

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

API 47 - 095 - 02346 County Tyler District Ellsworth  
Quad Shirley 7.5' Pad Name Weigle East Pad Field/Pool Name -----  
Farm name Edwin C. Weigle Well Number Dean 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 4368541m Easting 512672m  
Landing Point of Curve Northing 4368429.02m Easting 512028.83m  
Bottom Hole Northing 4371106m Easting 511103m

Elevation (ft) 812' 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 4/28/2016 Date drilling commenced 6/20/2016 Date drilling ceased 8/16/2016  
Date completion activities began 5/13/2018 Date completion activities ceased 9/3/2018  
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 194 Open mine(s) (Y/N) depths No  
Salt water depth(s) ft 1027 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

Reviewed by:

API 47-095 - 02346 Farm name Edwin C. Weigle Well number Dean 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"	60'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	501'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2534'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	16376'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6836'		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	102 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	600 sx	15.6	1.18	826	0'	8 Hrs.
Coal							
Intermediate 1	Class A	1001 sx	15.6	1.18	1181	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	725 sx (Lead) 1389 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.62 (Lead), 1.83 (Tail)	3774	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 16376' MD, 6290' TVD (BHL), 6312' (Deepest Point Drilled) Loggers TD (ft) 16376' MD

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

Plug back procedure N/A

Kick off depth (ft) 5942'

Check all wireline logs run  caliper  density  deviated/directional  induction  
 neutron  resistivity  gamma ray  temperature  sonic

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

Conductor - 0

Surface - 1 above guide shoe, 1 above insert float, 1 every 4th joint to surface

Intermediate - 1 above float joint, 1 above float collar, 1 every 4th joint to surface

Production - 1 above float joint, 1 below float collar, 1 every 3rd joint to top of cement

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

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

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



API 47- 095 - 02346 Farm name Edwin C. Weigle Well number Dean Unit 1H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>Marcellus</u>	<u>6266' (TOP)</u>	<u>TVD</u>	<u>6893' (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 2800 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 6933 mcfpd Oil 331 bpd NGL --- bpd Water --- bpd GAS MEASURED BY  Estimated  Orifice  Pilot

<u>LITHOLOGY/ FORMATION</u>	<u>TOP</u>	<u>BOTTOM</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 Allied Horizontal Wireline Service  
Address 381 Colonial Manor Road City North Huntington State PA Zip 15642

Cementing Company C&J Energy Services  
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 Griffith Telephone 303-357-7223  
Signature \_\_\_\_\_ Title Permitting Agent Date \_\_\_\_\_

