

04/05/2019



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

April 4, 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:

- Parachute Unit 1H (API # 47-095-02429)—Stonefly Pad
- Parachute Unit 2H (API # 47-095-02429)—Stonefly Pad
- Parachute Unit 3H (API # 47-095-02433)—Stonefly Pad
- Copper John Unit 1H (API # 47-095-02404)—Stonefly Pad
- Copper John Unit 2H (API # 47-095-02405)—Stonefly Pad
- Copper John Unit 3H (API # 47-095-02406)—Stonefly Pad
- Pheasant Unit 1H (API # 47-095-02434)—Stonefly Pad
- Pheasant Unit 2H (API # 47-095-02435)—Stonefly Pad
- Pheasant Unit 3H (API # 47-095-02437)—Stonefly Pad
- Tauscher Unit 1H (API # 47-095-02357)—Stonefly Pad
- Tauscher Unit 2H (API # 47-095-02407)—Stonefly Pad
- Tauscher Unit 3H (API # 47-095-02456)—Stonefly 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 light blue horizontal line.

Megan Griffith  
Permitting Agent  
Antero Resources Corporation

Enclosures

WR-35  
Rev. 8/23/13

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

API 47 - 095 - 02405 County Tyler District Centerville  
 Quad Middlebourne 7.5' Pad Name Stonefly Pad Field/Pool Name -----  
 Farm name Steven McPeek et al Well Number Copper John 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 4363155m Easting 506668m  
 Landing Point of Curve Northing 4362896.86m Easting 506307.86m  
 Bottom Hole Northing 4360605m Easting 507128m

Elevation (ft) 982' 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 3/15/2017 Date drilling commenced 8/29/2017 Date drilling ceased 1/26/2018  
 Date completion activities began 6/13/2018 Date completion activities ceased 12/7/2018  
 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 52', 400', 457' Open mine(s) (Y/N) depths No  
 Salt water depth(s) ft 1425', 1431' Void(s) encountered (Y/N) depths No  
 Coal depth(s) ft 52', 457' 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 47-095 - 02405 Farm name Steven McPeek et al Well number Copper John 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"	572'	New	54#, J-55	N/A	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2645'	New	36#, H-40	N/A	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4"/8-1/2"	5-1/2"	15165'	New	23#, P-110	N/A	Y
Tubing		2-3/8"	6815'		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	204 sx	15.6	1.18	244	0'	8 Hrs.
Surface	Class A	477 sx	15.6	1.19	402	0'	8 Hrs.
Coal							
Intermediate 1	Class A	909 sx	15.6	1.18	1047	0'	8 Hrs.
Intermediate 2							
Intermediate 3							
Production	Class H	796sx (Lead) 1116 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) 15165' MD, 6365' TVD (BHL), 6387' (Deepest Point Drilled) Loggers TD (ft) 15165' MD  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 6000' \_\_\_\_\_

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





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API 47- 095 - 02405 Farm name Steven McPeek et al Well number Copper John Unit 2H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6327' (TOP) TVD</u>	<u>6714' (TOP) MD</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

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 8886 mcfpd Oil 184 bpd NGL --- bpd Water 9 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 <sub>2</sub> 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.

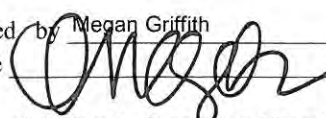
Drilling Contractor Frontier Drilling LLC  
Address 562 Spring Run Road City Pennsboro State WV Zip 26415

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  Title Permitting Agent Date 4/4/2019



