



Antero Resources
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Office 303.357.7310
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March 20, 2020

West Virginia Department of Environmental Protection
Office of Oil and Gas
601 57th Street
Charleston, WV 25304

To Whom It May Concern:

Please find enclosed the Well Operator's Report of Well Work, Form WR-35 (including As-Drilled Survey Plat, Directional Survey and FracFocus report), Discharge Monitoring Report Form WR-34 and corresponding logs for the following wells off of the **Weekley Trust Pad**:

- Cinqmars Unit 1H-2H
- Goliad Unit 1H-2H
- Ray Unit 1H-3H
- Swartzmiller Unit 1H-2H

If you have any questions, please feel free to contact me at (303)-357-7223.

Sincerely,

A handwritten signature in black ink, appearing to read "Megan Griffith", written over a white background.

Megan Griffith
Permitting Agent
Antero Resources Corporation

Enclosures

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

API 47- _____ - _____ County _____ District _____
Quad _____ Pad Name _____ Field/Pool Name _____
Farm name _____ Well Number _____
Operator (as registered with the OOG) _____
Address _____ City _____ State _____ Zip _____

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing _____ Easting _____
Landing Point of Curve Northing _____ Easting _____
Bottom Hole Northing _____ Easting _____

Elevation (ft) _____ 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)

Date permit issued _____ Date drilling commenced _____ Date drilling ceased _____
Date completion activities began _____ Date completion activities ceased _____
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

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

Freshwater depth(s) ft _____ Open mine(s) (Y/N) depths _____
Salt water depth(s) ft _____ Void(s) encountered (Y/N) depths _____
Coal depth(s) ft _____ Cavern(s) encountered (Y/N) depths _____
Is coal being mined in area (Y/N) _____

Reviewed by:

API 47- _____ - _____ Farm name _____ Well number _____

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							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							
Packer type and depth set							

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							
Surface							
Coal							
Intermediate 1							
Intermediate 2							
Intermediate 3							
Production							
Tubing							

Drillers TD (ft) _____ Loggers TD (ft) _____
 Deepest formation penetrated _____ Plug back to (ft) _____
 Plug back procedure _____

Kick off depth (ft) _____

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 _____

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 _____

API 47- _____ - _____ Farm name _____ Well number _____

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>
_____	_____ TVD _____ MD
_____	_____
_____	_____
_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface _____ psi Bottom Hole _____ psi DURATION OF TEST _____ hrs
 OPEN FLOW Gas _____ mcfpd Oil _____ bpd NGL _____ bpd Water _____ 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 _____
 Address _____ City _____ State _____ Zip _____
 Logging Company _____
 Address _____ City _____ State _____ Zip _____
 Cementing Company _____
 Address _____ City _____ State _____ Zip _____
 Stimulating Company _____
 Address _____ City _____ State _____ Zip _____

Please insert additional pages as applicable.