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

API 47-095-02346 Farm Name Edwin C. Weigle Well Number Dean Unit 1H

**EXHIBIT 1**

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	6/3/2018	16104	16274	60	Marcellus
2	6/4/2018	15904	16073	60	Marcellus
3	6/4/2018	15705	15873	60	Marcellus
4	6/4/2018	15505	15673	60	Marcellus
5	6/5/2018	15305	15474	60	Marcellus
6	6/5/2018	15105	15274	60	Marcellus
7	6/5/2018	14905	15074	60	Marcellus
8	6/6/2018	14706	14874	60	Marcellus
9	6/6/2018	14506	14674	60	Marcellus
10	6/8/2018	14306	14475	60	Marcellus
11	6/8/2018	14106	14275	60	Marcellus
12	6/8/2018	13906	14075	60	Marcellus
13	6/8/2018	13707	13875	60	Marcellus
14	6/9/2018	13507	13675	60	Marcellus
15	6/9/2018	13307	13476	60	Marcellus
16	6/9/2018	13107	13276	60	Marcellus
17	6/10/2018	12907	13076	60	Marcellus
18	6/10/2018	12708	12876	60	Marcellus
19	6/10/2018	12508	12676	60	Marcellus
20	6/10/2018	12308	12477	60	Marcellus
21	6/11/2018	12108	12277	60	Marcellus
22	6/11/2018	11908	12077	60	Marcellus
23	6/11/2018	11709	11877	60	Marcellus
24	6/12/2018	11509	11677	60	Marcellus
25	6/12/2018	11309	11478	60	Marcellus
26	6/12/2018	11109	11278	60	Marcellus
27	6/13/2018	10909	11078	60	Marcellus
28	6/13/2018	10710	10878	60	Marcellus
29	6/14/2018	10510	10678	60	Marcellus
30	6/14/2018	10310	10479	60	Marcellus
31	6/14/2018	10110	10279	60	Marcellus
32	6/14/2018	9910	10079	60	Marcellus
33	6/15/2018	9711	9879	60	Marcellus
34	6/15/2018	9511	9679	60	Marcellus
35	6/15/2018	9311	9480	60	Marcellus
36	6/15/2018	9111	9280	60	Marcellus
37	6/16/2018	8911	9080	60	Marcellus
38	6/16/2018	8712	8880	60	Marcellus
39	6/16/2018	8512	8680	60	Marcellus
40	6/17/2018	8312	8481	60	Marcellus
41	6/17/2018	8112	8281	60	Marcellus
42	6/17/2018	7912	8081	60	Marcellus
43	6/18/2018	7713	7881	60	Marcellus
44	6/18/2018	7513	7681	60	Marcellus
45	6/18/2018	7313	7482	60	Marcellus
46	6/19/2018	7113	7282	60	Marcellus
47	6/19/2018	6913	7082	60	Marcellus

## 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	6/3/2018	75.1	7095	4352	4561	16008	8894	N/A
2	6/4/2018	78.9	7434	5713	5035	18182	8818	N/A
3	6/4/2018	71.8	7672	7382	4030	19084	7948	N/A
4	6/4/2018	75.6	7100	4988	4738	16826	9638	N/A
5	6/5/2018	75.8	7319	5451	4841	17611	10658	N/A
6	6/5/2018	70.4	7250	5339	3908	16497	7857	N/A
7	6/5/2018	75.1	7424	5277	4313	17014	7860	N/A
8	6/6/2018	74.4	6982	5116	4938	17036	7768	N/A
9	6/6/2018	72.1	7400	5694	3983	17077	7668	N/A
10	6/8/2018	45.7	8070	6173	5082	19325	9446	N/A
11	6/8/2018	70.4	7020	5342	4214	16576	8150	N/A
12	6/8/2018	72.4	6868	5176	4763	16807	7909	N/A
13	6/8/2018	75.8	7097	5307	4691	17095	7685	N/A
14	6/9/2018	78	6967	5306	4814	17087	7716	N/A
15	6/9/2018	74.7	6999	5658	4426	17083	7724	N/A
16	6/9/2018	76.1	7085	5360	4007	16452	7832	N/A
17	6/10/2018	72.7	6816	6014	3992	16822	7748	N/A
18	6/10/2018	73	6854	6015	4002	16871	7621	N/A
19	6/10/2018	72.7	6864	6240	3889	16993	8973	N/A
20	6/10/2018	71	6594	6385	4228	17207	7738	N/A
21	6/11/2018	70.6	6589	6192	4140	16921	7477	N/A
22	6/11/2018	73.8	6929	6448	4340	17717	7543	N/A
23	6/11/2018	74.6	6628	6288	3994	16910	7726	N/A
24	6/12/2018	73.4	6659	5954	3867	16480	7757	N/A
25	6/12/2018	72.9	6658	6088	4211	16957	7643	N/A
26	6/12/2018	72.6	6680	5937	3853	16470	7610	N/A
27	6/13/2018	72.4	6571	6008	4057	16636	7583	N/A
28	6/13/2018	75.4	6808	6233	4257	17298	7478	N/A
29	6/14/2018	72.2	6766	6234	3727	16727	8817	N/A
30	6/14/2018	70.7	6724	5667	4507	16898	8093	N/A
31	6/14/2018	72.5	6803	5975	4068	16846	7813	N/A
32	6/14/2018	63.1	7328	5953	4376	17657	10431	N/A
33	6/15/2018	69.5	6649	6728	3758	17135	8173	N/A
34	6/15/2018	75.2	6560	6192	4638	17390	7465	N/A
35	6/15/2018	74.6	6422	6168	4169	16759	7606	N/A
36	6/15/2018	73.3	6562	6095	4022	16679	8221	N/A
37	6/16/2018	73	6638	6709	4489	17836	7725	N/A
38	6/16/2018	73	6424	6057	4644	17125	7631	N/A
39	6/16/2018	74.2	6291	5853	3948	16092	7360	N/A
40	6/17/2018	74.2	6403	6508	4007	16918	7507	N/A
41	6/17/2018	74.2	6582	6467	4341	17390	7380	N/A
42	6/17/2018	72.5	6975	6404	3815	17194	8132	N/A
43	6/18/2018	73.3	6391	5891	4102	16384	7518	N/A
44	6/18/2018	64.8	6824	6622	4391	17837	9944	N/A
45	6/18/2018	71.5	6538	6442	4202	17182	7623	N/A
46	6/19/2018	70.6	6536	6608	4228	17372	7818	
47	6/19/2018	73	6408	6381	4339		7595	N/A
	AVG=	72.4	6,857	5,966	4,275	786,463	379,320	TOTAL

