Antero Resources
1615 Wynkoop Street
Denver, CO 80202
Office 303.357.7310
Fax 303.357.7315

May 15, 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 **Dawson Pad**:

- Gabitalalek Unit 1H-2H
- Kilska Unit 1H-2H
- Rodzina Unit 1H-3H

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

Sincerely,

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 - 095 - 02580 County Tyler District Centerville
Quad Shirley 7.5' Pad Name Dawson Pad Field/Pool Name -----
Farm name Gary D. Dawson et ux Well Number Gabitalalek 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 4358971m Easting 510954m
Landing Point of Curve Northing 4358955.08m Easting 511165.05m
Bottom Hole Northing 4355663m Easting 512282m

Elevation (ft) 1009' 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 3/12/2019 Date drilling commenced 4/12/2019 Date drilling ceased 8/23/2019
Date completion activities began 10/3/2019 Date completion activities ceased 1/20/2020
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 115', 455' Open mine(s) (Y/N) depths No
Salt water depth(s) ft 551', 1830' Void(s) encountered (Y/N) depths No
Coal depth(s) ft 275', 975' Cavern(s) encountered (Y/N) depths No
Is coal being mined in area (Y/N) No

Reviewed by:

API 47- 095 - 02580 Farm name Gary D. Dawson et ux Well number Gabitalalek Unit 1H

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"	110'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	589'	New	54#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2618'	New	36#, H-40	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	18501'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6693'		4.7#, N-80		
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	244	0'	8 Hrs.
Surface	Class A	490 sx	15.6	1.19	402	0'	8 Hrs.
Coal							
Intermediate 1	Class A	900 sx	15.6	1.18	1047	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	730 sx (Lead) 2722 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.53 (Lead), 1.83 (Tail)	2819	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 18520' MD, 6463' TVD (BHL), 6463' (Deepest Point Drilled) Loggers TD (ft) 18520' MD

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

Plug back procedure N/A

Kick off depth (ft) 6200'

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

API 47- 095 - 02580 Farm name Gary D. Dawson et ux Well number Gabitalalek Unit 1H

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.

WR-35
Rev. 8/23/13

API 47- 095 - 02580 Farm name Gary D. Dawson et ux Well number Gabitalalek Unit 1H

PRODUCING FORMATION(S)	DEPTHS			
Marcellus	6452' (TOP)	TVD	6815' (TOP)	MD

Please insert additional pages as applicable.

GAS TEST ☐ Build up ☐ Drawdown ■ Open Flow OIL TEST ■ Flow ☐ Pump

SHUT-IN PRESSURE Surface 2800 psi Bottom Hole --- psi DURATION OF TEST --- hrs

OPEN FLOW	Gas	Oil	NGL	Water	GAS MEASURED BY
	13781 mcfpd	213 bpd	--- bpd	816 bpd	☐ Estimated ■ Orifice ☐ Pilot

LITHOLOGY/ FORMATION NAME	TOP DEPTH IN FT 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_2S, ETC)

***PLEASE SEE ATTACHED EXHIBIT 3**

Please insert additional pages as applicable.

Drilling Contractor Frontier Drilling LLC
Address 562 Spring Run Road City Pennsboro State WV Zip 26415

Logging Company Nine Energy Services
Address 125 Museum Road City Washington State PA Zip 15301

Cementing Company C&J Energy Services
Address 1650 Hackers Creek City Jane Lew State WV Zip 26378

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

Please insert additional pages as applicable.

Completed by Megan Griffith Telephone 303-357-7223
Signature [signature] Title Permitting Agent Date 5/16/20

