0	30.76	24.65	7,132.9	390.2	981.9	14,238,784.01	1,746,422.45	39° 12' 37.649 N	80° 37' 32.741 W
7,405.0	33.94	16.96	7,170.9	412.7	990.4	14,238,806.50	1,746,430.92	39° 12' 37.871 N	80° 37' 32.633 W
7,450.0	37.20	11.31	7,207.5	438.1	996.7	14,238,831.87	1,746,437.25	39° 12' 38.121 N	80° 37' 32.551 W
7,495.0	40.98	5.55	7,242.5	466.1	1,000.8	14,238,859.92	1,746,441.35	39° 12' 38.399 N	80° 37' 32.497 W
7,506.0	42.19	4.68	7,250.7	473.4	1,001.5	14,238,867.19	1,746,442.00	39° 12' 38.470 N	80° 37' 32.489 W
<b>Burkett</b>									
7,539.0	45.86	2.29	7,274.4	496.3	1,002.8	14,238,890.07	1,746,443.38	39° 12' 38.697 N	80° 37' 32.470 W
7,547.0	46.64	1.81	7,279.9	502.1	1,003.0	14,238,895.85	1,746,443.59	39° 12' 38.754 N	80° 37' 32.467 W
<b>Tully</b>									
7,584.0	50.27	359.73	7,304.5	529.8	1,003.4	14,238,923.53	1,746,443.94	39° 12' 39.027 N	80° 37' 32.461 W
7,629.0	54.86	357.75	7,331.8	565.5	1,002.6	14,238,959.24	1,746,443.14	39° 12' 39.381 N	80° 37' 32.469 W
7,674.0	60.38	355.96	7,355.9	603.4	1,000.5	14,238,997.17	1,746,441.04	39° 12' 39.756 N	80° 37' 32.494 W
7,719.0	66.02	354.87	7,376.2	643.4	997.3	14,239,037.19	1,746,437.82	39° 12' 40.152 N	80° 37' 32.533 W
7,764.0	70.37	354.43	7,392.9	685.0	993.4	14,239,078.78	1,746,433.92	39° 12' 40.563 N	80° 37' 32.580 W
7,808.0	74.31	352.72	7,406.3	726.7	988.7	14,239,120.43	1,746,429.22	39° 12' 40.975 N	80° 37' 32.638 W
<b>Marcellus</b>									
7,853.0	78.18	350.43	7,417.0	769.9	982.3	14,239,163.65	1,746,422.82	39° 12' 41.403 N	80° 37' 32.717 W
7,898.0	82.80	347.43	7,424.4	813.4	973.7	14,239,207.19	1,746,414.29	39° 12' 41.833 N	80° 37' 32.823 W
7,943.0	85.90	344.14	7,428.8	856.8	962.7	14,239,250.59	1,746,403.29	39° 12' 42.263 N	80° 37' 32.960 W
7,965.0	87.05	343.57	7,430.2	877.9	956.6	14,239,271.68	1,746,397.19	39° 12' 42.472 N	80° 37' 33.037 W
8,054.0	89.52	342.96	7,432.8	963.1	931.0	14,239,356.87	1,746,371.57	39° 12' 43.315 N	80° 37' 33.358 W
8,144.0	89.96	343.05	7,433.2	1,049.2	904.7	14,239,442.94	1,746,345.27	39° 12' 44.167 N	80° 37' 33.688 W
8,233.0	89.87	342.61	7,433.4	1,134.2	878.5	14,239,527.97	1,746,318.99	39° 12' 45.009 N	80° 37' 34.017 W
8,323.0	90.40	342.43	7,433.2	1,220.0	851.4	14,239,613.81	1,746,291.96	39° 12' 45.859 N	80° 37' 34.356 W
8,413.0	87.93	341.99	7,434.5	1,305.7	823.9	14,239,699.49	1,746,264.47	39° 12' 46.707 N	80° 37' 34.701 W
8,502.0	87.41	341.90	7,438.1	1,390.3	796.4	14,239,784.04	1,746,236.91	39° 12' 47.544 N	80° 37' 35.047 W
8,592.0	89.08	341.99	7,440.8	1,475.8	768.5	14,239,869.57	1,746,209.03	39° 12' 48.391 N	80° 37' 35.397 W
8,682.0	89.43	341.90	7,442.0	1,561.4	740.6	14,239,955.13	1,746,181.14	39° 12' 49.238 N	80° 37' 35.747 W
8,772.0	89.69	341.82	7,442.7	1,646.9	712.6	14,240,040.65	1,746,153.12	39° 12' 50.085 N	80° 37' 36.099 W
8,861.0	89.52	342.26	7,443.3	1,731.5	685.1	14,240,125.31	1,746,125.67	39° 12' 50.923 N	80° 37' 36.443 W
8,951.0	89.60	342.61	7,444.0	1,817.3	658.0	14,240,211.11	1,746,098.51	39° 12' 51.773 N	80° 37' 36.784 W
9,041.0	90.04	342.17	7,444.3	1,903.1	630.7	14,240,296.89	1,746,071.29	39° 12' 52.622 N	80° 37' 37.125 W