## EXHIBIT 3

LITHOLOGY/ FORMATION	TOP DEPTH (TVD)	BOTTOM DEPTH (TVD)	TOP DEPTH (MD)	BOTTOM DEPTH (MD)
	From Surface	From Surface	From Surface	From Surface
Siltstone	-6	221	-6	221
Siltstone and Coal	221	269	221	269
Siltstone	269	405	269	405
Sandstone	405	536	405	536
Shale w/trace coal	536	561	536	561
Shale w/trace coal	561	761	561	761
Siltstone	761	801	761	801
Shale w/trace coal	801	941	801	941
Siltstone	941	1,133	941	1,133
Sandstone	1,133	1,195	1,133	1,195
Siltstone	1,195	1,231	1,195	1,231
Sandstone	1,231	1,311	1,231	1,311
Siltstone	1,311	1,721	1,311	1,723
Big Lime	1,742	1,844	1,761	1,870
Big Injun	1,844	2,347	1,870	2,398
Gantz Sand	2,347	2,498	2,398	2,554
Fifty Foot Sandstone	2,498	2,592	2,554	2,651
Gordon	2,592	2,931	2,651	3,008
Fifth Sandstone	2,931	2,974	3,008	3,056
Bayard	2,974	3,336	3,056	3,463
Warren	3,336	3,726	3,463	3,896
Speechley	3,726	4,445	3,896	4,692
Balltown	4,067	4,850	4,272	5,144
Bradford	4,445	4,850	4,692	5,144
Benson	4,850	5,087	5,144	5,406
Alexander	5,087	5,280	5,406	5,617
Elk	5,280	5,624	5,617	5,988
Rhinestreet	5,654	5,921	6,029	6,333
Sycamore	5,921	6,093	6,333	6,562
Middlesex	6,093	6,186	6,562	6,724
Burkett	6,186	6,207	6,724	6,770
Tully	6,207	6,247	6,770	6,874
Marcellus	6,247	NA	6,874	NA

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

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	6/3/2018
Job End Date:	6/19/2018
State:	West Virginia
County:	Tyler
API Number:	47-095-02346-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Dean Unit 1H
Latitude:	39.47275600
Longitude:	-80.85170000
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,291
Total Base Water Volume (gal):	16,477,733
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	Supplied by Operator	Base Fluid					
			Water	7732-18-5	70.00000	87.78546	
DAP-902	CWS	Scale Inhibitor					
				Listed Below			





