

APPROVED

WR-35
Rev. 8/23/13

Page ___ of ___

NAME: *Antero*

DATE: 7/13/16

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

API 47-017-06613 County Doddridge District Central
Quad West Union 7.5' Pad Name Diane Davis Pad Field/Pool Name -----
Farm name Davis, Jonathan L., et al Well Number Hiley 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 4350536m Easting 515287m
Landing Point of Curve Northing 4350806.30m Easting 515330.52m
Bottom Hole Northing 4352541m Easting 514622m

Elevation (ft) 824' 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 10/31/2014 Date drilling commenced 11/1/2014 Date drilling ceased 2/24/2015
Date completion activities began 1/25/2016 Date completion activities ceased 3/28/2016
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 77' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1367' Void(s) encountered (Y/N) depths No
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

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Ax 07/21/16

API 47- 017 - 06613 Farm name Davis, Jonathan L., et al Well number Hiley 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	30"	20"	40'	New	94# H-40	N/A	Y
Surface	17-1/2"	13-3/8"	355'	New	48# H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2567'	New	36# J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	13185'	New	20# P-110	N/A	Y
Tubing		2-3/8"	6501'		4.7# N-80		
Packer type and depth set		N/A					

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Class A	111 sx	15.6	1.18	38	0'	8 Hrs.
Surface	Class A	422 sx	15.6	1.18	247	0'	8 Hrs.
Coal							
Intermediate 1	Class A	948 sx	15.6	1.18	804	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	1173 sx (Lead) 899 sx (Tail)	14.5 (Lead), 15.2 (Tail)	1.3 (Lead), 1.86 (Tail)	2547	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 13185' MD, 6345' TVD (BHL); 6377' TVD (Deepest Point Drilled) Loggers TD (ft) 13139' MD
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

Kick off depth (ft) 5594'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Shearer Unit 2H API #47-017-06359). Please reference the wireline logs submitted with Form WR-35 for Shearer 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

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 - 06613 Farm name Davis, Jonathan L., et al Well number Hiley Unit 1H

PERFORATION RECORD

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

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
*PLEASE SEE ATTACHED EXHIBIT 2								

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS		
<u>Marcellus</u>	<u>6315' (TOP)</u>	<u>TVD</u>	<u>6598' (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 3000 psi Bottom Hole --- psi DURATION OF TEST --- hrs
 OPEN FLOW Gas 9659 mcfpd Oil 24 bpd NGL --- bpd Water 1 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 ₂ S, ETC)
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***PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

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

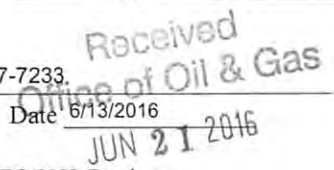
Logging Company Rush Wellsite Services
 Address 600 Alpha Drive City Canonsburg State PA Zip 15317

Cementing Company Allied Oil & Gas Services, LLC
 Address 1036 East Main Street City Bridgeport State WV Zip 26330

Stimulating Company US Well Services
 Address 533 Industrial Park Dr. City Jane Lew State WV Zip 26378

Please insert additional pages as applicable.

Completed by Kara Quackenbush Telephone 303-357-7233
 Signature *Kara Quackenbush* Title Permitting Agent Date 6/13/2016