Completed by _____ Telephone _____
 Signature _____ Title _____ Date _____

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	6/29/2019	16481.6	16536.6	60	Marcellus
2	6/30/2019	16283.3	16450.55	60	Marcellus
3	6/30/2019	16085	16252.25	60	Marcellus
4	7/1/2019	15886.7	16053.95	60	Marcellus
5	7/1/2019	15688.4	15855.65	60	Marcellus
6	7/1/2019	15490.1	15657.35	60	Marcellus
7	7/1/2019	15291.8	15459.05	60	Marcellus
8	7/2/2019	15093.5	15260.75	60	Marcellus
9	7/2/2019	14895.2	15062.45	60	Marcellus
10	7/8/2019	14696.9	14864.15	60	Marcellus
11	7/8/2019	14498.6	14665.85	60	Marcellus
12	7/9/2019	14300.3	14467.55	60	Marcellus
13	7/9/2019	14102	14269.25	60	Marcellus
14	7/9/2019	13903.7	14070.95	60	Marcellus
15	7/10/2019	13705.4	13872.65	60	Marcellus
16	7/10/2019	13507.1	13674.35	60	Marcellus
17	7/10/2019	13308.8	13476.05	60	Marcellus
18	7/11/2019	13110.5	13277.75	60	Marcellus
19	7/11/2019	12912.2	13079.45	60	Marcellus
20	7/12/2019	12713.9	12881.15	60	Marcellus
21	7/12/2019	12515.6	12682.85	60	Marcellus
22	7/12/2019	12317.3	12484.55	60	Marcellus
23	7/13/2019	12119	12286.25	60	Marcellus
24	7/13/2019	11920.7	12087.95	60	Marcellus
25	7/13/2019	11722.4	11889.65	60	Marcellus
26	7/13/2019	11524.1	11691.35	60	Marcellus
27	7/14/2019	11325.8	11493.05	60	Marcellus
28	7/14/2019	11127.5	11294.75	60	Marcellus
29	7/15/2019	10929.2	11096.45	60	Marcellus
30	7/15/2019	10730.9	10898.15	60	Marcellus
31	7/15/2019	10532.6	10699.85	60	Marcellus
32	7/15/2019	10334.3	10501.55	60	Marcellus
33	7/16/2019	10136	10303.25	60	Marcellus
34	7/16/2019	9937.7	10104.95	60	Marcellus
35	7/16/2019	9739.4	9906.65	60	Marcellus
36	7/17/2019	9541.1	9708.35	60	Marcellus
37	7/17/2019	9342.8	9510.05	60	Marcellus
38	7/17/2019	9144.5	9311.75	60	Marcellus
39	7/17/2019	8946.2	9113.45	60	Marcellus
40	7/17/2019	8747.9	8915.15	60	Marcellus
41	7/18/2019	8549.6	8716.85	60	Marcellus
42	7/18/2019	8351.3	8518.55	60	Marcellus
43	7/18/2019	8153	8320.25	60	Marcellus
44	7/18/2019	7954.7	8121.95	60	Marcellus
45	7/19/2019	7756.4	7923.65	60	Marcellus
46	7/19/2019	7558.1	7725.35	60	Marcellus
47	7/19/2019	7359.8	7527.05	60	Marcellus
48	7/19/2019	7161.5	7328.75	60	Marcellus
49	7/20/2019	6963.2	7130.45	60	Marcellus

