

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

API 47 - 095 - 02126 County Tyler District Ellsworth
Quad Shirley 7.5' Pad Name Pierpoint Pad Field/Pool Name _____
Farm name Seckman, Lloyd C. Well Number Weigle 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 4,366,958m Easting 512,149m
Landing Point of Curve Northing 4,367,168.53m Easting 512,282.49m
Bottom Hole Northing 4,370,181m Easting 511,207m

Elevation (ft) 1201' 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 11/1/2013 Date drilling commenced 1/5/2014 Date drilling ceased 3/8/2014
Date completion activities began 3/26/2014 Date completion activities ceased 5/18/2014
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 256' Open mine(s) (Y/N) depths N
Salt water depth(s) ft None Identified Void(s) encountered (Y/N) depths N
Coal depth(s) ft None Identified Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by: _____

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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#/J-55	N/A	Y
Surface	17-1/2"	13-3/8"	520'	New	48#/H-40	N/A	N*
Coal							
Intermediate 1	12-1/4"	9-5/8"	2618'	New	36#/J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17,829'	New	23#/P-110	N/A	Y
Tubing		2-3/8"	6888'		4.7#/N-80		
Packer type and depth set		N/A					

Comment Details *Notified Joe Taylor on 1/31/2014 about cement not returning to surface. Mixed and pumped 200 sxs Class A cement with successful return to surface.

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	150 sx	15.6	1.18	38 Cu. Ft.	0'	8 hrs
Surface	Class A	828 sx	15.6	1.18	361 Cu. Ft.	0'	8 hrs
Coal							
Intermediate 1	Class A	954 sx	15.6	1.18	820 Cu. Ft.	0'	8 hrs
Intermediate 2							
Intermediate 3							
Production	Class H	867 sx (Lead), 1775 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.44 (Lead), 1.80 (Tail)	3599 Cu. Ft.	-500' into Intermediate Casing	8 hrs
Tubing							

Drillers TD (ft) 17,829' MD, 6712' TVD (BHL), 6719' TVD (Deepest Point Drilled) Loggers TD (ft) 17,780' MD

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

Plug back procedure N/A

Kick off depth (ft) 6075'

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 Radioactive & Chemical

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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 (bbbls)	Amount of Nitrogen/other (units)
*PLEASE SEE ATTACHED EXHIBIT 2								

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS			
		TVD		MD
Marcellus	6659' (Top)		7076' (Top)	

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 4100 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW Gas 13,598 mcfpd Oil 606 bpd NGL --- bpd Water 4 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	DEPTH IN FT	DEPTH IN FT	DEPTH IN FT	
	NAME	TVD	MD	MD	

	0		0		

***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 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 Baker Hughes
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

Please insert additional pages as applicable.

Completed by Natalie Komp Telephone 303-357-6820
Signature *Natalie Komp* Title Permitting Agent Date 8/11/2015