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

07/22/2016

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	25-Jan-16	12,925	13,090	60	Marcellus
2	17-Feb-16	12,729	12,894	60	Marcellus
3	17-Feb-16	12,533	12,698	60	Marcellus
4	17-Feb-16	12,336	12,502	60	Marcellus
5	18-Feb-16	12,140	12,306	60	Marcellus
6	18-Feb-16	11,944	12,109	60	Marcellus
7	18-Feb-16	11,748	11,913	60	Marcellus
8	19-Feb-16	11,552	11,717	60	Marcellus
9	19-Feb-16	11,355	11,521	60	Marcellus
10	19-Feb-16	11,159	11,325	60	Marcellus
11	19-Feb-16	10,963	11,128	60	Marcellus
12	20-Feb-16	10,767	10,932	60	Marcellus
13	20-Feb-16	10,570	10,736	60	Marcellus
14	21-Feb-16	10,374	10,540	60	Marcellus
15	21-Feb-16	10,178	10,344	60	Marcellus
16	21-Feb-16	9,982	10,147	60	Marcellus
17	21-Feb-16	9,786	9,951	60	Marcellus
18	22-Feb-16	9,589	9,755	60	Marcellus
19	22-Feb-16	9,393	9,559	60	Marcellus
20	22-Feb-16	9,197	9,363	60	Marcellus
21	22-Feb-16	9,001	9,166	60	Marcellus
22	23-Feb-16	8,805	8,970	60	Marcellus
23	23-Feb-16	8,608	8,774	60	Marcellus
24	23-Feb-16	8,412	8,578	60	Marcellus
25	23-Feb-16	8,216	8,382	60	Marcellus
26	24-Feb-16	8,020	8,185	60	Marcellus
27	24-Feb-16	7,824	7,989	60	Marcellus
28	24-Feb-16	7,627	7,793	60	Marcellus
29	25-Feb-16	7,431	7,597	60	Marcellus
30	25-Feb-16	7,235	7,401	60	Marcellus
31	25-Feb-16	7,039	7,204	60	Marcellus
32	25-Feb-16	6,843	7,008	60	Marcellus
33	26-Feb-16	6,646	6,812	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	16-Feb-16	71.0	6,724	5,056	4,933	314,890	7,686	N/A
2	17-Feb-16	70.3	6,859	5,970	5,264	315,400	7,625	N/A
3	17-Feb-16	71.0	6,964	5,684	5,247	314,450	7,582	N/A
4	17-Feb-16	72.0	6,784	5,252	4,501	317,380	7,608	N/A
5	18-Feb-16	70.5	6,773	5,536	5,173	314,250	7,556	N/A
6	18-Feb-16	70.7	6,692	5,712	4,564	315,100	7,551	N/A
7	18-Feb-16	69.0	6,674	5,592	5,170	291,720	8,642	N/A
8	19-Feb-16	63.1	6,386	5,465	5,335	314,650	8,701	N/A
9	19-Feb-16	70.5	6,650	5,567	4,886	315,150	7,495	N/A
10	19-Feb-16	71.0	6,644	5,577	4,822	314,980	7,491	N/A
11	19-Feb-16	72.0	6,505	5,321	4,929	314,240	7,469	N/A
12	20-Feb-16	70.2	6,855	5,706	5,228	315,600	7,504	N/A
13	20-Feb-16	71.0	6,749	5,468	4,215	314,590	7,442	N/A
14	21-Feb-16	70.2	6,805	5,466	4,311	314,740	7,432	N/A
15	21-Feb-16	70.7	6,822	5,662	5,535	314,750	7,421	N/A
16	21-Feb-16	72.0	6,706	5,677	5,261	316,300	7,481	N/A
17	21-Feb-16	71.0	6,497	5,704	5,153	314,070	7,393	N/A
18	22-Feb-16	70.0	6,719	5,593	5,238	314,260	7,565	N/A
19	22-Feb-16	71.1	6,707	5,440	4,835	312,775	7,368	N/A
20	22-Feb-16	71.4	6,926	5,536	5,035	314,058	8,282	N/A
21	22-Feb-16	73.0	6,820	5,547	5,088	313,620	7,731	N/A
22	23-Feb-16	75.0	6,735	5,626	5,169	314,360	7,333	N/A
23	23-Feb-16	73.6	6,668	5,521	5,309	312,976	7,318	N/A
24	23-Feb-16	73.4	6,750	5,661	4,929	312,881	7,304	N/A
25	23-Feb-16	74.0	6,802	5,487	4,763	287,820	8,092	N/A
26	24-Feb-16	69.0	6,698	5,533	5,623	313,960	8,497	N/A
27	24-Feb-16	73.6	6,757	5,487	5,871	314,106	7,287	N/A
28	24-Feb-16	74.4	6,816	5,446	5,223	314,676	7,293	N/A
29	25-Feb-16	75.0	6,520	5,335	5,408	313,780	7,870	N/A
30	25-Feb-16	72.4	6,445	5,443	4,942	313,325	7,270	N/A
31	25-Feb-16	72.6	6,479	5,625	5,169	314,690	7,237	N/A
32	25-Feb-16	75.0	6,344	5,586	5,215	314,690	7,192	N/A
33	26-Feb-16	74.0	6,298	6,222	4,272	313,756	7,170	N/A
AVG=		71.6	6,684	5,561	5,049	10,327,993	7,603	TOTAL

