

3/23/13

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

API 47 - 091 - 01319 County Taylor District FLEMINGTON  
Quad ROSEMONT 7.5' Pad Name RSM118 Field/Pool Name \_\_\_\_\_  
Farm name JAMES M. TAYLOR ET AL Well Number 515746  
Operator (as registered with the OOG) EQT Production Company  
Address 625 Liberty Ave. EQT Plaza, Suite 1700 City Pittsburgh State PA Zip 15222

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,349,729.8 Easting 569,613.9  
Landing Point of Curve Northing 4,349,395.3 Easting 568,887.2  
Bottom Hole Northing 4,347,645.3 Easting 569,557.3

Elevation (ft) 1465 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)

Water base Mud 13.5 ppg barium sulfate, sodium chloride, xanthan gum, polyanionic cellulose, modified starch, sodium hydroxide, phosphonates and alkyl phosphates, glutaraldehyde solution, calcium hydroxide, partially hydrolyzed polyacrylamide/polyacrylate, potassium chloride, sodium carbonate, ground walnut shells, alcohol and modified fatty acid, ferrochrome lignosulfonate, calcium carbonate, fibrous cellulose

Date permit issued 01/30/2015 Date drilling commenced 06/03/2015 Date drilling ceased 10/7/2015  
Date completion activities began 12/6/2015 Date completion activities ceased 12/14/2015  
Verbal plugging (Y/N) N 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

Freshwater depth(s) ft 282,606,827 Open mine(s) (Y/N) depths \_\_\_\_\_  
Salt water depth(s) ft 1357 Void(s) encountered (Y/N) depths \_\_\_\_\_  
Coal depth(s) ft 22,600,646,697,757,797,813,847,889,938,1071 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

Reviewed by:

**PROV**

*Thomas R. Hayes*

3-21-16

04/01/2016

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API 47-091 - 01319 Farm name JAMES M. TAYLOR ET AL Well number 515746

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"	40'	NEW	A-500 94LB/FT	NONE	Y
Surface	17.5"	13.375"	921'	NEW	J-55 54.5LB/FT	NONE	Y
Coal							
Intermediate 1	12.375"	9.625"	2503'	NEW	A-500 40LB/FT	1490'	Y
Intermediate 2							
Intermediate 3							
Production	8.5"	5.5"	15,603'	NEW	P-110 20LB/FT	NONE	N
Tubing							
Packer type and depth set							

Comment Details N/A

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	38	15.6	1.18	44.84	0	8
Surface	CLASS A	784	15.6	1.20	940.8	0	8
Coal							
Intermediate 1	CLASS A / CLASS H	436 / 472	15.6 / 16.0	1.25 / 1.25	1135	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS H / CLASS H	1,065 / 1,005	15.2 / 15.6	1.07 / 1.84	2988.75	2,757'	24
Tubing							

Drillers TD (ft) 15,614' MD Loggers TD (ft) N/A

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

Plug back procedure Wellbore was plugged back from 8,206 RMD to 7,242 RMD through a fiberglass stinger with 55 bbls (280 sks) of 16.8 ppg 1.02 yield Denscem using Halliburton's BHKA tool. The plug was used to sidetrack this wellbore around a fish that was LIH.

Kick off depth (ft) 3,798' MD

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- NONE  
SURFACE- JOINTS: 1,10,20  
INTERMEDIATE- 6 CENTRALIZERS RAN AT LEAST EVERY 500' FEET  
PRODUCTION- 267 Solid composite body spiral centralizers installed every joint from bottom to 4,000 RMD

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WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

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WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

WV Department of  
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WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

API 47- 091 - 01319

Farm name JAMES M. TAYLOR ET AL

Well number 515746

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
					Please See Attached

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

Please insert additional pages as applicable.

API 47- 091 - 01319 Farm name JAMES M. TAYLOR ET AL Well number 515746

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
MARCELLUS	7,401.70	TVD 8,156.00 MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1,650 psi Bottom Hole N/A psi DURATION OF TEST 92 hrs

OPEN FLOW Gas 10,278 mcfpd Oil N/A bpd NGL 0.0 bpd Water 1,113.6 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	
	0		0		

Please insert additional pages as applicable.

Drilling Contractor ALPHA HUNTER DRILLING (RIG 5)  
Address P.O. BOX 430 City RENO State OH Zip 45773

Logging Company \_\_\_\_\_  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cementing Company BAKER HUGHES OILFIELD OPERATIONS, INC.  
Address 837 Philippi Pike City CLARKSBURG State WV Zip 26301

Stimulating Company Keane  
Address 2121 Sage Road City Houston State TX Zip 77056

Please insert additional pages as applicable.

