

04/05/2019



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

April 3, 2019

West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57<sup>th</sup> 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:

- Penny Unit 1H (API # 47-085-10298)—Mulvay Pad
- Penny Unit 2H (API # 47-085-10299)—Mulvay Pad
- Penny Unit 3H (API # 47-085-10300)—Mulvay Pad
- Stronsnider Unit 1H (API # 47-085-10201)—Mulvay Pad
- Stronsnider Unit 2H (API # 47-085-10202)—Mulvay Pad
- Stronsnider Unit 3H (API # 47-085-10203)—Mulvay Pad
- Trust Unit 1H (API # 47-085-10301)—Mulvay Pad
- Trust Unit 2H (API # 47-085-10302)—Mulvay Pad
- Niley Unit 1H (API # 47-085-10250)—Mulvay Pad
- Niley Unit 2H (API # 47-085-10251)—Mulvay Pad
- Niley Unit 3H (API # 47-085-10252)—Mulvay Pad

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", 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 - 085 - 10299 County Ritchie District Clay  
 Quad Pennsboro 7.5' Pad Name Mulvay Pad Field/Pool Name -----  
 Farm name Edwin D. Mulvay et al Well Number Penny Unit 2H  
 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 4352569m Easting 508713m  
 Landing Point of Curve Northing 4352097.65m Easting 509383.49m  
 Bottom Hole Northing 4349721m Easting 510168m

Elevation (ft) 1029' 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 9/29/2015 Date drilling commenced 12/23/2016 Date drilling ceased 7/17/2017  
 Date completion activities began 1/20/2018 Date completion activities ceased 8/5/2018  
 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 24', 76', 124', 422' Open mine(s) (Y/N) depths No  
 Salt water depth(s) ft 1522', 1949' Void(s) encountered (Y/N) depths No  
 Coal depth(s) ft 653', 664' Cavern(s) encountered (Y/N) depths No  
 Is coal being mined in area (Y/N) No

Reviewed by:  
\_\_\_\_\_

WR-35  
Rev. 8/23/13

API 47-085 - 10299 Farm name Edwin D. Mulvay et al Well number Penny Unit 2H

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"	95'	New	94#, H-40	N/A	Y
Surface	17-1/2"	13-3/8"	522'	New	48#, H-40	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2573'	New	36#, J-55	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	17008'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6970'		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 <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	102 sx	15.6	1.18	120	0'	8 Hrs.
Surface	Class A	555 sx	15.6	1.18	826	0'	8 Hrs.
Coal							
Intermediate 1	Class A	1000 sx	15.6	1.18	1181	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	655 sx (Lead) 1532 sx (Tail)	13.5 (Lead), 15.2 (Tail)	1.53 (Lead), 1.83 (Tail)	3774	~500' into Intermediate Casing	8 Hrs.
Tubing							

Drillers TD (ft) 17008' MD, 6453' TVD (BHL), 6453' (Deepest Point Drilled) Loggers TD (ft) 17008' MD

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

Plug back procedure N/A

Kick off depth (ft) 5600'

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- 085 - 10299 Farm name Edwin D. Mulvay et al Well number Penny Unit 2H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
<b>*PLEASE SEE ATTACHED EXHIBIT 1</b>					

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)
<b>*PLEASE SEE ATTACHED EXHIBIT 2</b>								

Please insert additional pages as applicable.

WR-35  
Rev. 8/23/13

API 47- 085 - 10299 Farm name Edwin D. Mulvay et al Well number Penny Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
Marcellus	6367' (TOP)	TVD	7024' (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 6283 mcfpd Oil 26 bpd NGL --- bpd Water 873 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 <sub>2</sub> S, ETC)
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**\*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 Allied Horizontal Wireline Services  
Address 381 Colonial Manor Road City North Huntington State PA Zip 15642

Cementing Company BJ Services  
Address 1036 East Main Street City Bridgeport State WV Zip 26330

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

Please insert additional pages as applicable.