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EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Fresh Water	77'	N/A	77'	N/A
Sandstone/ Shale	0	407	0	407
Sand Shale/ Trace Coal	est. 407	457	est. 407	457
Sandstone/ Limestone	est. 457	567	est. 457	567
Sandstone	est. 567	667	est. 567	667
Sandstone/ Limestone	est. 667	707	est. 667	707
Sandstone/ Siltstone	est. 707	807	est. 707	807
Sandstone/ Limestone	est. 807	927	est. 807	927
Shale	est. 927	947	est. 927	947
Sandstone/ Shale	est. 947	1147	est. 947	1147
Sandstone/ Trace Coal	est. 1147	1507	est. 1147	1507
Sandstone/ Siltstone	est. 1507	1567	est. 1507	1567
Sandstone/ Trace Coal	est. 1567	1587	est. 1567	1587
Sandstone/ Siltstone	est. 1587	1731	est. 1587	1733
Big Lime	1731	2388	1733	2390
Fifty Foot Sandstone	2388	2482	2390	2484
Gordon	2482	2787	2484	2789
Fifth Sandstone	2787	2827	2789	2829
Bayard	2827	3590	2829	3592
Speechley	3590	3864	3592	3866
Baltown	3864	4319	3866	4321
Bradford	4319	4752	4321	4754
Benson	4752	5012	4754	5014
Alexander	5012	5957	5014	6000
Sycamore	5957	6124	6000	6215
Middlesex	6124	6251	6215	6426
Burkett	6251	6279	6426	6488
Tully	6279	6315	6488	6598
Marcellus	6315	NA	6598	NA

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

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	2/16/2016
Job End Date:	2/26/2016
State:	West Virginia
County:	Doddridge
API Number:	47-017-06613-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Hiley 1H
Longitude:	-80.82269700
Latitude:	39.30407500
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,377
Total Base Water Volume (gal):	10,908,904
Total Base Non Water Volume:	0



Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Antero Resources	Base Fluid					
			Water	7732-18-5	100.00000	89.50052	
Sand	U.S. Well Services, LLC	Proppant					
			Crystalline Silica, quartz	14808-60-7	100.00000	10.16001	
HCL Acid (12.6%-18.0%)	U.S. Well Services, LLC	Bulk Acid					
			Water	7732-18-5	87.50000	0.14343	
			Hydrogen Chloride	7647-01-0	18.00000	0.03426	
LGC-15	U.S. Well Services	Gelling Agents					
			Guar Gum	9000-30-0	50.00000	0.03175	
			Petroleum Distillates	64742-47-8	60.00000	0.03007	
			Suspending agent (solid)	14808-60-7	3.00000	0.00486	
			Surfactant	68439-51-0	3.00000	0.00191	
WFRA-405	U.S. Well Services	Friction Reducer					
			Water	7732-18-5	60.00000	0.03377	
			2-Propenoic acid, polymer with 2-propenamides	29003-06-9	30.00000	0.01688	
			Hydrated light distillate (petroleum)	64742-47-8	30.00000	0.01359	
			Ethoxylated alcohol blend	68002-97-1	4.00000	0.00225	

SI-1100	U.S. Well Services	Scale Inhibitor				
			Water	7732-18-5	80.00000	0.01017
			Ethylene Glycol	107-21-1	25.00000	0.00359
			Copolymer of Maleic and Acrylic acid	52255-49-9	10.00000	0.00150
			Potassium salt of diethylene triamine penta (methylene phosphonic acid)	15827-60-8	7.50000	0.00129
			Hexamethylene triamine penta (methylene phosphonic acid)	34690-00-1	5.00000	0.00083
			Phosphino carboxylic acid polymer	71050-62-9	5.00000	0.00083
			Hexamethylene diamine penta (methylene phosphonic acid)	23605-74-5	2.00000	0.00033
K-BAC 1020	U.S. Well Services	Anti-Bacterial Agent				
			2,2-dibromo-3-nitrilopropionamide	10222-01-2	20.00000	0.00409
			Deionized Water	7732-18-5	28.00000	0.00234
AP One	U.S. Well Services	Gel Breakers				
			Ammonium Persulfate	7727-54-0	100.00000	0.00137
AI-302	U.S. Well Services	Acid Corrosion Inhibitors				
			Water	7732-18-5	95.00000	0.00031
			2-Propyn-1-ol compound with methyloxirane	38172-91-7	15.00000	0.00005
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.						

