

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

API 47-017-6505 County DODDRIDGE District Southwest
Quad OXFORD 7.5' Pad Name OXFORD 159 Field/Pool Name _____
Farm name JUSTIN L. HENDERSON ET AL Well Number 513700
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 4,339,877 Easting 520,547
Landing Point of Curve Northing 4,339,415 Easting 520,436
Bottom Hole Northing 4,341,818 Easting 519,266

Elevation (ft) 1,252 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 12.5 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 7/30/2014 Date drilling commenced 11/21/2014 Date drilling ceased 4/11/2015
Date completion activities began 5/26/2015 Date completion activities ceased 6/12/2015
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Received
Office of Oil & Gas
NOV 19 2015

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 264, 325, 401 Open mine(s) (Y/N) depths N
Salt water depth(s) ft 1312, 1379 Void(s) encountered (Y/N) depths N
Coal depth(s) ft 246, 313, 474, 616, 732, 735 Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:

02/05/2016

API 47- 017 - 6505 Farm name JUSTIN L. HENDERSON ET AL Well number 513700

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 40LB/FT	NONE	Y
Surface	17.5"	13.375"	1,087'	NEW	J-55 54.5LB/FT	None	N
Coal							
Intermediate 1	12.375"	9.625"	5,287'	NEW	P-110 40LB/FT	None	Y
Intermediate 2							
Intermediate 3							
Production	8.5"	5.5"	14416	NEW	P-110 20LB/FT	NONE	N
Tubing							
Packer type and depth set							

Comment Details Grouted to surface through 1" grout tubing with 350 sks of 15.6 ppg Neat Class A cement to get cement to surface on 13 3/8" cement job.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	38	15.6	1.18	44.84	0	8
Surface	CLASS A	866	15.6	1.20	1,021.88	0	8
Coal							
Intermediate 1	CLASS A / A / A	447 / 380 / 1,205	14.2 / 15.6 / 15.6	1.24 / 1.18 / 1.18	2,424.58	0	8
Intermediate 2							
Intermediate 3							
Production	Class A 50/50 POZ / H	610 / 915 / 1525	14.2 / 15.2	1.26 / 1.97	2571.15	4303	8
Tubing							

Drillers TD (ft) 14420 Loggers TD (ft) 14420

Deepest formation penetrated Marcellus Plug back to (ft) _____

Plug back procedure _____

Kick off depth (ft) 5345

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- RAN AT LEAST EVERY 500' FEET JOINTS: 1, 11, 21, 34, 46, 59, 69, 81, 94, 105, 117, 125

PRODUCTION- Centralizer on every joint from 4959' to 14414'

Received
Office of Oil & Gas

NOV 19 2015

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 _____

API 47- 017 - 6505 Farm name JUSTIN L. HENDERSON ET AL Well number 513700

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

**Received
Office of Oil & Gas
NOV 10 2015**

Please insert additional pages as applicable.

API 47- 017 - 6505 Farm name JUSTIN L. HENDERSON ET AL Well number 513700

Drilling Contractor Patterson UTI
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

Logging Company Phoenix Technology Services
Address 1805 Brittmoore Road City Houston State TX Zip 77043

Logging Company Gyro Data Inc.
Address 601 Mayer St. City Bridgeville State PA Zip 15017

Cementing Company Nabors
Address 2504 Smith Creek Road City Waynesburg State PA Zip 15370

