

Well Operator's Report of Well Work



Where energy meets innovation.

RECEIVED
Office of Oil and Gas

DEC 4 2017

WV Department of
Environmental Protection

Well Number: 515966

API: 47 - 085 - 10289

Submission: Initial Amended

Notes: Initial report w/ Flowback

Reviewed

02/16/2018

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

API 47-085-10289 County RITCHIE District UNION
Quad PULLMAN Pad Name PUL96 Field/Pool Name N/A
Farm name JAMES H. & WILMA J. WILSON Well Number 515966
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 N. 4,340,221.89 Easting 501,223.44
Landing Point of Curve Northing N. 4,340,444.12 Easting 501,474.13
Bottom Hole Northing N. 4,342,278.82 Easting 501,023.19

Elevation (ft) 1183' 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

RECEIVED
Office of Oil and Gas
DEC 4 2017
WV Department of
Environmental Protection

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 11.5 ppg, Synthetic Base Mud 11.5 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 07/26/2016 Date drilling commenced 04/17/2017 Date drilling ceased 7/28/2017
Date completion activities began 8/15/2017 Date completion activities ceased 9/17/2017
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 345,371,402,559 Open mine(s) (Y/N) depths N
Salt water depth(s) ft No salt water shows Void(s) encountered (Y/N) depths N
Coal depth(s) ft No coal seams Cavern(s) encountered (Y/N) depths N
Is coal being mined in area (Y/N) N

Reviewed by:
02/16/2018

API 47-085 - 10289 Farm name JAMES H. & WILMA J. WILSON Well number 515966

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	30"	26"	40'	NEW	A-500	N/A	Y
Surface	17 1/2"	13 3/8"	655'	NEW	J-55	142'	Y
Coal							
Intermediate 1	12 3/8"	9 5/8"	2563'	NEW	A-500	710'	Y
Intermediate 2							
Intermediate 3							
Production	8 3/4" & 8 1/2"	5 1/2"	13,245'	NEW	P-110	N/A	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 ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	49	15.6	1.18	57.7	0	8
Surface	CLASS A	601	15.6	1.20	721.2	0	8
Coal							
Intermediate 1	CLASS A / CLASS A	201 / 778	15.6 / 15.6	1.18 / 1.2	1170.78	0	8
Intermediate 2							
Intermediate 3							
Production	CLASS H / CLASS H	329 / 793	15.2 / 15.6	1.25 / 2.06	2044.83	5200	72
Tubing							

RECEIVED
Office of Oil and Gas

Drillers TD (ft) 13,259 Loggers TD (ft) N/A
 Deepest formation penetrated Marcellus Plug back to (ft) N/A
 Plug back procedure N/A

DEC 4 2017

WV Department of
Environmental Protection

Kick off depth (ft) 4953

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: 2 CENTRALIZERS AT JOINTS 1 AND 11
 INTERMEDIATE: 6 CENTRALIZERS PLACED EVERY 500'
 PRODUCTION: 197 Spiral body composite centralizers placed every joint from bottom to 4,995 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 _____

API 47- 085 - 10289 Farm name JAMES H. & WILMA J. WILSON Well number 515966

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)
								See Attached

RECEIVED
Office of Oil and Gas
DEC 4 2017
w/ Department of Environmental Protection

Please insert additional pages as applicable.

API 47- 085 - 10289 Farm name JAMES H. & WILMA J. WILSON Well number 515966

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Marcellus</u>	<u>6,368</u> TVD	<u>6,862</u> MD
_____	_____	_____
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 1,919 psi Bottom Hole N/A psi DURATION OF TEST 134.5 hrs

OPEN FLOW Gas 8,292 mcfpd Oil N/A bpd NGL 767 bpd Water 854 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 ₂ S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	<u>0</u>		<u>0</u>		

RECEIVED
Office of Oil and Gas
DEC 4 2017
WV Department of
Environmental Protection

Please insert additional pages as applicable.

Drilling Contractor Decker Drilling Rig 11
Address 11565 State Route 676 City Vincent State OH Zip 45784

Logging Company Gyrodata Incorporated
Address 73 Noblestown Road City Carnegie State PA Zip 15106

Cementing Company BJ Cementing Services
Address 837 Philippi Pike City Clarksburg State WV Zip 26301

Stimulating Company FTS International
Address 1432 Route 519 City Eighty Four State PA Zip 15330

Please insert additional pages as applicable.

