

Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: 513436

API: 47 - 049 - 02345

Submission:  Initial  Amended

Notes: Correction to Production Cement Top  
(MD)

**APPROVED**

NAME: *Bill Henderson*  
DATE: *2-5-2016*

RECEIVED  
Office of Oil and Gas

DEC 21 2015

WV Department of  
Environmental Protection

02/12/2016

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

API 47 - 049 - 02345 County Marion District Paw Paw  
Quad Grant Town Pad Name GRT 26 Field/Pool Name \_\_\_\_\_  
Farm name Neely Well Number 513436  
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 4,383,484 Easting 565,854  
Landing Point of Curve Northing 4,383,221 Easting 565,374  
Bottom Hole Northing 4,382,459 Easting 565,651

Elevation (ft) 1141 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 10/31/2014 Date drilling commenced 11/20/2014 Date drilling ceased 2/15/2015  
Date completion activities began 4/4/2015 Date completion activities ceased 4/9/2015  
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 to plug

Freshwater depth(s) ft 447' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1439', 2762' Void(s) encountered (Y/N) depths (Y) 479'-485'  
Coal depth(s) ft 109', 348', 452', 486', 793' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

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

02/12/2016

API 47-049 - 02345 Farm name Neely Well number 513436

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"	75'	NEW	A-500 40LB/FT	NONE	Y
Surface	17.5"	13.375"	653'	NEW	J-55 54.5LB/FT	446',486', 527'	N
Coal							
Intermediate 1	12.375"	9.625"	3,061'	NEW	P-110 40LB/FT	NONE	Y
Intermediate 2							
Intermediate 3							
Production	8.5"	5.5"	11,030'	NEW	P-110 20LB/FT	NONE	N
Tubing							
Packer type and depth set							

Comment Details 13 3/8" Cement did not circulate to surface. Run slickline and determine TOC at 200'. Run grout string down to TOC and pump 88sxs of 15.8ppg Neat Cement and establish cement returns to surface.

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	72	15.6	1.18	84.96	0	8
Surface	CLASS A	684/86	15.6/15.6	1.20/1.20	924.00	0	8
Coal							
Intermediate 1	CLASS A / CLASS A	905 / 203	15.6/ 15.6	1.18 /1.18	1307.44	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS A / CLASS H	910 / 340	14.2 / 15.2	1.26 / 1.97	1816.4	3,303'	8
Tubing							

Drillers TD (ft) 11043' Loggers TD (ft) N/A  
 Deepest formation penetrated Marcellus Plug back to (ft) N/A  
 Plug back procedure N/A

Kick off depth (ft) 5498'

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: 1,12  
 INTERMEDIATE- RAN AT LEAST EVERY 500' FEET JOINTS: #1,#11,#22,#34,#46,#58,#69  
 PRODUCTION- 144 Composite Body centralizers ran every joint from 4,925' to 10,965'

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- 049 - 2345 Farm name Neely Well number 513436

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- 049 - 02345 Farm name Neely Well number 513436

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
Marcellus	7,616'	TVD	8,340' MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1,222 psi Bottom Hole N/A psi DURATION OF TEST 48.5 hrs

OPEN FLOW Gas 9,586 mcfpd Oil N/A bpd NGL 0 bpd Water 1,945 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)
	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 HOSSCO SERVICES, LLC  
Address 614 TROTTERS LANE City CHARLESTON State WV Zip 25312

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

Stimulating Company FTSI  
Address 301 E 18th Street City Cisco State TX Zip 76437

Please insert additional pages as applicable.

Completed by Brad Maddox Telephone 412-395-7053  
Signature [Signature] Title Director of Drilling Date 12/9/2015

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

02/12/2016

API 47- 049 - 2345 Farm name Neely Well number 513436

Drilling Contractor Patterson UTI (Rig 252)  
Address 207 Carlton Drive City Eighty Four State PA Zip 15330

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

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

Cementing Company NABORS CEMENTING SERVICES  
Address 2504 SMITH CREEK ROAD City WAYNESBURG State PA Zip 15370