Completed by Jim Helmick Telephone (412) 395-5518  
Signature \_\_\_\_\_ Title VP Completions Date 3/9/2016

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Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Report WV Department of Environmental Protection

04/01/2016

API 47- 091 - 01319 Farm name JAMES M. TAYLOR ET AL Well number 515746

Drilling Contractor Savanna Drilling (Rig 803)  
Address 125 Industry Road City Waynesburg State PA Zip 15370

Logging Company GYRODATA  
Address 601 MAYER ST City BRIDGEVILLE State PA Zip 15017

Logging Company Hoss Co. Services LLC  
Address 614 Trotters Lane City Charleston State WV Zip 25312

Cementing Company C&J Energy Services (Nabors)  
Address 2504 Smith Creek Road City Waynesburg State PA Zip 15370

515746 (API#47-91001319) Final Formations

Formation Name	Final Top MD (ftGL) (ft)	Final Top TVD (ft)	Final Btm MD (ftGL) (ft)	Final Btm TVD (ft)
FRESH WATER ZONE	1		837	837
SAND/SHALE	1		32	
PITTSBURGH COAL	32		38	
SAND/SHALE	38		610	610
COAL	610	610	615	615
SAND/SHALE	615	615	656	656
COAL	656	656	661	661
SAND/SHALE	661	661	707	707
UPPER FREEPORT	707	707	708	708
SAND/SHALE	708	708	767	767
LOWER FREEPORT	767	767	768	768
SAND/SHALE	768	768	807	807
UPPER KITTANNING	807	807	808	808
SAND/SHALE	808	808	823	823
MIDDLE KITTANNING	823	823	828	828
SAND/SHALE	828	828	857	857
LOWER KITTANNING	857	857	858	858
SAND/SHALE	858	858	899	899
COAL	899	899	905	905
SAND/SHALE	905	905	948	948
COAL	948	948	953	953
SAND/SHALE	953	953	1,081.00	1,081.00
MAXTON	981	981	1,058.00	1,058.00
SAND/SHALE	1,058.00	1,058.00	1,360.00	1,359.90
COAL	1,081.00	1,081.00	1,085.00	1,085.00
BIG LIME	1,360.00	1,359.90	1,542.00	1,541.90
SAND/SHALE	1,542.00	1,541.90	1,643.00	1,642.90
WEIR	1,643.00	1,642.90	1,657.00	1,656.90
SAND/SHALE	1,657.00	1,656.90	1,871.00	1,870.80
GANTZ	1,871.00	1,870.80	1,937.00	1,936.80
SAND/SHALE	1,937.00	1,936.80	1,945.00	1,944.80
50F	1,945.00	1,944.80	1,995.00	1,994.80
SAND/SHALE	1,995.00	1,994.80	2,052.00	2,051.80
30F	2,052.00	2,051.80	2,092.00	2,091.80
SAND/SHALE	2,092.00	2,091.80	2,130.00	2,129.80
GORDON	2,130.00	2,129.80	2,180.00	2,179.80
SAND/SHALE	2,180.00	2,179.80	2,276.00	2,275.80
4TH SAND	2,276.00	2,275.80	2,371.00	2,370.80
SAND/SHALE	2,371.00	2,370.80	2,419.00	2,418.80
BAYARD	2,419.00	2,418.80	2,466.00	2,465.80
SAND/SHALE	2,466.00	2,465.80	2,811.00	2,810.80
WARREN	2,811.00	2,810.80	3,157.00	3,156.80
SPEECHLEY	3,157.00	3,156.80	3,439.00	3,438.80
BRADFORD	3,439.00	3,438.80	3,608.00	3,607.80
BALLTOWN	3,608.00	3,607.80	3,855.00	3,854.80
RILEY	3,855.00	3,854.80	4,467.00	4,466.70
BENSON	4,467.00	4,466.70	5,018.00	4,997.10
ELKS	5,018.00	4,997.10	6,822.00	6,378.70
SONYEA	6,822.00	6,378.70	7,532.00	6,916.80
MIDDLESEX	7,532.00	6,916.80	7,714.00	7,068.60
GENESEE	7,714.00	7,068.60	7,879.00	7,204.40
GENESEO	7,879.00	7,204.40	7,902.00	7,222.80
TULLY	7,902.00	7,222.80	7,967.00	7,273.70
HAMILTON	7,967.00	7,273.70	8,156.00	7,401.70
MARCELLUS	8,156.00	7,401.70		

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**515746-47-091-01319-0000 - Perforations**