Completed by James Abbott Telephone (412) 553-5996
Signature [Handwritten Signature] Title Dir Completions Date 11/30/2017

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

02/16/2018

WR-35
Rev. 8/23/13

Page ___ of ___

API 47- 085 - 10289 Farm name JAMES H. & WILMA J. WILSON Well number 515966

Drilling Contractor Savanna Drilling (Rig 655)
Address 125 Industry Road City Waynesburg State PA Zip 15370

Logging Company Baker Hughes
Address 4000 Town Center Blvd City Canonsburg State PA Zip 15317

02/16/2018

Well # 515966 Final Formations API # 47-085-10289

Formation Name	Drilling Top MD	Drilling Top (TVD)	Drilling Bottom MD	Drilling Btm (TVD)
FRESH WATER ZONE	1	1	559	559
SAND/SHALE	1	1	1,833.00	1,832.80
MAXTON	1,833.00	1,832.80	1,873.00	1,872.70
SAND/SHALE	1,873.00	1,872.70	2,053.00	2,052.60
BIG LIME	2,053.00	2,052.60	2,142.00	2,141.60
BIG INJUN	2,142.00	2,141.60	2,207.00	2,206.60
SAND/SHALE	2,207.00	2,206.60	2,450.00	2,448.90
WEIR	2,450.00	2,448.90	2,495.00	2,493.80
SAND/SHALE	2,495.00	2,493.80	2,665.00	2,663.60
GANTZ	2,665.00	2,663.60	2,668.00	2,666.60
SAND/SHALE	2,668.00	2,666.60	2,747.00	2,745.60
50F	2,747.00	2,745.60	2,781.00	2,779.50
SAND/SHALE	2,781.00	2,779.50	2,796.00	2,794.50
THIRTY FOOT	2,796.00	2,794.50	2,817.00	2,815.50
SAND/SHALE	2,817.00	2,815.50	2,834.00	2,832.50
GORDON	2,834.00	2,832.50	2,894.00	2,892.50
SAND/SHALE	2,894.00	2,892.50	2,954.00	2,952.50
FOURTH SAND	2,954.00	2,952.50	2,962.00	2,960.50
SAND/SHALE	2,962.00	2,960.50	3,047.00	3,045.50
5TH	3,047.00	3,045.50	3,067.00	3,065.50
SAND/SHALE	3,067.00	3,065.50	3,105.00	3,103.50
BAYARD	3,105.00	3,103.50	3,136.00	3,134.50
SAND/SHALE	3,136.00	3,134.50	3,506.00	3,504.50
WARREN	3,506.00	3,504.50	3,552.00	3,550.50
SAND/SHALE	3,552.00	3,550.50	3,616.00	3,614.50
SPEECHLEY	3,616.00	3,614.50	3,743.00	3,741.50
SAND/SHALE	3,743.00	3,741.50	3,954.00	3,952.50
BALLTOWN A	3,954.00	3,952.50	4,005.00	4,003.50
SAND/SHALE	4,005.00	4,003.50	4,601.00	4,599.50
RILEY	4,601.00	4,599.50	4,622.00	4,620.50
SAND/SHALE	4,622.00	4,620.50	4,942.00	4,940.50
BENSON	4,942.00	4,940.50	4,982.00	4,980.40
SAND/SHALE	4,982.00	4,980.40	5,221.00	5,213.00
ALEXANDER	5,221.00	5,213.00	5,246.00	5,236.00
ELKS	5,246.00	5,236.00	6,400.00	6,135.10
SONYEA	6,400.00	6,135.10	6,535.00	6,224.70
MIDDLESEX	6,535.00	6,224.70	6,634.00	6,277.20
GENESSEE	6,634.00	6,277.20	6,756.00	6,329.00
GENESEO	6,756.00	6,329.00	6,830.00	6,356.80
TULLY	6,830.00	6,356.80	6,852.00	6,364.40
HAMILTON	6,852.00	6,364.40	6,862.00	6,367.70
MARCELLUS	6,862.00	6,367.70	13,259.00	6,442.10

