

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

RECEIVED
Office of Oil and Gas

OCT 12 2017

WV Department of
Environmental Protection

API 47-085-10281 County Ritchie District Clay
Quad Pennsboro 7.5' Pad Name Zinn Pad Field/Pool Name -----
Farm name Ernest E. Zinn et al Well Number Kerogen Unit 2H
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 4352313m Easting 505336m
Landing Point of Curve Northing 4352693.005m Easting 505721.864m
Bottom Hole Northing 4354525m Easting 504950m

Elevation (ft) 1120' 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 03/16/2016 Date drilling commenced 04/12/2016 Date drilling ceased 06/04/2016
Date completion activities began 10/31/2016 Date completion activities ceased 04/16/2017
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 107' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 1567' 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

APPROVED

Reviewed by:

NAME: Michael Jeff
DATE: 10-25-17

WR-35
Rev. 8/23/13

API 47-085 - 10281 Farm name Ernest E. Zinn et al Well number Kerogen Unit 2H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	40'	New	94#, K-55	N/A	Y
Surface	17-1/2"	13-3/8"	612'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2542'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	13890'	New	20#, P-110	N/A	Y
Tubing		2-3/8"	6749'		5.95#, 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	102 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	741 sx	15.6	1.2	889	0'	8 Hrs.
Coal							
Intermediate 1	Class A	921 sx	15.6	1.18	1087	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	881 sx (Lead) 1136 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.44 (Lead), 1.84 (Tail)	3359	-500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 13890' MD, 6433' TVD (BHL), 6447' (Deepest Point Drilled) Loggers TD (ft) 13877' MD

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

Plug back procedure N/A

Kick off depth (ft) 6083'

** This is a subsequent well. Antero only runs wireline logs on one well on a multi-well pad (Norma Unit 1H API #47-085-10169). Please reference the wireline logs submitted with Form WR-35 for Norma Unit 1H. A Cement Bond Log has been included with this submittal.

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

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____

Conductor - 0

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

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

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

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

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

WR-35
Rev. 8/23/13

API 47- 085 - 10281 Farm name Ernest E. Zinn et al Well number Kerogen Unit 2H

PRODUCING FORMATION(S)	DEPTHS	
<u>Marcellus</u>	<u>6395' (TOP)</u> TVD	<u>6818' (TOP)</u> MD
_____	_____	_____
_____	_____	_____

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 7604 mcfpd Oil 102 bpd NGL --- bpd Water 707 bpd GAS MEASURED BY Estimated Orifice Pilot

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

***PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.


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

Logging Company Allied Horizontal Wireline Services
Address 381 Colonial Manor Rd. City North Huntingdon State PA Zip 15642

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

Stimulating Company Halliburton
Address 121 Champion Way Suite 200 City Canonsburg State PA Zip 15317

Please insert additional pages as applicable.

Completed by Samantha Klaas Telephone 303-357-6759
Signature  Title Permitting Agent Date 10/11/2017

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

API 47-085-10281 Farm Name Ernest E. Zinn et al Well Number Kerogen Unit 2H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	10/31/2016	13608	13775	60	Marcellus
2	11/16/2016	13409	13577	60	Marcellus
3	11/17/2016	13211	13378	60	Marcellus
4	11/18/2016	13013	13180	60	Marcellus
5	11/19/2016	12814	12982	60	Marcellus
6	11/20/2016	12616	12783	60	Marcellus
7	11/20/2016	12418	12585	60	Marcellus
8	11/21/2016	12219	12386	60	Marcellus
9	11/22/2016	12021	12188	60	Marcellus
10	11/23/2016	11822	11990	60	Marcellus
11	11/25/2016	11624	11791	60	Marcellus
12	11/26/2016	11426	11593	60	Marcellus
13	11/26/2016	11227	11395	60	Marcellus
14	11/26/2016	11029	11196	60	Marcellus
15	11/27/2016	10831	10998	60	Marcellus
16	11/28/2016	10632	10800	60	Marcellus
17	11/29/2016	10434	10601	60	Marcellus
18	11/29/2016	10236	10403	60	Marcellus
19	11/30/2016	10037	10205	60	Marcellus
20	12/1/2016	9839	10006	60	Marcellus
21	12/2/2016	9641	9808	60	Marcellus
22	12/3/2016	9442	9609	60	Marcellus
23	12/3/2016	9244	9411	60	Marcellus
24	12/3/2016	9045	9213	60	Marcellus
25	12/3/2016	8847	9014	60	Marcellus
26	12/4/2016	8649	8816	60	Marcellus
27	12/4/2016	8450	8618	60	Marcellus
28	12/5/2016	8252	8419	60	Marcellus
29	12/5/2016	8054	8221	60	Marcellus
30	12/6/2016	7855	8023	60	Marcellus
31	12/6/2016	7657	7824	60	Marcellus
32	12/7/2016	7459	7626	60	Marcellus
33	12/7/2016	7260	7427	60	Marcellus
34	12/7/2016	7062	7229	60	Marcellus
35	12/8/2016	6863	7031	60	Marcellus