<b>Stage Number</b>	<b>Perforation Date</b>	<b>Top Perf Depth (ftKB)</b>	<b>Bottom Perf Depth (ftKB)</b>	<b>Number of Shots</b>	<b>Formation</b>
Initiation Sleeve	10/23/2015	15,599.00	15,600.00	10	MARCELLUS
1	12/6/2015	15,453.00	15,543.00	32	MARCELLUS
2	12/6/2015	15,303.00	15,425.00	40	MARCELLUS
3	12/7/2015	15,153.00	15,271.00	40	MARCELLUS
4	12/7/2015	15,003.00	15,125.00	40	MARCELLUS
5	12/7/2015	14,853.00	14,975.00	40	MARCELLUS
6	12/8/2015	14,703.00	14,821.00	40	MARCELLUS
7	12/8/2015	14,553.00	14,675.00	40	MARCELLUS
8	12/8/2015	14,403.00	14,525.00	40	MARCELLUS
9	12/8/2015	14,253.00	14,375.00	40	MARCELLUS
10	12/8/2015	14,103.00	14,225.00	40	MARCELLUS
11	12/9/2015	13,953.00	14,075.00	40	MARCELLUS
12	12/9/2015	13,803.00	13,923.00	40	MARCELLUS
13	12/9/2015	13,653.00	13,773.00	40	MARCELLUS
14	12/9/2015	13,503.00	13,623.00	40	MARCELLUS
15	12/9/2015	13,355.00	13,475.00	40	MARCELLUS
16	12/10/2015	13,203.00	13,325.00	40	MARCELLUS
17	12/10/2015	13,053.00	13,175.00	40	MARCELLUS
18	12/10/2015	12,903.00	13,018.50	40	MARCELLUS
19	12/10/2015	12,753.00	12,875.00	40	MARCELLUS
20	12/10/2015	12,603.00	12,725.00	40	MARCELLUS
21	12/11/2015	12,453.00	12,575.00	40	MARCELLUS
22	12/11/2015	12,303.00	12,425.00	40	MARCELLUS
23	12/11/2015	12,153.00	12,275.00	40	MARCELLUS
24	12/11/2015	12,003.00	12,125.00	40	MARCELLUS
25	12/11/2015	11,853.00	11,975.00	40	MARCELLUS
26	12/11/2015	11,703.00	11,825.00	40	MARCELLUS
27	12/11/2015	11,551.00	11,666.00	40	MARCELLUS
28	12/12/2015	11,403.00	11,525.00	40	MARCELLUS
29	12/12/2015	11,253.00	11,373.00	40	MARCELLUS
30	12/12/2015	11,103.00	11,223.00	40	MARCELLUS
31	12/12/2015	10,953.00	11,075.00	40	MARCELLUS
32	12/12/2015	10,803.00	10,922.00	40	MARCELLUS
33	12/12/2015	10,653.00	10,775.00	40	MARCELLUS
34	12/12/2015	10,506.00	10,625.00	40	MARCELLUS
35	12/13/2015	10,353.00	10,475.00	40	MARCELLUS
36	12/13/2015	10,203.00	10,323.00	40	MARCELLUS
37	12/13/2015	10,053.00	10,173.00	40	MARCELLUS
38	12/13/2015	9,903.00	9,993.00	40	MARCELLUS
39	12/13/2015	9,753.00	9,875.00	40	MARCELLUS
40	12/13/2015	9,603.00	9,725.00	40	MARCELLUS
41	12/13/2015	9,453.00	9,575.00	40	MARCELLUS
42	12/14/2015	9,303.00	9,425.00	40	MARCELLUS
43	12/14/2015	9,153.00	9,275.00	40	MARCELLUS
44	12/14/2015	9,003.00	9,125.00	40	MARCELLUS
45	12/14/2015	8,853.00	8,975.00	40	MARCELLUS
46	12/14/2015	8,703.00	8,825.00	40	MARCELLUS

