



Antero Resources
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Denver, CO 80202
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", 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	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 _____
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 47-085-10349 Farm Name David L. Weekley Revocable Trust Well Number Swartzmiller Unit 1H

EXHIBIT 1

Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	8/11/2019	14079.5	14134.9	60	Marcellus
2	8/12/2019	13879.44	14048.49	60	Marcellus
3	8/12/2019	13678.98	13848.03	60	Marcellus
4	8/12/2019	13478.52	13647.57	60	Marcellus
5	8/13/2019	13278.06	13447.11	60	Marcellus
6	8/13/2019	13077.6	13246.65	60	Marcellus
7	8/13/2019	12247.65	12416	60	Marcellus
8	8/14/2019	12048.03	12216.38	60	Marcellus
9	8/14/2019	11848.41	12016.76	60	Marcellus
10	8/14/2019	11648.79	11817.14	60	Marcellus
11	8/14/2019	11449.17	11617.52	60	Marcellus
12	8/15/2019	11249.55	11417.9	60	Marcellus
13	8/15/2019	11049.93	11218.28	60	Marcellus
14	8/15/2019	10850.31	11018.66	60	Marcellus
15	8/15/2019	10650.69	10819.04	60	Marcellus
16	8/16/2019	10451.07	10619.42	60	Marcellus
17	8/16/2019	10251.45	10419.8	60	Marcellus
18	8/16/2019	10051.83	10220.18	60	Marcellus
19	8/16/2019	9852.21	10020.56	60	Marcellus
20	8/17/2019	9652.59	9820.94	60	Marcellus
21	8/17/2019	9452.97	9621.32	60	Marcellus
22	8/17/2019	9253.35	9421.7	60	Marcellus
23	8/18/2019	9053.73	9222.08	60	Marcellus
24	8/19/2019	8854.11	9022.46	60	Marcellus
25	8/19/2019	8654.49	8822.84	60	Marcellus
26	8/19/2019	8454.87	8623.22	60	Marcellus
27	8/19/2019	8255.25	8423.6	60	Marcellus
28	8/20/2019	8055.63	8223.98	60	Marcellus
29	8/20/2019	7856.01	8024.36	60	Marcellus
30	8/20/2019	7656.39	7824.74	60	Marcellus
31	8/20/2019	7456.77	7625.12	60	Marcellus
32	8/21/2019	7257.15	7425.5	60	Marcellus
33	8/21/2019	7057.53	7225.88	60	Marcellus
34	8/21/2019	6857.91	7026.26	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	8/11/2019	73.32	7342	7929	4130	171680	4850	N/A
2	8/12/2019	76.62	7329	5626	3128	400540	7153	N/A
3	8/12/2019	73.32	6756	7595	3280	405840	7281	N/A
4	8/12/2019	73.41	6659	5610	3421	407480	7594	N/A
5	8/13/2019	74.67	6769	5497	3583	406080	7521	N/A
6	8/13/2019	70.66	7723	5585	3461	405900	7688	N/A
7	8/13/2019	74.62	8035	5442	3500	400900	7121	N/A
8	8/14/2019	74.81	8126	5530	3576	401740	7022	N/A
9	8/14/2019	76.2	7936	5097	3930	402300	7089	N/A
10	8/14/2019	79.1	8133	5928	3915	405200	7286	N/A
11	8/14/2019	77.76	8075	5697	3766	405600	7095	N/A
12	8/15/2019	77.66	8312	5504	3787	403940	7050	N/A
13	8/15/2019	79.3	8238	5814	3984	401450	7171	N/A
14	8/15/2019	80.1	8297	5428	3873	404420	7176	N/A
15	8/15/2019	82.2	8242	5533	3715	399660	6974	N/A
16	8/16/2019	83.48	8012	4283	3915	406980	7031	N/A
17	8/16/2019	83.6	8272	5523	4048	397700	7108	N/A
18	8/16/2019	82.9	8205	5293	3602	410660	7180	N/A
19	8/16/2019	84.34	7772	5536	3703	407460	7040	N/A
20	8/17/2019	84.95	7713	5790	3689	408020	6944	N/A
21	8/17/2019	83.5	8044	5930	3764	401900	7073	N/A
22	8/17/2019	83.2	7923	5855	3859	414760	7241	N/A
23	8/18/2019	82.42	7669	5561	3868	400900	6950	N/A
24	8/19/2019	84.77	8007	5355	3850	408800	8794	N/A
25	8/19/2019	84.5	7934	5546	3713	405500	7101	N/A
26	8/19/2019	83.9	7839	5637	3827	420220	7190	N/A
27	8/19/2019	85.89	7928	5776	4032	423060	7041	N/A
28	8/20/2019	84.95	8001	5782	3869	419720	7133	N/A
29	8/20/2019	84.3	7656	5566	3842	402920	6914	N/A
30	8/20/2019	86	7867	5856	4016	400080	7013	N/A
31	8/20/2019	85.9	7949	5412	3969	403180	7031	N/A
32	8/21/2019	83.4	7722	5612	4082	400700	6920	N/A
33	8/21/2019	80.95	7544	5573	3892	401360	6925	N/A
34	8/21/2019	86.39	7763	5568	3933	400540	6938	N/A
	AVG	80.7	7,817	5,684	3,780	13,557,190	241,638	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 shale	405	425	405	425
Sandy, limy siltstone	425	485	425	485
Sandstone	485	585	485	585
Siltstone	585	685	585	685
Sandstone w lime stringers	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	2,068	2,045	2,083
Big Lime	2,083	2,838	2,059	2,838
Fifty Foot Sandstone	2,838	3,012	2,814	3,012
Gordon	3,012	3,121	2,988	3,121
Fifth Sandstone	3,121	3,542	3,097	3,546
Bayard	3,542	4,122	3,522	4,136
Speechley	4,122	4,363	4,112	4,381
Balltown	4,363	4,978	4,357	5,005
Bradford	4,978	5,398	4,981	5,433
Benson	5,398	5,609	5,409	5,647
Alexander	5,609	6,405	5,623	6,516
Sycamore	6,277	6,381	6,352	6,492
Middlesex	6,381	6,487	6,492	6,683
Burkett	6,487	6,513	6,683	6,747
Tully	6,513	6,535	6,747	6,814
Marcellus	6,535	NA	6,814	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.