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

API 47-095-02580 Farm Name Gary D. Dawson et ux Well Number Gabitalalek Unit 1H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	12/12/2019	18403	18359	60	Marcellus
2	12/13/2019	18320.40643	18154.4386	60	Marcellus
3	12/13/2019	18118.84503	17952.8772	60	Marcellus
4	12/13/2019	17917.28363	17751.3158	60	Marcellus
5	12/14/2019	17715.72222	17549.7544	60	Marcellus
6	12/14/2019	17514.16082	17348.193	60	Marcellus
7	12/14/2019	17312.59942	17146.6316	60	Marcellus
8	12/14/2019	17111.03801	16945.0702	60	Marcellus
9	12/15/2019	16909.47661	16743.5088	60	Marcellus
10	12/15/2019	16707.9152	16541.9474	60	Marcellus
11	12/15/2019	16506.3538	16340.386	60	Marcellus
12	12/16/2019	16304.7924	16138.8246	60	Marcellus
13	12/16/2019	16103.23099	15937.2632	60	Marcellus
14	12/16/2019	15901.66959	15735.7018	60	Marcellus
15	12/16/2019	15700.10819	15534.1404	60	Marcellus
16	12/17/2019	15498.54678	15332.5789	60	Marcellus
17	12/17/2019	15296.98538	15131.0175	60	Marcellus
18	12/17/2019	15095.42398	14929.4561	60	Marcellus
19	12/17/2019	14893.86257	14727.8947	60	Marcellus
20	12/18/2019	14692.30117	14526.3333	60	Marcellus
21	12/18/2019	14490.73977	14324.7719	60	Marcellus
22	12/18/2019	14289.17836	14123.2105	60	Marcellus
23	12/18/2019	14087.61696	13921.6491	60	Marcellus
24	12/19/2019	13886.05556	13720.0877	60	Marcellus
25	12/19/2019	13684.49415	13518.5263	60	Marcellus
26	12/19/2019	13482.93275	13316.9649	60	Marcellus
27	12/19/2019	13281.37135	13115.4035	60	Marcellus
28	12/20/2019	13079.80994	12913.8421	60	Marcellus
29	12/20/2019	12878.24854	12712.2807	60	Marcellus
30	12/20/2019	12676.68713	12510.7193	60	Marcellus
31	12/21/2019	12475.12573	12309.1579	60	Marcellus
32	12/21/2019	12273.56433	12107.5965	60	Marcellus
33	12/21/2019	12072.00292	11906.0351	60	Marcellus
34	12/21/2019	11870.44152	11704.4737	60	Marcellus
35	12/22/2019	11668.88012	11502.9123	60	Marcellus
36	12/22/2019	11467.31871	11301.3509	60	Marcellus
37	12/22/2019	11265.75731	11099.7895	60	Marcellus
38	12/22/2019	11064.19591	10898.2281	60	Marcellus
39	12/23/2019	10862.6345	10696.6667	60	Marcellus
40	12/23/2019	10661.0731	10495.1053	60	Marcellus
41	12/23/2019	10459.5117	10293.5439	60	Marcellus
42	12/23/2019	10257.95029	10091.9825	60	Marcellus
43	12/23/2019	10056.38889	9890.42105	60	Marcellus
44	12/24/2019	9854.827485	9688.85965	60	Marcellus
45	12/24/2019	9653.266082	9487.29825	60	Marcellus
46	12/24/2019	9451.704678	9285.73684	60	Marcellus
47	12/25/2019	9250.143275	9084.17544	60	Marcellus
48	12/25/2019	9048.581871	8882.61404	60	Marcellus
49	12/25/2019	8847.020468	8681.05263	60	Marcellus
50	12/25/2019	8645.459064	8479.49123	60	Marcellus
51	12/25/2019	8443.897661	8277.92982	60	Marcellus
52	12/26/2019	8242.336257	8076.36842	60	Marcellus
53	12/26/2019	8040.774854	7874.80702	60	Marcellus
54	12/26/2019	7839.21345	7673.24561	60	Marcellus
55	12/26/2019	7637.652047	7471.68421	60	Marcellus
56	12/26/2019	7436.090643	7270.12281	60	Marcellus
57	12/27/2019	7234.52924	7068.5614	60	Marcellus
58	12/27/2019	7032.967836	6867	60	Marcellus