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<b>Company:</b>	Antero Resources	<b>Local Co-ordinate Reference:</b>	Well Nestor Unit 1H
<b>Project:</b>	Doddridge County WV	<b>TVD Reference:</b>	P525: Nestor 1H 1407 GL + 19 KB @ 1426.0usft
<b>Site:</b>	Trent Pad: Bowen/Cox/Life/Baker/Nestor	<b>MD Reference:</b>	P525: Nestor 1H 1407 GL + 19 KB @ 1426.0usft
<b>Well:</b>	Nestor Unit 1H	<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

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL Nestor Unit 1H - hit/miss target - Shape - actual wellpath hits target center - Point	0.00	0.00	0.0	0.0	0.0	14,238,393.77	1,745,440.54	39° 12' 33.830 N	80° 37' 45.241 W
Actual BHL Nestor Ur - actual wellpath hits target center - Point	0.00	0.00	7,474.6	10,563.1	-2,152.6	14,248,956.86	1,743,287.90	39° 14' 18.360 N	80° 38' 12.060 W

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
7,126.0	6,926.0	318.3	904.6	Sycamore	
7,318.0	7,096.5	371.6	972.2	Middlesex	
7,506.0	7,250.7	473.4	1,001.5	Burkett	
7,547.0	7,279.9	502.1	1,003.0	Tully	
7,808.0	7,406.3	726.7	988.7	Marcellus	

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

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/22/2017
Job End Date:	7/3/2017
State:	West Virginia
County:	Doddridge
API Number:	47-017-06454-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Nestor 1H
Latitude:	39.20939722
Longitude:	-80.62923056
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,475
Total Base Water Volume (gal):	18,993,851
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	88.51381	
Sand	U.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	11.31532	
HCL Acid (12.6%-17.5%)	U.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.40000	0.05858	
			Hydrogen Chloride	7647-01-0	17.50000	0.01362	
LGC-15	U.S. Well Services, LLC	Gelling Agents	Guar Gum	9000-30-0	50.00000	0.02524	
			Petroleum Distillates	64742-47-8	60.00000	0.02390	
			Suspending agent (solid)	14808-60-7	3.00000	0.00386	
			Surfactant	68439-51-0	3.00000	0.00151	
WFRA-405	U.S. Well Services, LLC	Friction Reducer	2-Propenoic acid, polymer with 2 propenamide	9003-06-9	30.00000	0.01968	
			Hydrated light distillate (petroleum)	64742-47-8	30.00000	0.01584	

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Bioclear 2000	U.S. Well Services, LLC	Anti-Bacterial Agent					
			2,2-dibromo-3-nitrilopropionamide	10222-01-2	20.00000	0.00430	
			Deionized Water	7732-18-5	28.00000	0.00246	
AP One	U.S. Well Services, LLC	Gel Breakers					
			Ammonium Persulfate	7727-54-0	100.00000	0.00104	
SI-1200s	U.S. Well Services, LLC	Scale Inhibitor					
			Alkyl Phosphonic Acid	Proprietary	5.00000	0.00064	
			Ammonia	7664-41-7	0.50000	0.00010	
AI-303	U.S. Well Services, LLC	Acid Corrosion Inhibitors					
			Ethylene glycol	107-21-1	40.00000	0.00004	
			Cinnamaldehyde	104-55-2	20.00000	0.00002	
			Formic acid	64-18-6	20.00000	0.00002	
			Butyl cellosolve	111-76-2	20.00000	0.00001	
			Polyether	60828-78-6	10.00000	0.00001	
			Acetophenone,thiourea,formaldehyde polymer	68527-49-1	5.00000	0.00000	