Received
Office of Oil & Gas
NOV 19 2015

Well #513700 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	1	411	411
SAND/SHALE	1	1	256	256
WASHINGTON COAL	256	256	258	258
SAND/SHALE	258	258	323	323
WAYNESBURG A COAL	323	323	325	325
SAND/SHALE	325	325	484	484
UNIONTOWN COAL	484	484	486	486
SAND/SHALE	486	486	626	626
SEWICKLEY	626	626	628	628
SAND/SHALE	628	628	742	742
REDSTONE COAL	742	742	743	743
SAND/SHALE	743	743	745	745
PITTSBURGH COAL	745	745	749	749
SAND/SHALE	749	749	2,030.00	2,029.60
BIG LIME	2,030.00	2,029.60	2,174.00	2,173.60
SAND/SHALE	2,174.00	2,173.60	2,323.00	2,322.50
WEIR	2,323.00	2,322.50	2,437.00	2,436.40
SAND/SHALE	2,437.00	2,436.40	2,531.00	2,530.30
GANTZ	2,531.00	2,530.30	2,608.00	2,607.30
50F	2,608.00	2,607.30	2,684.00	2,683.20
SAND/SHALE	2,684.00	2,683.20	2,730.00	2,729.20
30F	2,730.00	2,729.20	2,765.00	2,764.10
SAND/SHALE	2,765.00	2,764.10	2,779.00	2,778.10
GORDON	2,779.00	2,778.10	2,870.00	2,869.00
4TH SAND	2,870.00	2,869.00	3,051.00	3,049.90
BAYARD	3,051.00	3,049.90	3,151.00	3,149.80
SAND/SHALE	3,151.00	3,149.80	3,388.00	3,386.70
WARREN	3,388.00	3,386.70	3,447.00	3,445.60
SAND/SHALE	3,447.00	3,445.60	3,459.00	3,457.60
SPEECHLEY	3,459.00	3,457.60	3,703.00	3,701.50
SAND/SHALE	3,703.00	3,701.50	4,139.00	4,136.90
BALLTOWN A	4,139.00	4,136.90	4,253.00	4,250.60
SAND/SHALE	4,253.00	4,250.60	4,338.00	4,335.30
RILEY	4,338.00	4,335.30	4,484.00	4,480.50
SAND/SHALE	4,484.00	4,480.50	5,009.00	5,001.00
BENSON	5,009.00	5,001.00	5,049.00	5,040.70
SAND/SHALE	5,049.00	5,040.70	5,180.00	5,170.60
ALEXANDER	5,180.00	5,170.60	6,211.00	6,068.90
RHINESTREET UPPER	6,211.00	6,068.90	6,362.00	6,186.60
RHINESTREET	6,362.00	6,186.60	6,571.00	6,354.80
SONYEA	6,571.00	6,354.80	6,750.00	6,491.80
MIDDLESEX	6,750.00	6,491.80	6,842.00	6,555.70
GENESSEE	6,842.00	6,555.70	6,950.00	6,619.20
GENESE0	6,950.00	6,619.20	7,032.00	6,658.80
TULLY	7,032.00	6,658.80	7,088.00	6,680.10
HAMILTON	7,088.00	6,680.10	7,088.00	6,704.60
MARCELLUS	7,178.00	6,704.60		

Received
Office of Oil & Gas

NOV 19 2015

02/05/2016

513700 - 47-017-06505-0000- Perforations

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	5/20/2015	14,414.00	14,416.00	10	MARCELLUS
1	5/26/2015	14,270.00	14,391.00	28	MARCELLUS
1.1	5/27/2015	14,250.00	14,276.00	28	MARCELLUS
2	5/27/2015	14,090.00	14,212.00	42	MARCELLUS
2.01	5/27/2015	14,090.00	14,291.00	0	MARCELLUS
3	5/30/2015	13,910.00	14,032.00	42	MARCELLUS
4	5/30/2015	13,730.00	13,852.00	42	MARCELLUS
5	5/30/2015	13,550.00	13,672.00	42	MARCELLUS
6	5/30/2015	13,370.00	13,492.00	42	MARCELLUS
7	5/31/2015	13,190.00	13,312.00	42	MARCELLUS
8	6/1/2015	13,010.00	13,132.00	42	MARCELLUS
9	6/1/2015	12,830.00	12,952.00	42	MARCELLUS
10	6/1/2015	12,650.00	12,772.00	42	MARCELLUS
11	6/1/2015	12,470.00	12,592.00	42	MARCELLUS
12	6/1/2015	12,290.00	12,412.00	42	MARCELLUS
13	6/2/2015	12,110.00	12,232.00	42	MARCELLUS
14	6/2/2015	11,930.00	12,052.00	42	MARCELLUS
15	6/2/2015	11,750.00	11,872.00	42	MARCELLUS
16	6/2/2015	11,570.00	11,692.00	42	MARCELLUS
17	6/3/2015	11,390.00	11,512.00	42	MARCELLUS
17.1	6/3/2015	11,360.00	11,448.00	42	MARCELLUS
18	6/3/2015	11,210.00	11,330.00	42	MARCELLUS
19	6/5/2015	11,030.00	11,152.00	42	MARCELLUS
20	6/6/2015	10,850.00	10,972.00	42	MARCELLUS
21	6/6/2015	10,670.00	10,792.00	42	MARCELLUS
22	6/6/2015	10,490.00	10,612.00	42	MARCELLUS
22.1	6/6/2015	10,520.00	10,591.00	42	MARCELLUS
23	6/6/2015	10,310.00	10,432.00	42	MARCELLUS
24	6/7/2015	10,130.00	10,252.00	42	MARCELLUS
25	6/7/2015	9,950.00	10,072.00	42	MARCELLUS
26	6/7/2015	9,770.00	9,892.00	42	MARCELLUS
26.1	6/7/2015	9,762.00	9,823.00	42	MARCELLUS
27	6/7/2015	9,584.00	9,702.00	42	MARCELLUS
27.01	6/7/2015	9,595.00	9,706.00	0	MARCELLUS
28	6/8/2015	9,402.00	9,522.00	42	MARCELLUS
29	6/9/2015	9,222.00	9,344.00	42	MARCELLUS
30	6/9/2015	9,042.00	9,162.00	42	MARCELLUS
31	6/9/2015	8,862.00	8,982.00	42	MARCELLUS
32	6/10/2015	8,682.00	8,804.00	42	MARCELLUS
33	6/10/2015	8,502.00	8,624.00	42	MARCELLUS
34	6/10/2015	8,322.00	8,444.00	42	MARCELLUS
35	6/10/2015	8,144.00	8,264.00	42	MARCELLUS
36	6/11/2015	7,962.00	8,084.00	42	MARCELLUS
37	6/11/2015	7,782.00	7,904.00	42	MARCELLUS
37.1	6/11/2015	7,770.00	7,884.00	42	MARCELLUS
38	6/11/2015	7,602.00	7,724.00	42	MARCELLUS
38.1	6/11/2015	7,587.00	7,709.00	42	MARCELLUS
39	6/11/2015	7,422.00	7,544.00	42	MARCELLUS
40	6/12/2015	7,242.00	7,364.00	42	MARCELLUS