API 47-095-02580 Farm Name Gary D. Dawson et ux Well Number Gabitalalek 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	12/12/2019	73.30955	8471.913	7097	3737	162140	4866.516	N/A
2	12/13/2019	72.77912	8086.783	5717	3829	406660	7155.846	N/A
3	12/13/2019	81.23663	8076.495	5715	4353	405960	8255.5	N/A
4	12/13/2019	80.44447	8455.424	5742	4074	402200	7246.21	N/A
5	12/14/2019	84.38483	8421.556	5353	4058	400560	7221.02	N/A
6	12/14/2019	76.70597	8013.134	5408	3953	398100	7269.213	N/A
7	12/14/2019	77.91798	8151.589	5719	3605	406840	7251.4	N/A
8	12/14/2019	77.60232	8398.386	5850	3789	402080	7067.89	N/A
9	12/15/2019	80.33045	8460.052	6081	3906	403880	7122.74	N/A
10	12/15/2019	76.48405	8228.99	6061	3869	411880	7305.98	N/A
11	12/15/2019	78.6817	8469.582	5855	3801	409740	7171.93	N/A
12	12/16/2019	72.39134	8074.489	5756	3776	410860	7149.71	N/A
13	12/16/2019	74.60442	8058.947	5998	4159	417000	7158.85	N/A
14	12/16/2019	77.23493	8069.248	6004	4145	410720	7146.74	N/A
15	12/16/2019	81.51285	8614.787	5825	3858	400540	7057.08	N/A
16	12/17/2019	83.15021	8805.197	6004	3740	405920	7018.34	N/A
17	12/17/2019	80.77125	8388.475	5534	3884	404080	7135.78	N/A
18	12/17/2019	81.02622	8062.294	4926	4638	411680	7193.18	N/A
19	12/17/2019	77.1506	8285.067	5572	3837	407100	6927.25	N/A
20	12/18/2019	76.53848	8459.592	6037	3848	401880	6841.72	N/A
21	12/18/2019	78.7	8252	5825	3925	408600	7096.7	N/A
22	12/18/2019	72.77865	7791.115	5716	4061	405980	7728.7	N/A
23	12/18/2019	82.6831	8049.84	5668	3881	408000	6990.46	N/A
24	12/19/2019	84.74714	8263.344	5846	3765	409280	6889.12	N/A
25	12/19/2019	81.32713	7958.606	5627	4025	402120	7003.43	N/A
26	12/19/2019	77.62405	7595.602	5701	4305	401320	7022.55	N/A
27	12/19/2019	77.73341	7953.502	5954	3908	401700	7432.61	N/A
28	12/20/2019	78.21719	8093.278	6014	4260	400820	7112.37	N/A
29	12/20/2019	83.61354	8311.108	7608	4203	402060	7882.41	N/A
30	12/20/2019	84.70756	8169.176	5975	3641	411920	6951.61	N/A
31	12/21/2019	85.70804	8222.553	5647	3601	406900	7024.98	N/A
32	12/21/2019	84.44787	8121.514	5985	4067	407300	6941.33	N/A
33	12/21/2019	83.5874	8159.868	5837	4240	404020	6919.73	N/A
34	12/21/2019	83.99255	8609.301	5556	3591	406280	6937.08	N/A
35	12/22/2019	74.49702	8789.512	6060	3715	408480	6887.82	N/A
36	12/22/2019	83.76791	8329.543	6267	4107	404980	6896.58	N/A
37	12/22/2019	81.56576	8533.347	5795	4217	400900	6920.9	N/A
38	12/22/2019	85.61148	8148.68	6095	3970	407520	6829.06	
39	12/23/2019	84.17848	8418.789	6480	3719	403360	7011.08	
40	12/23/2019	83.82325	8168.641	6827	4170	406260	6839.53	
41	12/23/2019	84.80011	8017.571	5778	4044	404860	6761.98	N/A
42	12/23/2019	83.39231	8639.093	5943	3797	406620	6851.94	N/A
43	12/23/2019	83.50463	8520.024	5898	4009	400600	6818.68	N/A
44	12/24/2019	78.12621	8237.057	6524	3975	403670	7195.09	N/A
45	12/24/2019	73.61323	8554.569	5801	3951	401460	6852.22	N/A
46	12/24/2019	82.60788	7259.88	5782	3692	408400	6882.51	N/A
47	12/25/2019	85.12311	7558.507	5784	3720	403080	6789.9	N/A
48	12/25/2019	86.75302	7474.263	5805	3824	405200	6811.09	N/A
49	12/25/2019	80.58429	7243.877	5647	3941	404560	6858.14	N/A
50	12/25/2019	75.7437	7754.825	5468	3578	406140	6731.41	N/A
51	12/25/2019	80.74112	7758.498	5867	3704	406420	6871.91	N/A
52	12/26/2019	88.37416	7647.631	6081	3716	401800	6815.45	N/A
53	12/26/2019	83.97184	7192.704	6049	3903	412180	6727.42	N/A
54	12/26/2019	84.94278	7076.086	5941	3555	406540	6645.96	N/A
55	12/26/2019	85.46958	7247.228	5473	3896	403980	6708.21	N/A
56	12/26/2019	87.92691	7140.132	5645	3516	410500	6778.93	N/A
57	12/27/2019	87.52122	8051.285	5756	3783	404940	6800.69	N/A
58	12/27/2019	82.22049	6640.469	6091	3692	413300	6616.07	N/A
	AVG=	**80.1**	**8,244**	**5,915**	**3,958**	**16,392,480**	**289,643**	TOTAL