API 47-095-02405 Farm Name Steven McPeek et al Well Number Copper John Unit 2H					
EXHIBIT 1					
Stage No.	Perforation Date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formations
1	11/1/2018	14724.425	14895.6	60	Marcellus
2	11/1/2018	14525.255	14693.23	60	Marcellus
3	11/1/2018	14326.085	14494.06	60	Marcellus
4	11/2/2018	14126.915	14294.89	60	Marcellus
5	11/2/2018	13927.745	14095.72	60	Marcellus
6	11/2/2018	13728.575	13896.55	60	Marcellus
7	11/3/2018	13529.405	13697.38	60	Marcellus
8	11/3/2018	13330.235	13498.21	60	Marcellus
9	11/3/2018	13131.065	13299.04	60	Marcellus
10	11/4/2018	12931.895	13099.87	60	Marcellus
11	11/4/2018	12732.725	12900.7	60	Marcellus
12	11/5/2018	12533.555	12701.53	60	Marcellus
13	11/5/2018	12334.385	12502.36	60	Marcellus
14	11/5/2018	12135.215	12303.19	60	Marcellus
15	11/5/2018	11936.045	12104.02	60	Marcellus
16	11/6/2018	11736.875	11904.85	60	Marcellus
17	11/6/2018	11537.705	11705.68	60	Marcellus
18	11/6/2018	11338.535	11506.51	60	Marcellus
19	11/7/2018	11139.365	11307.34	60	Marcellus
20	11/7/2018	10940.195	11108.17	60	Marcellus
21	11/8/2018	10741.025	10909	60	Marcellus
22	11/8/2018	10541.855	10709.83	60	Marcellus
23	11/9/2018	10342.685	10510.66	60	Marcellus
24	11/9/2018	10143.515	10311.49	60	Marcellus
25	11/9/2018	9944.345	10112.32	60	Marcellus
26	11/10/2018	9745.175	9913.15	60	Marcellus
27	11/10/2018	9546.005	9713.98	60	Marcellus
28	11/11/2018	9346.835	9514.81	60	Marcellus
29	11/12/2018	9147.665	9315.64	60	Marcellus
30	11/12/2018	8948.495	9116.47	60	Marcellus
31	11/13/2018	8749.325	8917.3	60	Marcellus
32	11/13/2018	8550.155	8718.13	60	Marcellus
33	11/14/2018	8350.985	8518.96	60	Marcellus
34	11/14/2018	8151.815	8319.79	60	Marcellus
35	11/15/2018	7952.645	8120.62	60	Marcellus
36	11/15/2018	7753.475	7921.45	60	Marcellus
37	11/16/2018	7554.305	7722.28	60	Marcellus
38	11/16/2018	7355.135	7523.11	60	Marcellus
39	11/17/2018	7155.965	7323.94	60	Marcellus
40	11/17/2018	6956.795	7124.77	60	Marcellus
41	11/17/2018	6757.625	6925.6	60	Marcellus



API 47-095-02405 Farm Name Steven McPeck et al Well Number Copper John Unit 2H								
EXHIBIT 2								
Stage No.	Stimulations Date	Avg Pump Rate	Avg Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/ other (units)
1	11/1/2018	68.30639	7014.109	5475	4444	347950	9064.59	N/A
2	11/1/2018	69.41218	7049.909	6144	4142	403600	8287.97	N/A
3	11/1/2018	70.29748	6905.321	5731	4353	404200	8078	N/A
4	11/2/2018	70.2725	7109.309	5980	3911	403250	7838.29	N/A
5	11/2/2018	73.07617	7125.796	5708	3591	401250	8079.56	N/A
6	11/2/2018	70.96627	7190.115	6190	4283	404950	8033	N/A
7	11/3/2018	72.6626	7242.725	6659	4160	409693	7987.75	N/A
8	11/3/2018	72.15279	7185.708	6308	4095	401250	7937.14	N/A
9	11/3/2018	75.86557	7352.739	6915	3498	403750	7895	N/A
10	11/4/2018	73.49656	7063.384	5148	4067	403100	8023.73	N/A
11	11/4/2018	70.41529	6817.365	6350	3845	404500	7932	N/A
12	11/5/2018	70.54644	6795.448	5225	4202	404500	7800	N/A
13	11/5/2018	77.22178	7265.683	6615	4320	395600	7745.3	N/A
14	11/5/2018	75.63955	7055.318	6206	3910	404550	7903	N/A
15	11/5/2018	73.9415	7122.835	6572	4507	403850	7946	N/A
16	11/6/2018	73.76686	7091.102	6468	4519	403650	7990.33	N/A
17	11/6/2018	73.77231	7079.677	6773	4050	403550	7953.91	N/A
18	11/6/2018	73.83449	6989.037	7145	4883	404050	7936	N/A
19	11/7/2018	75.16986	6723.085	5460	4837	404300	7971	N/A
20	11/7/2018	78.31699	7256.453	6983	4320	404600	7755.9	N/A
21	11/8/2018	77.70195	7235.604	6902	3697	403300	7930.74	N/A
22	11/8/2018	76.56859	7007.222	6606	3711	403750	7906.1	N/A
23	11/9/2018	74.99498	6958.861	7105	4168	403050	7907.12	N/A
24	11/9/2018	76.16873	6995.138	6694	4500	403600	7794.53	N/A
25	11/9/2018	75.58776	6967.476	6923	4018	403250	7829.9	N/A
26	11/10/2018	79.54999	7168.753	7008	3608	404500	7706.89	N/A
27	11/10/2018	76.85395	7185.569	7112	3646	403450	7851.56	N/A
28	11/11/2018	79.19268	6924.488	6411	3875	403950	8051.28	N/A
29	11/12/2018	77.11721	6565.906	4753	4232	402950	7753.53	N/A
30	11/12/2018	78.23601	6811.704	7052	4533	403750	7859.56	N/A
31	11/13/2018	76.36885	6803.405	7020	4762	404350	7889.86	N/A
32	11/13/2018	76.0341	7641.559	6068	4284	403850	7842.95	N/A
33	11/14/2018	76.70162	6631.162	6300	4291	403300	7976.65	N/A
34	11/14/2018	78.19335	6847.871	5554	3751	403600	9670.17	N/A
35	11/15/2018	76.59546	6908.601	6338	4827	372450	8717.93	N/A
36	11/15/2018	78.37623	6486.441	5783	4383	408250	8823.69	N/A
37	11/16/2018	77.33538	6367.255	6614	3885	402700	7732.54	N/A
38	11/16/2018	80.67201	6645.477	6680	4215	403800	8575.58	N/A
39	11/17/2018	76.65691	6223.061	6799	4613	402450	7784.11	N/A
40	11/17/2018	78.01137	6281.845	7089	4847	404200	7655.2	N/A
41	11/17/2018	77.14477	6149.801	7304	3950	402950	7677.29	N/A
	AVG=	75.2	6,933	6,394	4,189	16,463,593	329,096	TOTAL

