

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

API 47-091-01318 County Taylor District FLEMINGTON  
Quad ROSEMONT 7.5' Pad Name RSM118 Field/Pool Name \_\_\_\_\_  
Farm name JAMES M. TAYLOR ET AL Well Number 515745  
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 4,349,731.98 Easting 569,615.95  
Landing Point of Curve Northing 4,349,243.98 Easting 569,271.42  
Bottom Hole Northing 4,347,576.49 Easting 569,909.92

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 10/17/2015  
Date completion activities began 11/24/2015 Date completion activities ceased 12/5/2015  
Verbal plugging (Y/N) N Date permission granted N/A Granted by RECEIVED

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Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug  
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Freshwater depth(s) ft 282,606,827 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1357 Void(s) encountered (Y/N) depths N  
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

**APPROVED**

NAME: Christ L. Reynolds  
DATE: 3-21-16

Reviewed by: \_\_\_\_\_  
**04/01/2016**

API 47-091 - 01318 Farm name JAMES M. TAYLOR ET AL Well number 515745

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"	928'	NEW	J-55 54.5LB/FT	455'	Y
Coal							
Intermediate 1	12.375"	9.625"	2508'	NEW	A-500 40LB/FT	1527'	Y
Intermediate 2							
Intermediate 3							
Production	8.5"	5.5"	16,214'	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	733	15.6	1.20	879.6	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	1,105 / 1,075	15.2 / 15.6	1.07 / 1.84	3160.4	2,664'	24
Tubing							

Drillers TD (ft) 16,219' MD Loggers TD (ft) N/A  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 4,450' 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: 1,11,20

INTERMEDIATE- 7 CENTRALIZERS RAN AT LEAST EVERY 500' FEET

PRODUCTION- Composite body spiral centralizers ran every joint from bottom to 3,486 RMD.

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 \_\_\_\_\_

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API 47- 091 - 01318 Farm name JAMES M. TAYLOR ET AL Well number 515745

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

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API 47- 091 - 01318 Farm name JAMES M. TAYLOR ET AL Well number 515745

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

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1,880 psi Bottom Hole N/A psi DURATION OF TEST 97.50 hrs

OPEN FLOW Gas 9,047 mcfpd Oil N/A bpd NGL 0.0 bpd Water 1038.7 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)
	<u>0</u>		<u>0</u>		

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 Phoenix Technology Services  
Address 1805 Brittmooore Road City Houston State TX Zip 77043

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  
Signature \_\_\_\_\_ Title VP Completions

Telephone (409) 395-5518  
Date 2/29/2016

Submittal of Hydraulic Fracturing Chemical Disclosure Information

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Registry

Attach copy of FRACFOCUS Registry

API 47- 091 - 01318 Farm name JAMES M. TAYLOR ET AL Well number 515745

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

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515745 Final Formations API 47-91001318

Formation Name	Final Top MD (ftGL) (ft)	Final Top TVD (ft)	Final Btm MD (ftGL) (ft)	Final Btm TVD (ft)
FRESH WATER ZONE	1	1	837	837
SAND/SHALE	1	1	32	32
PITTSBURGH COAL	32	32	38	38
SAND/SHALE	38	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
GENESEEE	7,714.00	7,068.60	7,879.00	7,222.80
GENESEEO	7,879.00	7,204.40	7,902.00	7,222.80
TULLY	7,902.00	7,222.80	7,967.00	7,222.80
HAMILTON	7,967.00	7,273.70	8,156.00	7,401.70
MARCELLUS	8,156.00	7,401.70		

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**515745-47-091-01318-0000 - Perforations**

