

PM JK

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

47-091-01247

API 47-0910-01247 County TAYLOR District BOOTH'S CREEK  
Quad ROSEMONT 7.5' Pad Name RSM112 Field/Pool Name \_\_\_\_\_  
Farm name WOODELL, SPENCER C. & TINA Well Number 514214  
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 4351954.5 Easting 571444.7  
Landing Point of Curve Northing 4351822.3 Easting 571488.6  
Bottom Hole Northing 4348606.4 Easting 572510.3

Elevation (ft) 1590 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)  
SBM 11.5 ppg - powdered hydrocarbon resin, calcium carbonate, ground almond hulls, barium sulfate, calcium chloride, lecithin liquid, organophilic clay, polyaminated fatty acid, calcium hydroxide, polyimide surfactant, modified fatty acid, dimer.trimer fatty acid, ground walnut hulls, refined base oil.

Date permit issued 4/5/2012 Date drilling commenced 10/28/2013 Date drilling ceased 3/16/2014  
Date completion activities began 4/7/2014 Date completion activities ceased 5/19/2014  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

RECEIVED

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

Office of Oil and Gas

Freshwater depth(s) ft SEP 0 93014 022' Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1950' Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 706, 784, 942, 998, 1032' Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) \_\_\_\_\_

WV Department of  
Environmental Protection

Reviewed by:

09/19/2014

API 47-910 - 1247

Farm name WODELL, SPENCER C. & TINA Well number 514214

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"	70'	New	94lb/ft	N/A	Y
Surface	17-1/2"	13-3/8"	1,102'	New	54.5lb/ft	310', 625'	Y
Coal							
Intermediate 1	12-1/4"	9-5/8"	2,333'	New	40lb/ft	1,631', 1,715'	Y
Intermediate 2							
Intermediate 3							
Production	8-1/2"	5-1/2"	19,085'	New	20lb/ft	N/A	N
Tubing							
Packer type and depth set							

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	32	15.6	1.18	37.76	0	8
Surface	Class A	950	15.6	1.19	1,130.5	0	8
Coal							
Intermediate 1	Class A/Class A	515/350	15.6	1.19/1.20	1033	0	8
Intermediate 2							
Intermediate 3							
Production	Class A/Class H	650/1460	14.2/15.2	1.26/1.97	3,696	4,895'	72
Tubing							

Drillers TD (ft) 19,091' Loggers TD (ft) 7,721'

Deepest formation penetrated Marcellus Plug back to (ft) 6,585'

Plug back procedure Air drop plug set // pilot hole TD 7,721'. Kicked off curve from TOC at 6,585'.

Kick off depth (ft) 6,585'

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- N/A

Surface-Bowstring centralizer on shoe track and every 500' to surface

Intermediate-Bowstring centralizer on shoe track and every 500' to surface

Production- Composite bodied centralizers on every joint from TD up to 4,778'

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 \_\_\_\_\_





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	1,022.00	1,022.00
SAND / SHALE	1	1	706	706
COAL	706	706	712	712
SAND / SHALE	712	712	781	781
COAL	781	781	786	786
SAND / SHALE	786	786	942	942
COAL	942	942	947	947
SAND / SHALE	947	947	998	998
COAL	998	998	1,001.00	1,001.00
SAND / SHALE	1,001.00	1,001.00	1,032.00	1,032.00
COAL	1,032.00	1,032.00	1,038.00	1,038.00
SAND / SHALE	1,038.00	1,038.00	1,154.00	1,154.00
MAXTON	1,154.00	1,154.00	1,554.00	1,553.90
BIG LIME	1,554.00	1,553.90	1,838.00	1,837.90
WEIR	1,838.00	1,837.90	2,065.00	2,064.90
GANTZ	2,065.00	2,064.90	2,139.00	2,138.90
50F	2,139.00	2,138.90	2,246.00	2,245.80
30F	2,246.00	2,245.80	2,324.00	2,323.80
GORDON	2,324.00	2,323.80	2,470.00	2,469.80
4TH	2,470.00	2,469.80	2,613.00	2,612.70
BAYARD	2,613.00	2,612.70	3,037.00	3,036.60
B-5	3,037.00	3,036.60	3,255.00	3,254.60
SPEECHLEY	3,255.00	3,254.60	3,631.00	3,630.60
BRADFORD	3,631.00	3,630.60	3,775.00	3,774.60
BALLTOWN B	3,775.00	3,774.60	3,986.00	3,985.60
RILEY	3,986.00	3,985.60	4,610.00	4,609.50
BENSON	4,610.00	4,609.50	4,964.00	4,963.50
ELK	4,964.00	4,963.50	6,823.00	6,822.30
SONYEA	6,823.00	6,822.30	7,135.00	7,134.20
MIDDLESEX	7,135.00	7,134.20	7,236.00	7,234.40
GENESSEE	7,236.00	7,234.40	7,358.00	7,352.70
GENESE0	7,358.00	7,352.70	7,400.00	7,392.20
TULLY	7,400.00	7,392.20	7,456.00	7,444.20
HAMILTON	7,456.00	7,444.20	7,617.00	7,582.60
MRC3	7,617.00	7,582.60	19,091.00	8,013.10

