



Antero Resources
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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 "MGriffith", with a long horizontal flourish extending to the right.

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 _____

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.

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

PRODUCING FORMATION(S)

DEPTHS

	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 _____

API 47-085-10320 Farm Name David L. Weekley Revocable Trust Well Number Goliad Unit 1H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	7/21/2019	16638	16692.9	60	Marcellus
2	7/21/2019	16438.38	16606.73	60	Marcellus
3	7/22/2019	16238.76	16407.11	60	Marcellus
4	7/22/2019	16039.14	16207.49	60	Marcellus
5	7/23/2019	15839.52	16007.87	60	Marcellus
6	7/23/2019	15639.9	15808.25	60	Marcellus
7	7/23/2019	15440.28	15608.63	60	Marcellus
8	7/24/2019	15240.66	15409.01	60	Marcellus
9	7/25/2019	15041.04	15209.39	60	Marcellus
10	7/25/2019	14841.42	15009.77	60	Marcellus
11	7/25/2019	14641.8	14810.15	60	Marcellus
12	7/26/2019	14442.18	14610.53	60	Marcellus
13	7/27/2019	14242.56	14410.91	60	Marcellus
14	7/28/2019	14042.94	14211.29	60	Marcellus
15	7/28/2019	13843.32	14011.67	60	Marcellus
16	7/28/2019	13643.7	13812.05	60	Marcellus
17	7/29/2019	13444.08	13612.43	60	Marcellus
18	7/29/2019	13244.46	13412.81	60	Marcellus
19	7/30/2019	13044.84	13213.19	60	Marcellus
20	7/30/2019	12845.22	13013.57	60	Marcellus
21	7/30/2019	12645.6	12813.95	60	Marcellus
22	8/1/2019	12445.98	12614.33	60	Marcellus
23	8/1/2019	12246.36	12414.71	60	Marcellus
24	8/2/2019	12046.74	12215.09	60	Marcellus
25	8/2/2019	11847.12	12015.47	60	Marcellus
26	8/2/2019	11647.5	11815.85	60	Marcellus
27	8/3/2019	11447.88	11616.23	60	Marcellus
28	8/3/2019	11248.26	11416.61	60	Marcellus
29	8/3/2019	11048.64	11216.99	60	Marcellus
30	8/4/2019	10849.02	11017.37	60	Marcellus
31	8/4/2019	10649.4	10817.75	60	Marcellus
32	8/4/2019	10449.78	10618.13	60	Marcellus
33	8/4/2019	10250.16	10418.51	60	Marcellus
34	8/5/2019	10050.54	10218.89	60	Marcellus
35	8/5/2019	9850.92	10019.27	60	Marcellus
36	8/6/2019	9651.3	9819.65	60	Marcellus
37	8/6/2019	9451.68	9620.03	60	Marcellus
38	8/7/2019	9252.06	9420.41	60	Marcellus
39	8/7/2019	9052.44	9220.79	60	Marcellus
40	8/7/2019	8852.82	9021.17	60	Marcellus
41	8/7/2019	8653.2	8821.55	60	Marcellus
42	8/8/2019	8453.58	8621.93	60	Marcellus
43	8/8/2019	8253.96	8422.31	60	Marcellus
44	8/8/2019	8054.34	8222.69	60	Marcellus
45	8/8/2019	7854.72	8023.07	60	Marcellus
46	8/9/2019	7655.1	7823.45	60	Marcellus
47	8/9/2019	7455.48	7623.83	60	Marcellus
48	8/9/2019	7255.86	7424.21	60	Marcellus
49	8/10/2019	7056.24	7224.59	60	Marcellus
50	8/10/2019	6856.62	7024.97	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	7/21/2019	67.31	7990	5956	3199	181345	5459	N/A
2	7/21/2019	78.01	7728	5929	3534	405360	8784.9	N/A
3	7/22/2019	79.82	7715	5726	3584	404100	8905.5	N/A
4	7/22/2019	79.59	7849	5339	3502	412160	8993.7	N/A
5	7/23/2019	77.86	7898	5132	3438	407680	9045	N/A
6	7/23/2019	79.86	7722	5616	3443	405040	9558.1	N/A
7	7/23/2019	76.97	8000	5179	3644	406080	8966.7	N/A
8	7/24/2019	75.51	8040	4953	3737	407740	8956.1	N/A