API 47-095-02126 Farm Name Seckman, Lloyd C. Well Number Weigle Unit 1H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	26-Mar-14	17611'	17738'	60	Marcellus
2	11-Apr-14	17461'	17588'	60	Marcellus
3	11-Apr-14	17311'	17438'	60	Marcellus
4	11-Apr-14	17161'	17288'	60	Marcellus
5	12-Apr-14	17012'	17138'	60	Marcellus
6	12-Apr-14	16862'	16989'	60	Marcellus
7	12-Apr-14	16712'	16839'	60	Marcellus
8	12-Apr-14	16562'	16689'	60	Marcellus
9	12-Apr-14	16412'	16539'	60	Marcellus
10	13-Apr-14	16262'	16389'	60	Marcellus
11	13-Apr-14	16112'	16239'	60	Marcellus
12	13-Apr-14	15962'	16089'	60	Marcellus
13	13-Apr-14	15813'	15939'	60	Marcellus
14	14-Apr-14	15663'	15790'	60	Marcellus
15	14-Apr-14	15513'	15640'	60	Marcellus
16	14-Apr-14	15363'	15490'	60	Marcellus
17	15-Apr-14	15213'	15340'	60	Marcellus
18	15-Apr-14	15063'	15190'	60	Marcellus
19	15-Apr-14	14913'	15040'	60	Marcellus
20	15-Apr-14	14764'	14890'	60	Marcellus
21	16-Apr-14	14614'	14741'	60	Marcellus
22	16-Apr-14	14464'	14591'	60	Marcellus
23	16-Apr-14	14314'	14441'	60	Marcellus
24	16-Apr-14	14164'	14291'	60	Marcellus
25	16-Apr-14	14014'	14141'	60	Marcellus
26	17-Apr-14	13864'	13991'	60	Marcellus
27	17-Apr-14	13714'	13841'	60	Marcellus
28	17-Apr-14	13565'	13691'	60	Marcellus
29	17-Apr-14	13415'	13542'	60	Marcellus
30	18-Apr-14	13265'	13392'	60	Marcellus
31	18-Apr-14	13115'	13242'	60	Marcellus
32	18-Apr-14	12965'	13092'	60	Marcellus
33	18-Apr-14	12815'	12942'	60	Marcellus
34	18-Apr-14	12665'	12792'	60	Marcellus
35	18-Apr-14	12515'	12642'	60	Marcellus
36	20-Apr-14	12366'	12493'	60	Marcellus
37	20-Apr-14	12216'	12343'	60	Marcellus
38	20-Apr-14	12066'	12193'	60	Marcellus
39	20-Apr-14	11916'	12043'	60	Marcellus
40	21-Apr-14	11766'	11893'	60	Marcellus
41	21-Apr-14	11616'	11743'	60	Marcellus
42	21-Apr-14	11466'	11593'	60	Marcellus
43	21-Apr-14	11317'	11443'	60	Marcellus
44	22-Apr-14	11167'	11294'	60	Marcellus
45	22-Apr-14	11017'	11144'	60	Marcellus
46	22-Apr-14	10867'	10994'	60	Marcellus
47	22-Apr-14	10717'	10844'	60	Marcellus
48	22-Apr-14	10567'	10694'	60	Marcellus
49	23-Apr-14	10417'	10544'	60	Marcellus
50	23-Apr-14	10267'	10394'	60	Marcellus
51	23-Apr-14	10118'	10245'	60	Marcellus
52	23-Apr-14	9968'	10095'	60	Marcellus
53	23-Apr-14	9818'	9945'	60	Marcellus
54	24-Apr-14	9668'	9795'	60	Marcellus
55	24-Apr-14	9518'	9645'	60	Marcellus
56	24-Apr-14	9368'	9495'	60	Marcellus
57	24-Apr-14	9218'	9345'	60	Marcellus
58	24-Apr-14	9069'	9195'	60	Marcellus
59	24-Apr-14	8919'	9046'	60	Marcellus
60	25-Apr-14	8769'	8896'	60	Marcellus
61	25-Apr-14	8619'	8746'	60	Marcellus
62	25-Apr-14	8469'	8596'	60	Marcellus
63	25-Apr-14	8319'	8446'	60	Marcellus
64	25-Apr-14	8169'	8296'	60	Marcellus
65	25-Apr-14	8019'	8146'	60	Marcellus
66	25-Apr-14	7870'	7996'	60	Marcellus
67	26-Apr-14	7720'	7847'	60	Marcellus
68	26-Apr-14	7570'	7697'	60	Marcellus
69	26-Apr-14	7420'	7547'	60	Marcellus
70	26-Apr-14	7270'	7397'	60	Marcellus
71	27-Apr-14	7120'	7247'	60	Marcellus