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	10/23/2015	16,213.00	16,214.00	10	MARCELLUS
1	11/25/2015	16,067.00	16,159.00	32	MARCELLUS
2	11/25/2015	15,917.00	16,055.00	40	MARCELLUS
3	11/25/2015	15,767.00	15,889.00	40	MARCELLUS
4	11/25/2015	15,617.00	15,739.00	40	MARCELLUS
5	11/26/2015	15,467.00	15,589.00	40	MARCELLUS
6	11/26/2015	15,317.00	15,436.00	40	MARCELLUS
7	11/26/2015	15,167.00	15,287.00	40	MARCELLUS
8	11/26/2015	15,017.00	15,134.00	40	MARCELLUS
9	11/26/2015	14,867.00	14,989.00	40	MARCELLUS
10	11/27/2015	14,717.00	14,839.00	40	MARCELLUS
11	11/27/2015	14,567.00	14,689.00	40	MARCELLUS
12	11/27/2015	14,417.00	14,539.00	40	MARCELLUS
13	11/27/2015	14,267.00	14,389.00	40	MARCELLUS
14	11/27/2015	14,117.00	14,239.00	40	MARCELLUS
15	11/28/2015	13,960.00	14,089.00	40	MARCELLUS
16	11/28/2015	13,817.00	13,936.00	40	MARCELLUS
17	11/28/2015	13,667.00	13,789.00	40	MARCELLUS
18	11/28/2015	13,517.00	13,639.00	40	MARCELLUS
19	11/29/2015	13,367.00	13,489.00	40	MARCELLUS
20	11/29/2015	13,217.00	13,339.00	40	MARCELLUS
21	11/29/2015	13,067.00	13,189.00	40	MARCELLUS
22	11/29/2015	12,917.00	13,039.00	40	MARCELLUS
23	11/29/2015	12,767.00	12,889.00	40	MARCELLUS
24	11/30/2015	12,617.00	12,736.00	40	MARCELLUS
25	11/30/2015	12,467.00	12,589.00	40	MARCELLUS
26	11/30/2015	12,317.00	12,439.00	40	MARCELLUS
27	11/30/2015	12,167.00	12,289.00	40	MARCELLUS
28	11/30/2015	12,017.00	12,139.00	40	MARCELLUS
29	12/1/2015	11,867.00	11,989.00	40	MARCELLUS
30	12/1/2015	11,717.00	11,839.00	40	MARCELLUS
31	12/1/2015	11,567.00	11,689.00	40	MARCELLUS
32	12/1/2015	11,417.00	11,539.00	40	MARCELLUS
33	12/1/2015	11,267.00	11,389.00	40	MARCELLUS
34	12/1/2015	11,114.00	11,239.00	40	MARCELLUS
35	12/2/2015	10,967.00	11,089.00	40	MARCELLUS
36	12/2/2015	10,817.00	10,939.00	40	MARCELLUS
37	12/2/2015	10,667.00	10,789.00	40	MARCELLUS
38	12/2/2015	10,517.00	10,639.00	40	MARCELLUS
39	12/2/2015	10,367.00	10,489.00	40	MARCELLUS
40	12/3/2015	10,217.00	10,339.00	40	MARCELLUS
41	12/3/2015	10,067.00	10,189.00	40	MARCELLUS
42	12/3/2015	9,917.00	10,039.00	40	MARCELLUS
43	12/3/2015	9,767.00	9,887.00	40	MARCELLUS
44	12/3/2015	9,617.00	9,739.00	40	MARCELLUS
45	12/4/2015	9,467.00	9,587.00	40	MARCELLUS
46	12/4/2015	9,317.00	9,439.00	40	MARCELLUS
47	12/4/2015	9,164.00	9,289.00	40	MARCELLUS
48	12/4/2015	9,017.00	9,139.00	40	MARCELLUS
49	12/5/2015	8,867.00	8,989.00	40	MARCELLUS
50	12/5/2015	8,717.00	8,839.00	40	MARCELLUS
51	12/5/2015	8,567.00	8,689.00	40	MARCELLUS
52	12/5/2015	8,417.00	8,539.00	40	MARCELLUS