Completed by Megan Griffith Telephone 303-357-7223  
Signature  Title Permitting Agent Date 4/3/2019

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

API 47-085-10299 Farm Name <u>Edwin D. Mulvay et al</u> Well Number <u>Penny Unit 2H</u>					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	2/12/2018	16737	16907	60	Marcellus
2	2/13/2018	16535	16705	60	Marcellus
3	2/14/2018	16333	16503	60	Marcellus
4	2/14/2018	16131	16301	60	Marcellus
5	2/15/2018	15929	16099	60	Marcellus
6	2/15/2018	15727	15898	60	Marcellus
7	2/16/2018	15525	15696	60	Marcellus
8	2/17/2018	15323	15494	60	Marcellus
9	2/18/2018	15122	15292	60	Marcellus
10	2/19/2018	14920	15090	60	Marcellus
11	2/19/2018	14718	14888	60	Marcellus
12	2/20/2018	14516	14686	60	Marcellus
13	2/21/2018	14314	14484	60	Marcellus
14	2/21/2018	14112	14282	60	Marcellus
15	2/22/2018	13910	14080	60	Marcellus
16	2/24/2018	13708	13878	60	Marcellus
17	2/24/2018	13506	13676	60	Marcellus
18	2/25/2018	13304	13475	60	Marcellus
19	2/25/2018	13102	13273	60	Marcellus
20	2/26/2018	12900	13071	60	Marcellus
21	2/26/2018	12699	12869	60	Marcellus
22	2/27/2018	12497	12667	60	Marcellus
23	2/27/2018	12295	12465	60	Marcellus
24	2/28/2018	12093	12263	60	Marcellus
25	2/28/2018	11891	12061	60	Marcellus
26	3/1/2018	11689	11859	60	Marcellus
27	3/2/2018	11487	11657	60	Marcellus
28	3/2/2018	11285	11455	60	Marcellus
29	3/3/2018	11083	11254	60	Marcellus
30	3/3/2018	10881	11052	60	Marcellus
31	3/4/2018	10679	10850	60	Marcellus
32	3/5/2018	10478	10648	60	Marcellus
33	3/5/2018	10276	10446	60	Marcellus
34	5/7/2018	10074	10244	60	Marcellus
35	5/8/2018	9872	10042	60	Marcellus
36	5/8/2018	9670	9840	60	Marcellus
37	5/9/2018	9468	9638	60	Marcellus
38	5/9/2018	9266	9436	60	Marcellus
39	5/9/2018	9064	9234	60	Marcellus
40	5/10/2018	8862	9032	60	Marcellus
41	5/10/2018	8660	8831	60	Marcellus
42	5/10/2018	8458	8629	60	Marcellus
43	5/10/2018	8256	8427	60	Marcellus
44	5/11/2018	8055	8225	60	Marcellus
45	5/11/2018	7853	8023	60	Marcellus
46	5/11/2018	7651	7821	60	Marcellus
47	5/12/2018	7449	7619	60	Marcellus
48	5/12/2018	7247	7417	60	Marcellus
49	5/12/2018	7045	7215	60	Marcellus