API 47-095-02580 Farm Name Gary D. Dawson et ux Well Number Gabitalalek Unit 1H				
EXHIBIT 3				
LITHOLOGY/ FORMATION	**TOP DEPTH (TVD) From Surface**	**BOTTOM DEPTH (TVD) From Surface**	**TOP DEPTH (MD) From Surface**	**BOTTOM DEPTH (MD) From Surface**
Sandstone	0	300	0	300
Silty sandstone	300	440	300	440
Sandy siltstone	440	600	440	600
Sandstone	600	700	600	700
Sandy Marlstone	700	880	700	880
Calcarious Sandstone	880	1,070	880	1,070
Silty Marlstone	1,070	1,280	1,070	1,280
Sandstone w/ interbedded co	1,280	1,440	1,280	1,440
Sandstone w/ trace coal	1,440	1,590	1,440	1,590
Calcarious shale	1,590	1,650	1,590	1,650
Coal / shale	1,650	1,670	1,650	1,670
Calcarious shale	1,670	1,840	1,670	1,840
Calcarious Sandstone	1,840	1,924	1,840	N/A
Big Lime	1,924	2,731	1,938	2,758
Fifty Foot Sandstone	2,731	2,784	2,758	2,812
Gordon	2,784	3,052	2,812	3,084
Fifth Sandstone	3,052	3,193	3,084	3,228
Bayard	3,193	4,012	3,228	4,058
Speechley	4,012	4,291	4,058	4,342
Balltown	4,291	4,569	4,342	4,625
Bradford	4,569	4,802	4,625	4,862
Benson	4,802	5,183	4,862	5,249
Alexander	5,183	6,294	5,249	6,433
Sycamore	6,111	6,264	6,235	6,403
Middlesex	6,264	6,387	6,433	6,634
Burkett	6,387	6,421	6,664	6,720
Tully	6,421	6,452	6,750	6,815
Marcellus	6,452	NA	6,815	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.

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Rev. 10-10

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: 47-095-02580 County: Tyler
District: Centerville Well No: Gabitalalek Unit 1H
Farm Name: Gary D. Dawson et ux
Discharge Date/s From:(MMDDYY) 02/03/20 To: (MMDDYY) 03/04/20
Discharge Times. From: 0:00 To: 24:00
Total Volume to be Disposed from this facility (gallons): 1,325,486
Disposal Option(s) Utilized (write volumes in gallons):

(1) Land Application: 0 (Include a topographical map of the Area.)
(2) UIC: 0 Permit No.
(3) Offsite Disposal: 0 Site Location:
(4) Reuse: 1,325,486 Alternate Permit Number:
(5) Centralized Facility: 0 Permit No.
(6) Other method: 0 (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: Sr. Environmental & Regulatory Manager
Date Completed: 05/08/20

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 Digitally signed by Gretchen Kohler Date: 2020.05.11 15:56:56 -06'00'
Signature of a Principal Exec. Officer or Authorized agent.