Received
Office of Oil & Gas
NOV 19 2015

513700 - 47-017-06505-0000- 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	5/26/2015	12.1	7,014.00	8,970.00	4,129.00		1503	0
1	5/27/2015	43.9	7,130.00	8,750.00	3,577.00	1,239	5651	0
1.1	5/27/2015	57	9,040.00	9,294.00	4,793.00	1,050	2737	0
2	5/27/2015	92.9	8,669.00	9,232.00	5,623.00	499,720	12344	0
2.01	5/28/2015	0	4,101.00	9,483.00	0.00	0	530	0
2.02	5/29/2015	5.8	5,717.00	8,471.00	4,083.00	0	6443	0
3	5/30/2015	96.5	8,390.00	8,913.00	3,370.00	299,693	8218	0
4	5/30/2015	97.9	8,271.00	8,979.00	3,512.00	301,468	7543	0
5	5/30/2015	92.9	8,075.00	9,119.00	4,365.00	300,280	7672	0
6	5/30/2015	98.8	7,958.00	9,608.00	4,038.00	348,679	8252	0
6.01	5/31/2015	8.1	5,125.00	7,627.00	4,664.00	0	3842	0
7	5/31/2015	94.5	7,840.00	8,873.00	4,333.00	326,785	8482	0
8	6/1/2015	98	8,228.00	8,529.00	4,992.00	361,052	8668	0
9	6/1/2015	95.1	8,201.00	9,275.00	4,310.00	359,401	11024	0
10	6/1/2015	82.5	8,306.00	9,076.00	3,891.00	359,071	11754	0
11	6/1/2015	96	8,029.00	8,960.00	3,962.00	360,221	8539	0
12	6/2/2015	94.9	8,089.00	8,804.00	4,941.00	330,058	8110	0
13	6/2/2015	98.1	8,113.00	8,596.00	4,739.00	359,646	9193	0
14	6/2/2015	97.2	8,077.00	8,463.00	4,805.00	359,206	8772	0
15	6/2/2015	96.3	8,113.00	8,590.00	4,040.00	358,476	8632	0
16	6/3/2015	97.7	8,120.00	8,498.00	4,992.00	361,584	8592	0
17	6/3/2015	732.00	8,710.00	9,190.00	4,721	14,824	8,170	0
18	6/3/2015	89.60	8,342.00	9,165.00	5,907	375,007	8,554	0
18.01	6/5/2015	9.20	4,363.00	6,499.00	5,009	0	2,466	0
19	6/6/2015	92.10	7,797.00	9,101.00	5,080	361,789	8,166	0
20	6/6/2015	97.50	7,865.00	9,119.00	4,984	361,071	8,662	0
21	6/6/2015	98.80	7,789.00	9,130.00	4,390	359,759	8,487	0
22	6/6/2015	57.70	8,664.00	9,527.00	4,389	13,234	6,513	0
23	6/7/2015	96.7	7,534.00	8,751.00	5,136.00	498,152	11782	0
24	6/7/2015	99.5	7,352.00	7,616.00	5,203.00	360,433	8267	0
25	6/7/2015	99.2	7,206.00	8,668.00	5,033.00	361,964	8580	0
26	6/7/2015	99	7,566.00	7,998.00	5,233.00	362,566	10821	0
27	6/8/2015	67.10	8,104.00	9,832.00	5,377	5,288	2,155	0
27.01	6/8/2015	10.30	4,763.00	6,922.00	4,864	0	2,167	0
28	6/8/2015	88.30	8,313.00	8,872.00	5,211	497,233	24,343	0
28.01	6/9/2015	11.80	3,270.00	6,546.00	4,578	0	2,523	0
29	6/9/2015	98.70	7,682.00	9,011.00	5,043	364,562	7,783	0
30	6/9/2015	93.80	7,602.00	8,694.00	5,662	357,607	8,135	0
31	6/10/2015	97.90	7,028.00	7,257.00	5,221	361,248	8,193	0
32	6/10/2015	98.80	7,108.00	7,380.00	5,314	360,023	7,944	0
33	6/10/2015	92.60	7,922.00	9,243.00	5,400	359,805	9,081	0
34	6/10/2015	100.30	7,281.00	7,563.00	4,434	360,895	8,131	0
35	6/10/2015	99.10	7,638.00	7,982.00	5,128	358,840	8,438	0
36	6/11/2015	99.80	7,286.00	9,121.00	5,130	361,380	8,322	0
37	6/11/2015	99.60	7,674.00	8,543.00	5,631	360,380	8,960	0
38	6/11/2015	78.00	7,875.00	9,170.00	5,451	359,852	14,389	0
39	6/11/2015	93.50	7,491.00	8,621.00	5,487	360,968	8,194	0
40	6/12/2015	96.30	7,632.00	8,367.00	4,589	360,319	8,233	0