**515746-47-091-01319-0000 - Stimulated Stages**

Stage Number	Stimulation 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)
Initiation Sleeve	12/6/2015	14.60	8,434.00	8,969.00	5,526.00		555	0
1	12/6/2015	92.30	8,884.00	8,995.00	5,710.00	249,860	5281	0
2	12/6/2015	87.80	8,929.00	9,028.00	5,540.00	249,680	5090	0
3	12/7/2015	84.10	8,905.00	9,021.00	5,740.00	248,320	5190	0
4	12/7/2015	81.60	8,933.00	9,012.00	6,008.00	249,900	5131	0
5	12/7/2015	81.40	8,955.00	9,006.00	5,920.00	250,180	5065	0
6	12/8/2015	88.60	8,999.00	9,033.00	5,704.00	249,960	5430	0
7	12/8/2015	92.00	8,988.00	9,045.00	5,712.00	250,300	5122	0
8	12/8/2015	82.60	8,967.00	9,038.00	5,472.00	249,920	5046	0
9	12/8/2015	87.60	8,852.00	8,979.00	5,379.00	253,340	5033	0
10	12/8/2015	88.50	8,853.00	9,039.00	5,468.00	250,680	5064	0
11	12/9/2015	86.30	8,907.00	9,051.00	5,607.00	248,480	4977	0
12	12/9/2015	87.90	8,981.00	9,041.00	5,850.00	250,920	5000	0
13	12/9/2015	81.20	8,987.00	9,076.00	5,703.00	251,040	5282	0
14	12/9/2015	83.10	8,860.00	8,991.00	5,905.00	250,780	4995	0
15	12/9/2015	82.90	8,832.00	9,093.00	5,889.00	250,120	4987	0
16	12/10/2015	87.60	8,859.00	9,156.00	6,028.00	250,320	4989	0
17	12/10/2015	93.50	8,952.00	9,023.00	5,749.00	251,220	4997	0
18	12/10/2015	89.40	8,964.00	9,086.00	5,601.00	250,860	4,955	0
19	12/10/2015	87.60	8,849.00	9,062.00	5,756.00	250,740	4,947	0
20	12/10/2015	97.40	8,760.00	8,883.00	5,842.00	250,380	4,913	0
21	12/11/2015	98.30	8,856.00	8,930.00	6,087.00	250,420	4,888	0
22	12/11/2015	100.00	8,901.00	9,062.00	5,979.00	250,020	4,887	0
23	12/11/2015	98.70	8,960.00	9,057.00	5,977.00	250,800	4,934	0
24	12/11/2015	93.80	8,848.00	9,408.00	5,813.00	250,860	4868	0
25	12/11/2015	86.90	8,982.00	9,079.00	6,178.00	251,060	4858	0
26	12/11/2015	99.00	8,855.00	9,075.00	6,147.00	250,060	4832	0
27	12/12/2015	85.30	8,958.00	9,093.00	5,985.00	250,080	4879	0
28	12/12/2015	89.40	8,849.00	9,111.00	6,297.00	250,260	4788	0
29	12/12/2015	92.20	8,945.00	9,045.00	5,898.00	250,780	4842	0
30	12/12/2015	94.40	8,920.00	9,030.00	6,094.00	251,160	4822	0
31	12/12/2015	91.30	8,944.00	9,062.00	5,430.00	251,120	4795	0
32	12/12/2015	96.90	8,812.00	8,909.00	5,469.00	251,180	4745	0
33	12/12/2015	99.60	8,696.00	8,922.00	6,035.00	250,880	4715	0
34	12/13/2015	92.60	8,881.00	8,959.00	5,967.00	250,000	4720	0
35	12/13/2015	88.70	8,747.00	8,854.00	5,754.00	250,280	4735	0
36	12/13/2015	92.10	8,963.00	9,052.00	5,809.00	249,820	4710	0
37	12/13/2015	92.80	8,929.00	9,127.00	5,759.00	250,620	4702	0
38	12/13/2015	92.60	8,886.00	8,991.00	5,782.00	250,740	4725	0
39	12/13/2015	95.90	8,863.00	9,061.00	6,026.00	250,920	4633	0
40	12/13/2015	101.60	8,687.00	8,910.00	6,125.00	250,320	4670	0
41	12/13/2015	100.70	8,827.00	8,962.00	5,835.00	249,960	5119	0
42	12/14/2015	92.20	8,819.00	9,053.00	5,803.00	249,100	4678	0
43	12/14/2015	100.10	8,690.00	9,024.00	5,663.00	250,240	4626	0
44	12/14/2015	101.70	8,322.00	8,956.00	5,758.00	249,940	4630	0
45	12/14/2015	96.40	8,738.00	9,041.00	5,851.00	249,380	4601	0
46	12/14/2015	100.40	8,596.00	8,994.00	5,390.00	250,120	4610	0

Environmental Protection

Office of Oil and Gas

REGULATORY SERVICES



INVESTIGATION  
OF THE  
MURDER OF  
DR. MARTIN LUTHER KING, JR.  
APRIL 1, 1968  
FBI - MEMPHIS

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	12/6/2015
Job End Date:	12/14/2015
State:	West Virginia
County:	Taylor
API Number:	47-091-01319-00-00
Operator Name:	EQT Production
Well Name and Number:	515746
Longitude:	-80.19291400
Latitude:	39.29405600
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,402
Total Base Water Volume (gal):	9,494,562
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	Keane Group	Carrier/Base Fluid	Water	7732-18-5	100.00000	87.04324	None
Sand (Proppant)	Keane Group	Proppant	Silica Substrate	14808-60-7	100.00000	12.65254	None
Hydrochloric Acid (15%)	Keane Group	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.03656	None
FFR760	Keane Group	Friction Reducer	Hydrotreated Light Distillate	64742-47-8	30.00000	0.01797	None
			Alkyl Alcohol	Proprietary	10.00000	0.00599	None
			Oxyalkylated alcohol A	Proprietary	5.00000	0.00000	None
AI 600	Keane Group	Corrosion Inhibitor	Poly (oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-branched	127087-87-0	5.00000	0.00299	None
			Ethylene Glycol	107-21-1	40.00000	0.00024	None
			N, N-Dimethylformamide	68-12-2	20.00000	0.00012	None
			Cinnamialdehyde	104-55-2	15.00000	0.00009	None
			Tar bases, quinoline derivs, benzyl chloride-quatemized	72480-70-7	15.00000	0.00009	None
			2-Butoxyethanol	111-76-2	15.00000	0.00009	None

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		1-Decanol	112-30-1	5.00000	0.00003	None
		Isopropyl alcohol	67-63-0	2.50000	0.00002	None
		1-Octanol	111-87-5	2.50000	0.00002	None
		Triethyl Phosphate	78-40-0	2.50000	0.00002	None
LEB-10X	Keane Group	Gel Breaker				
		Ethylene Glycol	107-21-1	30.00000	0.00001	None