API 47-095-02405 Farm Name Steven McPeck et al Well Number Copper John Unit 2H				
EXHIBIT 3				
LITHOLOGY/ FORMATION	TOP DEPTH (TVD) From Surface	BOTTOM DEPTH (TVD) From Surface	TOP DEPTH (MD) From Surface	BOTTOM DEPTH (MD) From Surface
Silty Sandstone	0	205	0	205
Sandy siltstone	205	310	205	310
Sandstone	310	605	310	605
Silty Sandstone	605	785	605	785
limey siltstone	785	960	785	960
silty sandstone, tr. coal	960	1,110	960	1,110
silty sandstone	1,110	1,505	1,110	1,505
silty shale	1,505	1,635	1,505	1,635
sandstone, tr coal	1,635	1,645	1,635	1,645
silty sandstone	1,645	1,685	1,645	1,685
sandstone	1,685	1,760	1,685	1,760
sandy shale	1,760	1,785	1,760	1,785
shaly sand	1,785	1,860	1,785	1,870
Big Lime	1,875	2,020	1,885	2,034
Big Injun	2,020	2,480	2,034	2,510
Gantz Sand	2,480	2,617	2,510	2,651
Fifty Foot Sandstone	2,617	2,717	2,651	2,754
Gordon	2,717	3,052	2,754	3,104
Fifth Sandstone	3,052	3,106	3,104	3,162
Bayard	3,106	3,488	3,162	3,558
Warren	3,488	3,875	3,558	3,958
Speechley	3,875	4,569	3,958	4,674
Balltown	4,176	4,957	4,269	5,076
Bradford	4,569	4,957	4,674	5,076
Benson	4,957	5,215	5,076	5,344
Alexander	5,215	5,728	5,344	5,873
Rhinestreet	5,704	6,070	5,849	6,273
Sycamore	6,070	6,191	6,273	6,453
Middlesex	6,191	6,280	6,453	6,605
Burkett	6,280	6,306	6,605	6,661
Tully	6,306	6,327	6,661	6,714
Marcellus	6,327	NA	6,714	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:	11/1/2018
Job End Date:	11/17/2018
State:	West Virginia
County:	Tyler
API Number:	47-095-02405-00-00
Operator Name:	Antero Resources Corporation
Well Name and Number:	Copper John Unit 2H
Latitude:	39.41781900
Longitude:	-80.92271100
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,365
Total Base Water Volume (gal):	14,157,807
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	70.00000	87.44305	
DWP-641	CWS	Friction Reducer					
				Listed Below			