API 47-085-10281 Farm Name Ernest E. Zinn et al Well Number Kerogen Unit 2H								
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 (bbbls)	Amount of Nitrogen/ other (units)
1	11/15/2016	78.7	7360	5570.0	4001.0	358087	7687.2	N/A
2	11/16/2016	79.4	7149	5676.0	4059.0	356789	8017.0	N/A
3	11/17/2016	77.7	7252	5170.0	3074.0	357317	8396.0	N/A
4	11/18/2016	77.6	7267	5530.0	2804.0	359581	7762.3	N/A
5	11/19/2016	78.4	7005	5501.0	3145.0	355971	7727.6	N/A
6	11/20/2016	75.7	6986	5416.0	3575.0	363398	9645.5	N/A
7	11/20/2016	68.3	7350	5388.0	2853.0	357568	17041.0	N/A
8	11/21/2016	77.0	7027	5352.0	2665.0	351504	9421.6	N/A
9	11/22/2016	78.7	6880	5231.0	2726.0	357612	7798.1	N/A
10	11/23/2016	76.9	6797	5541.0	2951.0	362259	7810.3	N/A
11	11/25/2016	77.6	7142	5406.0	3249.0	357675	7686.4	N/A
12	11/26/2016	79.2	6804	5578.0	2849.0	356938	7699.8	N/A
13	11/26/2016	77.7	6525	5625.0	3504.0	357137	7605.1	N/A
14	11/26/2016	77.9	6734	5535.0	2839.0	354966	7583.5	N/A
15	11/27/2016	76.2	7305	5400.0	2572.0	357597	9458.0	N/A
16	11/28/2016	78.9	6557	5346.0	2810.0	359686	7617.3	N/A
17	11/29/2016	78.8	6569	5293.0	2904.0	359419	7772.8	N/A
18	11/29/2016	74.4	6420	5567.0	2961.0	353321	7465.2	N/A
19	11/30/2016	78.4	6708	5347.0	3528.0	356707	7634.5	N/A
20	12/1/2016	75.7	7016	5271.0	4791.0	335636	9147.2	N/A
21	12/2/2016	78.3	6934	5458.0	3397.0	357748	8891.0	N/A
22	12/3/2016	79.8	6366	5521.0	3227.0	357656	7595.1	N/A
23	12/3/2016	78.0	6317	5569.0	3199.0	360659	7773.1	N/A
24	12/3/2016	80.2	6470	5711.0	2969.0	358523	7546.1	N/A
25	12/3/2016	78.9	6137	5811.0	3089.0	355655	7541.9	N/A
26	12/4/2016	77.8	6055	5506.0	3275.0	357032	7455.0	N/A
27	12/4/2016	79.3	6387	5670.0	3007.0	356581	7503.3	N/A
28	12/5/2016	79.5	6380	5759.0	3113.0	344760	7248.6	N/A
29	12/5/2016	78.6	6683	5692.0	3176.0	360441	8351.2	N/A
30	12/6/2016	79.9	5996	5740.0	2967.0	359973	7392.3	N/A
31	12/6/2016	77.3	6533	5606.0	3309.0	354169	8354.5	N/A
32	12/7/2016	77.3	6509	5626.0	3069.0	355864	7344.9	N/A
33	12/7/2016	78.0	6959	6105.0	3034.0	355621	7834.9	N/A
34	12/7/2016	76.9	6391	6077.0	2570.0	356449	7393.7	N/A
35	12/8/2016	76.8	7068	5753.0	2528.0	358024	9135.7	N/A
	AVG=	77.7	6,744	5,553	3,137	12,478,323	288,338	TOTAL