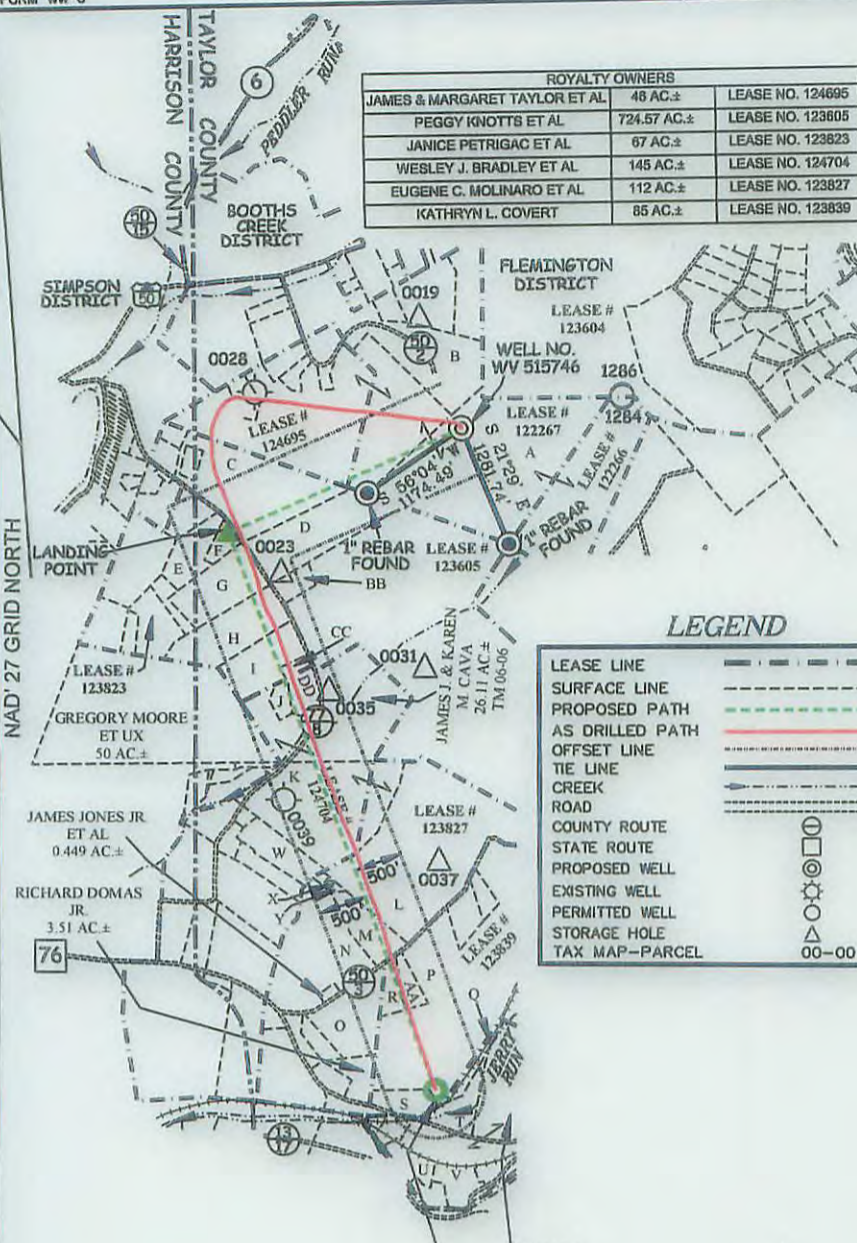
Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

\* 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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MAR 10 2016  
WV Department of  
Environmental Protection



ROYALTY OWNERS		
JAMES & MARGARET TAYLOR ET AL	48 AC±	LEASE NO. 124695
PEGGY KNOTTS ET AL	724.57 AC±	LEASE NO. 123605
JANICE PETRIGAC ET AL	67 AC±	LEASE NO. 123823
WESLEY J. BRADLEY ET AL	145 AC±	LEASE NO. 124704
EUGENE C. MOLINARO ET AL	112 AC±	LEASE NO. 123827
KATHRYN L. COVERT	85 AC±	LEASE NO. 123839

**EQT PRODUCTION COMPANY  
TAYLOR LEASE  
123 ACRES±  
WELL NO. WV 515746  
(RSM118 H10)**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'27 S.P.C.(FT) N. 289,967.5 E. 1,803,892.2  
 NAD'27 GEO. LAT-(N) 39.294056 LONG-(W) 80.192914  
 NAD'83 UTM (M) N. 4,349,729.8 E. 569,613.9

**LANDING POINT**  
 NAD'27 S.P.C.(FT) N. 288,909.7 E. 1,801,489.5  
 NAD'27 GEO. LAT-(N) 39.291101 LONG-(W) 80.201374  
 NAD'83 UTM (M) N. 4,349,395.3 E. 568,887.2

**BOTTOM HOLE**  
 NAD'27 S.P.C.(FT) N. 283,130.6 E. 1,803,592.9  
 NAD'27 GEO. LAT-(N) 39.275279 LONG-(W) 80.193784  
 NAD'83 UTM (M) N. 4,347,645.3 E. 569,557.3