**513436 Final Formations API 47-490-2345**

Formation Name	Final Top MD (ftGL) (ft)	Final Top TVD (ft)	Final Btm MD (ftGL) (ft)
FRESH WATER ZONE	1		457
SAND/SHALE	1		119
WAYNESBURG	119		124
SAND/SHALE	124		358
SEWICKLEY	358		364
SAND/SHALE	364		462
REDSTONE	462		464
SAND/SHALE	464		496
PITTSBURGH	496		504
SAND/SHALE	504		803
COAL	803		810
SAND/SHALE	810		1,405.00
MAXTON	1,405.00		1,478.00
SAND/SHALE	1,478.00		1,715.00
BIG LIME	1,715.00		1,836.00
BIG INJUN	1,836.00		1,947.00
SAND/SHALE	1,947.00		2,027.00
WEIR	2,027.00		2,048.00
SAND/SHALE	2,048.00		2,335.00
GANTZ	2,335.00		2,354.00
SAND/SHALE	2,354.00		2,381.00
50F	2,381.00		2,443.00
SAND/SHALE	2,443.00		2,497.00
30F	2,497.00		2,535.00
SAND/SHALE	2,535.00		2,580.00
GORDON	2,580.00		2,591.00
SAND/SHALE	2,591.00		2,651.00
4TH SAND	2,651.00		2,725.00
SAND/SHALE	2,725.00		2,821.00
BAYARD	2,821.00		2,884.00
SAND/SHALE	2,884.00		3,262.00
WARREN	3,262.00		4,868.00
BENSON	4,868.00		5,146.00
ALEXANDER	5,146.00		6,227.00
RHINESTREET	6,227.00	6,117.70	7,448.00
SONYEA	7,448.00	7,025.70	7,710.00
MIDDLESEX	7,710.00	7,227.20	7,810.00
GENESSEE	7,810.00	7,306.10	7,974.00
GENESEO	7,974.00	7,424.20	8,029.00
TULLY	8,029.00	7,460.00	8,128.00
HAMILTON	8,128.00	7,518.90	8,340.00
MARCELLUS	8,340.00	7,615.50	





**513436- 47-049-02345-0000 - 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>
<b>Initiation Sleeve</b>	3/22/2015	11,029.00	11,032.00	10	MARCELLUS
<b>1</b>	4/4/2015	10,883.00	11,004.00	32	MARCELLUS
<b>2</b>	4/5/2015	10,733.00	10,855.00	40	MARCELLUS
<b>3</b>	4/6/2015	10,586.00	10,705.00	40	MARCELLUS
<b>4</b>	4/6/2015	10,433.00	10,555.00	40	MARCELLUS
<b>5</b>	4/6/2015	10,283.00	10,405.00	40	MARCELLUS
<b>6</b>	4/6/2015	10,133.00	10,255.00	40	MARCELLUS
<b>7</b>	4/7/2015	9,983.00	10,105.00	40	MARCELLUS
<b>8</b>	4/7/2015	9,833.00	9,954.00	40	MARCELLUS
<b>9</b>	4/7/2015	9,683.00	9,805.00	40	MARCELLUS
<b>10</b>	4/7/2015	9,533.00	9,653.00	40	MARCELLUS
<b>11</b>	4/8/2015	9,383.00	9,503.00	40	MARCELLUS
<b>12</b>	4/8/2015	9,233.00	9,353.00	40	MARCELLUS
<b>13</b>	4/8/2015	9,083.00	9,205.00	40	MARCELLUS
<b>14</b>	4/8/2015	8,933.00	9,053.00	40	MARCELLUS
<b>15</b>	4/9/2015	8,783.00	8,903.00	40	MARCELLUS
<b>16</b>	4/9/2015	8,633.00	8,753.00	40	MARCELLUS

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/4/2015
Job End Date:	4/9/2015
State:	West Virginia
County:	Marion
API Number:	47-049-02345-00-00
Operator Name:	EQT Production
Well Name and Number:	513436
Longitude:	-80.23318300
Latitude:	39.59847800
Datum:	NAD83
Federal/Tribal Well:	NO
True Vertical Depth:	7,616
Total Base Water Volume (gal):	4,586,316
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	FTS International	Carrier/Base Fluid	Water	7732-18-5	100.00000	90.19967	None
Sand (Proppant)	FTS International	Proppant	Crystalline Silica	14808-60-7	100.00000	9.39686	None
MC MX 437-5	Multi-Chem	Calcium nitrate solution	Calcium nitrate	10124-37-5	60.00000	0.05788	None
FRW-900	FTS International	Friction reducer	Hydrotreated light distillate	64742-47-8	30.00000	0.02396	None
			Alkyl Alcohol	Proprietary	10.00000	0.00799	None
			Oxyalkylated alcohol A	Proprietary	5.00000	0.00399	None
Hydrochloric Acid (15%)	FTS International	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.02999	None
GS-500-SI	FTS International	Scale inhibitor	Ethylene glycol	107-21-1	10.00000	0.00253	None
FE-100L	FTS International	Iron control	Citric acid	77-92-9	55.00000	0.00069	None
CI-150	FTS International	Acid Corrosion inhibitor	Organic amine resin salt	Proprietary	30.00000	0.00011	None

			Isopropanol	67-63-0	30.00000	0.00011	None
			Ethylene glycol	107-21-1	30.00000	0.00011	None
			Quaternary ammonium compound	Proprietary	10.00000	0.00004	None
			Dimethylformamide	68-12-2	10.00000	0.00004	None
			Aromatic aldehyde	Proprietary	10.00000	0.00004	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)

Welcome Michelle N., Operator - OpNo. E1210363 [ Log Out ]

**Hydraulic Fracturing**  
DISCLOSURE



Please use the FracFocus XML submission process or create disclosures online.