02/16/2018

515966 47-085-10289-0000 - Perforations

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
Initiation Sleeve	8/9/2017	13,219	13,245	10	MARCELLUS
1	8/16/2017	13,058	13,180	32	MARCELLUS
2	8/16/2017	12,858	13,020	40	MARCELLUS
2	8/17/2017	12,878	12,960	24	MARCELLUS
3	8/18/2017	12,658	12,820	40	MARCELLUS
4	8/19/2017	12,458	12,620	40	MARCELLUS
5	8/20/2017	12,258	12,420	40	MARCELLUS
6	8/21/2017	11,996	12,078	40	MARCELLUS
6	8/21/2017	12,058	12,220	24	MARCELLUS
7	8/21/2017	11,796	11,958	40	MARCELLUS
8	8/22/2017	11,596	11,758	40	MARCELLUS
9	8/22/2017	11,396	11,558	40	MARCELLUS
10	8/23/2017	11,196	11,358	40	MARCELLUS
11	8/24/2017	10,996	11,158	40	MARCELLUS
12	8/24/2017	10,796	10,958	40	MARCELLUS
13	8/25/2017	10,596	10,758	40	MARCELLUS
14	8/26/2017	10,396	10,558	40	MARCELLUS
15	8/26/2017	10,196	10,358	40	MARCELLUS
16	8/27/2017	9,996	10,158	40	MARCELLUS
17	8/29/2017	9,796	9,958	40	MARCELLUS
18	8/29/2017	9,596	9,758	40	MARCELLUS
19	8/29/2017	9,396	9,558	40	MARCELLUS
20	8/30/2017	9,196	9,358	40	MARCELLUS
21	8/31/2017	8,996	9,158	40	MARCELLUS
22	9/1/2017	8,796	8,958	40	MARCELLUS
23	9/2/2017	8,596	8,758	40	MARCELLUS
24	9/2/2017	8,396	8,558	40	MARCELLUS
25	9/5/2017	8,196	8,358	40	MARCELLUS
26	9/7/2017	7,996	8,158	40	MARCELLUS
27	9/8/2017	7,796	7,958	40	MARCELLUS
28	9/10/2017	7,596	7,758	40	MARCELLUS
29	9/13/2017	7,396	7,558	40	MARCELLUS
30	9/15/2017	7,196	7,358	40	MARCELLUS
31	9/15/2017	6,996	7,158	40	MARCELLUS

RECEIVED
 Office of Oil and Gas
 DEC 4 2017
 M.D. Department of
 Environment & Protection

515966 47-085-10289-0000 - 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								
1	8/15/2017	92	8,590	9,460	8,321	450,535	3,725	0
2	8/17/2017	11	7,016	8,802	4,669	31,269	3,698	0
2	8/18/2017	43	8,363	9,342	5,161	18,896	2,325	0
3	8/19/2017	11	7,691	8,975	5,697	598,487	3,491	0
4	8/20/2017	98	7,712	8,584	2,638	446,940	10,501	0
5	8/21/2017	88	7,222	8,765	2,566	443,860	7,283	0
6	8/21/2017	100	8,176	8,573	2,556	461,801	7,712	0
7	8/22/2017	94	7,861	9,929	2,776	447,419	9,914	0
8	8/22/2017	88	7,997	9,579	2,579	449,695	8,383	0
9	8/23/2017	95	7,617	8,415	2,711	448,803	7,376	0
10	8/24/2017	98	7,139	8,959	2,930	450,798	7,448	0
11	8/24/2017	90	6,947	8,073	2,872	450,084	7,057	0
12	8/25/2017	98	7,405	7,797	2,824	447,406	7,229	0
13	8/26/2017	99	7,618	9,468	2,945	449,853	7,248	0
14	8/26/2017	97	7,281	7,640	3,027	450,230	7,241	0
15	8/27/2017	100	7,729	8,967	2,690	447,738	7,142	0
16	8/28/2017	94	7,908	8,732	2,811	450,127	7,881	0
17	8/29/2017	47	7,784	8,805	5,912	449,044	1,305	0
18	8/29/2017	99	7,619	8,218	2,904	450,409	2,507	0
19	8/30/2017	96	7,286	7,895	2,749	451,477	8,780	0
20	8/31/2017	98	7,224	7,898	2,863	449,873	7,008	0
21	9/1/2017	94	7,020	7,606	3,050	450,672	7,041	0
22	9/2/2017	100	7,150	8,196	3,160	450,184	6,964	0
23	9/2/2017	99	7,077	8,454	3,917	451,606	6,907	0
24	9/5/2017	100	7,304	7,731	3,038	451,117	6,826	0
25	9/7/2017	99	7,325	7,679	2,638	453,309	7,864	0
26	9/8/2017	97	7,482	8,412	2,908	451,995	6,893	0
27	9/10/2017	101	7,280	8,350	2,556	453,095	6,492	0
28	9/13/2017	100	7,070	9,280	2,647	449,065	6,995	0
29	9/15/2017	100	7,519	7,869	3,213	449,170	7,215	0
30	9/15/2017	100	7,654	9,035	2,712	449,433	6,937	0
31	9/17/2017	100	6,969	7,186	2,912	454,536	7,297	0