					Listed Below			
Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.								
					Crystalline silica (Quartz)	14808-60-7	100.00000	11.75555
					Hydrochloric acid	7647-01-0	37.00000	0.07880
					Calcite	471-34-1	1.00000	0.06769
					Guar gum	9000-30-0	60.00000	0.06250
					Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.06250
					Illite	12173-60-3	1.00000	0.04981
					Polymer	26100-47-0	45.00000	0.02445
					Ammonium Persulfate	64742-47-8	100.00000	0.01680
					Distillates (petroleum), hydrotreated light	64742-47-8	30.00000	0.01630
					Apatite	64476-38-6	0.10000	0.01175
					Goethite	1310-14-1	0.10000	0.01175
					Biotite	1302-27-8	0.10000	0.01175
					Polyethylene glycol mixture	25322-68-3	54.50000	0.00635
					2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000	0.00615
					Ammonium chloride	12125-02-9	11.00000	0.00598
					Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00521
					Ilmenite	98072-94-7	0.10000	0.00498
					Vinylidene chloride-methyl acrylate copolymer	69418-26-4	20.00000	0.00336
					2,2-Dibromo-3-Nitriopropionamide	10222-01-2	20.00000	0.00233
					Sorbitan monooleate	1338-43-8	4.00000	0.00217
					Polyethylene glycol monooleate	9004-96-0	3.00000	0.00163

					37251-67-5	1.50000	0.00156	
				Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether				
				1,2-Propanediol	57-55-6	10.00000	0.00154	
				Sorbitol tetraoleate	61723-83-9	2.00000	0.00109	
				Citric acid	77-92-9	60.00000	0.00071	
				Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00054	
				Sodium bromide	7647-15-6	4.00000	0.00047	
				Dibromoacetonitrile	3252-43-5	3.00000	0.00035	
				Alkyloxypolyethyleneoxy ethanol	84133-50-6	0.50000	0.00027	
				Acrylamide	79-06-1	0.10000	0.00005	
				Ethylene glycol	107-21-1	40.00000	0.00004	
				Diethylene glycol (mono) methyl ether	34590-94-8	20.00000	0.00002	
				Formic Acid	64-18-6	10.00000	0.00001	
				Cinnamaldehyde	104-55-2	10.00000	0.00001	
				Tar bases, quinolone derivs, benzyl chloride- quaternized	72480-70-7	10.00000	0.00001	
				Isopropanol	67-63-0	5.00000	0.00001	
				Tar bases, quinolone derivs	68513-87-1	1.00000	0.00001	
				Ethoxylated alcohols	Proprietary	10.00000	0.00001	Proprietary CAS
				Diethylene glycol	111-46-6	1.00000	0.00001	

\* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water  
\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%  
\*\*\* If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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)

LATITUDE 39°30'00"

5,511'

LATITUDE 39°30'00"

Antero Resources Corporation  
Well No. Dean Unit 1H  
API # 47-095-02346

LONGITUDE 80°50'00"

12,287'