9	7/25/2019	75.2	8214	5688	3720	397320	9693.5	N/A
10	7/25/2019	78.07	7750	5605	3906	408480	8830	N/A
11	7/25/2019	76.69	7660	4620	3890	409810	9025.9	N/A
12	7/26/2019	77.41	7851	5530	3574	408770	8989.7	N/A
13	7/27/2019	73.93	7410	4920	3478	407140	8788	N/A
14	7/28/2019	76.08	7485	5673	3572	401520	8661.4	N/A
15	7/28/2019	75.95	7478	5964	3509	404590	8798.3	N/A
16	7/28/2019	79.2	7482	5541	3571	396320	8714.9	N/A
17	7/29/2019	76.1	7464	5938	3613	399230	8696	N/A
18	7/29/2019	75	7192	5622	3736	404040	8819	N/A
19	7/30/2019	72.6	7242	5633	3557	403380	8568	N/A
20	7/30/2019	73.15	7160	5736	3570	405180	8724	N/A
21	7/30/2019	76.41	7357	5742	3652	392500	8605	N/A
22	8/1/2019	76	7294	4628	3664	404060	8777	N/A
23	8/1/2019	74.8	7014	5590	3531	403100	8570	N/A
24	8/2/2019	76.53	7311	6080	3717	406460	8956	N/A
25	8/2/2019	75.6	7376	6226	3598	401540	8706	N/A
26	8/2/2019	74.68	7221	5898	3738	401400	9267	N/A
27	8/3/2019	71.2	7027	5674	3624	415840	10311	N/A
28	8/3/2019	75.7	7166	6182	3703	407060	8618	N/A
29	8/3/2019	78.94	7017	5625	3705	401000	8521	N/A
30	8/4/2019	77.23	7447	5893	3653	427650	8810	N/A
31	8/4/2019	77.95	7165	5905	3743	405340	8562	N/A
32	8/4/2019	73.31	6820	6308	3831	402860	8610	N/A
33	8/4/2019	75.73	6922	5806	3904	405420	8624	N/A
34	8/5/2019	70.25	7139	6002	3893	401280	8517	N/A
35	8/5/2019	76.61	7254	6217	3856	401640	8458	N/A
36	8/6/2019	77.31	7206	5953	4091	418380	8679	N/A
37	8/6/2019	74.63	6835	6101	3785	410760	8475	N/A
38	8/7/2019	77.33	7070	6453	3984	402920	8496	N/A
39	8/7/2019	71.09	6649	5818	3745	398960	8364	N/A
40	8/7/2019	77.85	6547	4179	3910	406920	8650	N/A
41	8/7/2019	77.39	7151	5782	4004	404700	8437	N/A
42	8/8/2019	75.59	7160	5710	3591	399280	8959	N/A
43	8/8/2019	74.87	6567	5772	3709	405280	8575	N/A
44	8/8/2019	74.41	6655	5946	3853	405320	8545	N/A
45	8/8/2019	77.44	6719	5879	3968	404480	8387	N/A
46	8/9/2019	77.7	6642	6008	3793	401160	6798	N/A
47	8/9/2019	75.19	6792	6365	3830	409460	7024	N/A
48	8/9/2019	76.3	6585	5784	3709	407660	6956	N/A
49	8/10/2019	75.72	6947	5646	3952	402320	10044	N/A
50	8/10/2019	76.57	6972	6189	3820	403960	6849	N/A
	AVG	75.8	7,320	5,682	3,694	18,009,435	392,457	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	2,076	2,045	2,109
Big Lime	2,091	2,842	2,085	2,875
Fifty Foot Sandstone	2,842	3,020	2,851	3,054
Gordon	3,020	3,121	3,030	3,157
Fifth Sandstone	3,121	3,540	3,133	3,580
Bayard	3,540	4,124	3,556	4,166
Speechley	4,124	4,352	4,142	4,394
Balltown	4,352	4,967	4,370	5,009
Bradford	4,967	5,387	4,985	5,430
Benson	5,387	5,616	5,406	5,658
Alexander	5,616	6,418	5,634	6,518
Sycamore	6,294	6,394	6,363	6,494
Middlesex	6,394	6,492	6,494	6,671
Burkett	6,492	6,521	6,671	6,749
Tully	6,521	6,541	6,749	6,813
Marcellus	6,541	NA	6,813	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:	7/20/2019
Job End Date:	8/10/2019
State:	West Virginia
County:	Ritchie
API Number:	47-085-10320-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Goliad 1H
Latitude:	39.37159720
Longitude:	-80.92378800
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,857
Total Base Water Volume (gal):	18,065,342
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	87.93765	Density = 8.34
Ingredients	Listed Above	Listed Above					
			Water	7732-18-5	100.00000	0.32430	