Category 1
Sampling Results
API No : _____

Parameter	Predischarge Limits	Predischarge Reported	Discharge Limits	Discharge Reported	Units
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 Limits	Predischarge Reported	Discharge Limits	Discharge Reported	Units
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 Limits	Predischarge Reported	Discharge Limits	Discharge Reported	Units
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 Limits	Predischarge Reported	Discharge Limits	Discharge Reported	Units
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: _____

ANTERO RESOURCES CORPORATION

Location: Tyler County, WV
Field: Tyler
Facility: Dawson Pad
Slot: Slot #14
Well: Gabitalalek Unit 1H
Wellbore: Gabitalalek Unit 1H PWB

Plot reference wellpath is Gabitalalek Unit 1H PWP Rev-A.0	Grid System: NAD27 / UTM Zone 17 North, US feet
True vertical depths are referenced to H&P 519 (RKB)	North Reference: Grid north
Measured depths are referenced to H&P 519 (RKB)	Scale: True distance
H&P 519 (RKB) to Mean Sea Level: 1039 feet	Depths are in feet
Mean Sea Level to Ground level (At Slot: Slot #14): -1009 feet	Created by: dalaset on 2019-08-24
Coordinates are in feet referenced to Slot	Database: WA_MPL_EasternUS_Defn

Location Information

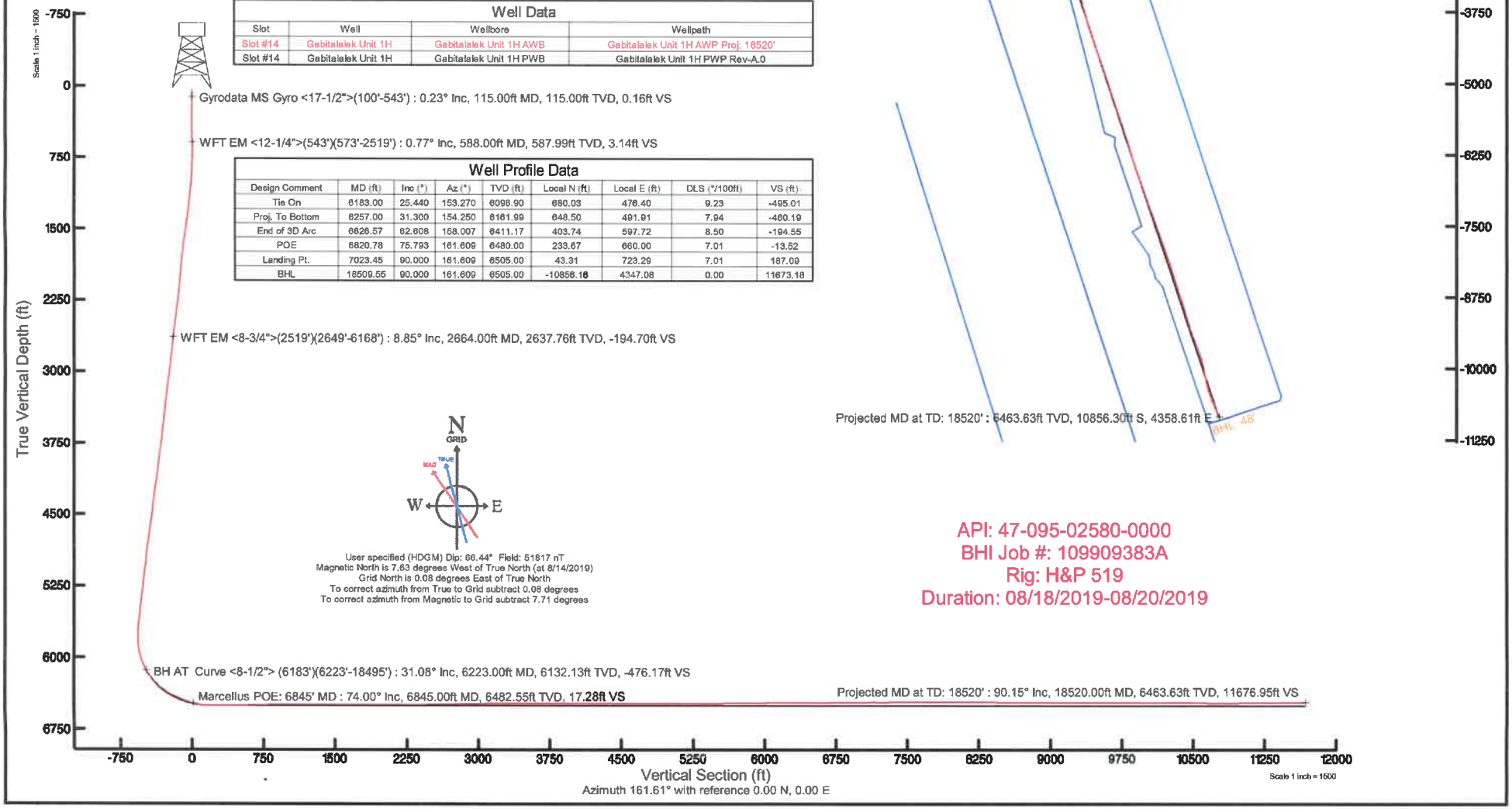
Facility Name			Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Dawson Pad			1676049.728	14300592.517	39°22'50.710"N	80°52'26.030"W
Slot	Local N (ft)	Local E (ft)	Grid East (US ft)	Grid North (US ft)	Latitude	Longitude
Slot #14	-250.56	259.48	1676309.100	14300342.060	39°22'48.230"N	80°52'22.730"W
H&P 519 (RKB) to Ground level (At Slot: Slot #14)					30ft	
Mean Sea Level to Ground level (At Slot: Slot #14)					-1009ft	
H&P 519 (RKB) to Mean Sea Level					1039ft	

