

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

API 47-017-06859 County Doddridge District West Union
Quad West Union 7.5' Pad Name Alexander Pad Field/Pool Name -----
Farm name Antero Resources Corporation Well Number Convair 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 4354064m Easting 519369m
Landing Point of Curve Northing 4353881m Easting 519760m
Bottom Hole Northing 4351809m Easting 520629m

Elevation (ft) 1181' 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 9/20/2017 Date drilling commenced 1/18/2018 Date drilling ceased 5/7/2018
Date completion activities began 10/21/2018 Date completion activities ceased 12/29/2018
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 None Identified 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 None Identified Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:

WR-35
Rev. 8/23/13

API 47-017 - 06859 Farm name Antero Resources Corporation Well number Convair Unit 2H

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"	105'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	582.1'	New	54#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2575.1'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	15661'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	7098.4'		4.7#, P-110		
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	204 sx	15.6	1.18	241	0'	8 Hrs.
Surface	Class A	540 sx	15.6	1.21	653	0'	8 Hrs.
Coal							
Intermediate 1	Class A	870 sx	15.6	1.21	1053	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	787 sx (Lead) 1304 sx (Tail)	14(Lead), 15.2 (Tail)	1.45 (Lead), 1.94(Tail)	3671	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 15661' MD, 6930' TVD (BHL), 6955' (Deepest Point Drilled) Loggers TD (ft) 15661' MD

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

Plug back procedure N/A

Kick off depth (ft) 6441'

** This is a subsequent Well. Antero only runs wireline logs on one well on a multi-well pad (Scorpio Unit 2H API#47-017-06861). Please reference the wireline logs submitted with Form WR-35 for Scorpio 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 N/A

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API 47- 017 - 06859 Farm name Antero Resources Corporation Well number Convair Unit 2H

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>6834' (TOP)</u>	<u>TVD</u>	<u>7164' (TOP)</u> MD
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 3600 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 10202 mcfpd Oil 107 bpd NGL --- bpd Water 411 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	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 Huntington State PA Zip 15642

Cementing Company Halliburton
Address 121 Champion Way City Canonsburg State PA Zip 15317

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

Please insert additional pages as applicable.

Completed by Karin Cox Telephone 303-357-6820
Signature  Title Permitting Agent Date 4/30/2019

API 47-017-06859 Farm Name Matthew W. Alexander & Linda Marie Muhly Well Number Convair Unit 2H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	10/21/2018	15458.2	15558	60	Marcellus
2	10/21/2018	15256.99	15426.665	60	Marcellus
3	10/21/2018	15055.78	15225.455	60	Marcellus
4	10/22/2018	14854.57	15024.245	60	Marcellus
5	10/22/2018	14653.36	14823.035	60	Marcellus
6	10/23/2018	14452.15	14621.825	60	Marcellus
7	10/23/2018	14250.94	14420.615	60	Marcellus
8	10/24/2018	14049.73	14219.405	60	Marcellus
9	10/24/2018	13848.52	14018.195	60	Marcellus
10	10/24/2018	13647.31	13816.985	60	Marcellus
11	10/25/2018	13446.1	13615.775	60	Marcellus
12	10/25/2018	13244.89	13414.565	60	Marcellus
13	10/26/2018	13043.68	13213.355	60	Marcellus
14	10/26/2018	12842.47	13012.145	60	Marcellus
15	10/27/2018	12641.26	12810.935	60	Marcellus
16	10/27/2018	12440.05	12609.725	60	Marcellus
17	10/27/2018	12238.84	12408.515	60	Marcellus
18	10/28/2018	12037.63	12207.305	60	Marcellus
19	10/28/2018	11836.42	12006.095	60	Marcellus
20	10/29/2018	11635.21	11804.885	60	Marcellus
21	10/29/2018	11434	11603.675	60	Marcellus
22	10/30/2018	11232.79	11402.465	60	Marcellus
23	10/30/2018	11031.58	11201.255	60	Marcellus
24	10/31/2018	10830.37	11000.045	60	Marcellus
25	10/31/2018	10629.16	10798.835	60	Marcellus
26	11/1/2018	10427.95	10597.625	60	Marcellus
27	11/1/2018	10226.74	10396.415	60	Marcellus
28	11/1/2018	10025.53	10195.205	60	Marcellus
29	11/2/2018	9824.32	9993.995	60	Marcellus
30	11/2/2018	9623.11	9792.785	60	Marcellus
31	11/3/2018	9421.9	9591.575	60	Marcellus
32	11/3/2018	9220.69	9390.365	60	Marcellus
33	11/3/2018	9019.48	9189.155	60	Marcellus
34	11/4/2018	8818.27	8987.945	60	Marcellus
35	11/4/2018	8617.06	8786.735	60	Marcellus
36	11/4/2018	8415.85	8585.525	60	Marcellus
37	11/5/2018	8214.64	8384.315	60	Marcellus
38	11/5/2018	8013.43	8183.105	60	Marcellus
39	11/6/2018	7812.22	7981.895	60	Marcellus
40	11/6/2018	7611.01	7780.685	60	Marcellus
41	11/6/2018	7409.8	7579.475	60	Marcellus
42	11/6/2018	7208.59	7378.265	60	Marcellus