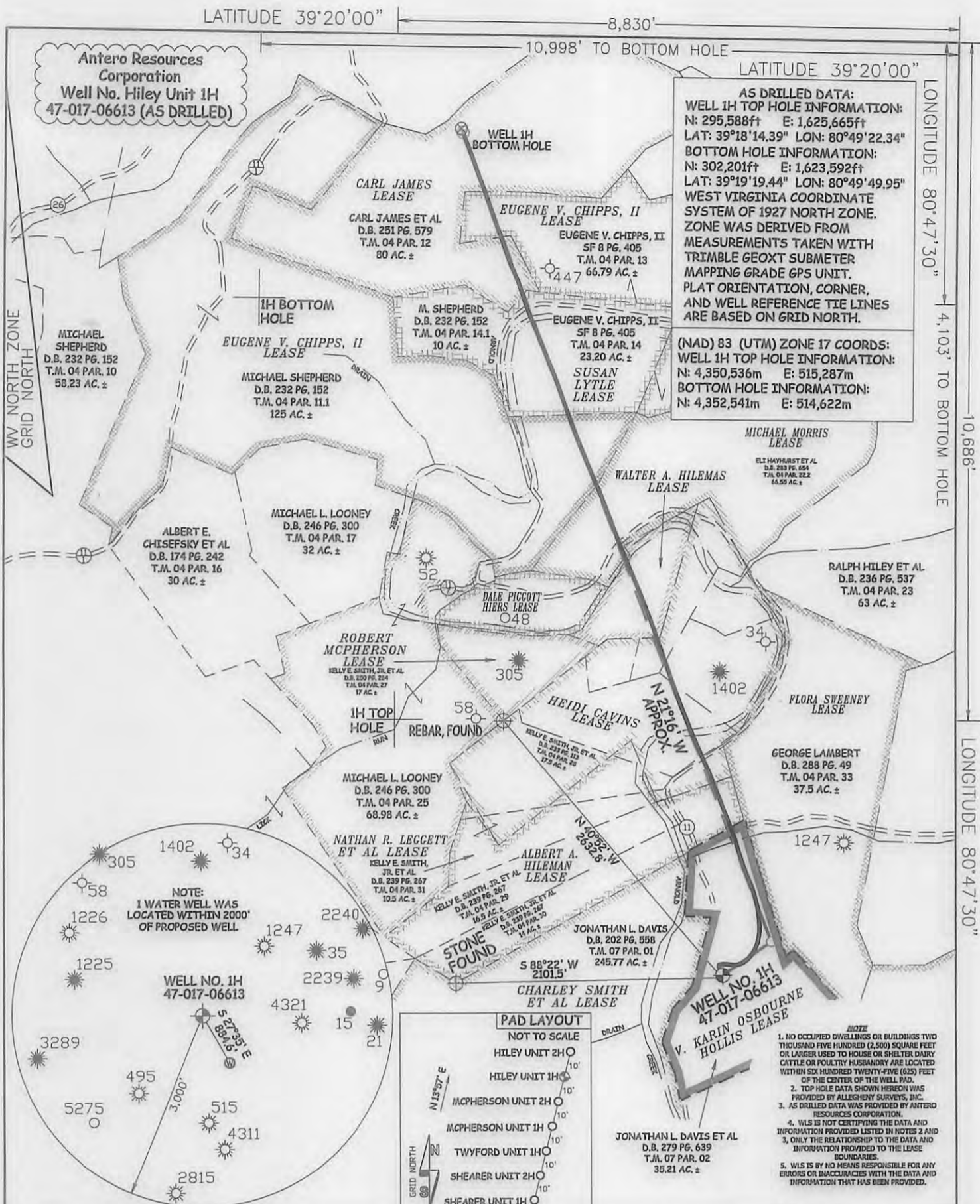
* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** 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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AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
 N: 295,588ft E: 1,625,665ft
 LAT: 39°18'14.39" LON: 80°49'22.34"
BOTTOM HOLE INFORMATION:
 N: 302,201ft E: 1,623,592ft
 LAT: 39°19'19.44" LON: 80°49'49.95"
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: 4,350,536m E: 515,287m
BOTTOM HOLE INFORMATION:
 N: 4,352,541m E: 514,622m



JOB # 14-037WA
 DRAWING # HILEY1HAD
 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
 P.O. BOX 17
 PENNSBORO, WV 26415