API 47-085-10345 Farm Name David L. Weekley Revocable Trust Well Number Goliad 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	6/29/2019	70.03	8057	6722	3141	162560	4896	N/A
2	6/30/2019	69.73	8574	5722	3359	401640	8482	N/A
3	6/30/2019	71.95	8397	5519	3687	401920	8934	N/A
4	7/1/2019	74.8	7680	5150	3439	407780	10822	N/A
5	7/1/2019	71.22	7693	5314	3517	399940	8712	N/A
6	7/1/2019	77.3	7354	5314	3565	407120	8784	N/A
7	7/1/2019	79.27	7750	5586	3486	404840	8726	N/A
8	7/2/2019	56.2	7395	5440	8446	270855	14607	N/A
9	7/2/2019	75.45	7784	5404	3297	401500	8740	N/A
10	7/8/2019	69.72	8179	6299	3649	406740	12769	N/A
11	7/8/2019	78.76	7958	5227	3624	404120	8712	N/A
12	7/9/2019	78.98	7622	5386	3590	407720	8658	N/A
13	7/9/2019	77.37	7491	5727	3492	399760	9078	N/A
14	7/9/2019	79.01	7541	5190	3506	416180	8800	N/A
15	7/10/2019	78.45	7675	5375	3581	401520	8704	N/A
16	7/10/2019	77.38	7402	5923	3597	403860	8760	N/A
17	7/10/2019	78.8	7307	5825	3511	400180	8574	N/A
18	7/11/2019	75.79	7350	5679	3492	407050	9081	N/A
19	7/11/2019	78.6	7394	5454	3438	406380	8638	N/A
20	7/12/2019	77.5	7540	5922	3473	405040	8588	N/A
21	7/12/2019	75.14	7458	5543	3521	399820	8640	N/A
22	7/12/2019	76.76	7339	5495	3730	406980	8642	N/A
23	7/13/2019	80.3	7830	6075	3690	400380	8564	N/A
24	7/13/2019	79.7	7556	5950	3667	384705	8085	N/A
25	7/13/2019	75.99	7277	5867	3659	376220	8631	N/A
26	7/13/2019	79.98	7216	5700	3625	385635	8379	N/A
27	7/14/2019	73.17	7363	5684	3896	403000	14049	N/A
28	7/14/2019	79.6	7385	5718	3605	403080	8574	N/A
29	7/15/2019	79.82	7503	5706	3542	397300	8483	N/A
30	7/15/2019	76.64	6845	5678	3520	399860	8774	N/A
31	7/15/2019	76.67	6927	6208	3547	402720	8863	N/A
32	7/15/2019	78.67	7271	5975	3648	402120	8564	N/A
33	7/16/2019	78.29	7180	5876	3634	399225	8517	N/A
34	7/16/2019	76.63	6867	5987	3593	401120	8655	N/A
35	7/16/2019	79.1	6743	6577	3707	409700	8737	N/A
36	7/17/2019	79.9	7006	5789	3482	400920	8508	N/A
37	7/17/2019	80.38	7145	5856	3744	392640	8345	N/A
38	7/17/2019	77.29	6981	5848	3606	397080	8443	N/A
39	7/17/2019	78.01	6896	5459	3463	396960	8365	N/A
40	7/17/2019	79.92	7071	6001	3614	397160	8205	N/A
41	7/18/2019	79.62	7012	5793	3817	403320	8418.6	N/A
42	7/18/2019	80.71	7184	5702	3827	405900	8452.5	N/A
43	7/18/2019	79.52	6939	5785	3754	402220	8413.9	N/A
44	7/18/2019	79.88	7080	5714	3721	399460	8370.8	N/A
45	7/19/2019	79.88	7040	6042	3860	398400	8229.7	N/A
46	7/19/2019	76.85	7194	5722	3632	397720	8524	N/A
47	7/19/2019	80.69	7162	6559	3662	414000	8480.4	N/A
48	7/19/2019	77.17	6849	6120	3792	400620	8453	N/A
49	7/20/2019	81.15	6876	5773	3994	402800	8335.4	N/A
	AVG	76.8	7,406	5,738	3,697	17,682,630	400,974	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
Silty sandstone	0	225	0	225
Silty sandstone w/ coal	225	265	225	265
Sandy Siltstone	265	325	265	325
Silty sandstone	325	405	325	405
Sandy sahle	405	425	405	425
Sandy, limy siltstone	425	485	425	485
Sandstone	485	585	485	585
Siltstone	585	685	585	685
Sandstone w lime stingers	685	1,275	685	1,275
Silty sandstone	1,275	1,685	1,275	1,685
Limy shale	1,685	1,905	1,685	1,905
Sandstone	1,905	2,045	1,905	2,045
Siltstone	2,045	2,055	2,045	2,096
Big Lime	2,070	2,839	2,072	2,885
Fifty Foot Sandstone	2,839	3,001	2,861	3,049
Gordon	3,001	3,120	3,025	3,171
Fifth Sandstone	3,120	3,517	3,147	3,575
Bayard	3,517	4,120	3,551	4,191
Speechley	4,120	4,357	4,167	4,435
Balltown	4,357	4,978	4,411	5,073
Bradford	4,978	5,380	5,049	5,483
Benson	5,380	5,594	5,459	5,701
Alexander	5,594	6,422	5,677	6,619
Sycamore	6,299	6,398	6,458	6,595
Middlesex	6,398	6,495	6,595	6,776
Burkett	6,495	6,526	6,776	6,854
Tully	6,526	6,548	6,854	6,919
Marcellus	6,548	NA	6,919	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:	6/28/2019
Job End Date:	7/20/2019
State:	West Virginia
County:	Ritchie
API Number:	47-085-10345-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Goliad 2H
Latitude:	39.37160000
Longitude:	-80.92375270
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,618
Total Base Water Volume (gal):	18,740,466
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	Halliburton	Base Fluid					
			Water	7732-18-5	100.00000	88.66192	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.34432	

WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
MC B-8614	Halliburton	Biocide					
				Listed Below			
Excelerate EC-8	Halliburton	Friction Reducer					
				Listed Below			
FDP-S1296-17	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
CalBreak 5501	Calfrac Well Services Corp.	Breaker					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
Sand-Premium White-40/70	Halliburton	Proppant					
				Listed Below			
SP BREAKER	Halliburton	Breaker					

