

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

API 47-103-03213 County WETZEL District GRANT  
Quad BIG RUN Pad Name BIG464 Field/Pool Name N/A  
Farm name COASTAL FOREST RESOURCES COMPANY D/B/A COSTAL TIMBERLANDS COMPANY Well Number BIG464H26 (519446)  
Operator (as registered with the OOG) EQT Production Company  
Address 625 LIBERTY AVENUE, 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 4,379,873.12 Easting 541,527.47  
Landing Point of Curve Northing 4,379,801.06 Easting 541,440.74  
Bottom Hole Northing 4,378,534.85 Easting 542,001.98

Elevation (ft) 1247' 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) Synthetic Based Mud 13.2 ppg, aliphatic based non-aqueous drilling fluid, barium sulfate, calcium chloride, organophilic clay, quaternary ammonium clay, gilsonite, blended emulsifier, wetting agent, blended graphite, hydrated lime, calcium carbonate, ground walnut shells, fibrous cellulose.

Date permit issued 12/12/2017 Date drilling commenced 12/16/2017 Date drilling ceased 07/11/2018  
Date completion activities began 09/02/2018 Date completion activities ceased 10/04/2018  
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 115, 190, 438 Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 1730, 1854 Void(s) encountered (Y/N) depths N  
Coal depth(s) ft 562, 801, 903, 918 Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

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Reviewed by:  
DmH  
2-21-19



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API 47-103 - 03213

Farm name COASTAL FOREST RESOURCES COMPANY DBA COASTAL TIMBERLANDS CO Well number BIG464H26 (519446)

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 85.6#	N/A	Y
Surface	17-1/2"	13-3/8"	1021'	NEW	J-55 54.5#	251'	Y
Coal							
Intermediate 1	12-3/8"	9-5/8"	2852'	NEW	A-500 40#	1753'	Y
Intermediate 2							
Intermediate 3							
Production	8-3/4" & 8-1/2"	5 1/2"	12444'	NEW	P-110 20#	N/A	N
Tubing							
Packer type and depth set							

Comment Details Production Cement job has calculated TOC of 3985' MD, which is greater than 500' TVD above the producing formation. No issues during cement job.

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	100	15.6	1.18	118	0	8+
Surface	CLASS A	980	15.6	1.18	1156	0	8
Coal							
Intermediate 1	CLASS A	1078	15.6	1.20	1293	0	8
Intermediate 2							
Intermediate 3							
Production	Class A	1668	15.6	1.19	1985	3985'	8+
Tubing							

Drillers TD (ft) 12453' 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) 5775' 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: ON SHOE TRACK AND EVERY 300' FEET TO SURFACE  
 INTERMEDIATE: ON SHOE TRACK AND EVERY 500' FEET TO SURFACE  
 PRODUCTION: ON SHOE TRACK AND EVERY JOINT TO 5305'

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS RECEIVED Office of Oil and Gas

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS DEC 28 2018

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED WV Department of Environmental Protection

API 47- 103 - 03213 Farm name COASTAL FOREST RESOURCES COMPANY DBA COASTAL TIMBERLANDS Well number BIG464H26 (519446)

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
					<b>Please See Attached</b>

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)
								<b>Please See Attached</b>

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Please insert additional pages as applicable.

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Farm name COASTAL FOREST RESOURCES COMPANY DBA COASTAL TIMBERLANDS COMP Well number BIG464H26 (519446)

PRODUCING FORMATION(S)	DEPTHS	
MARCELLUS	7,381' TVD	7,750' MD

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow      OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1,400 psi Bottom Hole N/A psi DURATION OF TEST 182 hrs

OPEN FLOW Gas 13,041 mcfpd Oil N/A bpd NGL 0.00 bpd Water 2,609.37 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 <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		

Please insert additional pages as applicable.

Drilling Contractor Precision Drilling  
Address 2640 Reach Road City Williamsport State PA Zip 17701

Logging Company Baker Hughes  
Address 400 Technology Drive - Suite 100 City Cannonsburg State PA Zip 15317

Cementing Company BJ Services, LLC  
Address 4000 Town Center Blvd, Suite 210 City Cannonsburg State PA Zip 15317

Stimulating Company ProFrac  
Address 777 Main Street, Suite 3900 City Ft. Worth State TX Zip 76102

Please insert additional pages as applicable.