Received
 Office of Oil & Gas
 NOV 19 2015

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	5/26/2015
Job End Date:	6/12/2015
State:	West Virginia
County:	Doddridge
API Number:	47-017-06505-00-00
Operator Name:	EQT Production
Well Name and Number:	513700
Longitude:	-80.76219500
Latitude:	39.20783800
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	6,705
Total Base Water Volume (gal):	16,126,320
Total Base Non Water Volume:	0

Received
Office of Oil & Gas
NOV 19 2015



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	FTS International	Carrier/Base Fluid	Water	7732-18-5	100.00000	90.63267	None
Sand (Proppant)	FTS International	Proppant	Crystalline Silica	14808-60-7	100.00000	8.87969	None
MC MX 437-5	Multi-Chem	Calcium nitrate solution	Calcium nitrate	10124-37-5	60.00000	0.06022	None
FRW-900	FTS International	Friction reducer	Hydrotreated light distillate	64742-47-8	30.00000	0.02616	None
			Alkyl Alcohol	Proprietary	10.00000	0.00872	None
			Oxyalkylated alcohol A	Proprietary	5.00000	0.00436	None
Hydrochloric Acid (15%)	FTS International	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.03676	None
HVG-1	FTS International	Gelling agent	Petroleum distillate	64742-47-8	55.00000	0.01160	None
			Guar gum	9000-30-0	50.00000	0.01055	None
			Surfactant	68439-51-0	2.00000	0.00042	None
			Clay	14808-60-7	2.00000	0.00042	None
B-10	FTS International	High pH buffer					

			Potassium carbonate	584-08-7	48.00000	0.00277	None
			Potassium hydroxide	1310-58-3	20.00000	0.00116	None
CS-500-SI	FTS International	Scale inhibitor					
			Ethylene glycol	107-21-1	10.00000	0.00257	None
FE-100L	FTS International	Iron control					
			Citric acid	77-92-9	55.00000	0.00076	None
CI-150	FTS International	Acid Corrosion Inhibitor					
			Isopropanol	67-63-0	30.00000	0.00014	None
			Ethylene glycol	107-21-1	30.00000	0.00014	None
			Organic amine resin salt	Proprietary	30.00000	0.00014	None
			Aromatic aldehyde	Proprietary	10.00000	0.00005	None
			Dimethylformamide	68-12-2	10.00000	0.00005	None
			Quaternary ammonium compound	Proprietary	10.00000	0.00005	None
APB-1	FTS International	Breaker					
			Ammonium persulfate	7727-54-0	95.00000	0.00026	None
NE-100	FTS International	Non-emulsifier					
			2-Butoxyethanol	111-76-2	10.00000	0.00003	None
			2-Propanol	67-63-0	10.00000	0.00003	None
			Dodecylbenzenesulfonic acid	27176-87-0	5.00000	0.00002	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.