**514214 - 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>
1	4/7/2014	18,801.00	19,043.00	40	MARCELLUS
2	5/5/2014	18,501.00	18,743.00	40	MARCELLUS
3	5/5/2014	18,201.00	18,443.00	40	MARCELLUS
4	5/5/2014	17,901.00	18,143.00	40	MARCELLUS
5	5/6/2014	17,601.00	17,843.00	40	MARCELLUS
6	5/6/2014	17,301.00	17,543.00	40	MARCELLUS
7	5/7/2014	17,001.00	17,243.00	40	MARCELLUS
8	5/7/2014	16,701.00	16,943.00	40	MARCELLUS
9	5/7/2014	16,401.00	16,643.00	40	MARCELLUS
10	5/8/2014	16,101.00	16,343.00	40	MARCELLUS
11	5/8/2014	15,801.00	16,043.00	40	MARCELLUS
12	5/8/2014	15,498.00	15,743.00	40	MARCELLUS
13	5/9/2014	15,201.00	15,443.00	40	MARCELLUS
14	5/9/2014	14,901.00	14,143.00	40	MARCELLUS
15	5/10/2014	14,816.00	14,601.00	40	MARCELLUS
16	5/10/2014	14,301.00	14,543.00	40	MARCELLUS
17	5/10/2014	14,010.00	14,243.00	40	MARCELLUS
18	5/11/2014	13,943.00	13,701.00	40	MARCELLUS
19	5/11/2014	13,401.00	13,643.00	40	MARCELLUS
20	5/11/2014	13,343.00	13,101.00	40	MARCELLUS
21	5/12/2014	13,043.00	12,801.00	40	MARCELLUS
22	5/12/2014	12,501.00	12,743.00	40	MARCELLUS
23	5/14/2014	12,201.00	12,443.00	40	MARCELLUS
24	5/14/2014	11,901.00	12,143.00	40	MARCELLUS
25	5/14/2014	11,601.00	11,843.00	40	MARCELLUS
26	5/15/2014	11,301.00	11,566.00	40	MARCELLUS
27	5/15/2014	11,243.00	11,006.00	40	MARCELLUS
28	5/15/2014	10,701.00	10,943.00	40	MARCELLUS
29	5/16/2014	10,401.00	10,643.00	40	MARCELLUS
30	5/16/2014	10,101.00	10,343.00	40	MARCELLUS
31	5/17/2014	9,801.00	10,043.00	40	MARCELLUS
32	5/17/2014	9,505.00	9,743.00	40	MARCELLUS
33	5/17/2014	9,201.00	9,443.00	40	MARCELLUS
34	5/17/2014	8,901.00	9,139.00	40	MARCELLUS
35	5/18/2014	8,601.00	8,843.00	40	MARCELLUS
36	5/19/2014	8,297.00	8,543.00	40	MARCELLUS
37	5/19/2014	8,001.00	8,243.00	40	MARCELLUS