WG-36 GELLING AGENT	Halliburton	Gelling Agent					
				Listed Below			
Sand-Premium White-30/50	Halliburton	Proppant					
				Listed Below			
MC B-8614	Halliburton	Biocide					
				Listed Below			
Excelerate EC-8	Halliburton	Friction Reducer					
				Listed Below			
SP BREAKER	Halliburton	Breaker					
				Listed Below			
Sand-Common White-100 Mesh, SSA-2	Halliburton	Proppant					
				Listed Below			
FDP-S1296-17	Halliburton	Acid Corrosion Inhibitor					
				Listed Below			
OPTIFLO-II DELAYED RELEASE BREAKER	Halliburton	Breaker					
				Listed Below			

CalBreak 5501	Calfrac Well Services Corp.	Breaker					
				Listed Below			
SCALECHEK LP-70	Halliburton	Scale Inhibitor					
				Listed Below			
HYDROCHLORIC ACID, 22 BAUME	Halliburton	Solvent					
				Listed Below			
Sand-Premium White-40/70	Halliburton	Proppant					
				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	11.69334	
			Hydrochloric acid	7647-01-0	15.00000	0.04092	
			Acrylamide acrylate polymer	Proprietary	30.00000	0.01675	
			Hydrotreated light petroleum distillate	64742-47-8	30.00000	0.01675	
			Inorganic salt	Proprietary	30.00000	0.01675	
			Guar gum	9000-30-0	100.00000	0.01592	
			Ethylene glycol	107-21-1	60.00000	0.00857	
			Glutaraldehyde	111-30-8	30.00000	0.00283	
			Telomer	Proprietary	10.00000	0.00143	
			Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl chlorides	68424-85-1	5.00000	0.00047	
			Ammonium Persulfate	7727-54-0	100.00000	0.00044	
			Methanol	67-56-1	100.00000	0.00029	
			Sodium polyacrylate	9003-04-7	1.00000	0.00014	

			Ammonium persulfate	7727-54-0	100.00000	0.00010	
			Ethanol	64-17-5	1.00000	0.00009	
			2 Propenoic acid, methylester, polymer with 1,1-dichloroethene	25038-72-6	20.00000	0.00009	
			Modified thiourea polymer	Proprietary	30.00000	0.00006	
			Mixture of dimer and trimer fatty acids of indefinite composition derived from tall oil	61790-12-3	30.00000	0.00006	
			Oxylated phenolic resin	Proprietary	30.00000	0.00003	
			Ethoxylated alcohols	Proprietary	5.00000	0.00001	
			Hexadecene	629-73-2	5.00000	0.00001	
			Propargyl alcohol	107-19-7	5.00000	0.00001	
			Phosphoric acid	7664-38-2	0.10000	0.00001	
			Acrylic acid	79-10-7	0.01000	0.00000	
			C.I. pigment Orange 5	3468-63-1	1.00000	0.00000	
			Sodium persulfate	7775-27-1	100.00000		
			Sodium sulfate	7757-82-6	0.10000		

* 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: 47-085-10320

County: Ritchie

District: Clay

Well No: Goliad Unit 1H

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,

(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.