API 47-085-10299 Farm Name <u>Edwin D. Mulvay et al</u> Well Number <u>Penny Unit 2H</u>								
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	2/12/2018	68.8832	7908.446	5368	3845	418700	8944	N/A
2	2/13/2018	73.4341	7915.869	5506	4532	419790	9347	N/A
3	2/14/2018	76.0781	7730.002	6441	3569	421580	8896	N/A
4	2/14/2018	73.4285	7521.333	6102	3690	420370	9137	N/A
5	2/15/2018	77.3473	7821.911	5841	3532	420280	8742	N/A
6	2/15/2018	76.2794	7761.947	6342	3509	419600	9133	N/A
7	2/16/2018	74.7694	7826.043	5972	3572	419250	10231	N/A
8	2/17/2018	71.0492	7662.759	5934	3711	418980	8991	N/A
9	2/18/2018	60.3447	7338.356	6210	4320	420200	16754	N/A
10	2/19/2018	46.9	8609.9	6186	4307	424295	14235	N/A
11	2/19/2018	71.9596	7472.425	6478	4033	422400	9552	N/A
12	2/20/2018	70.2	7358.6	5838	3818	421675	8904	N/A
13	2/21/2018	69.8902	7355.29	6046	3683	420450	9053	N/A
14	2/21/2018	70.1356	7323.602	5887	3839	420200	9010	N/A
15	2/22/2018	74.7837	7587.46	6189	3746	420790	8931	N/A
16	2/24/2018	76.5	7516.4	6273	4056	423420	8993	N/A
17	2/24/2018	74.9699	7626.211	6091	3784	419700	9027	N/A
18	2/25/2018	74.1	7644.3	6218	4079	420695	9060	N/A
19	2/25/2018	71.044	7323.331	5879	4849	423900	9034	N/A
20	2/26/2018	71.6	7631.7	5615	4072	424560	8789	N/A
21	2/26/2018	74.0268	7491.033	6306	4198	422130	8826	N/A
22	2/27/2018	76.4131	7316.354	6055	3977	422500	8812	N/A
23	2/27/2018	75.1752	7435.792	6286	3969	421120	8831	N/A
24	2/28/2018	74.8	7361.6	6188	3925	422730	8717	N/A
25	2/28/2018	74.2428	7324.864	6015	3903	424300	8799	N/A
26	3/1/2018	72.753	7323.426	6110	3944	420140	8738	N/A
27	3/2/2018	71.8529	7654.125	6514	4329	421790	8840	N/A
28	3/2/2018	71.9922	7536.254	6134	4315	423780	9037	N/A
29	3/3/2018	72.4	7456.9	5762	4386	422500	8786	N/A
30	3/3/2018	75.4623	7219.327	6397	3665	421360	8732	N/A
31	3/4/2018	76.1	7310.6	6377	3652	422515	8712	N/A
32	3/5/2018	75.7038	7168.473	6079	4017	421760	8729	N/A
33	3/5/2018	76.436	7035.469	5368	3695	424400	8655	N/A
34	5/7/2018	76.9714	6904.681	5724	4465	429650	8302	N/A
35	5/8/2018	77.5246	6723.043	7321	3750	421700	8748	N/A
36	5/8/2018	73.5258	6364.535	5893	3846	420600	8531	N/A
37	5/9/2018	73.2132	7386.072	6304	4022	421630	10526	N/A
38	5/9/2018	73.2794	7024.857	6723	3729	424500	8777	N/A
39	5/9/2018	75.6081	7247.984	6776	3691	423300	8480	N/A
40	5/10/2018	72.0706	7148.222	6866	3726	423350	8925	N/A
41	5/10/2018	74.1978	7050.023	7209	3730	423630	8338	N/A
42	5/10/2018	68.7511	6967	6490	3702	425900	12346	N/A
43	5/10/2018	66.7479	6906.986	7251	5076	421250	16317	N/A
44	5/11/2018	74.9374	6681.607	5919	3531	420700	8327	N/A
45	5/11/2018	78.0742	6839.787	5260	3749	426100	8294	N/A
46	5/11/2018	74.6243	6232.355	4299	3750	423100	8350	N/A
47	5/12/2018	73.3	7250	6160	3668	423850	10736	N/A
48	5/12/2018	76.7199	6369.336	6487	3642	420610	8213	N/A
49	5/12/2018	77.1913	6598.443	6582	3850	419940	8050	N/A
	AVG=	<b>72.8</b>	<b>7,349</b>	<b>6,131</b>	<b>3,941</b>	<b>19,417,270</b>	<b>433,238</b>	TOTAL