Well Data

Slot	Well	Wellbore	Wellpath
Slot #14	Gabitalalek Unit 1H	Gabitalalek Unit 1H AWB	Gabitalalek Unit 1H AWP Proj: 18520'
Slot #14	Gabitalalek Unit 1H	Gabitalalek Unit 1H PWB	Gabitalalek Unit 1H PWP Rev-A.0

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On	6183.00	25.440	153.270	6098.90	680.03	476.40	9.23	-495.01
Proj. To Bottom	6257.00	31.300	154.250	6161.99	648.50	491.91	7.94	-460.19
End of 3D Arc	6626.57	62.608	158.007	6411.17	403.74	597.72	8.50	-194.55
POE	6820.78	75.793	161.609	6480.00	233.67	660.00	7.01	-13.52
Landing Pt.	7023.45	90.000	161.609	6505.00	43.31	723.29	7.01	187.09
BHL	18509.55	90.000	161.609	6505.00	-10856.18	4347.08	0.00	11673.18



User specified (HDGM) Dip: 66.44° Field: 51817 nT
Magnetic North is 7.63 degrees West of True North (at 8/14/2019)
Grid North is 0.08 degrees East of True North
To correct azimuth from True to Grid subtract 0.08 degrees
To correct azimuth from Magnetic to Grid subtract 7.71 degrees

API: 47-095-02580-0000
BHI Job #: 109909383A
Rig: H&P 519
Duration: 08/18/2019-08/20/2019

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/12/2019
Job End Date:	12/27/2019
State:	West Virginia
County:	Tyler
API Number:	47-095-02580-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Gabitalalek 1H
Latitude:	39.38006400
Longitude:	-80.87298100
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,475
Total Base Water Volume (gal):	17,922,761
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	Supplied by Operator	Base Fluid					
			Water	7732-18-5	100.00000	86.21703	
Calbreak 5501	CWS	Breaker					
				Listed Below			