API 47-017-06859 Farm Name Matthew W. Alexander & Linda Marie Muhly Well Number Convair 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 (bbls)	Amount of Nitrogen/ other (units)
1	10/21/2018	71.54	7337	8438	3055	277790	6683	N/A
2	10/21/2018	78.56	7895	5722	3261	397600	8079	N/A
3	10/21/2018	77.84	7654	5617	3477	400960	8013	N/A
4	10/22/2018	77.68	7864	5903	3472	400660	8239	N/A
5	10/22/2018	76.08	8379	5961	3643	406460	8068	N/A
6	10/23/2018	75.41	7762	6350	3738	402120	7910	N/A
7	10/23/2018	75.09	7915	6400	4031	400680	8164	N/A
8	10/24/2018	75.25	7987	6181	4594	403960	8051	N/A
9	10/24/2018	72.05	7641	6083	4892	395260	8053	N/A
10	10/24/2018	77.59	7885	5707	4187	409580	8137	N/A
11	10/25/2018	72.44	7504	6086	4115	409740	8108	N/A
12	10/25/2018	69.2	7887	5783	4203	403420	8255	N/A
13	10/26/2018	73.7	7499	5674	5103	404020	8631	N/A
14	10/26/2018	76.36	7771	5600	5248	408240	9262	N/A
15	10/27/2018	79.8	7768	4927	5290	406440	8055	N/A
16	10/27/2018	77.33	7478	5737	5308	412840	9776	N/A
17	10/27/2018	78.1	7786	5681	5029	409200	8217	N/A
18	10/28/2018	79.27	7550	6354	4984	408920	8200	N/A
19	10/28/2018	77.9	7795	5601	4767	406700	7916	N/A
20	10/29/2018	79.1	7717	6104	5060	409780	8019	N/A
21	10/29/2018	78.6	7718	5990	3716	407220	8027	N/A
22	10/30/2018	78.3	7428	5635	3955	401860	8073	N/A
23	10/30/2018	76.31	7784	5834	3968	412780	8646	N/A
24	10/31/2018	79.4	7572	6062	3718	408080	8321	N/A
25	10/31/2018	78.9	7728	6124	4620	408960	8073	N/A
26	11/1/2018	79	7674	6159	3840	393824	8121	N/A
27	11/1/2018	73.2	7686	6368	4727	323000	6888	N/A
28	11/1/2018	75.1	7681	5807	3982	401780	9285	N/A
29	11/2/2018	76.9	7785	5996	3930	408880	7920	N/A
30	11/2/2018	76.7	7651	6054	4047	401100	8293	N/A
31	11/3/2018	79	7649	5946	5039	403440	8023	N/A
32	11/3/2018	74.9	6940	5858	4037	404600	8069	N/A
33	11/3/2018	77.8	7446	5475	5034	405420	8114	N/A
34	11/4/2018	78.7	7400	6038	5069	397160	7920	N/A
35	11/4/2018	75.01	7584	5681	4212	399800	9124	N/A
36	11/4/2018	77.7	6891	5680	4993	402860	7958	N/A
37	11/5/2018	75.95	6778	5535	4209	407360	8040	N/A
38	11/5/2018	76.78	6623	5511	3752	405880	7944	N/A
39	11/6/2018	78.8	6843	6033	3919	408020	8029	N/A
40	11/6/2018	79.85	6728	5781	4115	409760	8032	N/A
41	11/6/2018	70	7717	5866	4457	400860	9865	N/A
42	11/6/2018	78.5	7014	6139	3607	408260	8092	N/A
	AVG=	77	7,557	5,940	4,295	16,795,274	344,693	TOTAL