**LEGEND**

LEASE LINE	---
SURFACE LINE	----
PROPOSED PATH	---
AS DRILLED PATH	---
OFFSET LINE	---
TIE LINE	---
CREEK	---
ROAD	---
COUNTY ROUTE	---
STATE ROUTE	---
PROPOSED WELL	⊙
EXISTING WELL	⊙
PERMITTED WELL	⊙
STORAGE HOLE	⊙
TAX MAP-PARCEL	00-00

A	JAMES & MARGARET TAYLOR ET AL	137.39 AC±	TM 01-01
B	QUALITY MACHINE COMPANY INC.	25 AC±	
C	JOHN P & MARY J FREDERICK	22.46 AC±	TM 06-5.4
D	DANIEL & CHRISTINE CRIMM	15 AC±	TM 06-5.5
E	ALAN R & LAURA A ROMINE	6.26 AC±	TM 06-13.1
F	JOY & HENRY T. BROWN III	2.17 AC±	TM 06-13.2
G	JANICE E. FRANCIS A. PETRIGAC	9.91 AC±	TM 06-10
H	SHEILA L. McELDOWNEY	11.62 AC±	TM 06-09
I	JOSEPH & MARY MELKO	8.39 AC±	TM 06-08
J	JAMES J. & KAREN M. CAVA	1 AC±	TM 06-07
K	DANIEL A. & JAMES J. CAVA	28.7318 AC±	TM 06-16
L	EDWARD & MARK PEOSCEK	45.814 AC±	TM 06-34.8
M	LOUISE S. BATMAN	7.77 AC±	TM 06-34.9
N	EUGENE C. & LORETTA MOLINARO	18.33 AC±	
O	JAMES B. JONES JR.	9.46 AC±	TM 06-34.6
P	DORSEY B. McELDOWNEY	53.10 AC±	TM 06-33.2
Q	TAYLOR WAREHOUSE SERVICES INC	1.50 AC±	TM 06-31.1
R	HARRY B. McELDOWNEY	4.45 AC±	TM 06-33.3
S	WAYNE A. & VIRGINIA McCAULEY	3.32 AC±	TM 06-24
T	THOMAS A. JOHNSTON	4.940 AC±	TM 06-31.2
U	JUDY & LAWRENCE EDWARDS	3.7 AC±	
V	JACKIE N. CAIN	2.13 AC±	
W	JAMES & JACKLIN ROMEO	6.83 AC±	
X	SOUTHWESTERN WATER DISTRICT	0.39 AC±	
Y	SOUTHWESTERN WATER DISTRICT	0.83 AC±	
Z	SAMUEL & NANCY CALE	0.54 AC±	
AA	HARRY B. McELDOWNEY	1.422 AC±	TM 06-33.6
BB	DAVID V. CAVA ET AL	2.42 AC±	
CC	WILLIAM PASTERNAK ET AL	1.01 AC±	TM 06-8.1
DD	JOSEPH & MARY GARRETT	3.89 AC±	TM 06-6.1

**AS DRILLED COORDINATES  
FOR WELL NO. WV 515746**  
 (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'27 S.P.C.(FT) N. 289,967.5 E. 1,803,892.2  
 NAD'27 GEO. LAT-(N) 39.294056 LONG-(W) 80.192914  
 NAD'83 UTM (M) N. 4,349,729.8 E. 569,613.9

**BOTTOM HOLE**  
 NAD'27 S.P.C.(FT) N. 283,132.5 E. 1,803,598.9  
 NAD'27 GEO. LAT-(N) 39.275284 LONG-(W) 80.193783  
 NAD'83 UTM (M) N. 4,347,645.9 E. 569,559.1

**BOTTOM HOLE  
WELL NO.  
WV 515746**

**NOTES ON SURVEY**

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
- AS DRILLED INFORMATION PROVIDED BY EQT.

**Professional Energy Consultants**  
 DIVISION OF SMITH LAND SURVEYING, INC.  
  
 SURVEYORS  
 ENGINEERS  
 ENVIRONMENTAL  
 PROJECT MGMT.  
 (304) 482-5934  
 WWW.SLSURVEYS.COM

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 2288 *Earl N. Thompson*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE SEPTEMBER 22, 20 14  
 REVISED NOVEMBER 02, 20 15  
 OPERATORS WELL NO. WV 515746  
 API WELL NO. 47-091-01319H  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7265P515746  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'

STATE OF WEST VIRGINIA  
 DIVISION OF ENVIRONMENTAL PROTECTION  
 OFFICE OF OIL AND GAS

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1463(GROUND)1465(PROPOSED) WATERSHED PEDDLER RUN  
 DISTRICT FLEMINGTON COUNTY TAYLOR QUADRANGLE ROSEMONT 7.5'

SURFACE OWNER JAMES M. TAYLOR ET AL ACREAGE 137.39±  
 ROYALTY OWNER JAMES TAYLOR (LIFE) ET AL ACREAGE 123± **04/01/2016**

PROPOSED WORK:  
 DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION   
 PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER   
 PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION MARCELLUS  
 ESTIMATED DEPTH TVD 7,632'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY  
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