RECEIVED
 Office of Oil and Gas
 DEC 4 2017
 W. Department of
 Environmental Protection

Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	8/15/2017
Job End Date:	9/17/2017
State:	West Virginia
County:	Ritchie
API Number:	47-085-10289-00-00
Operator Name:	EQT Production
Well Name and Number:	515966
Latitude:	39.21118800
Longitude:	-80.98599700
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	6,368
Total Base Water Volume (gal):	9,921,534
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	85.43776	None
HVG-1	FTS International	Gelling Agent					
				Listed Below			

RECEIVED
 Office of Oil and Gas
 WV Department of
 Environmental Protection
 DEC 4 2017

Other Chemical (s)	Listed Above	See Trade Name (s) List					
				Listed Below			
FRW-1450	FTS International	Friction Reducer					
				Listed Below			
Hydrochloric Acid (15%)	FTS International	Acidizing					
				Listed Below			
Sand (Proppant)	FTS International	Proppant					
				Listed Below			
CS-500-SI	FTS International	Scale Inhibitor					
				Listed Below			
CI-150	FTS International	Acid Corrosion Inhibitor					
				Listed Below			
MX-5-3886	Multi-Chem	Bacteria Treatment					
				Listed Below			
MX-8-2544	Multi-Chem	Bacteria Treatment					
				Listed Below			
ABP-1	FTS International	Breaker					

DEED
 Minnesota Department of
 Environmental Protection
 4 2011
 Prohibited Oil and Gas

				Listed Below			
Items above are Trade Names with the exception of Base Water . Items below are the individual ingredients.							
			Silica Substrate	14808-60-7	100.00000	14.14647	None
			Calcium Nitrate.4H2O	13477-34-4	100.00000	0.11272	None
			Calcium Nitrate.4H2O	13477-34-4	100.00000	0.11272	
			Hydrochloric Acid	7647-01-0	15.00000	0.02972	None
			Distillates (Petroleum), Hydrotreated Light	64742-47-8	30.00000	0.02046	
			Distillates (Petroleum), Hydrotreated Light	64742-47-8	30.00000	0.02046	None
			Sodium Chloride	7647-14-5	100.00000	0.01003	
			Sodium Chloride	7647-14-5	100.00000	0.01003	None
			Alcohols, C11-14- iso-,C13-rich, ethoxylated	78330-21-9	5.00000	0.00341	None
			Alcohols, C11-14- iso-,C13-rich, ethoxylated	78330-21-9	5.00000	0.00341	
			Ethylene Glycol	107-21-1	10.00000	0.00251	None
			Ethylene Glycol	107-21-1	10.00000	0.00251	
			Petroleum Distillate	64742-47-8	55.00000	0.00058	
			Petroleum Distillate	64742-47-8	55.00000	0.00058	None
			Guar Gum	9000-30-0	50.00000	0.00052	
			Guar Gum	9000-30-0	50.00000	0.00052	None
			Sodium Nitrate	7631-99-4	5.00000	0.00050	None
			Sodium Nitrate	7631-99-4	5.00000	0.00050	
			Ammonium Persulfate	7727-54-0	95.00000	0.00021	None
			Isopropanol	67-63-0	30.00000	0.00011	None
			Organic Amine Resin Salt	Proprietary	30.00000	0.00011	None
			Ethylene Glycol	107-21-1	30.00000	0.00011	None
			Aromatic Aldehyde	Proprietary	10.00000	0.00004	None
			Quaternary Ammonium Compound	Proprietary	10.00000	0.00004	None