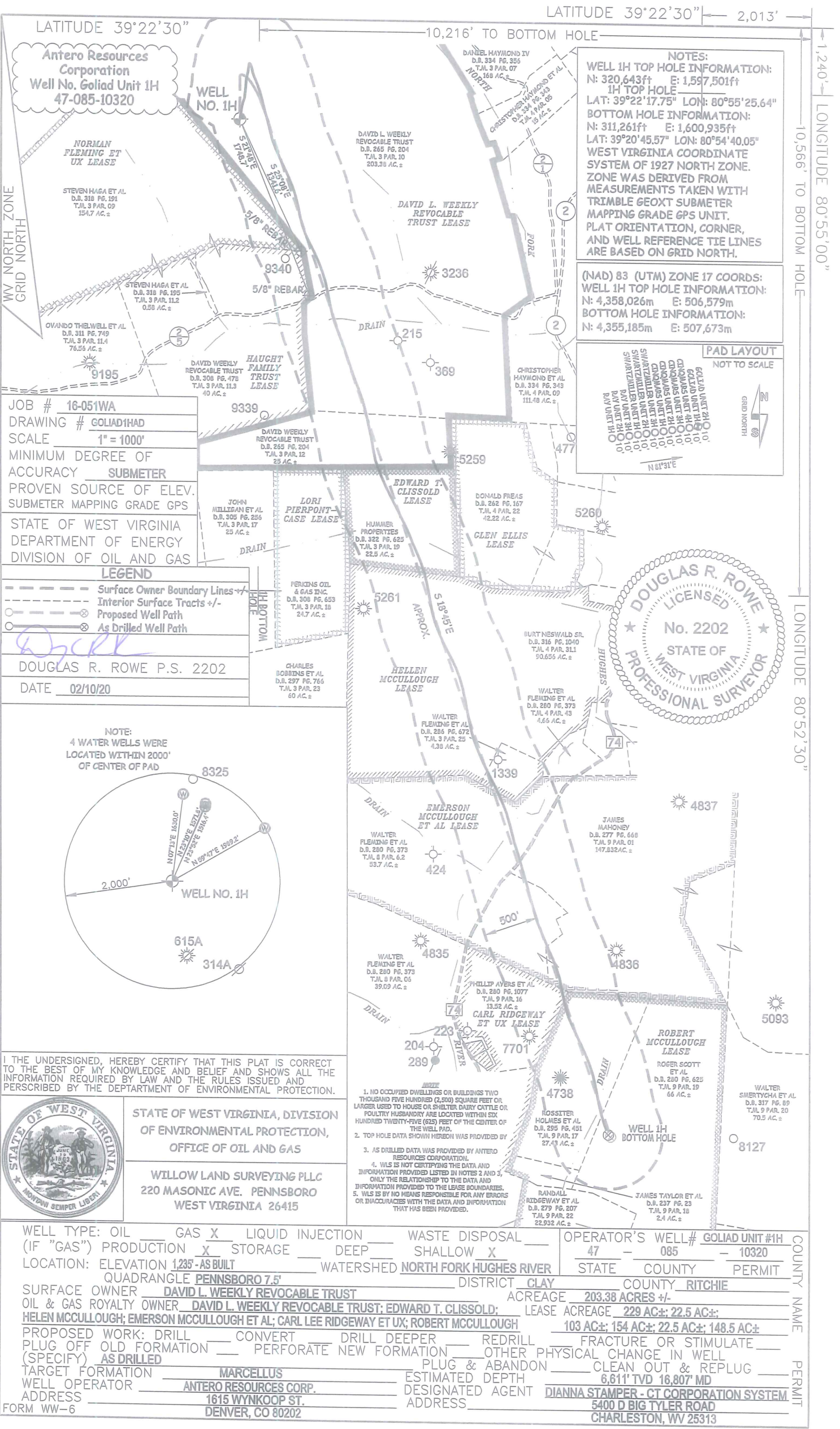
Category 4
Sampling Results
API No: _____

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: _____



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

WELL TYPE: OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/>		OPERATOR'S WELL#		GOLIAD UNIT #1H	
(IF "GAS") PRODUCTION <input checked="" type="checkbox"/> STORAGE <input type="checkbox"/> DEEP <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>		47 - 085		- 10320	
LOCATION: ELEVATION 1235' - AS BUILT		STATE		COUNTY	PERMIT
QUADRANGLE PENNSBORO 7.5'		DISTRICT CLAY		COUNTY	RITCHIE
SURFACE OWNER DAVID L. WEEKLY REVOCABLE TRUST		ACREAGE		203.38 ACRES +/-	
OIL & GAS ROYALTY OWNER DAVID L. WEEKLY REVOCABLE TRUST; EDWARD T. CLISSOLD;		LEASE ACREAGE		229 AC±; 22.5 AC±;	
HELEN MCCULLOUGH; EMERSON MCCULLOUGH ET AL; CARL LEE RIDGEWAY ET UX; ROBERT MCCULLOUGH				103 AC±; 154 AC±; 22.5 AC±; 148.5 AC±	
PROPOSED WORK: DRILL <input type="checkbox"/> CONVERT <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/>		PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> OTHER PHYSICAL CHANGE IN WELL <input type="checkbox"/>		(SPECIFY) AS DRILLED	
TARGET FORMATION MARCELLUS		PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/>			
WELL OPERATOR ANTERO RESOURCES CORP.		ESTIMATED DEPTH		6,611' TVD 16,807' MD	
ADDRESS 1615 WYNKOOP ST.		DESIGNATED AGENT		DIANNA STAMPER - CT CORPORATION SYSTEM	
FORM WW-6		ADDRESS		5400 D BIG TYLER ROAD	
DENVER, CO 80202				CHARLESTON, WV 25313	