[FIND A WELL BY STATE](#)

[ABOUT PROJECT PARTNERS](#)

(Note: Clicking the FracFocus, FIND A WELL links will open a new window.)

**Prepare Disclosure for FracFocus Submission**

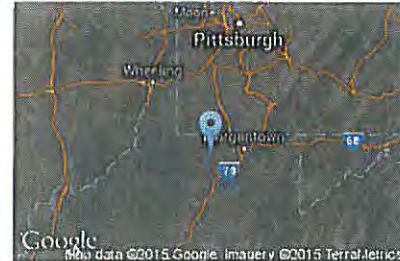
[Disclosure Lists](#) | [Dashboard](#)

**i** Disclosure has been submitted.

Note: This window expires with 10 minutes of inactivity. After that you will be taken back to the dashboard.

**Hydraulic Fracturing Data**

Job Start Date 4/4/2015	Job End Date 4/9/2015	API Number 47-049-02345-00-00	State & County West Virginia --- Marion
Well Name 513436			
Longitude -80.233183	Latitude 39.598478	Datum NAD83	Federal/Tribal Well?
True Vertical Depth (ft) 7615.5	Total Water Vol (gal) 4586316	Total Non Water Vol 0	Total Mass (lbs) 42431205



**MSDS Chemical Ingredients**

	Trade Name	Supplier	Purpose	Ingredients	CAS #	% High Additive	% HF Job	Comments	Ingredient Mass
<input type="button" value="Edit"/>	Water	FTS International	Carrier/Base Fluid	Water	7732-18-5	100%	90.1996702047%	None	38272807.02
<input type="button" value="Edit"/>	Sand (Proppant)	FTS International	Proppant	Crystalline Silica	14808-60-7	100%	9.3968577965%	None	3987200
<input type="button" value="Edit"/>	MC MX 437-5	Multi-Chem	Calcium nitrate solution	Calcium nitrate	10124-37-5	60%	.0578762633%	None	24557.596
<input type="button" value="Edit"/>	FRW-900	FTS International	Friction reducer	Hydrotreated light distillate	64742-47-8	30%	.0239624698%	None	10167.565
				Alkyl Alcohol	Proprietary	10%	.0079874899%	None	3389.188
				Oxyalkylated alcohol A	Proprietary	5%	.003993745%	None	1694.594
<input type="button" value="Edit"/>	Hydrochloric Acid (15%)	FTS International	Acidizing	Hydrochloric Acid	7647-01-0	15%	.0299874555%	None	12724.039
<input type="button" value="Edit"/>	CS-500-SI	FTS International	Scale inhibitor	Ethylene glycol	107-21-1	10%	.0025266164%	None	1072.074
<input type="button" value="Edit"/>	FE-100L	FTS International	Iron control	Citric acid	77-92-9	55%	.0006892542%	None	292.459
<input type="button" value="Edit"/>	CI-150	FTS International							

		Acid Corrosion Inhibitor						
<input type="button" value="Edit"/> NE-100	FTS International	Non- emulsifier	Organic amine resin salt	Proprietary	30%	.0001109816%	None	47.091
			Isopropanol	67-63-0	30%	.0001109816%	None	47.091
			Ethylene glycol	107-21-1	30%	.0001109816%	None	47.091
			Quaternary ammonium compound	Proprietary	10%	.0000369939%	None	15.697
			Dimethylformamide	68-12-2	10%	.0000369939%	None	15.697
			Aromatic aldehyde	Proprietary	10%	.0000369939%	None	15.697
			2-Butoxyethanol	111-76-2	10%	.0000330998%	None	14.045
			2-Propanol	67-63-0	10%	.0000330998%	None	14.045
			Dodecylbenzenesulfonic acid	27176-87-0	5%	.0000165499%	None	7.022