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

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS
 WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 829' ORIGINAL - 824' AS-DRILLED WATERSHED HEADWATERS MIDDLE ISLAND CREEK
 QUADRANGLE WEST UNION 7.5' DISTRICT CENTRAL COUNTY DODD
 SURFACE OWNER JONATHAN L. DAVIS ET AL ACREAGE 35.21 ACRES +/-
 OIL & GAS ROYALTY OWNER V. KARIN OSBOURNE HOLLIS; ALBERT A. HILEMAN; HEIDI CAVINS; LEASE ACREAGE 79.09 ACRES +/-; 50.5 ACRES +/-; 86 ACRES +/-; WALTER A. HILEMAS; MICHAEL MORRIS; EUGENE V. CHIPPS II; SUSAN LYTLE; CARL JAMES; EUGENE V. CHIPPS II 9 ACRES +/-; 60.55 ACRES +/-; 140 ACRES +/-; 35 ACRES +/-; 60 ACRES +/-; 120 ACRES +/-
 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 6,344' TVD 13,185' MD
 WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
 ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
 DENVER, CO 80202 CHARLESTON, WV 25313

05/22/2016

COUNTY NAME PERMIT

LATITUDE 39°20'00"

8,830'

10,998' TO BOTTOM HOLE

LATITUDE 39°20'00"

LONGITUDE 80°47'30"

4,103' TO BOTTOM HOLE

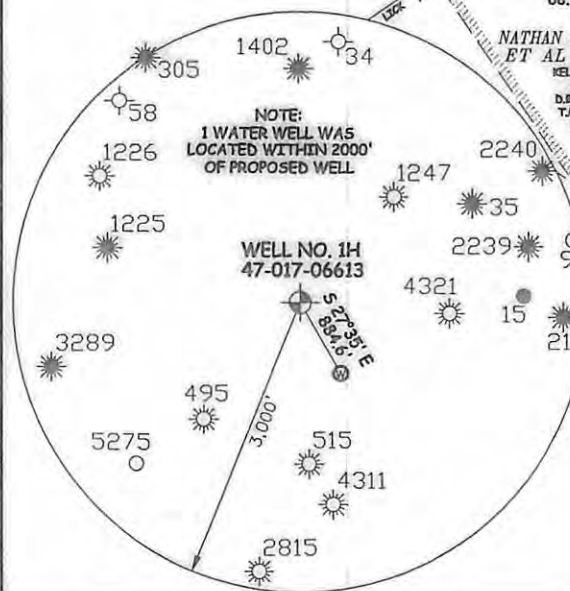
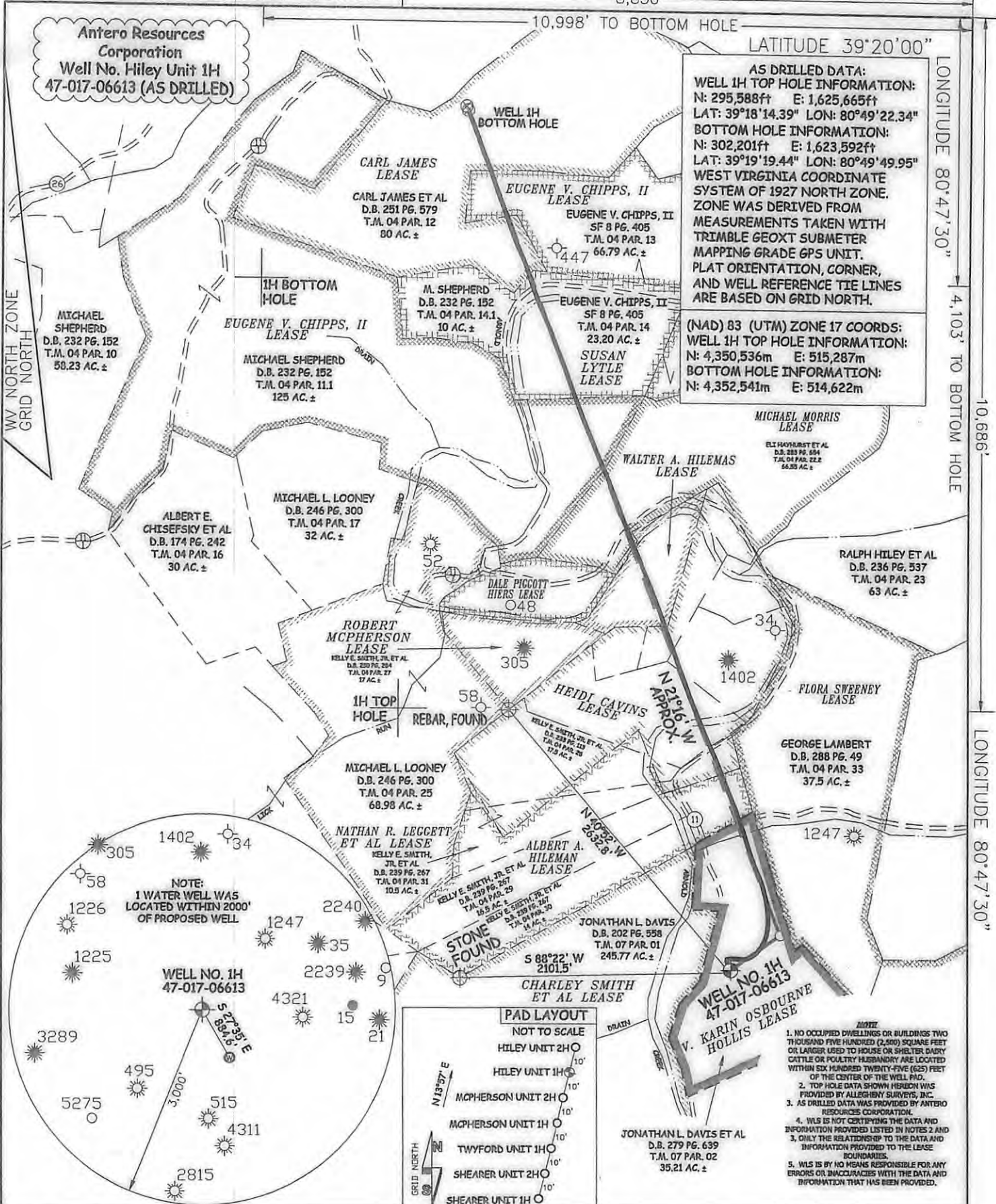
10,686'