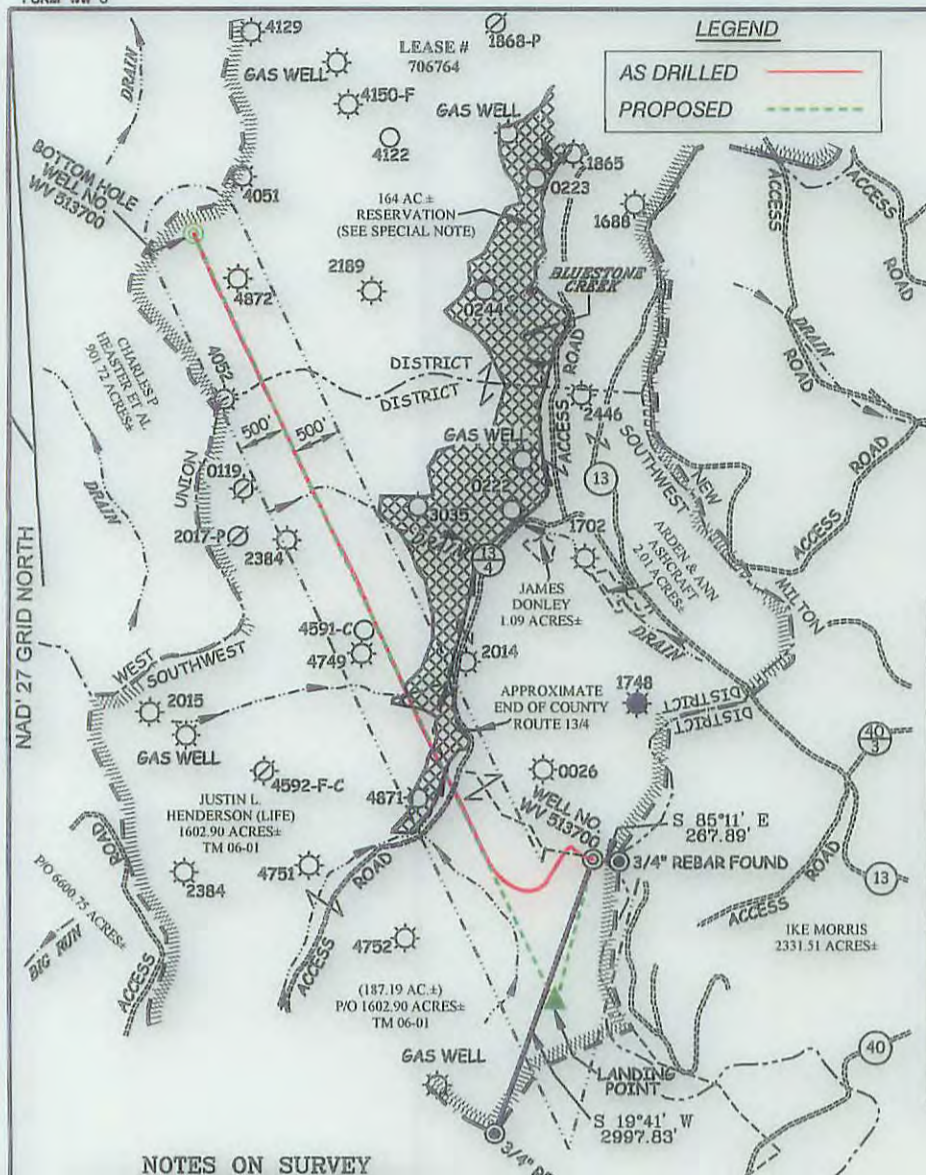
* Total Water Volume sources may include fresh water, produced water, and/or recycled water