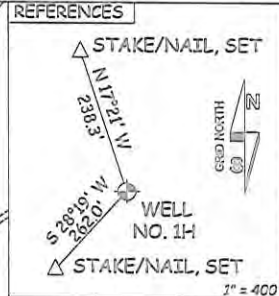
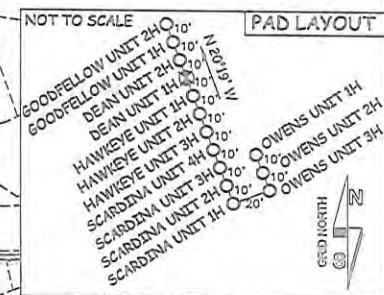
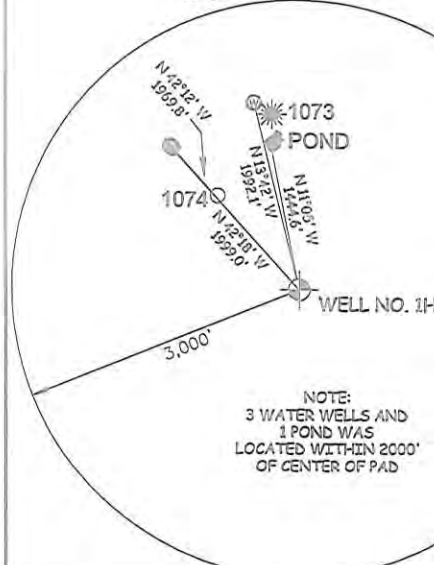
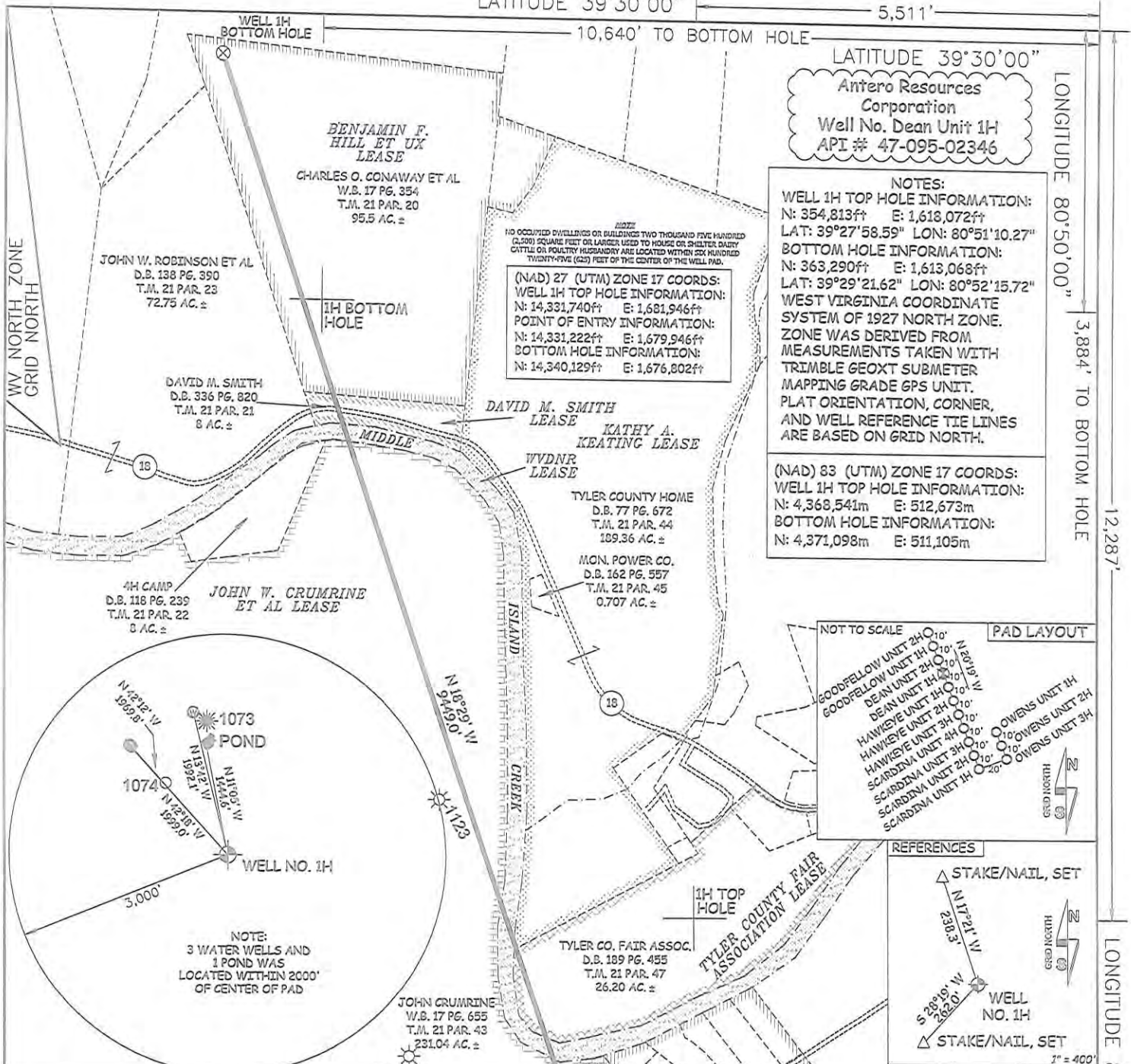
LONGITUDE 80°50'00"