				Listed Below			
Sand-Premium White-30/50	Halliburton	Proppant					
				Listed Below			
SCALECHEK LP-70	Halliburton	Scale Inhibitor					
				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	10.94707	
			Hydrochloric acid	7647-01-0	15.00000	0.17583	
			Guar gum	9000-30-0	100.00000	0.01816	
			Inorganic salt	Proprietary	30.00000	0.01658	
			Acrylamide acrylate polymer	Proprietary	30.00000	0.01658	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01658	
			Ethylene glycol	107-21-1	60.00000	0.00857	
			Glutaraldehyde	111-30-8	30.00000	0.00286	
			Telomer	Proprietary	10.00000	0.00143	
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00048	
			Ammonium Persulfate	7727-54-0	100.00000	0.00041	
			Methanol	67-56-1	100.00000	0.00031	
			Sodium polyacrylate	9003-04-7	1.00000	0.00014	
			Ethanol	64-17-5	1.00000	0.00010	
			2 Propenoic acid, methylester, polymer with 1,1-dichloroethene	25038-72-6	20.00000	0.00008	
			Sodium persulfate	7775-27-1	100.00000	0.00008	

			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00006	
			Modified thiourea polymer	Proprietary	30.00000	0.00006	
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			Phosphoric acid	7664-38-2	0.10000	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(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Discharge Monitoring Report
Oil and Gas General Permit

Company Name: Antero Resources Corporation
API No: 47-085-10345 County: Ritchie
District: Clay Well No: Goliad Unit 2H
Farm Name: David Weekley L. Revocable Trust
Discharge Date/s From:(MMDDYY) 09/26/19 To: (MMDDYY) 10/26/19
Discharge Times. From: 0:00 To: 24:00
Total Volume to be Disposed from this facility (gallons): 906,634
Disposal Option(s) Utilized (write volumes in gallons):

- (1) Land Application: _____ (Include a topographical map of the Area.)
(2) UIC: 104,033 Permit No. 3400923821, 3400923823, 3400923824, 3416729731, 3416729543, 3416729464, 3416729445, 3410523619, 3410523652
(3) Offsite Disposal: _____ Site Location: _____
(4) Reuse: 802,601 Alternate Permit Number: _____
(5) Centralized Facility: _____ Permit No. _____
(6) Other method: _____ (Include an explanation)

Follow Instructions below to determine your treatment category:

Optional Pretreatment test: n/a Cl- mg/l n/a DO mg/l

1. Do you have permission to use expedited treatment from the Director or his representative? (Y/N) n/a If yes, who? _____ and place a four (4) on line 7. If not go to line 2
2. Was Frac Fluid or flowback put into the pit? (Y/N) n/a If yes, go to line 5. If not, go to line 3.
3. Do you have a chloride value pretreatment (see above)? (Y/N) n/a If yes, go to line 4 If not, go to line 5.
4. Is the Chloride level less than 5000 mg/l? (Y/N) n/a If yes, then enter a one (1) on line 7.
5. Do you have a pretreatment value for DO? (See above) (Y/N) n/a If yes, go to line 6 If not, enter a three (3) in line 7.
6. Is the DO level greater than 2.5 mg/l?(Y/N) n/a If yes, enter a two (2) on line 7. If not, enter a three (3) on line 7.
7. n/a is the category of your pit. Use the Appropriate section.
8. Comments on Pit condition: n/a No pit on site

Name of Principal Exec. Officer: Gretchen Kohler
Title of Officer: Senior Environmental and Regulatory Manager
Date Completed: 3/16/20

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Gretchen Kohler
Signature of a Principal Exec. Officer or Authorized agent.

Category 1
Sampling Results
API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	5	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl	5,000	_____	5,000	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
Total Al***		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Disposal Area		_____	Monitor	_____	Acres

*** Al is only reported if the pH is above 9.0

Category 2
Sampling Results
API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	10	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
Total Al***		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Disposal Area		_____	Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____

Date: _____

** Include a description of your aeration technique.

Aeration Code: _____

*** Al is only reported if the pH is above 9.0

Category 3
Sampling Results
API No : _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	20	_____	N/A	N/A	Days
Fe	6	_____	6	_____	mg/l
D.O.	2.5	_____	2.5	_____	mg/l
Settleable Sol.	0.5	_____	0.5	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
Total Al***		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Disposal Area		_____	Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____