API 47-085-10281 Farm Name Ernest E. Zinn et al Well Number Kerogen Unit 2H

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	107'	N/A	107'	N/A
Shale/ Siltstone	20	300	20	300
Sandstone	300	440	300	440
Shale/ Siltstone	440	660	440	660
Sandstone	660	740	660	740
Limestone	740	820	740	820
Sandstone/ Shale	820	920	820	920
Shale	920	1000	920	1000
Sandstone	1000	1320	1000	1320
Siltstone	1320	1420	1320	1420
Sandstone	1420	1480	1420	1480
Sandstone	1480	1640	1480	1640
Shale / Sandstone	1640	1700	1640	1700
Sandstone	1700	1986	1700	2015
Big Lime	1986	2535	2015	2586
Gantz	2535	2819	2586	2879
Fifty Foot Sandstone	2819	2970	2879	3035
Gordon	2970	3340	3035	3419
Fifth Sandstone	3340	3412	3419	3493
Bayard	3412	3911	3493	4013
Speechley	3911	4160	4013	4272
Baltown	4160	4639	4272	4768
Bradford	4639	5003	4768	5145
Benson	5003	5232	5145	5385
Alexander	5232	5526	5385	5692
Elk	5526	5810	5692	5988
Rhinestreet	5810	6138	5988	6343
Sycamore	6138	6234	6343	6465
Middlesex	6234	6344	6465	6651
Burkett	6344	6373	6651	6733
Tully	6373	6395	6733	6818
Marcellus	6395	NA	6818	NA

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/15/2016
Job End Date:	12/9/2016
State:	West Virginia
County:	Ritchie
API Number:	47-085-10281-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Kerogen 2H
Latitude:	39.32013000
Longitude:	-80.93826400
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,448
Total Base Water Volume (gal):	12,358,564
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
Fresh Water	Operator	Base Fluid					
			Water	7732-18-5	100.00000	88.93061	Density = 8.330
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.23200	

WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
FR-76	Halliburton	Friction Reducer					
				Listed Below			
SAND-PREMIUM WHITE-40/70, BULK	Halliburton	Proppant					
				Listed Below			
MC B-8614	Halliburton	Biocide					
				Listed Below			
SP BREAKER	Halliburton	Breaker					
				Listed Below			
SAND-COMMON WHITE - 100 MESH, 3307 LB BAG	Halliburton	Proppant					
				Listed Below			
MC S-2510T	Halliburton	Scale Inhibitor					
				Listed Below			
HAI-OS ACID INHIBITOR	Halliburton	Corrosion Inhibitor					
				Listed Below			

HYDROCHLORIC ACID	Halliburton	Solvent					
				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	10.77935	
			Hydrochloric acid	7647-01-0	15.00000	0.02672	
			Guar gum	9000-30-0	100.00000	0.02498	
			Inorganic salt	Proprietary	30.00000	0.01902	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01902	
			Acrylamide acrylate copolymer	Proprietary	30.00000	0.01902	Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
			Ethylene Glycol	107-21-1	60.00000	0.00839	
			Glutaraldehyde	111-30-8	30.00000	0.00268	
			Neutralized Polyacrylic Emulsion	Proprietary	10.00000	0.00140	
			Sodium persulfate	7775-27-1	100.00000	0.00046	
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00045	
			Methanol	67-56-1	60.00000	0.00009	
			Ethanol	64-17-5	1.00000	0.00009	
			Reaction product of acetophenone, formaldehyde, thiourea and oleic acid in dimethyl formamide	68527-49-1	30.00000	0.00004	
			Ethoxylated alcohols	Proprietary	30.00000	0.00004	
			Fatty acids, tall oil	Proprietary	30.00000	0.00004	
			Olefins	Proprietary	5.00000	0.00002	
			Propargyl alcohol	107-19-7	10.00000	0.00001	
			Phosphoric acid	7664-38-2	0.10000	0.00001	

			Sodium sulfate	7757-82-6	0.10000	0.00000
--	--	--	----------------	-----------	---------	---------

* 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)

WELL OPERATOR: ANTERO RESOURCES CORP. ADDRESS: 1615 WYNNCOOP STREET DENVER, CO 80202

DESIGNATED AGENT: DIANNA STAMPER CT CORPORATION SYSTEM ADDRESS: 5400 D BIG TYLER ROAD CHARLESTON, WV 25313

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL

WELL # 12-131WA

DRAWING # KEROGENHAD

SCALE 1" = 1000'