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**515745-47-091-01318-0000 - 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 (bbbls)	Amount of Nitrogen/other (units)
Initiation Sleeve	11/24/2015	18.70	7,170.00	883.00	6,529.00	238,760	937	0
1	11/25/2015	82.10	8,789.00	9,085.00	4,707.00	251,760	8399	0
2	11/25/2015	84.00	8,951.00	8,998.00	5,524.00	251,960	7023	0
3	11/25/2015	84.40	8,943.00	8,993.00	5,557.00	250,000	7103	0
4	11/25/2015	84.20	8,860.00	9,157.00	5,349.00	249,540	7008	0
5	11/26/2015	83.90	8,866.00	9,207.00	5,577.00	248,260	7028	0
6	11/26/2015	85.90	8,931.00	8,987.00	5,819.00	251,760	7047	0
7	11/26/2015	84.80	8,908.00	9,044.00	5,342.00	251,920	6453	0
8	11/26/2015	86.60	8,922.00	9,038.00	5,338.00	250,550	6495	0
9	11/27/2015	87.30	8,875.00	9,024.00	5,224.00	251,980	6560	0
10	11/27/2015	91.50	8,904.00	9,038.00	5,471.00	252,120	6496	0
11	11/27/2015	99.30	8,890.00	9,001.00	5,591.00	250,920	6416	0
12	11/27/2015	92.20	8,897.00	8,995.00	5,144.00	251,440	6396	0
13	11/27/2015	91.70	8,963.00	9,038.00	5,394.00	250,100	6468	0
14	11/27/2015	88.60	8,952.00	9,095.00	5,080.00	249,220	6449	0
15	11/28/2015	82.30	8,849.00	9,443.00	5,824.00	253,840	6547	0
16	11/28/2015	84.90	8,936.00	9,034.00	5,930.00	249,320	6704	0
17	11/28/2015	87.00	8,833.00	9,063.00	5,835.00	250,400	8164	0
18	11/28/2015	85.00	8,877.00	9,039.00	5,866.00	250,640	6,913	0
19	11/29/2015	88.90	8,788.00	8,997.00	5,718.00	250,800	6,729	0
20	11/29/2015	89.30	8,848.00	8,968.00	5,911.00	250,120	6,818	0
21	11/29/2015	91.10	8,967.00	9,030.00	5,843.00	248,740	6,323	0
22	11/29/2015	90.60	8,919.00	9,017.00	5,778.00	249,560	6,253	0
23	11/29/2015	94.30	8,960.00	9,039.00	5,767.00	251,760	6,484	0
24	11/30/2015	89.10	8,919.00	9,077.00	5,686.00	248,520	6232	0
25	11/30/2015	88.60	8,937.00	9,013.00	5,730.00	250,720	6648	0
26	11/30/2015	86.30	8,934.00	9,014.00	5,561.00	250,720	6614	0
27	11/30/2015	85.50	8,900.00	9,053.00	5,712.00	254,040	6209	0
28	11/30/2015	88.00	8,827.00	9,107.00	5,957.00	252,500	6954	0
29	12/1/2015	90.00	8,943.00	9,016.00	5,647.00	252,930	6260	0
30	12/1/2015	86.90	8,904.00	9,008.00	5,517.00	250,630	6111	0
31	12/1/2015	88.50	8,935.00	9,016.00	5,822.00	249,580	6084	0
32	12/1/2015	86.00	8,909.00	9,001.00	6,019.00	250,560	6709	0
33	12/1/2015	87.90	8,912.00	9,082.00	6,099.00	252,000	6248	0
34	12/2/2015	91.30	8,912.00	9,025.00	6,050.00	254,140	6162	0
35	12/2/2015	87.50	8,916.00	9,093.00	6,090.00	253,120	6056	0
36	12/2/2015	91.00	8,931.00	9,053.00	6,065.00	248,940	6395	0
37	12/2/2015	89.80	8,941.00	9,048.00	5,998.00	252,800	6393	0
38	12/2/2015	90.40	8,910.00	9,090.00	6,015.00	252,920	6077	0
39	12/2/2015	100.20	8,922.00	9,049.00	6,024.00	252,780	6066	0
40	12/3/2015	95.80	8,983.00	9,079.00	5,964.00	249,060	5970	0
41	12/3/2015	91.30	8,935.00	9,076.00	5,978.00	248,920	6267	0
42	12/3/2015	93.10	8,938.00	9,007.00	6,327.00	251,400	6311	0
43	12/3/2015	89.20	8,966.00	9,023.00	5,709.00	251,920	6368	0
44	12/3/2015	88.70	9,033.00	9,333.00	6,146.00	165,640	4697	0
44.01	12/4/2015	8.70	5,863.00	7,668.00	6,419.00	0	3093	0
44.1	12/4/2015	89.50	8,812.00	9,061.00	6,325.00	86,840	3311	0
45	12/4/2015	95.00	8,945.00	9,020.00	5,826.00	254,220	6391	0
46	12/4/2015	98.20	8,930.00	9,001.00	5,637.00	254,600	6328	0
47	12/4/2015	95.70	8,824.00	9,014.00	5,788.00	252,960	5985	0
48	12/4/2015	97.20	8,626.00	8,891.00	5,940.00	253,600	5943	0
49	12/5/2015	100.10	8,537.00	8,844.00	5,885.00	252,860	5851	0
50	12/5/2015	100.90	8,534.00	9,022.00	5,871.00	252,040	6232	0
51	12/5/2015	101.60	8,496.00	8,775.00	5,702.00	250,320	6324	0
52	12/5/2015	83.40	8,876.00	9,047.00	4,902.00	251,220	6286	0