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API 47-095-02126 Farm Name Seckman, Lloyd C. Well Number Weigle Unit 1H								
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-Apr-14	31.4	6,140	4,600	4,684	199,200	6,965	N/A
2	11-Apr-14	53.0	6,838	5,643	4,802	200,824	6,256	N/A
3	11-Apr-14	75.4	7,575	5,932	4,397	204,215	6,397	N/A
4	11-Apr-14	72.0	7,122	5,763	4,968	204,114	6,847	N/A
5	11-Apr-14	73.0	7,290	5,289	4,534	199,915	6,099	N/A
6	12-Apr-14	73.0	7,384	5,962	4,364	199,319	6,034	N/A
7	12-Apr-14	76.9	7,320	5,707	4,267	200,424	6,062	N/A
8	12-Apr-14	76.0	7,664	5,081	4,087	206,094	6,065	N/A
9	13-Apr-14	75.5	7,526	5,469	6,956	201,210	6,075	N/A
10	13-Apr-14	73.0	7,266	5,369	5,019	199,910	5,939	N/A
11	13-Apr-14	77.0	7,540	5,195	4,756	199,024	6,049	N/A
12	13-Apr-14	78.0	7,559	4,926	4,033	201,455	6,027	N/A
13	14-Apr-14	76.3	7,660	5,303	3,988	199,422	5,936	N/A
14	14-Apr-14	76.0	7,385	5,147	4,838	197,739	6,107	N/A
15	14-Apr-14	77.0	7,496	5,006	4,329	201,355	5,957	N/A
16	14-Apr-14	80.8	7,433	5,246	4,230	200,983	5,899	N/A
17	15-Apr-14	77.0	7,528	5,626	4,899	198,282	5,932	N/A
18	15-Apr-14	77.0	7,384	5,290	4,990	197,298	5,944	N/A
19	15-Apr-14	78.0	7,380	5,086	4,142	200,926	5,965	N/A
20	15-Apr-14	77.0	7,256	5,126	4,202	198,212	5,836	N/A
21	15-Apr-14	81.3	7,416	5,409	5,101	207,101	6,386	N/A
22	16-Apr-14	75.0	7,426	5,391	4,001	205,526	5,905	N/A
23	16-Apr-14	78.0	7,444	5,087	4,582	198,817	5,838	N/A
24	16-Apr-14	83.8	7,426	4,950	4,822	200,543	5,870	N/A
25	16-Apr-14	79.2	7,509	5,342	4,979	201,743	5,804	N/A
26	17-Apr-14	82.2	7,463	5,354	4,888	200,295	5,729	N/A
27	17-Apr-14	77.7	7,236	5,448	4,978	199,749	5,768	N/A
28	17-Apr-14	77.2	7,135	5,204	4,635	200,101	5,866	N/A
29	17-Apr-14	75.1	7,030	5,396	4,237	203,290	5,814	N/A
30	18-Apr-14	78.6	7,140	5,236	4,647	200,845	5,803	N/A
31	18-Apr-14	79.4	7,144	5,200	4,763	201,053	5,797	N/A
32	18-Apr-14	75.7	6,963	5,038	4,994	199,508	5,884	N/A
33	18-Apr-14	76.2	6,847	4,881	4,411	201,106	5,770	N/A
34	18-Apr-14	75.5	6,960	5,233	4,817	203,478	5,929	N/A
35	18-Apr-14	75.4	7,270	5,362	4,775	202,857	5,781	N/A
36	20-Apr-14	79.0	7,175	5,154	4,684	200,438	5,837	N/A
37	20-Apr-14	78.4	7,022	5,154	4,671	199,441	5,864	N/A
38	20-Apr-14	77.9	6,873	4,894	4,817	202,687	5,884	N/A
39	20-Apr-14	76.1	6,830	5,517	4,926	201,697	5,758	N/A
40	21-Apr-14	76.1	6,840	5,682	4,987	197,224	5,680	N/A
41	21-Apr-14	77.5	6,928	5,152	5,059	200,141	5,601	N/A
42	21-Apr-14	77.4	6,791	5,289	4,774	199,985	5,666	N/A
43	21-Apr-14	80.5	7,012	5,411	4,967	206,699	5,803	N/A
44	22-Apr-14	76.1	7,410	6,050	4,972	199,924	5,734	N/A
45	22-Apr-14	82.0	7,424	5,804	5,176	200,636	5,723	N/A
46	22-Apr-14	77.0	6,915	5,384	5,226	201,211	5,621	N/A
47	22-Apr-14	77.0	6,910	5,591	4,784	203,905	5,685	N/A
48	22-Apr-14	76.1	6,700	5,831	4,965	198,764	5,655	N/A
49	23-Apr-14	76.3	6,770	5,202	5,156	199,803	5,634	N/A
50	23-Apr-14	78.3	6,830	5,022	5,529	200,093	5,643	N/A
51	23-Apr-14	78.0	6,661	5,194	4,506	202,251	5,717	N/A
52	23-Apr-14	78.0	6,850	5,712	4,997	200,027	5,546	N/A
53	23-Apr-14	77.0	6,800	5,480	5,703	198,700	5,511	N/A
54	24-Apr-14	77.1	6,650	5,332	5,006	199,938	5,518	N/A
55	24-Apr-14	76.0	6,800	5,377	5,399	197,484	5,437	N/A
56	24-Apr-14	77.4	6,859	5,293	5,125	199,774	5,563	N/A
57	24-Apr-14	76.1	6,440	5,115	4,898	200,976	5,543	N/A
58	24-Apr-14	78.0	6,400	5,445	5,299	198,983	5,525	N/A
59	24-Apr-14	76.0	6,600	5,027	4,476	198,531	5,500	N/A
60	25-Apr-14	78.0	6,500	5,357	4,723	200,189	5,514	N/A
61	25-Apr-14	76.2	6,422	5,050	4,790	201,185	5,543	N/A
62	25-Apr-14	75.3	6,184	4,776	3,874	203,085	5,610	N/A
63	25-Apr-14	77.0	6,400	5,177	4,041	201,691	5,481	N/A
64	25-Apr-14	77.0	6,961	4,965	3,661	199,470	5,532	N/A
65	26-Apr-14	77.0	6,278	4,714	4,690	203,825	5,567	N/A
66	26-Apr-14	76.7	6,372	5,105	5,130	198,867	5,428	N/A
67	26-Apr-14	77.0	6,411	5,028	4,595	199,831	5,477	N/A
68	26-Apr-14	77.0	6,365	5,606	4,746	205,614	5,515	N/A
69	26-Apr-14	78.0	6,296	5,830	4,624	203,219	5,573	N/A
70	26-Apr-14	77.0	6,230	6,271	4,887	201,221	5,461	N/A
71	27-Apr-14	77.0	6,513	5,816	3,668	226,327	5,826	N/A
AVG=		76.1	6,994	5,325	4,741	14,289,769	412,510	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
Freshwater	256	NA	256	NA
Siltstone	0	296	0	296
Siltstone with Trace Coal	296	316	296	316
Siltstone	316	336	316	336
Sandstone	336	376	336	376
Siltstone with Trace Coal	376	466	376	466
Sandstone	466	716	466	716
Sandstone/Siltstone	716	956	716	956
Limestone/Siltstone	956	1,176	956	1,176
Siltstone/Sandstone with Trace Coal	1,176	1,216	1,176	1,216
Siltstone	1,216	1,356	1,216	1,356
Sandstone	1,356	1,496	1,356	1,496
Siltstone with Trace Coal	1,496	1,516	1,496	1,516
Sandstone/Siltstone	1,516	1,916	1,516	1,916
Sandstone with Trace Coal	1,916	1,956	1,916	1,956
Sandstone/Siltstone	1,956	2,096	1,956	2,096
Big Lime	2,096	2,201	2,096	2,201
Big Injun	2,201	2,694	2,201	2,694
Gantz Sand	2,694	2,833	2,694	2,833
Fifty Foot Sandstone	2,833	2,920	2,833	2,920
Gordon	2,920	3,263	2,920	3,263
Fifth Sandstone	3,263	3,321	3,263	3,321
Bayard	3,321	3,672	3,321	3,672
Warren	3,672	4,069	3,672	4,069
Speechley	4,069	4,780	4,069	4,780
Bradford	4,780	5,190	4,780	5,190
Benson	5,190	5,423	5,190	5,424
Alexander	5,423	5,585	5,424	5,585
Elk	5,585	5,977	5,585	5,977
Rhinestreet	5,977	6,312	5,977	6,337
Sycamore	6,312	6,490	6,337	6,630
Middlesex	6,490	6,590	6,630	6,862
Burkett	6,590	6,618	6,862	6,935
Tully	6,618	6,659	6,935	7,076
Marcellus	6,659	NA	7,076	NA