NOTES:  
WELL 1H TOP HOLE INFORMATION:  
N: 354,813ft E: 1,618,072ft  
LAT: 39°27'58.59" LON: 80°51'10.27"  
BOTTOM HOLE INFORMATION:  
N: 363,290ft E: 1,613,068ft  
LAT: 39°29'21.62" LON: 80°52'15.72"  
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH 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: 4,368,541m E: 512,673m  
BOTTOM HOLE INFORMATION:  
N: 4,371,098m E: 511,105m

NOTE:  
NO OCCUPIED DWELLINGS OR BUILDINGS TWO THOUSAND FIVE HUNDRED (2,000) 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.

(NAD) 27 (UTM) ZONE 17 COORDS:  
WELL 1H TOP HOLE INFORMATION:  
N: 14,331,740ft E: 1,681,946ft  
POINT OF ENTRY INFORMATION:  
N: 14,331,222ft E: 1,679,946ft  
BOTTOM HOLE INFORMATION:  
N: 14,340,129ft E: 1,676,802ft



47 - 095 - 02346  
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

LYDIA GREGG EST  
W.B. 36 PG. 469  
T.M. 27 PAR. 6  
35 AC. ±

JOHN A. DONTRAGER ET AL  
D.B. 368 PG. 472  
T.M. 27 PAR. 7  
121.752 AC. ±

ROBERT L. DEAN LEASE  
LORETTA J. FULKS  
D.B. 212 PG. 10  
T.M. 27 PAR. 8  
35 AC. ±

RICHARD L. SEAGO ET UX LEASE

REUBEN SCHWARTZ ET AL  
D.B. 119 PG. 512  
T.M. 27 PAR. 19  
86 AC. ±

JOB # 13-040WA  
DRAWING # DEAN1HR  
SCALE 1" = 1000'  
MINIMUM DEGREE OF ACCURACY SUBMETER  
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

LEGEND  
--- Surface Owner Boundary Lines +/-  
--- Interior Surface Tracts +/-  
--- Existing Fence  
⊕ Found monument, as noted  
THOMAS SUMMERS P.S. 2109  
DATE 05/03/16  
OPERATOR'S WELL# DEAN UNIT 1H

STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS

DATE 05/03/16  
OPERATOR'S WELL# DEAN UNIT 1H

WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
(IF "GAS") PRODUCTION \_\_\_ STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
LOCATION: ELEVATION 811 ORIGINAL - 812' AS-BUILT WATERSHED OUTLET MIDDLE ISLAND CREEK  
QUADRANGLE SHIRLEY 7.5' DISTRICT ELLSWORTH COUNTY TYLER  
SURFACE OWNER EDWIN C. WEIGLE ACREAGE 60.19 ACRES +/-

OIL & GAS ROYALTY OWNER KATHY ANN SEAGO; RICHARD L. SEAGO ET UX; ROBERT L. DEAN; LEASE ACREAGE 129.2 AC. ±; 74.2 AC. ±; 35 AC. ±;  
JAMES E. GREGG ET UX; JOHN W. CRUMRINE ET AL; WVDNR; TYLER COUNTY FAIR ASSOCIATION; KATHY A. KEATING; DAVID M. SMITH; BENJAMIN F. HILL ET UX 141 AC. ±; 266 AC. ±; 34 AC. ±; 26.665 AC. ±; 190.07 AC. ±; 8 AC. ±; 95.5 AC. ±  
PROPOSED WORK: DRILL \_\_\_ CONVERT \_\_\_ DRILL DEEPER X REDRILL \_\_\_ FRACTURE OR STIMULATE X  
PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION X OTHER PHYSICAL CHANGE IN WELL  
(SPECIFY) MOD - BHL PLUG & ABANDON CLEAN OUT & REPLUG  
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,500' TVD 16,700' MD  
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM  
ADDRESS 1615 WYNKOOP STREET ADDRESS 5400 D BIG TYLER ROAD  
DENVER, CO 80202 CHARLESTON, WV 25313