CI-9100G	CWS	Corrosion Inhibitor					
				Listed Below			
Hydrochloric Acid	CWS	Clean Perforations					
				Listed Below			
DynaRate 6522	CWS	Friction Reducer					
				Listed Below			
SaniFrac 8123	CWS	Microbiocide					
				Listed Below			
CalGel 4000	CWS	Gel Slurry					
				Listed Below			
Sand (Proppant)	CWS	Propping Agent					
				Listed Below			
Other Chemical (s)	Listed Above	See Trade Name (s) List					
				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	13.42714	
			Illite	12173-60-3	1.00000	0.13427	
			Hydrochloric acid	7647-01-0	37.00000	0.11238	
			Copolymer of 2-propenamide	69418-26-4	30.00000	0.01940	
			Ilmenite	98072-94-7	0.10000	0.01343	

			Biotite	1302-27-8	0.10000	0.01343	
			Goethite	1310-14-1	0.10000	0.01343	
			Apatite	64476-38-6	0.10000	0.01343	
			Distillates (petroleum), hydrotreated light	64742-47-8	20.00000	0.01294	
			Guar gum	9000-30-0	60.00000	0.00645	
			Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000	0.00645	
			Ammonium chloride	12125-02-9	8.00000	0.00517	
			Glutaraldehyde	111-30-8	14.00000	0.00161	
			Oleic Acid Diethanolamide	93-83-4	2.00000	0.00129	
			Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000	0.00054	
			Alkyl dimethyl benzyl ammonium chloride	68424-85-1	3.00000	0.00034	
			Didecyl dimethyl ammonium chloride	7173-51-5	3.00000	0.00034	
			Ethanol	64-17-5	3.00000	0.00034	
			Ammonium Persulfate	7727-54-0	100.00000	0.00023	
			Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether	37251-67-5	1.50000	0.00016	
			Ethylene Glycol	107-21-1	40.00000	0.00006	
			Vinylidene chloride-methyl acrylate copolymer	25038-72-6	20.00000	0.00005	
			Diethylene glycol, monomethyl ether	34590-94-8	20.00000	0.00003	
			Tar bases, quinolone derivs, benzyl chloride-quatenized	72480-70-7	10.00000	0.00002	
			Formic acid	64-18-6	10.00000	0.00002	
			Cinnamaldehyde	104-55-2	10.00000	0.00002	
			Ethoxylated Alcohols	68131-39-5	10.00000	0.00002	

			Isopropyl alcohol	67-63-0	5.00000	0.00001	

* 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)

LATITUDE 39°25'00" — 11,208'

6,869' TO BOTTOM HOLE
LATITUDE 39°22'30"

LONGITUDE 80°50'00" — 9,019' TO BOTTOM HOLE — 13,332' — LONGITUDE 80°50'00"

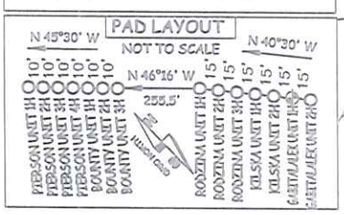
WV NORTH ZONE GRID NORTH

Antero Resources Corporation Well No. Gabitalalek Unit 1H

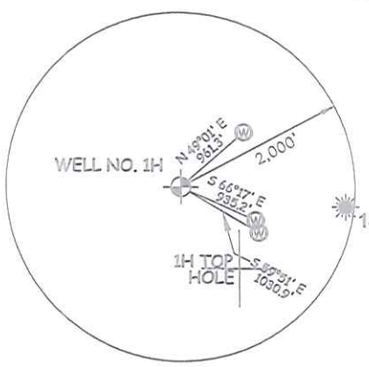
NOTES:
WELL 1H TOP HOLE INFORMATION:
N: 323,502ft E: 1,611,910ft
LAT: 39°22'48.23" LON: 80°52'22.73"
BOTTOM HOLE INFORMATION:
N: 312,576ft E: 1,616,087ft
LAT: 39°21'00.87" LON: 80°51'27.44"
WEST VIRGINIA COORDINATE SYSTEM OF 1927 NORTH ZONE.
ZONE WAS DERIVED FROM MEASUREMENTS TAKEN WITH TRIMBLE GEOXT 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 1H TOP HOLE INFORMATION:
N: 4,358,971m E: 510,954m
BOTTOM HOLE INFORMATION:
N: 4,355,663m E: 512,282m