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Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/11/2014
Job End Date:	4/27/2014
State:	West Virginia
County:	Tyler
API Number:	47-095-02126-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Weigle Unit 1H
Longitude:	-80.85879400
Latitude:	39.45210000
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,719
Total Base Water Volume (gal):	27,936,384
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	Operator	Carrier	Water	7732-18-5	100.00000	93.99894	
Sand, White, 40/70	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00000	3.57989	
Sand, White, 20/40	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00000	1.50245	
Sand, White, 100 mesh	Baker Hughes	Proppant	Crystalline Silica (Quartz)	14808-60-7	100.00000	0.62673	
HCl, 10.1 - 15%	Baker Hughes	Acidizing	Water	7732-18-5	85.00000	0.12143	SmartCare Product
			Hydrochloric Acid	7647-01-0	15.00000	0.02143	SmartCare Product
GW-3LDF	Baker Hughes	Gelling Agent	Mineral Oil	8042-47-5	70.00000	0.02720	SmartCare Product
			Guar Gum	9000-30-0	60.00000	0.02331	SmartCare Product
			Petroleum Distillates	64742-47-8	30.00000	0.01166	SmartCare Product
			Paraffinic Petroleum Distillate	64742-55-8	30.00000	0.01166	SmartCare Product
			Crystalline Silica: Quartz	14808-60-7	5.00000	0.00194	SmartCare Product
			Isotridecanol, ethoxylated	9043-30-5	5.00000	0.00194	SmartCare Product
			1-butoxy-2-propanol	5131-66-8	5.00000	0.00194	SmartCare Product