RECEIVED
 Office of Oil and Gas
 DEC 4 2017
 Environmental Protection
 Department of

			Dimethylformamide	68-12-2	10.00000	0.00004	None
			Clay	14808-60-7	2.00000	0.00002	
			Clay	14808-60-7	2.00000	0.00002	None
			Surfactant	68439-51-0	2.00000	0.00002	
			Surfactant	68439-51-0	2.00000	0.00002	None

* Total Water Volume sources may include various types of water including fresh water, produced water, and recycled water

** Information is based on the maximum potential for concentration and thus the total may be over 100%

*** If you are calculating a percentage of total ingredients do not add the water volume below the green line to the water volume above the green line

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)

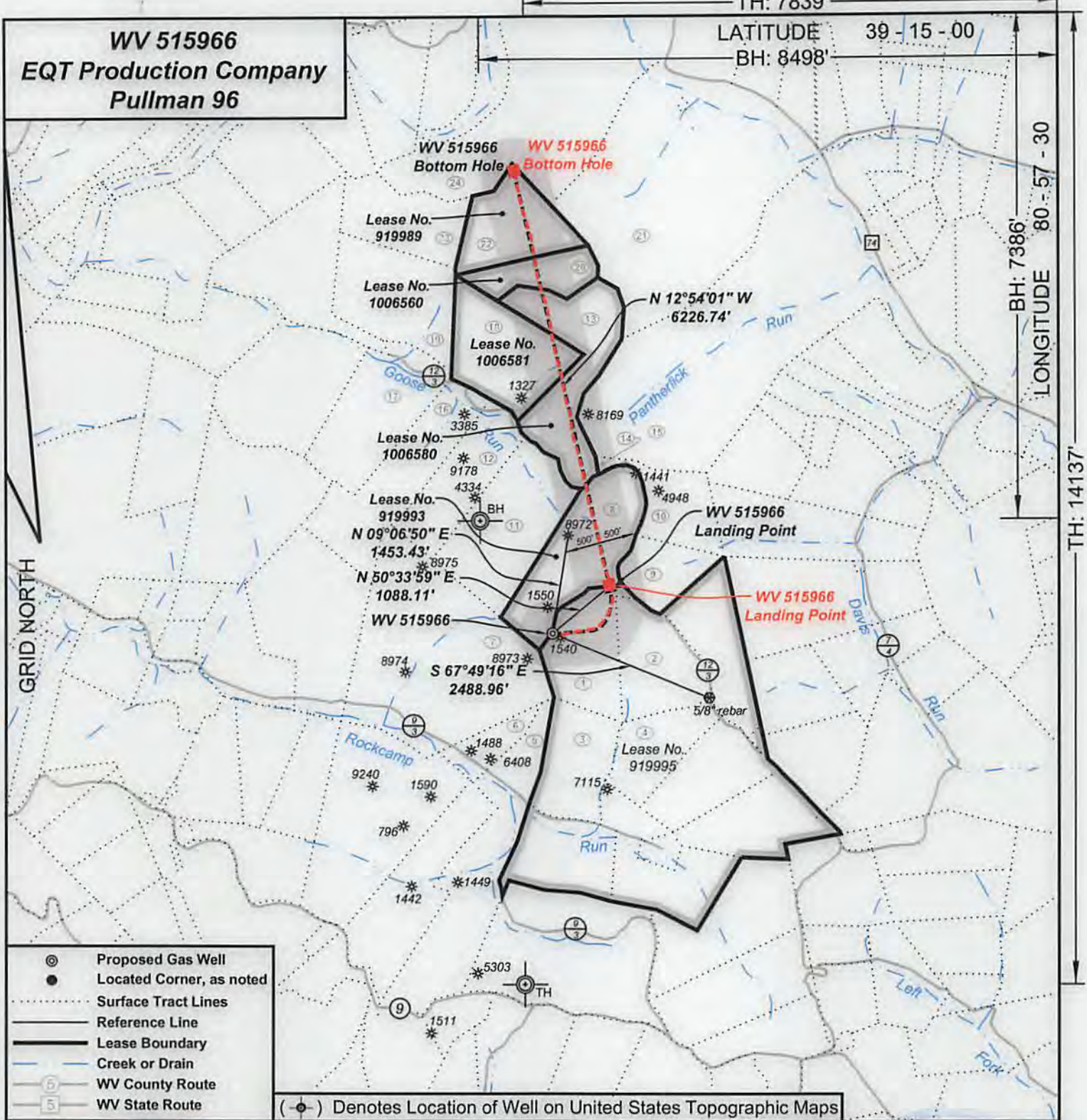
RECEIVED
Office of Oil and Gas
DEC 4 2017
WV Department of
Environmental Protection