COUNTY NAME PERMIT

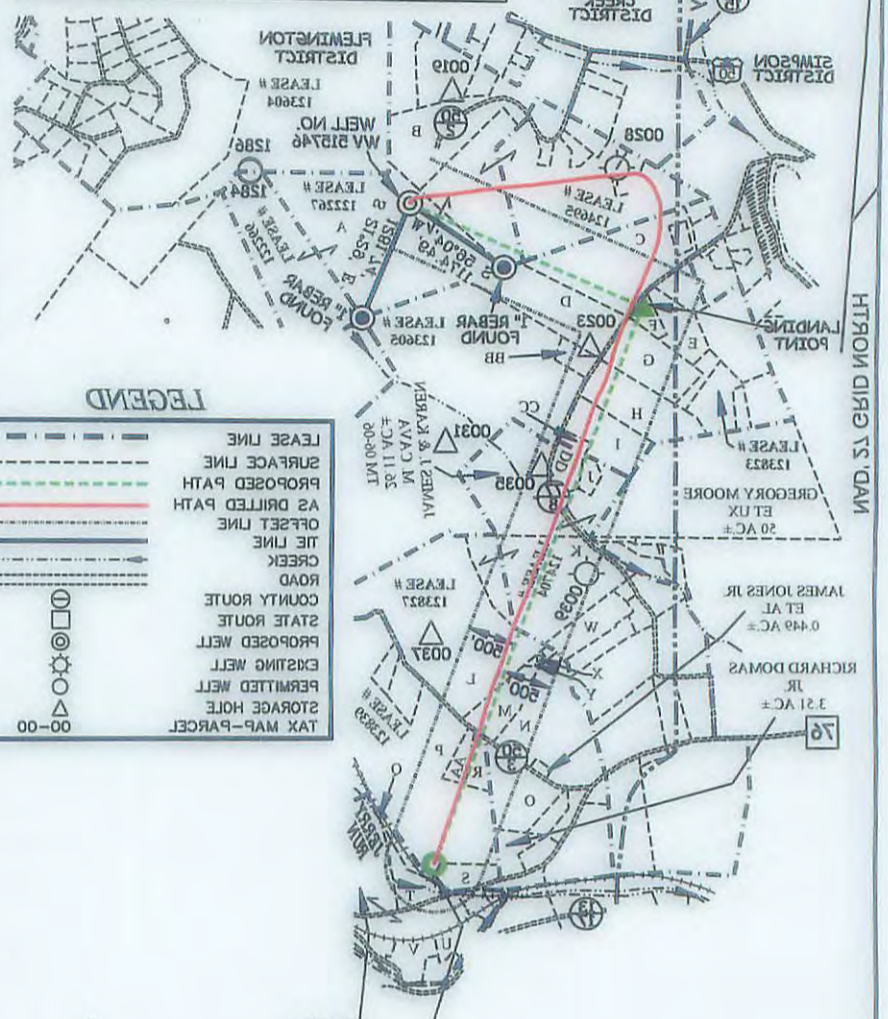
LATITUDE 39°50'00"

LONGITUDE 80°10'00"

EQT PRODUCTION COMPANY  
TAYLOR LEASE  
123 ACRES ±  
WELL NO. W 51246  
(RSM18 H10)

(S.P.C. NORTH ZONE) (UTM) ZONE 17 NORTH)  
NAD'83 UTM (M) N. 4,347,298 E. 589,813.9  
NAD'83 GEO. LAT-(N) 39.294058 LONG-(W) 80.182914  
NAD'83 S.P.C. (FT) N. 288,987.5 E. 1,803,882.5  
LANDING POINT  
NAD'83 UTM (M) N. 4,347,298 E. 589,813.9  
NAD'83 GEO. LAT-(N) 39.294058 LONG-(W) 80.182914  
NAD'83 S.P.C. (FT) N. 288,987.5 E. 1,803,882.5  
BOTTOM HOLE  
NAD'83 UTM (M) N. 4,347,452.3 E. 589,527.3  
NAD'83 GEO. LAT-(N) 39.275229 LONG-(W) 80.183784  
NAD'83 S.P.C. (FT) N. 283,130.8 E. 1,803,282.9

ROYALTY OWNERS	
JAMES & MARGARET TAYLOR ET AL	48 AC ± LEASE NO. 12889
PEGGY KNOTT ET AL	124.5 AC ± LEASE NO. 12890
JANICE PETRIGAC ET AL	87 AC ± LEASE NO. 12882
WESLEY J. BRADLEY ET AL	148 AC ± LEASE NO. 12870
EUGENE C. MOLINARO ET AL	112 AC ± LEASE NO. 12862
KATHRYN J. COVERT	88 AC ± LEASE NO. 12899