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°15'00" | -1,201'

LATITUDE 39°15'00"

LONGITUDE 80°37'30"

4,214' TO BOTTOM HOLE

1,478'

LONGITUDE 80°37'30"

COUNTY NAME

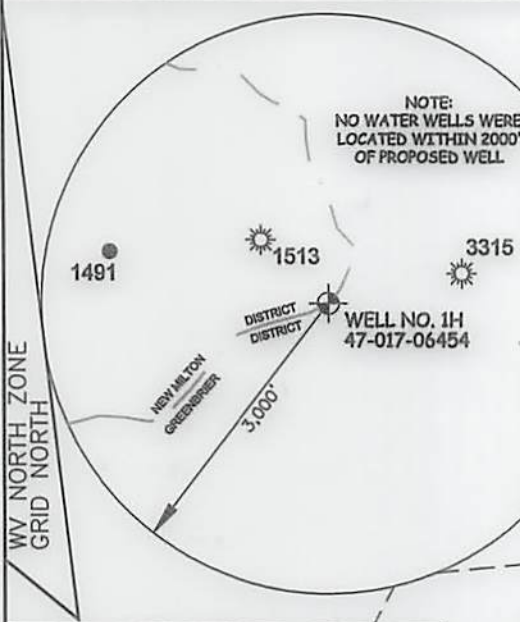
PERMIT

**Antero Resources Corporation**  
**Well No. Nestor Unit 1H**  
**47-017-06454 (AS DRILLED)**

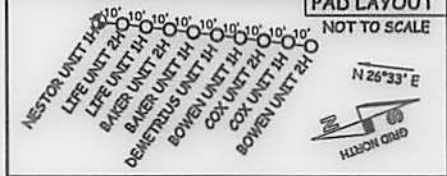
**AS DRILLED DATA:**  
**WELL 1H TOP HOLE INFORMATION:**  
N: 260,387ft E: 1,680,022ft  
LAT: 39°12'33.82" LON: 80°37'45.25"  
**BOTTOM HOLE INFORMATION:**  
N: 270,989ft E: 1,678,045ft  
LAT: 39°14'18.35" LON: 80°38'12.07"  
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE.

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: 4,340,089m E: 532,026m  
**BOTTOM HOLE INFORMATION:**  
N: 4,343,309m E: 531,369m



- 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.
  6. THE INTERIOR BOUNDARY LINES OF THE DAVID E. GADDIS ET AL TRACTS (TM 6 PARCELS 13, 13.1 & 13.2) SHOWN HEREON IN BOLD ARE BASED ON CURRENT DEEDS OF RECORD ONLY. THE SURFACE OWNER REFUSED ACCESS ONTO HIS PROPERTY TO OBTAIN THE NECESSARY INFORMATION TO VERIFY THE LOCATION OF THE BOUNDARY. THESE LINES ARE SHOWN FOR MAPPING PURPOSES ONLY.



JOB # 13-022WA  
DRAWING # NESTOR1HAD  
SCALE 1" = 1000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS  
STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
DIVISION OF OIL AND GAS

**LEGEND**

- Surface Owner Boundary Lines +/-
- Interior Surface Tracts +/-
- Proposed Well Path
- As Drilled Well Path

THOMAS SUMMERS P.S. 2109  
DATE 11/01/17  
OPERATOR'S WELL# NESTOR UNIT #1H  
API WELL # 47 - 017 - 06454  
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.