FRW-18	Baker Hughes	Friction Reducer	Hydrotreated Light Distillate	64742-47-8	30.00000	0.01047	SmartCare Product
	Baker Hughes	Scale Inhibitor	Ethylene Glycol	107-21-1	45.00000	0.00473	SmartCare Product
	Baker Hughes	Biocide	Calcium Chloride	10043-52-4	5.00000	0.00053	SmartCare Product
			Glutaraldehyde	111-30-8	30.00000	0.00260	SmartCare Product
			Didecyl Dimethyl Ammonium Chloride	7173-51-5	10.00000	0.00087	SmartCare Product
			Quaternary Ammonium Compound	68424-85-1	5.00000	0.00043	SmartCare Product
			Ethanol	64-17-5	5.00000	0.00043	SmartCare Product
Ferrotrol 300L	Baker Hughes	Iron Control	Citric Acid	77-92-9	60.00000	0.00061	SmartCare Product
CI-14	Baker Hughes	Corrosion Inhibitor	Methanol	67-56-1	100.00000	0.00023	SmartCare Product
			Polyoxyalkylenes	Trade Secret	30.00000	0.00007	SmartCare Product
			Fatty Acids	Trade Secret	10.00000	0.00002	SmartCare Product
			Olefin	Trade Secret	5.00000	0.00001	SmartCare Product
			Propargyl Alcohol	107-19-7	5.00000	0.00001	SmartCare Product
Enzyme G-NE	Baker Hughes	Breaker	Contains non-hazardous ingredients which are listed in the non-MSDS section of the report	NA			SmartCare Product
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.							
		Other Chemicals	Water	7732-18-5		0.03078	
			Poly (acrylamide-co-acrylic acid) partial sodium salt	Trade Secret		0.01047	
			2-Propenoic, Polymer with Sodium Phosphinate, Sodium Salt	71050-62-9		0.00210	
			Ammonium Chloride	12125-02-9		0.00105	
			Alcohols, C12-16, ethoxylated	Trade Secret		0.00070	
			Oleamide DEA	93-83-4		0.00070	
			Hemicellulase Enzyme Concentrate	9025-56-3		0.00031	
			Polyoxyethylene Sorbitan Monooleate	9005-65-6		0.00017	
			Sorbitan Monooleate	Trade Secret		0.00017	
			Sodium Chloride	7647-14-5		0.00011	
			Potassium Chloride	7447-40-7		0.00011	
			2-butoxy-1-propanol	Trade Secret		0.00004	
			Modified Thiourea Polymer	68527-49-1		0.00002	
			Hydrochloric Acid	7647-01-0		0.00000	
			Formaldehyde	50-00-0		0.00000	