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: 47-085-10349 County: Ritchie
District: Clay Well No: Swartzmiller 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, 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)

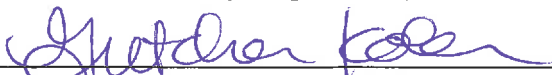
Follow Instructions below to determine your treatment category:

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.



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.

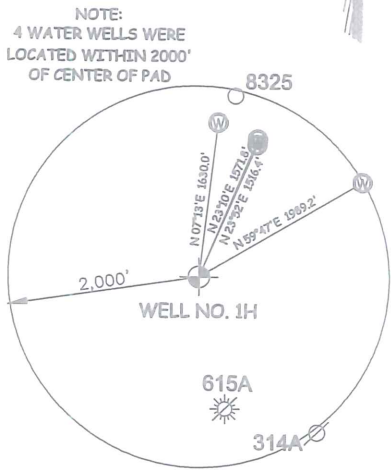
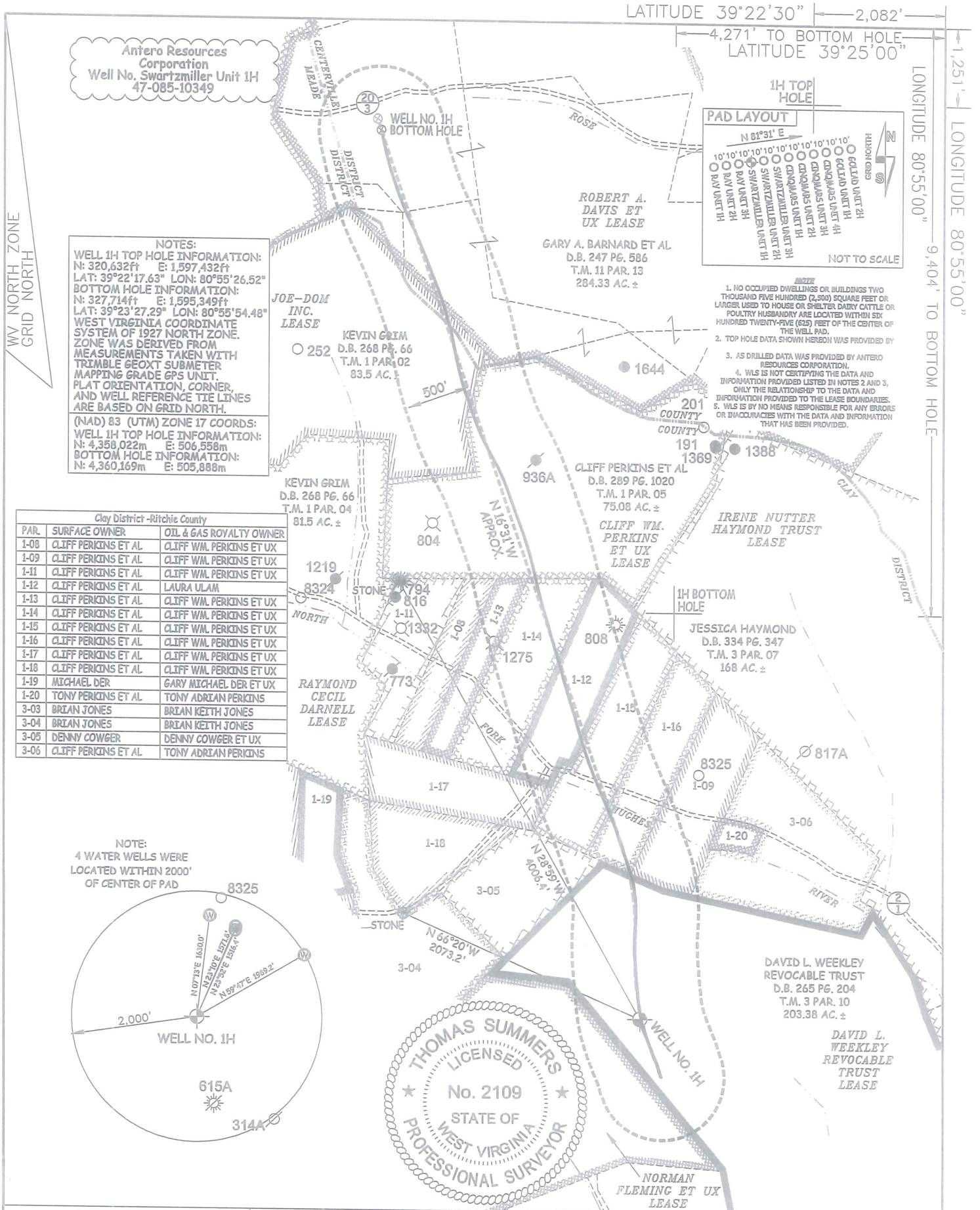
Category 4
Sampling Results
API No: _____