Date: _____

** Include a description of your aeration technique.

Aeration Code: _____

*** Al is only reported if the pH is above 9.0.

Category 4
Sampling Results
API No: _____

Parameter	Predischarge		Discharge		Units
	Limits	Reported	Limits	Reported	
pH	6-10	_____	6-10	_____	S.U
Settling Time	1	_____	N/A	N/A	Days
Fe	Monitor	_____	Monitor	_____	mg/l
D.O.	Monitor	_____	Monitor	_____	mg/l
Settleable Sol.	Monitor	_____	Monitor	_____	mg/l
Cl*	12,500	_____	12,500	_____	mg/l
Oil	Trace	_____	Trace	_____	Obs.
TOC**		_____	Monitor	_____	mg/l
Oil and Grease		_____	Monitor	_____	mg/l
TSS		_____	Monitor	_____	mg/l
Total Mn	Monitor	_____	Monitor	_____	mg/l
Volume		_____	Monitor	_____	Gal
Flow		_____	Monitor	_____	Gal/min
Activated Carbon (0.175)		_____	N/A	N/A	lb/Bl
Date Site Reclaimed	N/A	N/A			10 days from dis.
Disposal Area		_____	Monitor	_____	Acres

* Can be 25,000 with inspector's approval,

(Inspector's signature): _____

Date: _____

LATITUDE 39°22'30"

2,003'

LATITUDE 39°22'30"

LONGITUDE 80°52'30"

LONGITUDE 80°55'00"

10,076' TO BOTTOM HOLE

Antero Resources Corporation Well No. Goliad Unit 2H 47-085-10345

NOTES: WELL 2H TOP HOLE INFORMATION: N: 320,644ft E: 1,597,511ft LAT: 39°22'17.76" LON: 80°55'25.51" BOTTOM HOLE INFORMATION: N: 311,739ft E: 1,601,685ft LAT: 39°20'50.41" LON: 80°54'30.60" 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 2H TOP HOLE INFORMATION: N: 4,358,026m E: 506,582m BOTTOM HOLE INFORMATION: N: 4,355,335m E: 507,899m

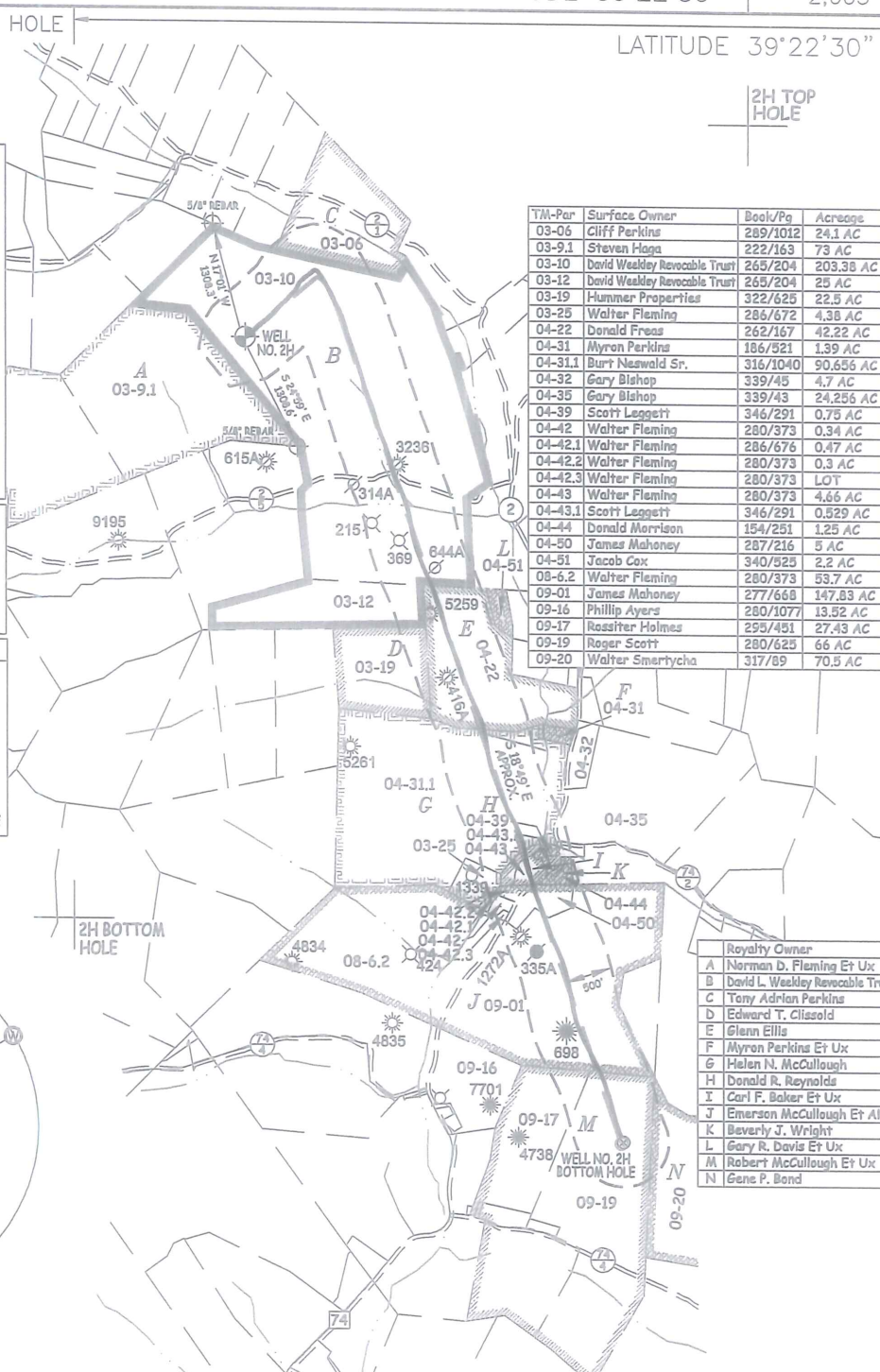
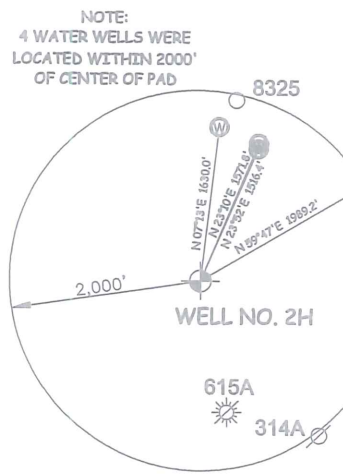
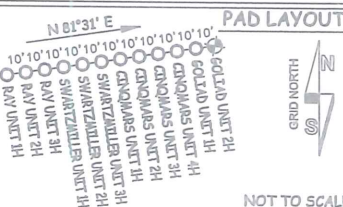