API 47-017-06859 Farm Name Matthew W. Alexander & Linda Marie Muhly Well Number Convair 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
Shaly Sandstone	0	155	0	155
Sandy Shale	est 155	215	est 155	215
Shaly Sandstone	est 215	255	est 215	255
Sandstone	est 255	395	est 255	395
Shaly Sandstone	est 395	505	est 395	505
Sandstone	est 505	575	est 505	575
Carbonaceous shale	est 575	615	est 575	615
Sandstone	est 615	765	est 615	765
Shaly sandstone tr coal	est 765	1,025	est 765	1,025
Shaly Siltstone	est 1025	1,305	est 1025	1,305
Sandstone	est 1305	1,455	est 1305	1,455
Sandy siltstone	est 1455	1,855	est 1455	1,855
Sandstone	est 1855	2,088	est 1855	2,087
Big Lime	2,088	2,662	2,087	2,660
Fifty Foot Sandstone	2,662	2,876	2,660	2,874
Gordon	2,876	3,089	2,874	3,084
Fifth Sandstone	3,089	3,147	3,084	3,140
Bayard	3,147	3,959	3,140	3,928
Speechley	3,959	4,268	3,928	4,228
Balltown	4,268	4,762	4,228	4,709
Bradford	4,762	5,237	4,709	5,168
Benson	5,237	5,512	5,168	5,435
Alexander	5,512	6,558	5,435	6,446
Sycamore	6,558	6,762	6,446	6,620
Middlesex	6,762	6,971	6,620	6,754
Burkett	6,971	7,037	6,754	6,784
Tully	7,037	7,164	6,784	6,834
Marcellus	7,164	NA	6,834	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:	10/21/2018
Job End Date:	11/6/2018
State:	West Virginia
County:	Doddridge
API Number:	47-017-06859-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Convair 2H
Latitude:	39.33570600
Longitude:	-80.77542200
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,955
Total Base Water Volume (gal):	14,822,822
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	87.74845	Density = 8.330
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.22093	

Brine Water	Operator	Base Fluid							
		Water		7732-18-5	100.00000	0.04389	Density = 9.800		
WG-36 GELLING AGENT	Halliburton	Gelling Agent							
				Listed Below					
FDP-S1296-17	Halliburton	Corrosion Inhibitor							
				Listed Below					
SP BREAKER	Halliburton	Breaker							
				Listed Below					
SAND-PREMIUM WHITE-40/70	Halliburton	Proppant							
				Listed Below					
EXCELERATE PS-2	Halliburton	Friction Reducer							
				Listed Below					
HYDROCHLORIC ACID	Halliburton	Solvent							
				Listed Below					
SCALECHEK LP-70	Halliburton	Scale Inhibitor							
				Listed Below					
SAND-PREMIUM WHITE 30/50	Halliburton	Proppant							

					Listed Below				
SAND-COMMON WHITE-100 MESH	Halliburton	Proppant							
					Listed Below				
MC B-8614	Halliburton	Biocide							
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	11.94089		
				Hydrochloric acid	7647-01-0	15.00000	0.02566		
				Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01721		
				Inorganic salt	Proprietary	30.00000	0.01721		
				Acrylamide acrylate polymer	Proprietary	30.00000	0.01721		Denise Tuck, Halliburton, 3000 N. Sam Houston Pkwy E., Houston, TX 77032, 281-871-6226
				Guar gum	9000-30-0	100.00000	0.01507		
				Ethylene glycol	107-21-1	60.00000	0.00865		
				Glutaraldehyde	111-30-8	30.00000	0.00246		
				Teimer	Proprietary	10.00000	0.00144		
				Sodium persulfate	7775-27-1	100.00000	0.00053		
				Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00041		
				Sodium polyacrylate	9003-04-7	1.00000	0.00014		
				Methanol	67-56-1	100.00000	0.00014		
				Ethanol	64-17-5	1.00000	0.00008		
				Modified thiourea polymer	Proprietary	30.00000	0.00004		
				Phosphoric acid	7664-38-2	0.10000	0.00001		