**514214 - Stimulated Stages**

<b>Stage Number</b>	<b>Stimulation Date</b>	<b>Ave Pump Rate (BPM)</b>	<b>Ave Treatment Pressure (PSI)</b>	<b>Max Breakdown Pressure (PSI)</b>	<b>ISIP (PSI)</b>	<b>Amount of Proppant (lbs)</b>	<b>Amount of Water (bbbls)</b>	<b>Amount of Nitrogen/other (units)</b>
1	5/5/2014	87.40	8,685.00	0.00	4,081	501,140	12,445	0
2	5/5/2014	91.00	8,723.00	5,586.00	4,320	494,788	12,410	0
3	5/5/2014	89.80	8,801.00	5,879.00	5,107	501,080	12,267	0
4	5/6/2014	87.30	8,808.00	6,348.00	5,136	501,140	12,320	0
5	5/6/2014	89.00	8,787.00	5,937.00	4,306	498,160	12,419	0
6	5/6/2014	88.90	8,668.00	6,230.00	4,832	501,610	12,303	0
7	5/7/2014	89.00	8,699.00	6,169.00	4,710	498,040	12,180	0
8	5/7/2014	83.20	8,830.00	6,237.00	5,869	500,770	12,205	0
9	5/7/2014	88.40	8,773.00	6,058.00	5,053	501,050	12,398	0
10	5/8/2014	89.00	8,700.00	6,162.00	5,600	499,970	12,487	0
11	5/8/2014	88.10	8,820.00	6,670.00	4,581	501,920	11,998	0
12	5/8/2014	86.00	8,605.00	6,040.00	5,457	500,340	12,459	0
<b>Injection Test</b>	5/9/2014	8.00	7,037.00	NA	NA	NA	1,500	0
13	5/9/2014	91.00	8,698.00	6,033.00	5,375	496,840	14,291	0
14	5/10/2014	94.50	8,845.00	6,148.00	5,740	501,400	12,206	0
15	5/10/2014	89.60	8,809.00	6,434.00	4,950	498,630	13,542	0
16	5/10/2014	94.00	8,791.00	6,623.00	6,284	501,970	13,104	0
17	5/11/2014	95.90	8,848.00	6,373.00	5,847	502,350	12,202	0
18	5/11/2014	94.00	8,823.00	7,013.00	5,046	498,080	12,439	0
19	5/11/2014	96.00	8,862.00	6,816.00	5,715	502,740	12,050	0
20	5/11/2014	93.50	8,765.00	7,871.00	5,815	504,820	12,586	0
21	5/12/2014	93.00	8,845.00	6,745.00	4,978	464,000	10,324	0
22	5/14/2014	93.00	8,824.00	7,192.00	4,721	498,800	12,221	0
23	5/14/2014	88.00	8,704.00	7,299.00	4,710	501,620	13,002	0
24	5/14/2014	92.00	8,819.00	7,099.00	5,879	500,420	12,103	0
25	5/15/2014	92.00	8,772.00	6,827.00	5,969	500,340	12,086	0
26	5/15/2014	93.00	8,690.00	7,267.00	5,640	502,540	12,070	0
27	5/15/2014	90.00	8,722.00	7,074.00	5,726	501,830	12,204	0
28	5/16/2014	91.00	8,345.00	7,399.00	6,040	497,000	14,461	0
29	5/16/2014	98.00	8,734.00	6,784.00	5,933	500,230	11,874	0
30	5/16/2014	95.00	8,672.00	7,253.00	6,173	500,500	12,006	0
31	5/17/2014	100.00	8,413.00	6,773.00	5,937	503,741	12,026	0
32	5/17/2014	100.00	8,160.00	7,299.00	5,808	500,890	12,016	0
33	5/17/2014	101.00	8,079.00	7,789.00	6,015	499,580	12,464	0
34	5/18/2014	101.00	7,980.00	7,199.00	6,316	500,140	11,983	0
35	5/18/2014	100.00	7,793.00	6,799.00	5,440	501,500	11,993	0
36	5/19/2014	101.00	7,500.00	6,927.00	5,679	500,439	12,138	0
37	5/19/2014	97.00	8,669.00	6,741.00	5,536	504,650	12,016	0

# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/7/2014
Job End Date:	5/19/2014
State:	West Virginia
County:	Taylor
API Number:	47-091-01247-00-00
Operator Name:	EQT Production
Well Name and Number:	RSM112 - 514214
Longitude:	-80.17144800
Latitude:	39.31395200
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	8,013
Total Base Water Volume (gal):	19,833,038
Total Base Non Water Volume:	910,376