** 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 & Gas
NOV 19 2015



SPECIAL NOTE
 THERE IS NO SURVEY OR LEGAL DESCRIPTION DEFINING THE ACTUAL LOCATION OF THE 164 ACRE MEADOWLAND RESERVATION. DUE TO THE PASSAGE OF TIME SINCE THE RESERVATION WAS CREATED IT APPEARS THERE IS NO LIVING PERSON(S) WITH KNOWLEDGE OF ITS TRUE LOCATION. LOCATION OF RESERVATION SHOWN HEREON COMPILED FROM: "A" A MAP TITLED "CARNAGIE NATURAL GAS CO. LEEMAN MAXWELL LEASES, DODDRIDGE COUNTY, WEST VA" "B" PERIMETER OF RESERVATION AS SHOWN BY GLENN TRADER "CARETAKER OF HENDERSONS' PORTION OF MAXWELL LANDS" WHICH WAS LOCATED USING A MAPPING GRADE GPS RECEIVER "C" DETAILS SHOWN ON 1939 USDA AERIAL PHOTOGRAPHY OBTAINED FROM THE WV GEOLOGICAL SURVEY. SLS RECOMMENDS THAT PROPER LEGAL STEPS BE TAKEN TO CONFIRM CONCURRENCE OF ALL APPROPRIATE PARTIES RELATIVE TO THE RESERVATION AS SHOWN HEREON. THIS PLAT IS SUBJECT TO ANY ADDITIONAL INFORMATION (UNDISCOVERED TO DATE) WHICH MAY CHANGE THE LOCATION AND/OR CONFIGURATION OF THE RESERVATION AS SHOWN HEREON.

**EQT PRODUCTION COMPANY
 LEEMAN MAXWELL LEASE
 2,164 ACRES±
 WELL NO. WV 513700**
 (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'27 S.P.C.(FT) N. 260,321.4 E. 1,642,341.6
 NAD'27 GEO. LAT-(N) 39.207837 LONG-(W) 80.762195
 NAD'83 UTM (M) N. 4,339,877.4 E. 520,546.6
LANDING POINT
 NAD'27 S.P.C.(FT) N. 258,811.1 E. 1,641,952.4
 NAD'27 GEO. LAT-(N) 39.203676 LONG-(W) 80.763494
 NAD'83 UTM (M) N. 4,339,415.3 E. 520,435.6
BOTTOM HOLE
 NAD'27 S.P.C.(FT) N. 266,759.4 E. 1,638,246.0
 NAD'27 GEO. LAT-(N) 39.225353 LONG-(W) 80.776970
 NAD'83 UTM (M) N. 4,341,817.9 E. 519,266.1

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.

**AS DRILLED COORDINATES
 FOR WELL NO. WV 513700**
 (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)
 NAD'27 S.P.C.(FT) N. 260,321.4 E. 1,642,341.6
 NAD'27 GEO. LAT-(N) 39.207837 LONG-(W) 80.762195
 NAD'83 UTM (M) N. 4,339,877.4 E. 520,546.6
BOTTOM HOLE
 NAD'27 S.P.C.(FT) N. 266,770.1 E. 1,638,248.6
 NAD'27 GEO. LAT-(N) 39.225382 LONG-(W) 80.776961
 NAD'83 UTM (M) N. 4,341,821.1 E. 519,266.8

Professional Energy Consultants
 A DIVISION OF SMITH LAND SURVEYING, INC.

 SURVEYORS
 ENGINEERS
 ENVIRONMENTAL
 PROJECT MGMT.
 (304) 452-5634 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 JANUARY 06, 20 14
 REVISED 03/24/14 & 04/17/15
 OPERATORS WELL NO. WV 513700
 API WELL NO. 47 - 017 - 06505-H
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7889AD513700
 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 1,276'(GROUND) 1,252'(PROPOSED) WATERSHED BLUESTONE CREEK
 DISTRICT SOUTHWEST COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5'
 SURFACE OWNER JUSTIN L. HENDERSON (LIFE) ACREAGE 187.19 OF 1,602.90±
 ROYALTY OWNER LEEMAN MAXWELL HRS ACREAGE 2,164±
 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 6,663'

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

02/05/2016

APPROVED

NAME: *Quil Fink*

DATE: *1/27/16*

Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: 513700

API: 47 - 017 - 6505

Submission: Initial Amended

Notes: Add'l Injection test: 2.01, 2.02, 6.01,
18.01, 27.01, 28.01

Reperfs: 1.1, 17.1, 22.1, 26.1, 37.1,
38.1

Final

Received
Office of Oil & Gas

NOV 19 2015

02/05/2016