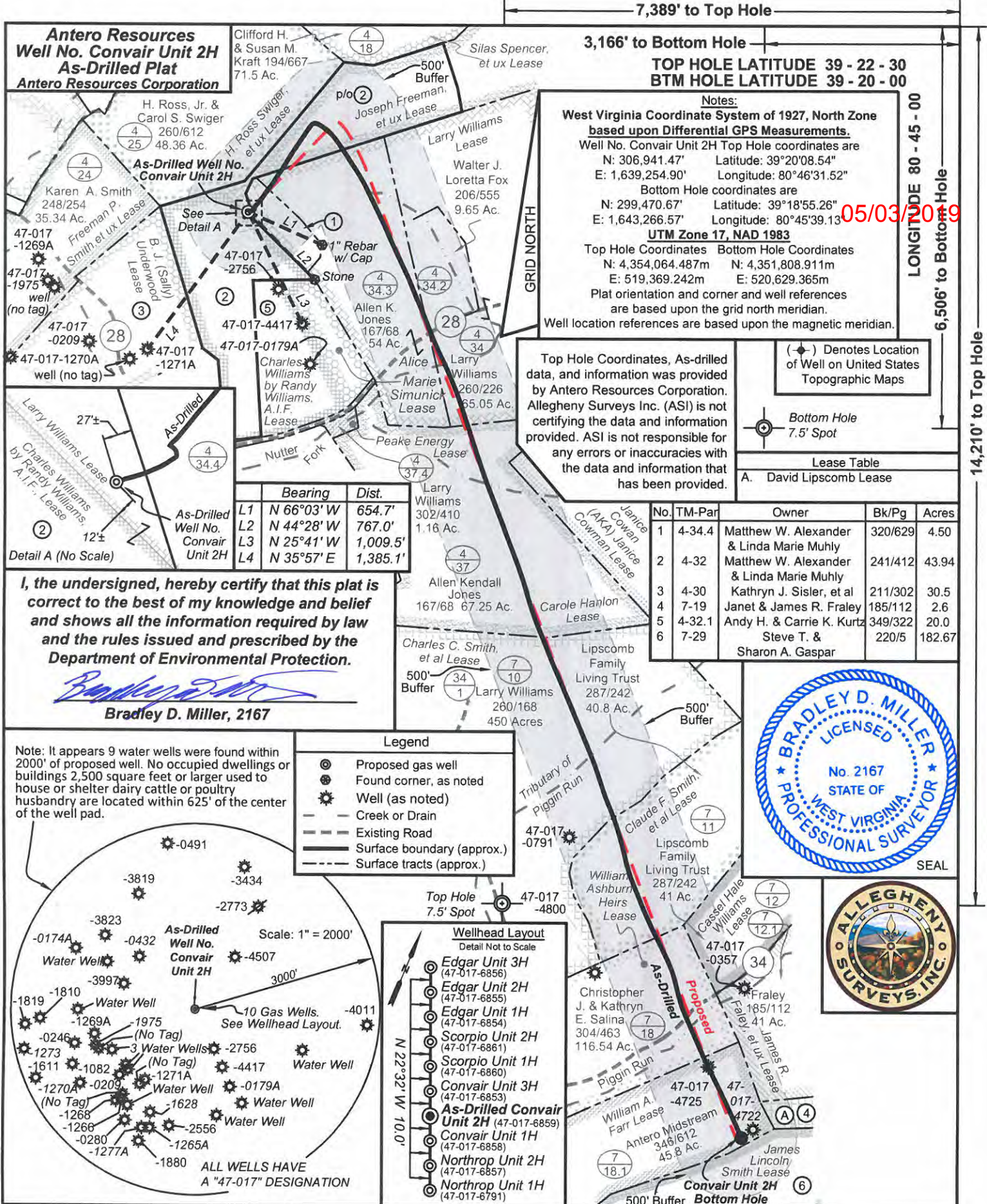
			Propargyl alcohol	107-19-7	5.00000	0.00001			
			Ethoxylated alcohols	Proprietary	5.00000	0.00001			
			Acrylic acid	79-10-7	0.01000	0.00000			
			Sodium sulfate	7757-82-6	0.10000	0.00000			

* 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(r) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)



7,389' to Top Hole
 3,166' to Bottom Hole
 TOP HOLE LATITUDE 39 - 22 - 30
 BTM HOLE LATITUDE 39 - 20 - 00

Notes:
 West Virginia Coordinate System of 1927, North Zone based upon Differential GPS Measurements.
 Well No. Convair Unit 2H Top Hole coordinates are
 N: 306,941.47' Latitude: 39°20'08.54"
 E: 1,639,254.90' Longitude: 80°46'31.52"
 Bottom Hole coordinates are
 N: 299,470.67' Latitude: 39°18'55.26"
 E: 1,643,266.57' Longitude: 80°45'39.13"
UTM Zone 17, NAD 1983
 Top Hole Coordinates Bottom Hole Coordinates
 N: 4,354,064.487m N: 4,351,808.911m
 E: 519,369.242m E: 520,629.365m
 Plat orientation and corner and well references are based upon the grid north meridian.
 Well location references are based upon the magnetic meridian.