Completed by Adam Hughey Telephone (412) 553-5884  
Signature [Signature] Title Director - Completions Date 12/20/2018 RE: DEC  
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API 47- 103 . 03213 Farm name COASTAL FOREST RESOURCES COMPANY D/B/A COASTAL TIMBERLANDS Well number BIG464H26 (519446)

Drilling Contractor Fountain Quail  
Address P.O. Box 430 City Reno State OH Zip 45773

Logging Company Gyrodatta Inc.  
Address 73 Noblestown Road City Carnegie State PA Zip 15106

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

Cementing Company Universal  
Address 13549 S. Mosiertown Rd City Meadville State PA Zip 16335

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**519446 47-103-03213-00-00 Perforations**

Stage Number	Perforation Date	Top Perf Depth (ftKB)	Bottom Perf Depth (ftKB)	Number of Shots	Formation
1	8/6/2018	12,417	12,419	0	MARCELLUS
2	9/2/2018	12,154	12,316	40	MARCELLUS
3	9/14/2018	11,954	12,116	40	MARCELLUS
4	9/14/2018	11,754	11,916	40	MARCELLUS
5	9/16/2018	11,554	11,716	40	MARCELLUS
6	9/17/2018	11,354	11,516	40	MARCELLUS
7	9/18/2018	11,154	11,316	40	MARCELLUS
8	9/19/2018	10,954	11,116	40	MARCELLUS
9	9/19/2018	10,754	10,916	40	MARCELLUS
10	9/20/2018	10,554	10,716	40	MARCELLUS
11	9/21/2018	10,354	10,516	40	MARCELLUS
12	9/22/2018	10,154	10,316	40	MARCELLUS
13	9/23/2018	9,954	10,116	40	MARCELLUS
14	9/24/2018	9,754	9,916	40	MARCELLUS
15	9/25/2018	9,554	9,716	40	MARCELLUS
16	9/26/2018	9,354	9,516	40	MARCELLUS
17	9/27/2018	9,154	9,316	40	MARCELLUS
18	9/28/2018	8,954	9,116	40	MARCELLUS
19	9/28/2018	8,754	8,916	40	MARCELLUS
20	9/29/2018	8,554	8,716	40	MARCELLUS
21	9/30/2018	8,354	8,517	40	MARCELLUS
22	10/1/2018	8,154	8,316	40	MARCELLUS
23	10/2/2018	7,954	8,116	40	MARCELLUS
24	10/3/2018	7,754	7,916	40	MARCELLUS

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519446 47-103-03213-00-00 - 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)
1	9/2/2018	83	8,735.00	9,022.00	5,603.00	180,940.00	4,000.20	0
2	9/14/2018	82	8,707.00	9,226.00	5,865.00	450,880.00	8,587.00	0
3	9/14/2018	80	9,062.00	9,365.00	5,269.00	450,440.00	7,563.60	0
4	9/16/2018	66	9,198.00	9,465.00	6,177.00	453,380.00	14,574.80	0
5	9/17/2018	83	9,081.00	9,327.00	5,753.00	450,880.00	9,476.00	0
6	9/18/2018	89	8,904.00	9,364.00	5,511.00	450,240.00	9,678.00	0
7	9/19/2018	69	8,917.00	9,411.00	5,983.00	449,920.00	11,394.00	0
8	9/19/2018	91	8,944.00	9,250.00	6,056.00	449,620.00	8,404.00	0
9	9/20/2018	83	8,508.00	9,295.00	6,046.00	450,540.00	7,838.00	0
10	9/21/2018	66	8,790.00	9,461.00	6,232.00	450,660.00	12,013.90	0
11	9/22/2018	87	8,541.00	9,425.00	6,354.00	450,910.00	7,895.00	0
12	9/23/2018	87	8,617.00	9,334.00	6,042.00	450,800.00	7,853.50	0
13	9/24/2018	93	8,705.00	9,234.00	5,889.00	450,440.00	7,829.00	0
14	9/25/2018	75	8,650.00	9,427.00	4,903.00	450,780.00	9,134.00	0
15	9/26/2018	99	8,890.00	9,331.00	6,241.00	450,010.00	7,269.50	0
16	9/27/2018	92	8,893.00	9,510.00	5,928.00	450,320.00	8,275.00	0
17	9/28/2018	99	8,997.00	9,392.00	6,351.00	450,640.00	7,433.00	0
18	9/28/2018	98	8,887.00	9,237.00	6,232.00	450,120.00	7,813.00	0
19	9/29/2018	101	8,912.00	9,156.00	6,068.00	450,620.00	7,161.00	0
20	9/30/2018	98	8,333.00	8,741.00	5,669.00	450,000.00	7,432.00	0
21	10/1/2018	95	8,216.00	9,111.00	5,347.00	450,080.00	9,137.00	0
22	10/2/2018	93	8,861.00	9,428.00	5,801.00	450,160.00	7,532.50	0
23	10/3/2018	76	7,591.00	9,590.00	6,137.00	450,880.00	10,542.00	0
24	10/3/2018	99	7,976.00	8,569.00	4,333.00	450,040.00	7,238.00	0