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MAR 02 2016

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	11/24/2015
Job End Date:	12/5/2015
State:	West Virginia
County:	Taylor
API Number:	47-091-01318-00-00
Operator Name:	EQT Production
Well Name and Number:	515745
Longitude:	-80.19288900
Latitude:	39.29407600
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,402
Total Base Water Volume (gal):	14,439,096
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	89.83770	None
Sand (Proppant)	Keane Group	Proppant	Silica Substrate	14808-60-7	100.00000	9.92211	None
Hydrochloric Acid (15%)	Keane Group	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.02784	None
FFR760	Keane Group	Friction Reducer	Hydrotreated Light Distillate	64742-47-8	30.00000	0.01615	None
			Alkyl Alcohol	Proprietary	10.00000	0.00538	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	0.00269	None
			ethylene Glycol	107-21-1	40.00000	0.00019	None
			N-Dimethylformamide	68-12-2	20.00000	0.00009	None
			Tar bases, quinoline derivs, benzyl chloride-quatemized	72480-70-7	15.00000	0.00007	None
			2-Butoxyethanol	111-76-2	15.00000	0.00007	None
			Cinnamialdehyde	104-55-2	15.00000	0.00007	None

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			1-Decanol	112-30-1	5.00000	0.00002	None
			Triethyl Phosphate	78-40-0	2.50000	0.00001	None
			Isopropyl alcohol	67-63-0	2.50000	0.00001	None
			1-Octanol	111-87-5	2.50000	0.00001	None
PGS-214	Keane Group	Fast Hydrating Guar Slurry					
			PGS-214	NA	100.00000	0.00031	None
LEB-10X	Keane Group	Gel Breaker					
			Ethylene Glycol	107-21-1	30.00000	0.00009	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)

**RECEIVED**  
 Office of Oil and Gas  
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 Environmental Protection

A	JAMES & MARGARET TAYLOR ET AL	137.39 AC±	TM 01-01
B	DANIEL & CHRISTINE CRIMM	15 AC±	TM 06-5-5
C	EDWARD & MARK PEOSCEK	45.814 AC±	TM 06-34.8
D	DORSEY B. McELDOWNEY	53.10 AC±	TM 06-33.2
E	AARON C. McELDOWNEY ET AL	3.08 AC±	TM 06-33.4
F	TAYLOR WAREHOUSE SERVICES INC	1.50 AC±	TM 06-31.1
G	AARON & CATHERINE McELDOWNEY	2.090 AC±	TM 06-33.5
H	TAYLOR WAREHOUSE SERVICES LLC	0.33 AC±	TM 06-32.1
I	QUALITY MACHINE COMPANY INC	25 AC±	
J	JOSEPH & MARY MELKO	8.39 AC±	
K	WILLIAM PASTERNAK ET AL	1.01 AC±	
L	JOSEPH & MARY GARRETT	3.89 AC±	

**EQT PRODUCTION COMPANY  
TAYLOR LEASE  
123 ACRES±  
WELL NO. WV 515745  
(RSM118 H9)**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'27 S.P.C.(FT) N. 289,974.63 E. 1,803,899.21  
 NAD'27 GEO. LAT-(N) 39.294076 LONG-(W) 80.192889  
 NAD'83 UTM (M) N. 4,349,731.98 E. 569,615.95