Table with 4 columns: TN-Par, Surface Owner, Book/Pg, Acreage. Lists various surface owners and their associated acreage.

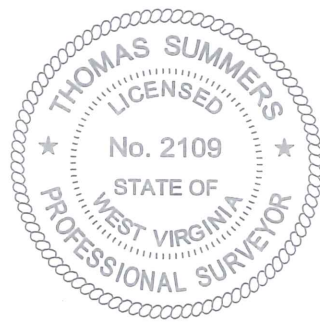
Table with 2 columns: Royalty Owner, Name. Lists royalty owners A through N.

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

- 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...
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 # 16-051WA, DRAWING # GOLIAD 2HAD, SCALE 1" = 2000', 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, DATE 02/10/20, OPERATOR'S WELL # GOLIAD UNIT #2H

WELL TYPE: OIL GAS X LIQUID INJECTION WASTE DISPOSAL 47 085 10345 (IF "GAS") PRODUCTION X STORAGE DEEP SHALLOW X STATE COUNTY PERMIT LOCATION: ELEVATION 1,235' AS BUILT QUADRANGLE PENNSBORO 7.5' WATERSHED NORTH FORK HUGHES RIVER DISTRICT CLAY COUNTY RITCHIE SURFACE OWNER DAVID L. WEEKLEY REVOCABLE TRUST ACREAGE 203.38 ACRES +/- OIL & GAS ROYALTY OWNER DAVID L. WEEKLEY REVOCABLE TRUST; GLENN ELLIS; HELEN N. McCULLOUGH; DONALD R. REYNOLDS; CARL F. BAKER ET UX; BEVERLY J. WRIGHT; EMERSON McCULLOUGH ET AL; ROBERT McCULLOUGH ET UX LEASE ACREAGE 229 AC±; 32 AC±; 103 AC±; 0.75 AC±; 4.36 AC±; 1.25 AC±; 154 AC±; 148.5 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 6,613' TVD 16,650' MD WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM ADDRESS 1615 WYNKOOP ST. DENVER, CO 80202 ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313