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# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	9/2/2018
Job End Date:	10/4/2018
State:	West Virginia
County:	Wetzel
API Number:	47-103-03213-00-00
Operator Name:	EQT Production
Well Name and Number:	519446
Latitude:	39.56746800
Longitude:	-80.51672700
Datum:	NAD83
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,381
Total Base Water Volume (gal):	8,655,108
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	Prof rac	Carrier/Base Fluid					
			Water	7732-18-5	100.00000	87.01497	None
Other Chemical (s)	Listed Above	See Trade Name (s) List					
			Water	7732-18-5	45.00000		

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Product Name	Manufacturer	Function	Listing Status	Other	Other	Other	Other	Other
Silver SI - 800	Silverback Chemical, LLC	Scale Inhibitor	Listed Below					
ProFe 105	ProFrac	Iron Control						
ProSlick 700	ProFrac	Friction Reducer	Listed Below					
ProChek 100	ProFrac	Scale Inhibitor	Listed Below					
Silver FR 543	Silverback Chemical, LLC	Friction Reducer	Listed Below					
Hydrochloric Acid (15%)	ProFrac	Acidizing	Listed Below					
ProVis 4.0	ProFrac	Gelling Agent	Listed Below					
Silver FR-931	Silverback Chemical, LLC	Friction Reducer	Listed Below					
Proppant	ProFrac	Proppant	Listed Below					

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Glut-Quat 268	ProFrac	Biocide		Listed Below				
ProHib 100	ProFrac	Acid Corrosion Inhibitor		Listed Below				
Bio Matar 123	Silverback Chemical, LLC	Biocide		Listed Below				
ProBreak 100	ProFrac	Gelling Agent		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	12.70199	None	
		Hydrochloric Acid		7647-01-0	15.00000	0.02909	None	
		Proprietary Polymers		Proprietary	60.00000	0.02568		
		Petroleum Distillates, Hydrotreated Light Naphthenic		64742-53-6	60.00000	0.02568	None	
		Petroleum Distillates, Hydrotreated Light Naphthenic		64742-53-6	60.00000	0.02568		
		Proprietary Polymers		Proprietary	60.00000	0.02568	None	
		Non-Hazardous Substances		Proprietary	90.00000	0.01428		
		Non-Hazardous Substances		Proprietary	90.00000	0.01428	None	
		Proprietary Mixture		Proprietary	100.00000	0.00574	None	
		Proprietary Mixture		Proprietary	100.00000	0.00574	None	

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					Polycarboxylic Acid Salt Mixture	Proprietary	40.00000	0.00492	None
					Other Components Below Reportable Levels	Proprietary	60.00000	0.00441	None
					Other Components Below Reportable Levels	Proprietary	60.00000	0.00441	
					Glutaraldehyde	111-30-8	20.00000	0.00317	
					Glutaraldehyde	111-30-8	20.00000	0.00317	None
					Glutaraldehyde	111-30-8	30.00000	0.00221	
					Glutaraldehyde	111-30-8	30.00000	0.00221	None
					Distillates (Petroleum), Hydrotreated Light	64742-47-8	30.00000	0.00128	
					Distillates (Petroleum), Hydrotreated Light	64742-47-8	30.00000	0.00128	None
					Didecyldimethylammonium Chloride	7173-51-5	10.00000	0.00074	None
					Didecyldimethylammonium Chloride	7173-51-5	10.00000	0.00074	
					Quaternary Ammonium Compounds, Benzyl-C12 -C16-Alkyldimethyl, Chlorides	68424-85-1	10.00000	0.00074	
					Quaternary Ammonium Compounds, Benzyl-C12 -C16-Alkyldimethyl, Chlorides	68424-85-1	10.00000	0.00074	None
					Didecyl Dimethyl Ammonium Chloride	7173-51-5	3.00000	0.00048	
					Alkyl Dimethyl Benzyl Ammonium Chloride	68391-01-5	3.00000	0.00048	None
					Didecyl Dimethyl Ammonium Chloride	7173-51-5	3.00000	0.00048	None
					Alkyl Dimethyl Benzyl Ammonium Chloride	68391-01-5	3.00000	0.00048	
					Ethanol	64-17-5	5.00000	0.00037	None
					Ethanol	64-17-5	5.00000	0.00037	
					Methanol	67-56-1	90.00000	0.00032	None
					Hydrotreated Light Distillate (Petroleum)	64742-47-8	65.00000	0.00025	None