05/03/2019

Top Hole Coordinates, As-drilled data, and information was provided by Antero Resources Corporation. Allegheny Surveys Inc. (ASI) is not certifying the data and information provided. ASI is not responsible for any errors or inaccuracies with the data and information that has been provided.

(*) Denotes Location of Well on United States Topographic Maps

Bottom Hole 7.5' Spot

Lease Table
 A. David Lipscomb Lease

No.	TM-Par	Owner	Bk/Pg	Acres
1	4-34.4	Matthew W. Alexander & Linda Marie Muhly	320/629	4.50
2	4-32	Matthew W. Alexander & Linda Marie Muhly	241/412	43.94
3	4-30	Kathryn J. Sisler, et al	211/302	30.5
4	7-19	Janet & James R. Fraley	185/112	2.6
5	4-32.1	Andy H. & Carrie K. Kurtz	349/322	20.0
6	7-29	Steve T. & Sharon A. Gaspar	220/5	182.67

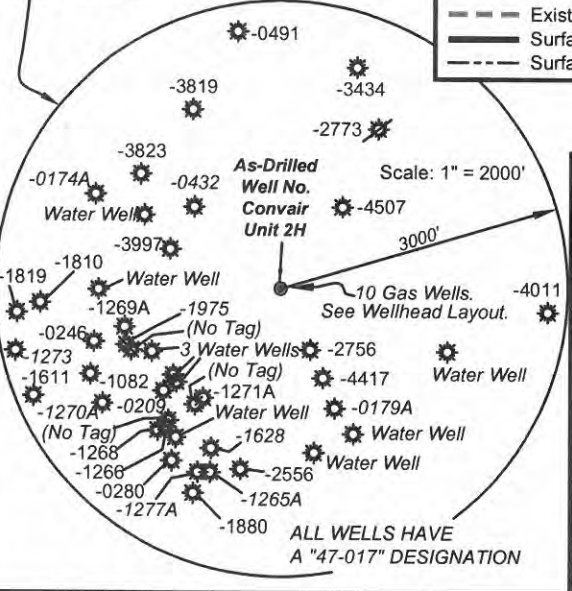
I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the rules issued and prescribed by the Department of Environmental Protection.

Bradley D. Miller
Bradley D. Miller, 2167



Note: It appears 9 water wells were found within 2000' of proposed well. No occupied dwellings or buildings 2,500 square feet or larger used to house or shelter dairy cattle or poultry husbandry are located within 625' of the center of the well pad.

- Legend**
- Proposed gas well
 - Found corner, as noted
 - Well (as noted)
 - Creek or Drain
 - Existing Road
 - Surface boundary (approx.)
 - Surface tracts (approx.)



- Wellhead Layout**
 Detail Not to Scale
- Edgar Unit 3H (47-017-6856)
 - Edgar Unit 2H (47-017-6855)
 - Edgar Unit 1H (47-017-6854)
 - Scorpio Unit 2H (47-017-6861)
 - Scorpio Unit 1H (47-017-6860)
 - Convair Unit 3H (47-017-6853)
 - As-Drilled Convair Unit 2H (47-017-6859)
 - Convair Unit 1H (47-017-6858)
 - Northrop Unit 2H (47-017-6857)
 - Northrop Unit 1H (47-017-6791)



FILE NO: 47-30-WU-14
 DRAWING NO: Convair 2H Well Plat
 SCALE: 1" = 1000'
 MINIMUM DEGREE OF ACCURACY: Submeter
 PROVEN SOURCE OF ELEVATION: WVDOT, Harrisville, WV

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: October 8 20 18
 Operator's Well No. Convair Unit 2H
 API WELL NO
 47 - 017 - 06859
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Drilled Grade - 1181' WATERSHED: Headwaters Middle Island Creek QUADRANGLE: West Union
 DISTRICT: West Union Matthew W. Alexander Joseph Freeman, et ux; COUNTY: Doddridge
 SURFACE OWNER: & Linda Marie Muhly William A. Farr; Charles C. Smith, et al ACREAGE: 43.94 60; 120; 40
 ROYALTY OWNER: Clyde F. Smith, et al; Carole Hanlon; Larry Williams; William Ashburn Heirs LEASE NO: ACREAGE: 428.51; 71.5
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY) As-Drilled 6,930' TVD
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus Shale ESTIMATED DEPTH: 15,661' MD

WELL OPERATOR: Antero Resources Corporation DESIGNATED AGENT: Dianna Stamper - CT Corporation System
 ADDRESS: 1615 Wynkoop Street ADDRESS: 5400 D Big Tyler Road
 Denver, CO 80202 Charleston, WV 25313