WV 515966
EQT Production Company
Pullman 96

TH: 7839'
 LATITUDE 39 - 15 - 00
 BH: 8498'

BH: 7386'
 LONGITUDE 80 - 57 - 30

TH: 14137'



- ⊙ Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- 6 WV County Route
- 5 WV State Route

(⊙) Denotes Location of Well on United States Topographic Maps



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 Department of Environmental Protection.

Deane A. Hall
 P.S. 2089SU



FILE NO: 243-14
 DRAWING NO: 243-14 Pullman 96 H9.dwg
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1:2500
 PROVEN SOURCE OF ELEVATION: NGS CORs Station

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

DATE: September 7 20 17
 OPERATOR'S WELL NO. 515966
 API WELL NO
 47 - 85 - 10289
 STATE COUNTY PERMIT

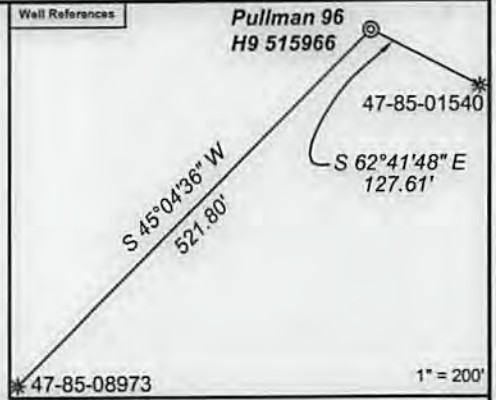
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
 LOCATION: ELEVATION: As-Built 1182.6' WATERSHED Goose Run of Rockcamp Run QUADRANGLE: Pullman
 DISTRICT: Union COUNTY: Ritchie
 SURFACE OWNER: James H. & Wilma J. Wilson ACREAGE: 40.089
 ROYALTY OWNER: Laurie Ann Haddox, et al LEASE NO: 919995 ACREAGE: 360
 PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 6,376

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Rex C. Ray
 ADDRESS: PO Box 280 / 115 Professional Place ADDRESS: PO Box 280 / 115 Professional Place
 Bridgeport, WV 26330 Bridgeport, WV 26330