API 47-085-10299 Farm Name <u>Edwin D. Mulvay et al</u> Well Number <u>Penny Unit 2H</u>				
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	-15	105	-15	105
Sandy siltstone	105	145	105	145
Shale	145	185	145	185
Sandstone	185	305	185	305
Sandy Shale	305	545	305	545
Silty Shale	545	745	545	745
Sandy siltstone	745	885	745	885
silty shale	885	1,005	885	1,005
Sandy siltstone	1,005	1,115	1,005	1,115
Shaly Siltstone	1,115	1,345	1,115	1,345
Sandstone	1,345	1,525	1,345	1,525
Sandy siltstone	1,525	1,645	1,525	1,645
Silty Sandstone	1,645	1,868	1,645	1,877
Big Lime	1,883	2,064	1,892	2,075
Big Injun	2,064	2,428	2,075	2,443
Gantz Sand	2,428	2,675	2,443	2,692
Fifty Foot Sandstone	2,675	2,852	2,692	2,872
Gordon	2,852	3,006	2,872	3,029
Fifth Sandstone	3,006	3,280	3,029	3,312
Bayard	3,280	3,375	3,312	3,409
Warren	3,375	3,743	3,409	3,788
Speechley	3,743	4,503	3,788	4,564
Balltown	3,962	4,886	4,011	4,956
Bradford	4,503	4,886	4,564	4,956
Benson	4,886	5,110	4,956	5,186
Alexander	5,110	5,723	5,186	5,818
Rhinestreet	5,699	6,075	5,794	6,307
Sycamore	6,075	6,193	6,307	6,551
Middlesex	6,193	6,305	6,551	6,799
Burkett	6,305	6,336	6,799	6,888
Tully	6,336	6,367	6,888	7,024
Marcellus	6,367	NA	7,024	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	2/12/2018
Job End Date	5/12/2018
State	West Virginia
County	Ritchie
API Number	47-085-10299-00-00
Operator Name	Antero Resources Corporation
Well Name and Number	Penny 2H
Latitude	39.32240600
Longitude	-80.89909400
Datum	NAD83
Federal Well	NO
Indian Well	NO
True Vertical Depth	6,451
Total Base Water Volume (gal)	20,054,676
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	Antero Resources	Carrier/Base Fluid	Water	7732-18-5	100.00000	88.75654	
Sand	J.S. Well Services, LLC	Proppant	Crystalline Silica, quartz	14808-60-7	100.00000	10.97524	
HCL Acid (12.6%-17.5%)	J.S. Well Services, LLC	Bulk Acid	Water	7732-18-5	87.40000	0.12752	
LGC-15	J.S. Well Services, LLC	Gelling Agents	Hydrogen Chloride	7647-01-0	17.50000	0.02965	
			Guar Gum	9000-30-0	50.00000	0.03123	
			Petroleum Distillates	64742-47-8	60.00000	0.02958	
			Suspending agent (solid)	14808-60-7	3.00000	0.00478	
			Surfactant	68439-51-0	3.00000	0.00187	
WFRA-405	J.S. Well Services, LLC	Friction Reducer	2-Propenoic acid, polymer with propanamide	29003-06-9	30.00000	0.01625	
			Hydrated light distillate (petroleum)	64742-47-8	30.00000	0.01308	

Bioclear 2000	U.S. Well Services, LLC	Anti-Bacterial Agent	2,2-dibromo-3-nitropropionamide	10222-01-2	20.00000	0.00434
			Deionized Water	7732-18-5	28.00000	0.00248
SI-1200	U.S. Well Services, LLC	Scale Inhibitor	Ethylene Glycol	107-21-1	40.00000	0.00486
			Proprietary Scale Inhibitor	Proprietary	10.00000	0.00130
AP One	U.S. Well Services, LLC	Gel Breakers	Ammonium Persulfate	7727-54-0	100.00000	0.00077
SI-1200s	U.S. Well Services, LLC	Scale Inhibitor	Proprietary Scale Inhibitor	Proprietary	10.00000	0.00043
AI-303	U.S. Well Services, LLC	Acid Corrosion Inhibitors	Ethylene glycol	107-21-1	40.00000	0.00004
			Cinnamaldehyde	104-55-2	20.00000	0.00002
			Formic acid	64-18-6	20.00000	0.00002
			Butyl cellosolve	111-76-2	20.00000	0.00001
			Polyether	60828-78-6	10.00000	0.00001
			Acetophenone,thiourea,formaldehyde polymer	68527-49-1	5.00000	0.00000

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

\* Total Water Volume sources may include fresh water, produced water, and/or recycled water  
 \*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided. Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

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

Company Name: Antero Resources Corporation  
 API No: 47-085-10299 County: Ritchie  
 District: Clay Well No: Penny Unit 2H  
 Farm Name: Edwin D. Mulvay et al  
 Discharge Date/s From:(MMDDYY) 08/24/18 To: (MMDDYY) 09/23/18  
 Discharge Times. From: 0:00 To: 24:00  
 Total Volume to be Disposed from this facility (gallons): 760,649  
 Disposal Option(s) Utilized (write volumes in gallons):

- (1) Land Application: \_\_\_\_\_ (Include a topographical map of the Area.)  
 (2) UIC: 193,373 Permit No. 3400923821, 3416729543, 3416729464, 3416729445, 3410523619, 3416729731, 3400923761, 3405320968, 3410523268,  
 (3) Offsite Disposal: 305 Site Location: Mud Masters  
 (4) Reuse: 566, 970 Alternate Permit Number: \_\_\_\_\_  
 (5) Centralized Facility: \_\_\_\_\_ Permit No. \_\_\_\_\_  
 (6) Other method: \_\_\_\_\_ (Include an explanation)

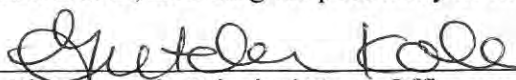
Follow Instructions below to determine your treatment category:

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: 10/30/18

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.

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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

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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: \_\_\_\_\_