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/B1
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: _____



JOB # 17-044WA	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.	LEGEND ----- Surface Owner Boundary Lines +/- ----- Interior Surface Tracts +/- ○ Proposed Well Path ⊗ As Drilled Well Path
DRAWING # SWARTMILLER1HAD	STATE OF WEST VIRGINIA, DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS	THOMAS SUMMERS P.S. 2109
SCALE 1" = 1000'		DATE 02/10/20
MINIMUM DEGREE OF ACCURACY SUBMETER	WILLOW LAND SURVEYING PLLC 220 MASONIC AVE. PENNSBORO WEST VIRGINIA 26415	OPERATOR'S WELL # SWARTZMILLER UNIT #1H
PROVEN SOURCE OF ELEV. SUBMETER MAPPING GRADE GPS	STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS	WELL TYPE: OIL ___ GAS <u>X</u> LIQUID INJECTION ___ WASTE DISPOSAL ___ (IF "GAS") PRODUCTION <u>X</u> STORAGE ___ DEEP ___ SHALLOW <u>X</u>
STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVISION OF OIL AND GAS		LOCATION: ELEVATION 1,235' AS BUILT WATERSHED NORTH FORK HUGHES RIVER
QUADRANGLE PENNSBORO 7.5' - TH MIDDLEBOURNE 7.5' - BH DISTRICT CLAY COUNTY RITCHIE		
SURFACE OWNER DAVID L. WEEKLEY REVOCABLE TRUST ACREAGE 203.38 ACRES +/-		
OIL & GAS ROYALTY OWNER DAVID L. WEEKLEY REVOCABLE TRUST; CLIFF WM. PERKINS ET UX; LEASE ACREAGE 229 AC±; 16.35 AC±; CLIFF WM. PERKINS ET UX; CLIFF WM. PERKINS ET UX; LAURA ULAM; CLIFF WM. PERKINS ET UX; CLIFF WM. PERKINS ET UX; 17 AC±; 18.5 AC±; 16.5 AC±; 16 AC±; 75.08 AC±; JOE-DOM INC.; ROBERT A. DAVIS ET UX 380 AC±; 284.33 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		
TARGET FORMATION MARCELLUS ESTIMATED DEPTH 6,581' TVD 14,250' MD		
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM		
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD CHARLESTON, WV 25313		