Items above are Trade Names with the exception of Base Water. Items below are the individual ingredients.									
				Listed Below					
				Crystalline silica (Quartz)	14808-60-7	100.00000		12.18412	
				Calcite	471-34-1	1.00000		0.07945	
				Hydrochloric acid	7647-01-0	37.00000		0.05894	
				Illite	12173-60-3	1.00000		0.04201	
				Distillates (petroleum), hydrotreated middle	64742-46-7	60.00000		0.03932	
				Guar gum	9000-30-0	60.00000		0.03932	
				Polymer	26100-47-0	45.00000		0.02335	
				Distillates (petroleum), hydrotreated light	64742-47-8	30.00000		0.01557	
				Biotite	1302-27-8	0.10000		0.01215	
				Apatite	64476-38-6	0.10000		0.01215	
				Goethite	1310-14-1	0.10000		0.01215	
				Polyethylene glycol mixture	25322-68-3	54.50000		0.00617	
				2-Propenoic acid, homopolymer, sodium salt	9003-04-7	40.00000		0.00580	
				Ammonium chloride	12125-02-9	11.00000		0.00571	
				Ilmenite	98072-94-7	0.10000		0.00420	
				Quaternary ammonium compounds, bis (hydrogenated tallow alkyl)dimethyl, salts with bentonite	68953-58-2	5.00000		0.00328	
				2,2-Dibromo-3-Nitrilopropionamide	10222-01-2	20.00000		0.00226	
				Sorbitan monooleate	1338-43-8	4.00000		0.00208	
				Polyethylene glycol monooleate	9004-96-0	3.00000		0.00156	
				1,2-Propanediol	57-55-6	10.00000		0.00145	
				Ammonium Persulfate	64742-47-8	100.00000		0.00141	
				Sorbitol tetraoleate	61723-83-9	2.00000		0.00104	

					37251-67-5	1.50000	0.00098	
				Oxirane, 2-methyl-, polymer with oxirane, monodecyl ether				
				Citric acid	77-92-9	60.00000	0.00053	
				Amines, tallow alkyl, ethoxylated	61791-26-2	1.00000	0.00052	
				Sodium bromide	7647-15-6	4.00000	0.00045	
				Dibromoacetonitrile	3252-43-5	3.00000	0.00034	
				Vinylidene chloride-methyl acrylate copolymer	69418-26-4	20.00000	0.00028	
				Alkylloxypolyethyleneoxy ethanol	84133-50-6	0.50000	0.00026	
				Acrylamide	79-06-1	0.10000	0.00005	
				Ethylene glycol	107-21-1	40.00000	0.00003	
				Diethylene glycol (mono) methyl ether	34590-94-8	20.00000	0.00002	
				Formic Acid	64-18-6	10.00000	0.00001	
				Diethylene glycol	111-46-6	1.00000	0.00001	
				Tar bases, quinolone derivs	68513-87-1	1.00000	0.00001	
				Tar bases, quinolone derivs, benzyl chloride- quatenized	72480-70-7	10.00000	0.00001	
				Ethoxylated alcohols	Proprietary	10.00000	0.00001	Proprietary CAS
				Cinnamaldehyde	104-55-2	10.00000	0.00001	
				Isopropanol	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)



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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: 47-095-02405 County: Tyler  
 District: Centerville Well No: Copper John Unit 2H  
 Farm Name: Steven McPeek et al  
 Discharge Date/s From:(MMDDYY) 01/08/19 To: (MMDDYY) 02/07/19  
 Discharge Times. From: 0:00 To: 24:00  
 Total Volume to be Disposed from this facility (gallons): 765,779  
 Disposal Option(s) Utilized (write volumes in gallons):

- (1) Land Application: \_\_\_\_\_ (Include a topographical map of the Area.)  
 (2) UIC: 458,877 Permit No. 3400923821, 3410523619, 3416729731, 3416729543, 3416729464,  
 (3) Offsite Disposal: 700 Site Location: Mud Masters  
 (4) Reuse: 306,202 Alternate Permit Number: \_\_\_\_\_  
 (5) Centralized Facility: \_\_\_\_\_ Permit No. \_\_\_\_\_  
 (6) Other method: \_\_\_\_\_ (Include an explanation)

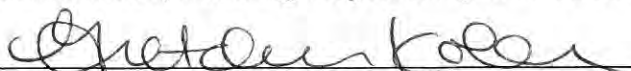
Follow Instructions below to determine your treatment category:

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: 3/18/19

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/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: \_\_\_\_\_