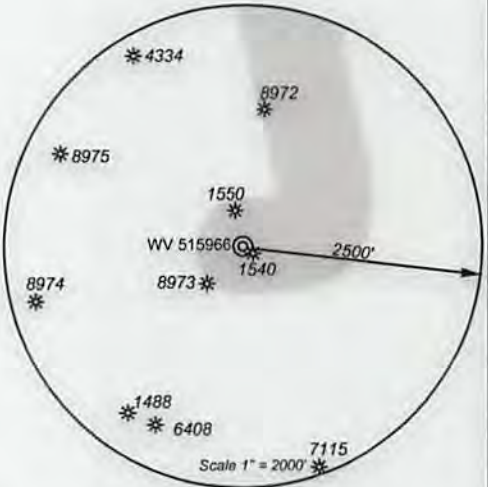
02/16/2018

WV 515966
EQT Production Company
Pullman 96

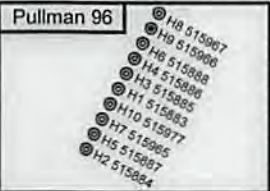
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	7	8.4	Ritchie	Union	Wilma J. Wilson	40.09
2	7	8.3	Ritchie	Union	James D. Wilson	39.87
3	7	8.5	Ritchie	Union	Robert & Oleta Jane Wilson	37.23
4	7	8.2	Ritchie	Union	Ian David Wilson	30.10
5	7	11.0	Ritchie	Union	Arnold K. Richards (Life)	43.84
6	7	6.0	Ritchie	Union	Eva L. Riffle	14.75
7	7	5.0	Ritchie	Union	Jean W. Moore	134.70
8	7	4.0	Ritchie	Union	James D. Wilson, et al.	63.00
9	39	10.0	Ritchie	Clay	Charlie Ray & Lori Ann Amos	24.64
10	39	10.1	Ritchie	Clay	Pierce Okla & Suzanne Denise Amos	25.36
11	7	3.0	Ritchie	Union	Earl Wilson Jr., et al.	61.00
12	7	2.1	Ritchie	Union	Michael W. Elder	46.20
13	35	39.0	Ritchie	Clay	Chester D. Riddle, et al.	49.50
14	7	17.0	Ritchie	Union	Max D. & Laura B. Dodd	1.00
15	35	40.0	Ritchie	Clay	Max D. & Laura B. Dodd	211.60
16	7	2.0	Ritchie	Union	Michael W. Elder	66.00
17	7	1.0	Ritchie	Union	Randall K. Woods	55.20
18	35	39.1	Ritchie	Clay	Chester D. Riddle, et al.	47.50
19	35	38.0	Ritchie	Clay	James L. Crouse, et al.	50.00
20	35	39.2	Ritchie	Clay	Howard E. Todd	22.50
21	35	31.0	Ritchie	Clay	Max D. & Laura B. Dodd	93.33
22	35	30.0	Ritchie	Clay	Hothem Family Properties LP	38.75
23	35	29.0	Ritchie	Clay	James L. Crouse, et al.	38.50
24	35	14.0	Ritchie	Clay	Earl Wilson Jr., et al.	293.36



As-Drilled Well Information:
WV 515966 coordinates are
NAD 27 N: 262,511.67 E: 1,578,950.12
NAD 83 UTM N: 4,340,221.89 E: 501,223.44
WV 515966 Landing Point coordinates are
NAD 27 N: 263,227.18 E: 1,579,784.95
NAD 83 UTM N: 4,340,444.12 E: 501,474.13
WV 515966 Bottom Hole coordinates are
NAD 27 N: 269,272.65 E: 1,578,405.70
NAD 83 UTM N: 4,342,278.82 E: 501,023.19
West Virginia Coordinate system of 1927 (North Zone).
Geographic coordinates are NAD27.
UTM coordinates are NAD83, Zone 17, Meters.
Plat orientation, corner and well ties are based upon
the grid north meridian.
Well location references are based upon the grid north
meridian.



- ⊙ Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- ⑥ WV County Route
- ⑤ WV State Route



Lease No.	Name	Acres
919993	Ian David Wilson, et al.	63
1006580	Eagle Ridge L.P., et al.	49.5
1006581	Eagle Ridge L.P., et al.	47.5
1006560	E. Howard Todd	22.5
919989	Sandra Kay Reed, et al.	38



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 Department of Environmental Protection.

Draper J. Hill
P.S. 2089SU



FILE NO: 243-14
DRAWING NO: 243-14 Pullman 96 H9.dwg
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station

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

DATE: September 7 20 17
OPERATOR'S WELL NO. 515966
API WELL NO
47 - 85 - 10289
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION: ELEVATION: As-Built 1182.6' WATERSHED Goose Run of Rockcamp Run QUADRANGLE: Pullman
DISTRICT: Union COUNTY: Ritchie
SURFACE OWNER: James H. & Wilma J. Wilson ACREAGE: 40.089
ROYALTY OWNER: Laurie Ann Haddock, et al LEASE NO: 919995 ACREAGE: 360
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 6,376

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Rex C. Ray
ADDRESS: PO Box 280 / 115 Professional Place ADDRESS: PO Box 280 / 115 Professional Place
Bridgeport, WV 26330 Bridgeport, WV 26330

02/16/2018