LONGITUDE 80°47'30"

Antero Resources Corporation
Well No. Hiley Unit 1H
47-017-06613 (AS DRILLED)

AS DRILLED DATA:
WELL 1H TOP HOLE INFORMATION:
N: 295,588ft E: 1,625,665ft
LAT: 39°18'14.39" LON: 80°49'22.34"
BOTTOM HOLE INFORMATION:
N: 302,201ft E: 1,623,592ft
LAT: 39°19'19.44" LON: 80°49'49.95"
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.

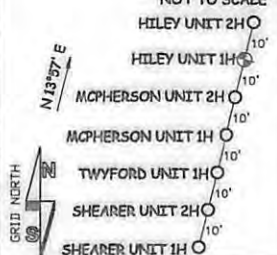
(NAD) 83 (UTM) ZONE 17 COORDS:
WELL 1H TOP HOLE INFORMATION:
N: 4,350,536m E: 515,287m
BOTTOM HOLE INFORMATION:
N: 4,352,541m E: 514,622m



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

WELL NO. 1H
47-017-06613

PAD LAYOUT
NOT TO SCALE



- 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 # 14-037WA
DRAWING # HILEY1HAD
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
P.O. BOX 17
PENNSBORO, WV 26415

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

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 829' ORIGINAL - 824' AS-DRILLED WATERSHED HEADWATERS MIDDLE ISLAND CREEK
QUADRANGLE WEST UNION 7.5' DISTRICT CENTRAL COUNTY DODDRIDGE

SURFACE OWNER JONATHAN L. DAVIS ET AL ACREAGE 35.21 ACRES +/-
OIL & GAS ROYALTY OWNER V. KARIN OSBOURNE HOLLIS; ALBERT A. HILEMAN; HEIDI CAVINS; WALTER A. HILEMAS; MICHAEL MORRIS; EUGENE V. CHIPPS II; SUSAN LYTLE; CARL JAMES; EUGENE V. CHIPPS II LEASE ACREAGE 79.09 ACRES +/-; 50.5 ACRES +/-; 86 ACRES +/-; 9 ACRES +/-; 60.55 ACRES +/-; 140 ACRES +/-; 35 ACRES +/-; 80 ACRES +/-; 120 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 & RE-PLUG ___
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,344' TVD 13,185' MD

WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

07/22/2016

COUNTY NAME PERMIT