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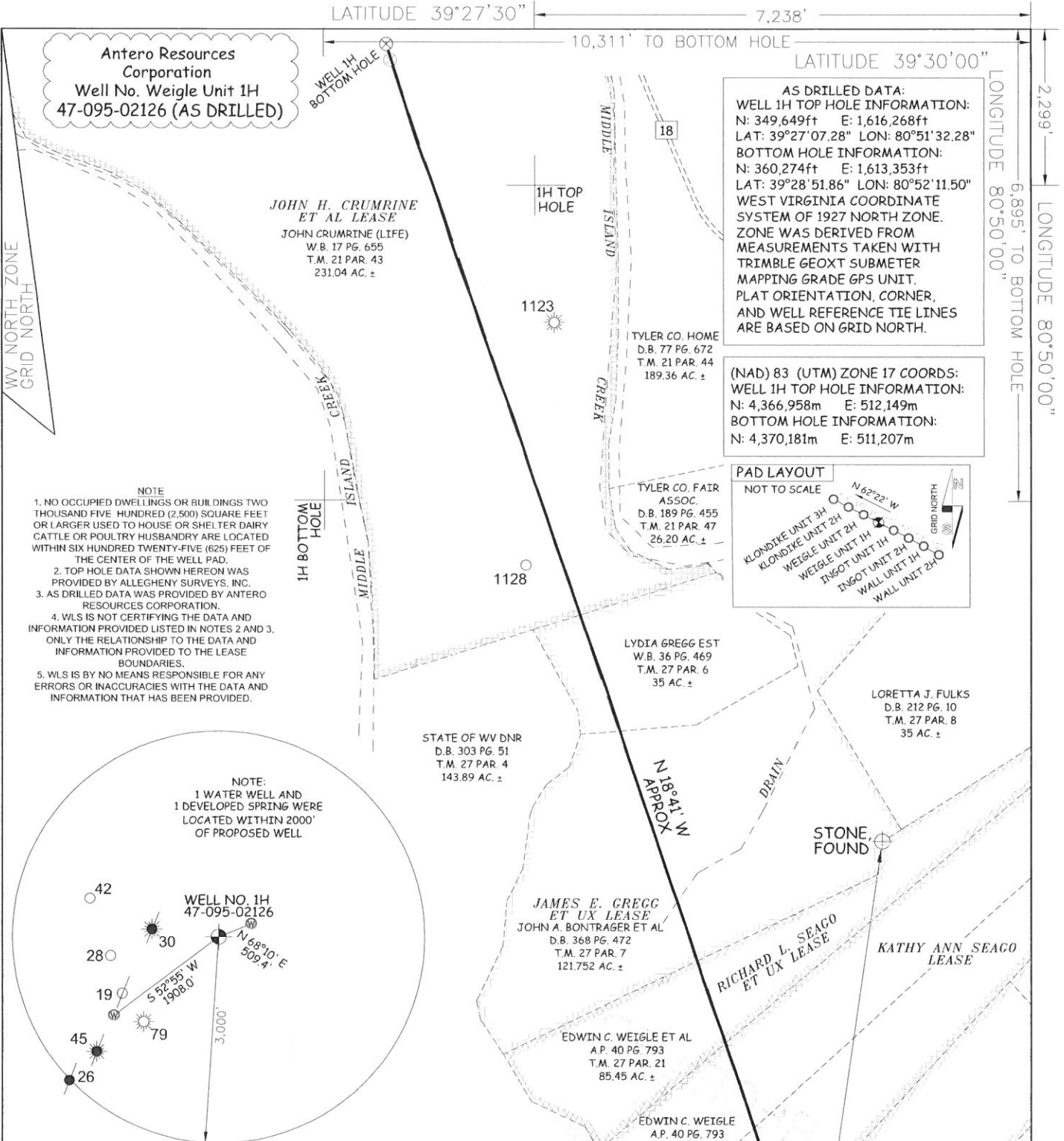
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MORGANTOWN, WV

* 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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STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

WILLOW LAND SURVEYING PLLC
220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415

JOB # 13-036WA
DRAWING # WEIGLE1HAD
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 +/-
- Existing Fence
- Found monument, as noted
- Proposed Well Path
- As Drilled Well Path

DATE 07/17/15
OPERATOR'S WELL # WEIGLE UNIT #1H

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL 47 - 095 - 02126
(IF "GAS") PRODUCTION STORAGE DEEP SHALLOW STATE COUNTY PERMIT
LOCATION: ELEVATION ??? ORIGINAL - 1,201' AS DRILLED WATERSHED OUTLET MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5 DISTRICT ELLSWORTH COUNTY TYLER
SURFACE OWNER LLOYD C. SECKMAN ACREAGE 128.5 ACRES +/-
OIL & GAS ROYALTY OWNER LLOYD C. SECKMAN; THOMAS L. BURKHART; KATHY ANN SEAGO; LEASE ACREAGE 128.5 ACRES±; 90 ACRES±; 129.2 ACRES±;
RICHARD L. SEAGO ET UX; JAMES E. GREGG ET UX; JOHN H. CRUMRINE ET AL 74.2 AC±; 141 AC±; 256 AC±

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 6,712' TVD 17,829' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1625 17TH STREET ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313