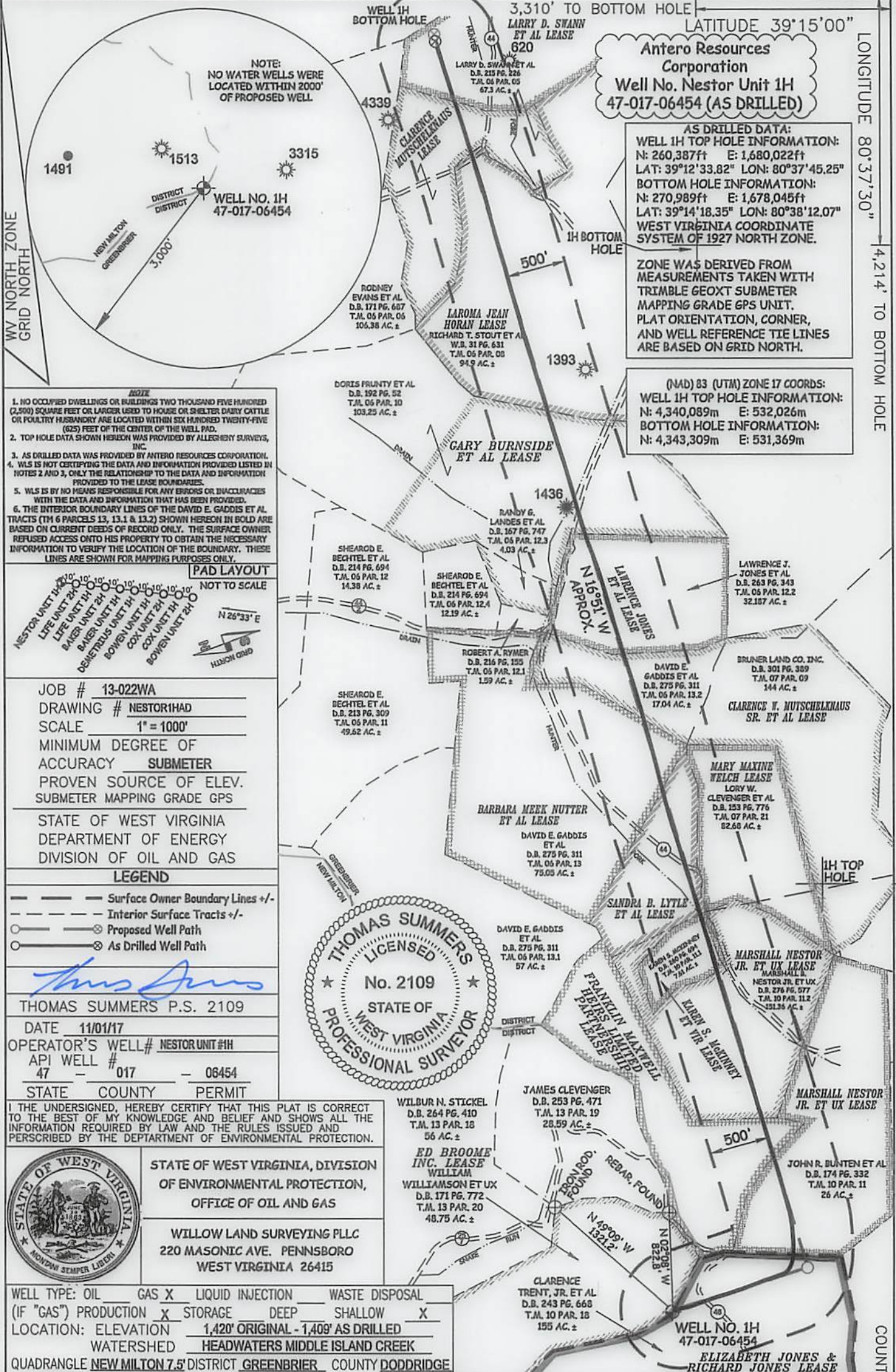
STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WILLOW LAND SURVEYING PLLC  
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415



WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
LOCATION: ELEVATION 1,420' ORIGINAL - 1,409' AS DRILLED  
WATERSHED HEADWATERS MIDDLE ISLAND CREEK  
QUADRANGLE NEW MILTON 7.5' DISTRICT GREENBRIER COUNTY DODDRIDGE