JOB # 12-131WA

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

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL

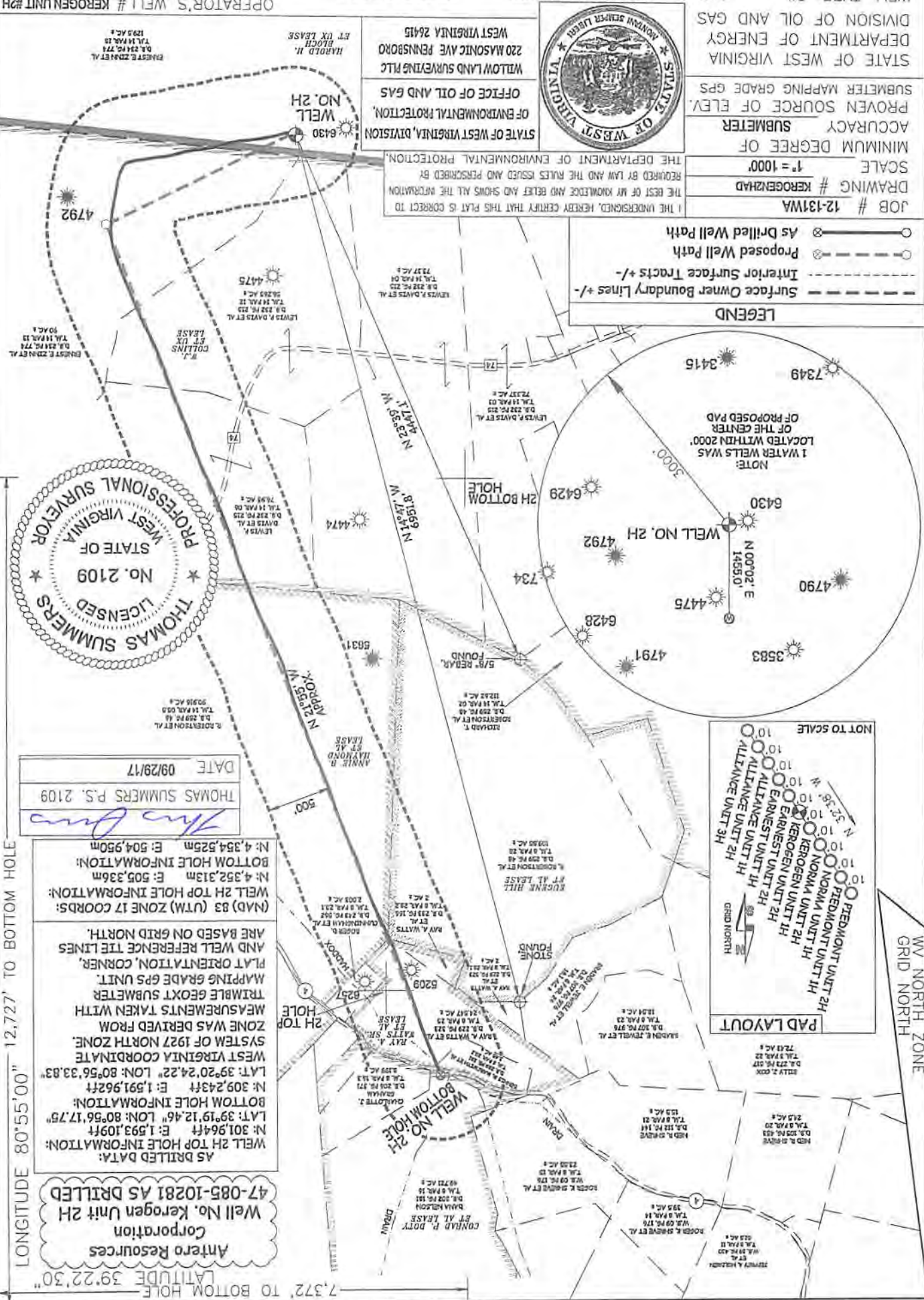
LOCATION: ELEVATION AS DRILLED - 1,120' WATERSHED NORTH FORK HUGHES RIVER STATE 47 COUNTY 085 PERMIT # 10281