## 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	USWS	Carrier	Water	7732-18-5	100.00000	89.58971	
Sand	USWS	Proppant	Crystalline Silica	14808-60-7	100.00000	10.02408	
MX-5	Halliburton	Biocide	Sodium Nitrate	7631-99-4	60.00000	0.05821	
WFRA-405E	USWS	Friction Reducer	Distillates, Petroleum, Hydrotreated Light	64742-47-8	20.00000	0.02055	
			Sodium Chloride	7647-14-5	20.00000	0.02055	
15% Hydrochloric Acid	USWS	Acidizing	Hydrochloric Acid	7647-01-0	15.00000	0.02004	
SI-110	USWS	Scale Inhibitor	Ethylene Glycol	107-21-1	40.00000	0.01106	
MX-8	Halliburton	Biocide	Bacteria Culture	000-00-0	100.00000	0.00978	
LGC-15	USWS	Increases Viscosity	Petroleum Distillates	64742-47-8	60.00000	0.00893	
AP-One	USWS	Gel Breaker	Ammonium Persulfate	7727-54-0	100.00000	0.00027	



AI-301	USWS	Corrosion Inhibitor				
		DIETHYLENE GLYCOL	111-46-6	30.00000	0.00008	
		METHENAMINE	100-97-0	20.00000	0.00006	
		HYDROGEN CHLORIDE	7647-01-0	10.00000	0.00003	
		POLYETHYLENEPOLYAMINE	58603-67-8	10.00000	0.00003	
		COCO AMINE	51791-14-8	5.00000	0.00001	
<b>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.</b>						

\* 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)

# EQT PRODUCTION CO. WELL NO. WV 514214 CORDER LEASE

LATITUDE 39°20'00"

**WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD'27)**

N. 297,167.7  
E. 1,810,021.3

LAT=(N) 39.313952  
LONG=(W) 80.171448

UTM (NAD'83)(METERS)  
N. 4,351,954.5  
E. 571,444.8

### NOTES ON SURVEY

- TIES TO WELLS, CORNERS, AND REFERENCES ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD'27.
- LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 59 PAGE 101 & DEED BOOK 224 PAGE 405.
- SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF TAYLOR COUNTY IN JULY, 2013.
- WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS (SURVEY GRADE).
- U.S. RT. 50 IN THIS AREA APPEARS TO BE PART OF THE OLD NORTHWESTERN TURNPIKE, A STRIP OF LAND CLAIMED IN FEE BY THE WVDH. SLS RECOMMENDS PROPER LEGAL & LEASING (IF NEEDED) PROCEDURES BE TAKEN BEFORE DRILLING COMMENCES.
- PLAT DATED 04/19/10 REVISED 07/16/11 TO EXTEND HORIZONTAL LEG AND CHANGE BOTTOM HOLE COORDINATES. REVISED AGAIN 07/29/11 TO CHANGE SIX DIGIT WELL NUMBERS & REVISED 10/23/13 TO EXTEND LATERAL, ETC.
- NO WATER WELLS WERE FOUND WITHIN 250 FEET OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS (GREATER THAN 2500 SQUARE FEET) OR DWELLINGS WERE FOUND WITHIN 825 FEET OF CENTER OF PROPOSED WELL PAD.
- PLAT UPDATED ON 06/26/14 TO SHOW THE AS DRILLED PATH COORDINATES FROM INFORMATION PROVIDED BY EQT ON 03/27/14.