SURFACE OWNER CLARENCE TRENT, JR. ET AL ACREAGE 155 ACRES +/-  
OIL & GAS ROYALTY OWNER ELIZABETH JONES & RICHARD JONES; MARSHALL NESTOR, JR. ET UX; FRANKLIN MAXWELL PARTNERSHIP; MARSHALL NESTOR, JR. ET UX; VARGIS S. MCKINNEY ET VIR; SANDRA BAILEY LYTLE ET AL; BARBARA M. NUTTER ET AL; CLARENCE W. MUTSCHELKNAUS SR. ET AL; LAWRENCE J. JONES ET AL; GARY BURNSIDE ET AL; LAROMA JEAN HORAN; CLARENCE MUTSCHELKNAUS; LARRY D. SWANN ET AL. LEASE ACREAGE: 155 AC +/-; 50 AC +/-; 44.8 AC +/-; 42.88 AC +/-; 7.61 AC +/-; 19.75 AC +/-; 75.05 AC +/-; 109 AC +/-; 32.18 AC +/-; 64 AC +/-; 94.9 AC +/-; 31 AC +/-; 35.75 AC +/-

PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_  
PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) (X) AS DRILLED  
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 7,475' TVD 18,140' MD  
WELL OPERATOR ANTERO RESOURCES CORPORATION DESIGNATED AGENT DIANNA STAMPER  
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD  
FORM WW-6 DENVER, CO 80202 CHARLESTON, WV 25313



LATITUDE 39°15'00" 1,201'

LATITUDE 39°15'00"

LONGITUDE 80°37'30"

4,214' TO BOTTOM HOLE

14,789'

LONGITUDE 80°37'30"