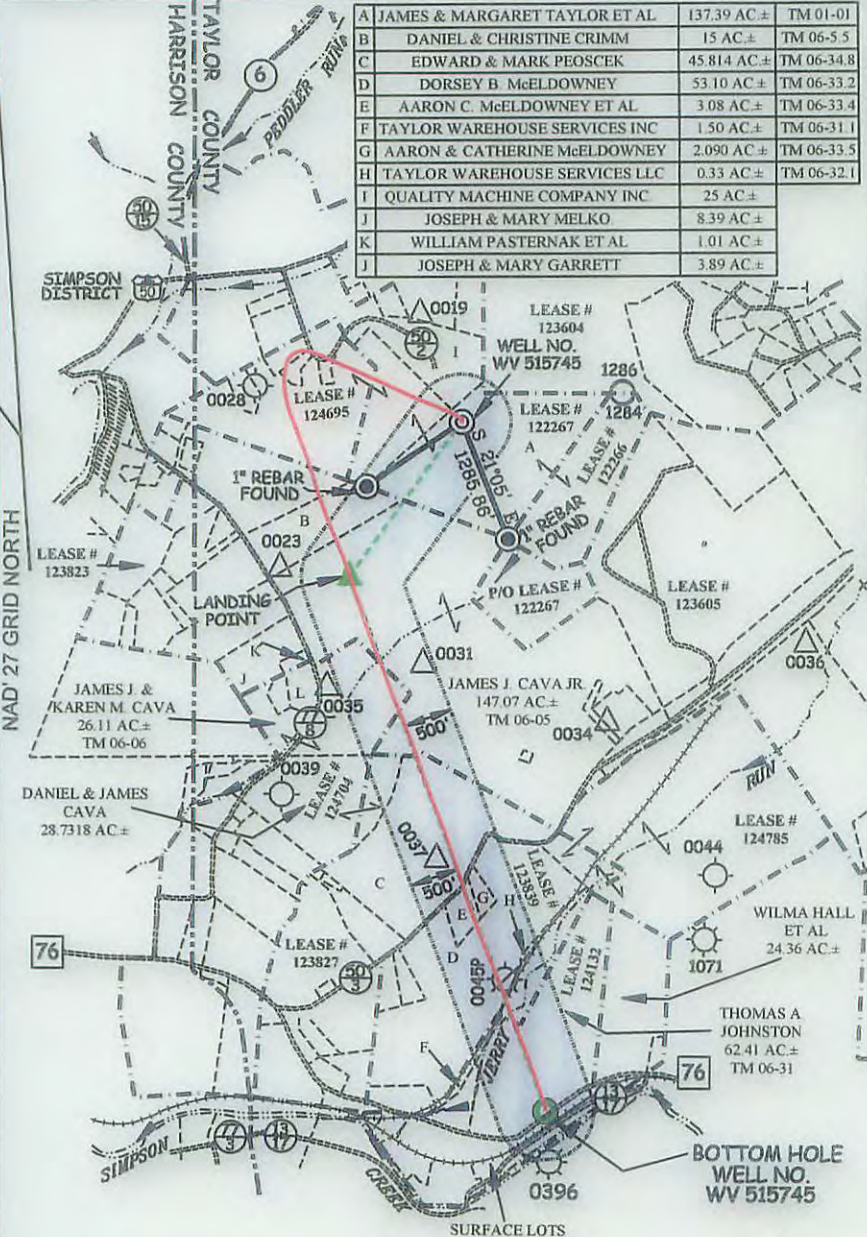
**LANDING POINT**  
 NAD'27 S.P.C.(FT) N. 288,392.15 E. 1,802,742.05  
 NAD'27 GEO. LAT-(N) 39.289706 LONG-(W) 80.196934  
 NAD'83 UTM (M) N. 4,349,243.98 E. 569,271.42

**BOTTOM HOLE**  
 NAD'27 S.P.C.(FT) N. 282,885.55 E. 1,804,746.28  
 NAD'27 GEO. LAT-(N) 39.274630 LONG-(W) 80.189704  
 NAD'83 UTM (M) N. 4,347,576.49 E. 569,909.92

**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

NAD'27 GRID NORTH



**NOTES ON SURVEY**

1. 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.
2. AS DRILLED INFORMATION PROVIDED BY EQT.

**ROYALTY OWNERS**

PEGGY KNOTTS ET AL	724.57 AC±	LEASE NO. 123805
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
THOMAS A JOHNSTON	75 AC±	LEASE NO. 124132

**AS DRILLED COORDINATES  
FOR WELL NO. WV 515745**  
 (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'27 S.P.C.(FT) N. 289,974.63 E. 1,803,899.21  
 NAD'27 GEO. LAT-(N) 39.294076 LONG-(W) 80.192889  
 NAD'83 UTM (M) N. 4,349,731.98 E. 569,615.95  
**BOTTOM HOLE**  
 NAD'27 S.P.C.(FT) N. 282,887.44 E. 1,804,763.98  
 NAD'27 GEO. LAT-(N) 39.274636 LONG-(W) 80.189641  
 NAD'83 UTM (M) N. 4,347,577.16 E. 569,915.31

**Professional Energy Consultants**  
 A DIVISION OF SMITH LAND SURVEYING, INC.  
  
 SURVEYORS  
 ENGINEERS  
 ENVIRONMENTAL  
 PROJECT MGMT.  
 (304) 482-6834 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 06/03/15 & 11/03/15  
 OPERATORS WELL NO. WV 515745  
 API WELL NO. 47 - 091 - 01318H  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7265AD515745  
 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

14,299'

COUNTY NAME

PERMIT