NORTH

LONGITUDE 80°10'00"



LINE	BEARING	DISTANCE
L1	S 20°00'00" W	381.00'
L2	S 60°00'00" W	123.00'
L3	S 82°00'00" W	411.00'
L4	S 80°15'00" W	417.00'
L5	N 80°15'00" W	208.33'
L6	S 20°15'00" W	74.75'
L7	N 80°00'00" W	231.00'
L8	S 30°00'00" W	126.67'
L9	N 22°00'00" W	541.00'
L10	S 50°15'00" W	675.00'
L11	N 50°15'00" W	261.00'
L12	S 30°00'00" E	126.67'
L13	N 72°00'00" E	186.72'
L14	N 50°00'00" W	186.72'
L15	N 22°00'00" W	1084.00'
L16	S 50°15'00" E	675.00'
L17	N 50°15'00" W	261.00'
L18	S 20°00'00" W	126.67'
L19	N 20°00'00" E	105.00'
L20	N 60°15'00" E	544.00'
L21	N 20°00'00" E	203.12'
L22	N 60°00'00" E	181.12'

**LANDING POINT  
WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD'27)**

N. 296,526.2  
E. 1,810,148.2

LAT=(N) 39.312193  
LONG=(W) 80.170983

UTM (NAD'83)(METERS)  
N. 4,351,759.7  
E. 571,486.7

**LEGEND**

AS DRILLED ————

PROPOSED - - - - -

**BOTTOM HOLE  
WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD'27)**

N. 286,121.6  
E. 1,813,329.2

LAT=(N) 39.283692  
LONG=(W) 80.159471

UTM (NAD'83)(METERS)  
N. 4,348,606.0  
E. 572,508.5

### AS DRILLED INFORMATION

WELL NO. WV 514214 STATE PLANE COORDINATES NORTH ZONE (NAD'27)	WELL NO. WV 514214 STATE PLANE COORDINATES NORTH ZONE (NAD'27)
N. 286,123.1 E. 1,813,336.0	N. 297,167.7 E. 1,810,021.3
LAT=(N) 39.283696 LONG=(W) 80.159696	LAT=(N) 39.313952 LONG=(W) 80.171448
UTM (NAD'83)(METERS) N. 4,348,606.4 E. 572,510.3	UTM (NAD'83)(METERS) N. 4,351,954.5 E. 571,444.8



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. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE OCTOBER 23, 20 13

REVISED DATE AUGUST 26, 20 14

OPERATORS WELL NO. WV 514214

API WELL NO. 47-091-01247

STATE WV COUNTY BRIDGEPORT PERMIT 0919/2014

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7249ASDRILLED514214

PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2,000'

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

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

LOCATION: ELEVATION 1,587.5 (GROUND) / 1,590 (PROPOSED) WATERSHED CORBIN BRANCH & HUSTEAD FORK

DISTRICT BOOTH'S CREEK COUNTY TAYLOR QUADRANGLE ROSEMONT 7.5'

SURFACE OWNER SPENCER C. & TINA R. WOODDELL ACREAGE 107.17±

ROYALTY OWNER PEGGY KNOTTS ET AL (310 AC±) / O.E. EVA L. CORDER ET AL (240 AC±) / W. DOUGLAS BARNETT ET AL (81 AC±)

PROPOSED WORK: RICHARD D. KNOTTS ET AL (40 AC±) / PEGGY KNOTTS ET AL (756 AC±) / JOHN C. STOUT ET AL (277.5 AC±) LEASE NO. 109889 / 125209 / 122071 / 122264 / 123605 / 988340

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 \_\_\_\_\_

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

# EQT PRODUCTION CO. WELL NO. WV 514214 CORDER LEASE

WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD 27)

N. 297,167.7  
E. 1,810,021.9

LAT=(N) 39.313952  
LONG=(W) 80.171448

UTM (NAD'83)(METERS)  
N. 4,351,954.5  
E. 571,444.8

### NOTES ON SURVEY

1. TIES TO WELLS, CORNERS, AND REFERENCES ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD'27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 59 PAGE 101 & DEED BOOK 224 PAGE 405.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF TAYLOR COUNTY IN JULY, 2013.
4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS (SURVEY GRADE).
5. U.S. RT. 50 IN THIS AREA APPEARS TO BE PART OF THE OLD NORTHWESTERN TURNPIKE, A STRIP OF LAND CLAIMED IN FEE BY THE WVDH. SLS RECOMMENDS PROPER LEGAL & LEASING (IF NEEDED) PROCEDURES BE TAKEN BEFORE DRILLING COMMENCES.
6. PLAT DATED 04/19/10 REVISED 07/18/11 TO EXTEND HORIZONTAL LEG AND CHANGE BOTTOM HOLE COORDINATES, REVISED AGAIN 07/25/11 TO CHANGE SIX DIGIT WELL NUMBERS & REVISED 10/23/13 TO EXTEND LATERAL, ETC.
7. NO WATER WELLS WERE FOUND WITHIN 250 FEET OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS (GREATER THAN 2500 SQUARE FEET) OR DWELLINGS WERE FOUND WITHIN 625 FEET OF CENTER OF PROPOSED WELL PAD.
8. PLAT UPDATED ON 08/26/14 TO SHOW THE AS DRILLED PATH COORDINATES FROM INFORMATION PROVIDED BY EQT ON 03/27/14.