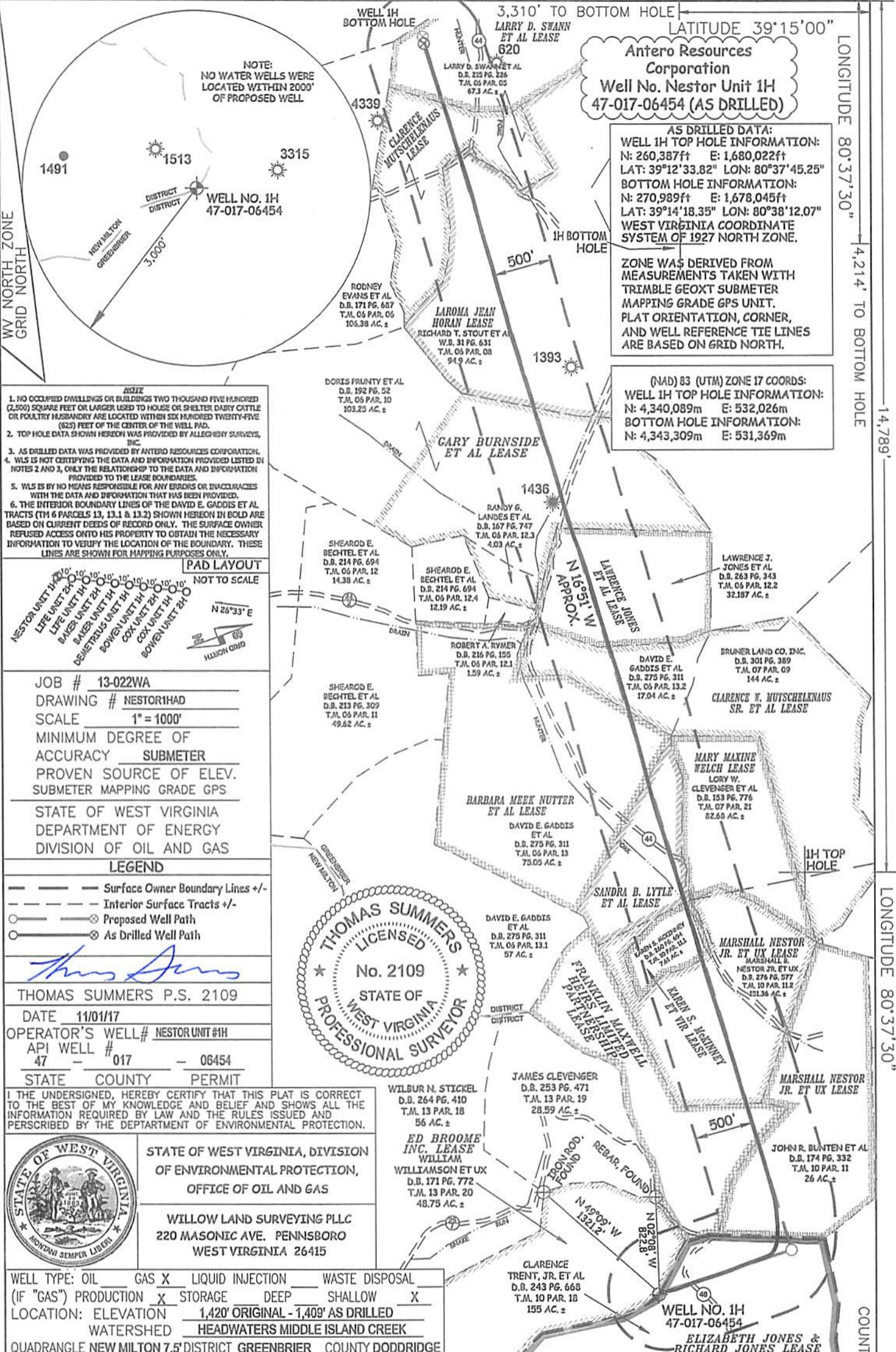
COUNTY NAME

Antero Resources Corporation  
Well No. Nestor Unit 1H  
47-017-06454 (AS DRILLED)

AS DRILLED DATA:  
WELL 1H TOP HOLE INFORMATION:  
N: 260,387ft E: 1,680,022ft  
LAT: 39°12'33.82" LON: 80°37'45.25"  
BOTTOM HOLE INFORMATION:  
N: 270,989ft E: 1,678,045ft  
LAT: 39°14'18.35" LON: 80°38'12.07"  
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: 4,340,089m E: 532,026m  
BOTTOM HOLE INFORMATION:  
N: 4,343,309m E: 531,369m



NOTE:  
NO WATER WELLS WERE LOCATED WITHIN 2000' OF PROPOSED WELL

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.
6. THE INTERIOR BOUNDARY LINES OF THE DAVID E. GADDIS ET AL TRACTS (TM 6 PARCELS 13, 13.1 & 13.2) SHOWN HEREON IN BOLD ARE BASED ON CURRENT DEEDS OF RECORD ONLY. THE SURFACE OWNER REFUSED ACCESS ONTO HIS PROPERTY TO OBTAIN THE NECESSARY INFORMATION TO VERIFY THE LOCATION OF THE BOUNDARY. THESE LINES ARE SHOWN FOR MAPPING PURPOSES ONLY.

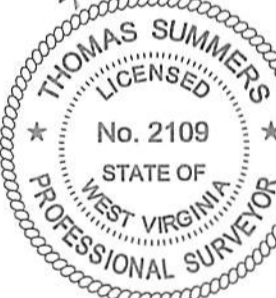
PAD LAYOUT NOT TO SCALE

JOB # 13-022WA  
DRAWING # NESTOR1HAD  
SCALE 1" = 1000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS  
STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY  
DIVISION OF OIL AND GAS

LEGEND

- Surface Owner Boundary Lines +/-
- - - Interior Surface Tracts +/-
- Proposed Well Path
- ⊗ As Drilled Well Path

THOMAS SUMMERS P.S. 2109  
DATE 11/01/17  
OPERATOR'S WELL# NESTOR UNIT #1H  
API WELL # 47 - 017 - 06454  
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

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
(IF "GAS") PRODUCTION  STORAGE  DEEP  SHALLOW   
LOCATION: ELEVATION 1,420' ORIGINAL - 1,409' AS DRILLED  
WATERSHED HEADWATERS MIDDLE ISLAND CREEK  
QUADRANGLE NEW MILTON 7.5' DISTRICT GREENBRIER COUNTY DODDRIDGE

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