PAD LAYOUT
NOT TO SCALE



3 WATER WELLS WERE LOCATED WITHIN 2000' OF CENTER OF PAD



Clay District -Ritchie County	
12-14	Warren Suker Jr.
12-14.1	Gary Dawson
12-14.2	Nathaniel Hendricks
12-14.3	Gwalia Dawson Hrs.
12-14.4	Gary Dawson
12-14.5	McCartney Keystone Trust
12-19	Robert Sinclair
15-01	Gary Dawson
15-1.1	Larry Caine
15-1.2	Larry Robinson
15-1.3	Joseph Mills Community Center
15-1.4	David Cowles Jr.
15-1.5	Russell Bonner Est
15-1.6	Russell Bonner Est
15-1.7	Antero Resources Corp.
15-1.8	W.V.D.N.R.
15-1.9	Antero Resources Corp.
15-1.10	Gary Dawson
15-02	Robert Graham
15-07	Ralph Underwood III
15-7.1	Judith Bagley
15-08	Conrad Costilow
15-09	Eugene Bennett
15-12	Larry Hadley
15-13	Sara Reed
15-13.1	Sara Reed
15-13.2	Cecil Lovejoy
15-14	George Moore
15-14.1	Linda Moore
15-18	John Jacenklew Sr.
15-19	David Price
15-20	Sandra Clark
15-32	Marvin Sole
15-32.1	Marvin Sole
15-33	Randy Dawson
15-34	Ronnie Dawson
15-35	Jamie Ferguson
15-36	Donald Ferguson
17-03	Kimberly Ridgeway
17-10	Jason Glasscock
17-10.1	Sandra Clark
17-10.5	Sandra Clark
17-10.6	George Sprowls
17-12	GNG Transmission Corporation

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 DEPTARTMENT 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

NOTE
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 ANTERO RESOURCES CORPORATION.
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 # 18-032WA
DRAWING # GABITALALEK1HAD
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

LEGEND
Surface Owner Boundary Lines +/-
Interior Surface Tracts +/-
Proposed Well Path
As Drilled Well Path

THOMAS SUMMERS P.S. 2109

DATE 05/01/20

OPERATOR'S WELL# GABITALALEK UNIT #1H

THOMAS SUMMERS LICENSED No. 2109 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 1,009' - AS BUILT WATERSHED HEADWATERS MIDDLE ISLAND CREEK
QUADRANGLE SHIRLEY 7.5' (TH) WEST UNION 7.5' (BH) DISTRICT CENTERVILLE COUNTY TYLER
SURFACE OWNER GARY D. DAWSON ET UX ACREAGE 104.27 ACRES +/-
OIL & GAS ROYALTY OWNER GARY D. DAWSON ET UX; CARL W. ASH; IDA MAE BONNER; LARRY J. McCAW; RALPH J. UNDERWOOD; CONRAD E. COSTILOW; MARGARET E. OLEXA; THELMA FERGUSON ET AL; NANCY B. WESTFALL ET UX; RALPH J. WESTFALL ET UX; W.V.D.N.R.; AMANDA GREGG ET AL; VIOLET GREGG ET AL; NATHAN JOSEPH LEASE ACREAGE 104.27 AC.±; 0.54 AC.±; 2.33 AC.±; 1.75 AC.±; 57 AC.±; 56.75 AC.±; 79.5 AC.±; 49 AC.±; 26 AC.±; 94 AC.±; 64.78 AC.±; 85 AC.±; 90 AC.±; 114 AC.±; 147 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 6,463' TVD 18,520' MD
WELL OPERATOR ANTERO RESOURCES CORP. DESIGNATED AGENT DIANNA STAMPER - CT CORPORATION SYSTEM
ADDRESS 1615 WYNKOOP ST. ADDRESS 5400 D BIG TYLER ROAD
DENVER, CO 80202 CHARLESTON, WV 25313

47 — 095 — 02580
STATE COUNTY PERMIT

COUNTY NAME PERMIT

FORM WW-6