### AS DRILLED INFORMATION

**BOTTOM HOLE**  
WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD 27)

N. 286,123.1  
E. 1,813,335.0

LAT=(N) 39.283696  
LONG=(W) 80.159696

UTM (NAD'83)(METERS)  
N. 4,348,606.4  
E. 572,510.3

**BOTTOM HOLE**  
WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD 27)

N. 297,167.7  
E. 1,810,021.9

LAT=(N) 39.313952  
LONG=(W) 80.171448

UTM (NAD'83)(METERS)  
N. 4,351,954.5  
E. 571,444.8

**LANDING POINT**  
WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD 27)

N. 298,526.2  
E. 1,810,148.2

LAT=(N) 39.312193  
LONG=(W) 80.170983

UTM (NAD'83)(METERS)  
N. 4,351,759.7  
E. 571,486.7

### LEGEND

AS DRILLED ———  
PROPOSED - - - - -

**BOTTOM HOLE**  
WELL NO. WV 514214  
STATE PLANE COORDINATES  
NORTH ZONE (NAD 27)

N. 286,121.6  
E. 1,813,329.2

LAT=(N) 39.283692  
LONG=(W) 80.159471

UTM (NAD'83)(METERS)  
N. 4,348,606.0  
E. 572,508.5



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. 677

*Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE OCTOBER 23, 20 13

REVISED DATE AUGUST 26, 20 14

OPERATORS WELL NO. WV 514214

API WELL NO. 47-091-01247  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7249ASDRILLED514214

PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2,000'

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 1,587.5' (GROUND) / 1,580' (PROPOSED) WATERSHED CORBIN BRANCH & HUSTEAD FORK

DISTRICT BOOTH'S CREEK COUNTY TAYLOR QUADRANGLE ROSEMONT 7.5'

SURFACE OWNER SPENCER C. & TINA R. WOODDELL ACREAGE 107.17±

ROYALTY OWNER PEGGY KNOTTS ET AL (310 AC±) / O.E., EVA L. CORDER ET AL (240 AC±) / W. DOUGLAS BARNETT ET AL (756 AC±)

PROPOSED WORK: RICHARD D. KNOTTS ET AL (40 AC±) / PEGGY KNOTTS ET AL (756 AC±) / JOHN C. STOUT ET AL (277.5 AC±) LEASE NO. 106869 / 125208 / 122871 / 122284 / 123605 / 986340

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   

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

LINE	BEARING	DISTANCE
L1	S 81°45'00" W	663.00'
L2	S 10°00'00" W	402.00'
L3	S 25°15'00" W	472.50'
L4	S 25°15'00" W	411.15'
L5	N 00°00'00" W	259.32'
L6	S 25°15'00" W	143.75'
L7	N 00°00'00" W	231.00'
L8	S 30°00'00" W	1288.97'
L9	N 22°00'00" W	661.00'
L10	N 54°15'00" W	179.15'
L11	N 00°00'00" W	292.04'
L12	S 78°00'00" E	118.14'
L13	N 72°00'00" E	888.77'
L14	N 34°00'00" W	854.33'
L15	N 10°00'00" W	1082.40'
L16	S 30°00'00" E	833.12'
L17	N 00°00'00" E	272.80'
L18	S 20°00'00" W	198.00'
L19	N 00°00'00" W	99.00'
L20	N 20°00'00" E	99.00'
L21	N 88°15'00" E	168.00'
L22	N 42°15'00" E	544.50'
L23	N 59°45'00" E	202.13'
L24	N 40°00'00" E	981.10'

COUNTY NAME  
PERMIT