SURFACE OWNER: ERNEST E. ZINN ET AL QUADRANGLE PENNSBORO 75' DISTRICT CLAY ACREAGE 129.5 ACRES +/- LEASE ACREAGE 131.5 ACRES +/- 60 ACRES +/- REDRILL PERFORMATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) AS DRILLED PLUG & ABANDON CLEAN OUT & REFLUG TARGET FORMATION MARCELLUS

WELL OPERATOR: ANTERO RESOURCES CORP. ADDRESS: 1615 WYNNCOOP STREET DENVER, CO 80202

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11/09/2018



DATE 09/29/17

THOMAS SUMMERS P.S. 2109

AS DRILLED DATA:

WELL 2H TOP HOLE INFORMATION:

N: 301.964ft E: 1.593.109ft

LAT: 39°19'12.46" LON: 80°56'17.75"

BOTTOM HOLE INFORMATION:

N: 309.243ft E: 1.591.962ft

LAT: 39°20'24.22" LON: 80°56'33.83"

WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE. ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOMX SUBMETER MAPPING GRADE GPS UNIT. PLAT ORIENTATION, CORNER, AND WELL REFERENCE TIE LINES ARE BASED ON GRID NORTH.

(NAD) 83 (UTM) ZONE 17 COORDS:

WELL 2H TOP HOLE INFORMATION:

N: 4,352.313m E: 505.336m

BOTTOM HOLE INFORMATION:

N: 4,354.525m E: 504.950m

Antero Resources Corporation

Well No. Kerogen Unit 2H

47-085-10281 AS DRILLED

LATITUDE 39.2230"

LONGITUDE 80.5500"

LONGITUDE 80.5500"

LONGITUDE 80.5500"

4.811"

7.372" TO BOTTOM HOLE

6.110"

LATITUDE 39.2000"

7.372" TO BOTTOM HOLE



LATITUDE 39°20'00"

6,110'

7,372' TO BOTTOM HOLE

LATITUDE 39°22'30"

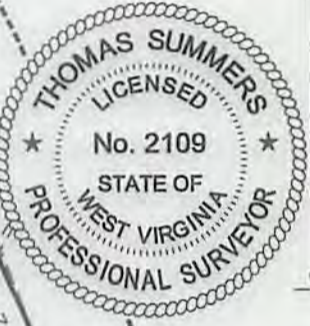
LONGITUDE 80°55'00" 12,727' TO BOTTOM HOLE

Antero Resources Corporation
Well No. Kerogen Unit 2H
47-085-10281 AS DRILLED

AS DRILLED DATA: 11/09/2018
WELL 2H TOP HOLE INFORMATION:
N: 301,964ft E: 1,593,109ft
LAT: 39°19'12.46" LON: 80°56'17.75"
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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:
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N: 4,352,313m E: 505,336m
BOTTOM HOLE INFORMATION:
N: 4,354,525m E: 504,950m

THOMAS SUMMERS P.S. 2109
DATE 09/29/17



NOT TO SCALE



NOTE:
1 WATER WELLS WAS LOCATED WITHIN 2000' OF THE CENTER OF PROPOSED PAD

LEGEND

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

JOB # 12-131WA
DRAWING # KEROGENZHAD
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY SUBMETER
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS

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

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

OPERATOR'S WELL# KEROGEN UNIT #2H
API WELL #
WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL
(IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X
LOCATION: ELEVATION AS DRILLED - 1,120' WATERSHED NORTH FORK HUGHES RIVER STATE COUNTY PERMIT
QUADRANGLE PENNSBORO 7.5' DISTRICT CLAY COUNTY COUNTY RITCHIE
SURFACE OWNER ERNEST E. ZINN ET AL ACREAGE 129.5 ACRES +/-
OIL & GAS ROYALTY OWNER HAROLD H. BLOCH ET UX; W.J. COLLINS ET UX; ANNIE B. HAYMOND ET AL; RAY A WATTS SR. ET AL; CONRAD P. DOTY ET AL LEASE ACREAGE 131.5 ACRES +/-; 575 ACRES +/-; 639.06 ACRES +/-; 27.997 ACRES +/-; 60 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 ESTIMATED DEPTH 6,434' TVD 13,890' MD
TARGET FORMATION MARCELLUS
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1615 WYNKOOP STREET ADDRESS CT CORPORATION SYSTEM
DENVER, CO 80202 CHARLESTON, WV 25313