**Non-MSDS Chemical Ingredients**

Trade Name	Supplier	Purpose	Ingredients	CAS #	% High Additive	% HF Job	Comments	Ingredient Mass
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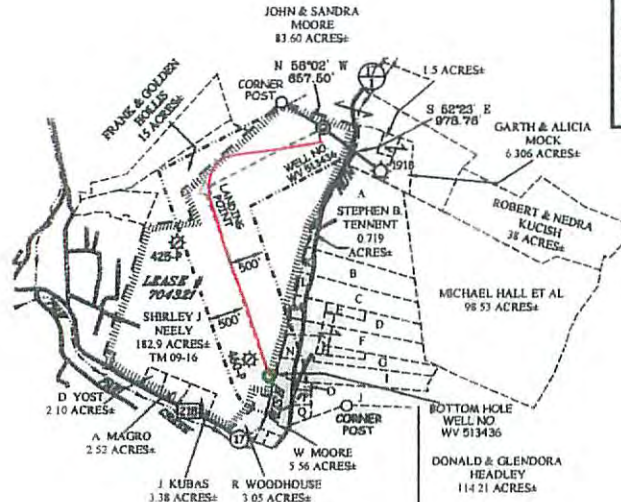
NOTES ON SURVEY

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

LATITUDE 39°37'30"

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	○
TAX MAP--PARCEL	00-00



A - D. TENNANT ET AL	33.99 ACRES±
B - E. TENNANT	10.98 ACRES±
C - E. LAYMAN	9.35 ACRES±
D - C. TENNANT ET AL	8.61 ACRES±
B - C. TENNANT	1.57 ACRES±
F - C. TENNANT ET AL	9.46 ACRES±
G - W. ICE	5.65 ACRES±
H - H. HAUGHT	1.90 ACRES±
I - A. HENDERSON ET AL	11.70 ACRES±
J - D. HEADLEY ET AL	9.86 ACRES±
K - E. TENNANT	1.2 ACRES±
L - R. EDDY	1.71 ACRES±
M - F. MARKLEY	2.29 ACRES±
N - R. HUNTER	3.35 ACRES±
O - D. WOOD ET AL	0.606 ACRES±
P - D. BOWAN	1 ACRES±
Q - P. MARKLEY	1.32 ACRES±

NORTH

LONGITUDE 80°12'30"

9.601'

**EQT PRODUCTION COMPANY  
D. HAUGHT LEASE  
190.5 ACRES±  
WELL NO. WV 513436**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT)	N. 400,932.2	E. 1,793,400.3
NAD'27 GEO.	LAT-(N) 39.598477	LONG-(W) 80.233183
NAD'83 UTM (M)	N. 4,383,483.7	E. 585,654.4

LANDING POINT

NAD'27 S.P.C.(FT)	N. 400,095.1	E. 1,791,809.8
NAD'27 GEO.	LAT-(N) 39.598143	LONG-(W) 80.238803
NAD'83 UTM (M)	N. 4,383,220.6	E. 585,374.2

BOTTOM HOLE

NAD'27 S.P.C.(FT)	N. 397,580.5	E. 1,792,877.2
NAD'27 GEO.	LAT-(N) 39.589259	LONG-(W) 80.235652
NAD'83 UTM (M)	N. 4,382,458.9	E. 585,651.2

**AS DRILLED COORDINATES  
FOR WELL NO. WV 513436**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT)	N. 400,932.2	E. 1,793,400.3
NAD'27 GEO.	LAT-(N) 39.598477	LONG-(W) 80.233183
NAD'83 UTM (M)	N. 4,383,483.7	E. 585,654.4

BOTTOM HOLE

NAD'27 S.P.C.(FT)	N. 397,579.1	E. 1,792,883.4
NAD'27 GEO.	LAT-(N) 39.589256	LONG-(W) 80.235630
NAD'83 UTM (M)	N. 4,382,458.5	E. 585,653.1



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 APRIL 29, 20 13

REVISED 08/06/14 & 02/19/15

OPERATORS WELL NO WV 513436

API WELL NO. 47

STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7248ASDRILLED513436 SCALE 1" = 2,000'

HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)

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



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

LOCATION: ELEVATION 1,141' WATERSHED RUSH RUN

DISTRICT PAW PAW COUNTY MARION QUADRANGLE GRANT TOWN 7.5'

SURFACE OWNER SHIRLEY J. NEELY ACREAGE 182.9±

ROYALTY OWNER JUDITH YOST ROBINSON, ET AL ACREAGE 190.5±

PROPOSED WORK: LEASE NO. 704321

DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE X 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 7561'

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY

ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280

BRIDGEPORT, WV 26330 BRIDGEPORT, WV 26330

COUNTY NAME

PERMIT