A	JAMES & MARGARET TAYLOR ET AL	137.39 AC ±	TM 01-01
B	QUALITY MACHINE COMPANY INC	25 AC ±	
C	JOHN P. & MARY I. FREDRICK	23.46 AC ±	TM 06-24
D	DANIEL & CHRISTINE CRIMM	15 AC ±	TM 06-23
E	ALAN R. & LAURA A. ROMINE	6.26 AC ±	TM 06-13
F	JOY & HENRY T. BROWN III	2.17 AC ±	TM 06-12
G	JANICE FRANKS & A. PETRIGAC	9.91 AC ±	TM 06-10
H	SHEILA L. McELDOWNEY	11.82 AC ±	TM 06-09
I	JOSEPH & MARY MELKO	8.39 AC ±	TM 06-08
J	JAMES J. & KAREN M. CAVA	1 AC ±	TM 06-07
K	DANIEL A. & JAMES J. CAVA	28.7318 AC ±	TM 06-16
L	EDWARD & MARK PESOSK	42.814 AC ±	TM 06-34
M	LOUISE S. BATMAN	7.27 AC ±	TM 06-39
N	EUGENE C. & LORETTA MOLINARO	18.33 AC ±	TM 06-38
O	JAMES B. JONES JR.	9.46 AC ±	TM 06-36
P	DORSEY B. McELDOWNEY	23.10 AC ±	TM 06-32
Q	TAYLOR WAREHOUSE SERVICES INC	1.20 AC ±	TM 06-31
R	HARRY B. McELDOWNEY	4.42 AC ±	TM 06-33
S	WAYNE A. & VIRGINIA McCAULEY	3.32 AC ±	TM 06-28
T	THOMAS A. JOHNSTON	4.94 AC ±	TM 06-31.5
U	JUDY & LAWRENCE EDWARDS	3.7 AC ±	
V	JACQIE N. CAIN	2.13 AC ±	
W	JAMES & JACKLIN ROMEO	6.83 AC ±	
X	SOUTHWESTERN WATER DISTRICT	0.39 AC ±	
Y	SOUTHWESTERN WATER DISTRICT	0.83 AC ±	
Z	SAMUEL & NANCY CALE	0.24 AC ±	
AA	HARRY B. McELDOWNEY	1.422 AC ±	TM 06-33.6
BB	DAVID V. CAVA ET AL	2.42 AC ±	
CC	WILLIAM PASTERNAK ET AL	1.01 AC ±	TM 06-8.1
DD	JOSEPH & MARY GARRETT	3.89 AC ±	TM 06-6.1

**LEGEND**

- LEASE LINE
- SURFACE LINE
- PROPOSED PATH
- AS DRILLED PATH
- OFFSET LINE
- THE LINE
- CREEK
- ROAD
- COUNTY ROUTE
- STATE ROUTE
- PROPOSED WELL
- EXISTING WELL
- PERMITTED WELL
- STORAGE HOLE
- TAX MAP - PARCEL

**AS DRILLED COORDINATES FOR WELL NO. W 51246**  
(S.P.C. NORTH ZONE) (UTM) ZONE 17 NORTH)  
NAD'83 UTM (M) N. 4,347,298 E. 589,813.9  
NAD'83 GEO. LAT-(N) 39.294058 LONG-(W) 80.182914  
NAD'83 S.P.C. (FT) N. 288,987.5 E. 1,803,882.5  
BOTTOM HOLE  
NAD'83 UTM (M) N. 4,347,452.3 E. 589,527.3  
NAD'83 GEO. LAT-(N) 39.275229 LONG-(W) 80.183784  
NAD'83 S.P.C. (FT) N. 283,130.8 E. 1,803,282.9

**NOTES ON SURVEY**

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS > 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 825' OF THE CENTER OF PROPOSED WELL PAD.
- AS DRILLED INFORMATION PROVIDED BY EQT.

**Professional Energy Consultants**  
A DIVISION OF SMITH LAND SURVEYS, INC.  
SURVEYORS  
ENGINEERS  
ENVIRONMENTAL  
PROJECT MGMT.  
WWW.SLSURVEYS.COM (801) 452-8888

BY THE DIVISION OF ENVIRONMENTAL PROTECTION THE REGULATIONS ISSUED AND PRESCRIBED THE INFORMATION REQUIRED BY LAW AND KNOWLEDGE AND BELIEF AND SHOWS ALL THIS PLAN IS CORRECT TO THE BEST OF MY I THE UNDERSIGNED, HEREBY CERTIFY THAT



DATE SEPTEMBER 22 2014  
REVISED NOVEMBER 02 2015  
OPERATORS WELL NO. W 51246  
APL  
WELL NO. 47  
STATE 091 COUNTY 01319A PERMIT

**STATE OF WEST VIRGINIA**  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

MINIMUM DEGREE OF ACCURACY 1" = 200'  
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)  
SCALE 1" = 200'  
FILE NO. 7289P51246

WELL TYPE: OIL  GAS  INJECTION  LIQUID WASTE DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER  PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_  
ESTIMATED DEPTH TVD 7,832' TARGET FORMATION MARCELLUS

WELL OPERATOR EQT PRODUCTION COMPANY ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330  
DESIGNATED AGENT REX C. RAY ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

04/01/2016