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				Alcohols, C11-14-iso-, C13-Rich, Ethoxylated	78330-21-9	5.00000	0.00021	None
				Alcohols, C11-14-iso-, C13-Rich, Ethoxylated	78330-21-9	5.00000	0.00021	
				Gum Guar	9000-30-0	50.00000	0.00019	None
				Citric Acid	77-92-9	100.00000	0.00005	
				Citric Acid	77-92-9	100.00000	0.00005	None
				Imidazoline	61790-69-0	5.00000	0.00002	None
				Isopropanol	67-63-0	5.00000	0.00002	None
				Propargyl Alcohol	107-19-7	5.00000	0.00002	None
				Alcohols, C7-9-ISO, C8 Rich	68526-83-0	5.00000	0.00002	None
				Xylene	1330-20-7	5.00000	0.00002	None
				Ammonium Persulfate	7727-54-0	100.00000	0.00001	None
				Ethylbenzene	100-41-4	1.00000	0.00000	None
				Alcohols, C12-16, Ethoxylated	68551-12-2	2.00000		
				Petroleum Distillate	64742-47-8	20.00000		
				Oleic Acid Diethanolamide	93-83-4	2.00000		
				Ammonium Chloride ((NH4)Cl)	12125-02-9	1.00000		
				Copolymer Of 2-Propenamide	Proprietary	30.00000		

\* 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)

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API# 47-103-03213		Final Formations		Well# BIG464H26 (519446)	
Formation Name	Drill Top MD (ftKB)	Drill Top (TVD) (ftKB)	Drill Btm MD (ftKB)	Drill Btm (TVD) (ftKB)	
SAND/SHALE	1	1	562	562	
WAYNESBURG COAL	562	562	565	565	
SAND/SHALE	565	565	801	801	
COAL	801	801	803	803	
SAND/SHALE	803	803	903	903	
SEWICKLEY COAL	903	903	905	905	
SAND/SHALE	905	905	918	918	
PITTSBURGH COAL	918	918	925	925	
SAND/SHALE	925	925	1818	1818	
MAXTON	1818	1818	1997	1997	
SAND/SHALE	1997	1997	2260	2260	
BIG LIME	2260	2260	2336	2336	
SAND/SHALE	2336	2336	2348	2348	
BIG INJUN	2348	2348	2417	2417	
SAND/SHALE	2417	2417	2546	2546	
WEIR	2546	2546	2696	2696	
SAND/SHALE	2696	2696	2761	2761	
GANTZ	2761	2761	2797	2797	
SAND/SHALE	2797	2797	2902	2902	
FIFTY FOOT	2902	2902	2958	2958	
SAND/SHALE	2958	2958	2997	2997	
THIRTY FOOT	2997	2997	3024	3024	
SAND/SHALE	3024	3024	3053	3053	
GORDON	3053	3053	3098	3098	
SAND/SHALE	3098	3098	3123	3123	
FORTH SAND	3123	3123	3136	3136	
SAND/SHALE	3136	3136	3195	3195	
FIFTH SAND	3195	3195	3214	3214	
SAND/SHALE	3214	3214	3248	3248	
BAYARD	3248	3248	3266	3266	
SAND/SHALE	3266	3266	3671	3671	
WARREN	3671	3671	3695	3695	
SAND/SHALE	3695	3695	3791	3791	
SPEECHLEY	3791	3791	3839	3839	
SAND/SHALE	3839	3839	4149	4149	
BALLTOWN A	4149	4149	4164	4164	
SAND/SHALE	4164	4164	4634	4634	
RILEY	4634	4634	4676	4676	
SAND/SHALE	4676	4676	5263	5263	
BENSON	5263	5263	5312	5312	
SAND/SHALE	5312	5312	5677	5677	
ALEXANDER	5677	5677	5744	5744	
ELKS	5744	5744	7086	6929	
SONYEA	7086	6929	7249	7078	
MIDDLESEX	7249	7078	7316	7135	
GENESEE	7316	7135	7439	7228	
GENESEO	7439	7228	7484	7257	
TULLY	7484	7257	7525	7282	
HAMILTON	7525	7282	7750	7381	
MARCELLUS	7750	7381	12453	7559	

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WELL OPERATOR: EQT Production Company  
 ADDRESS: 115 Professional Place PO Box 280 Bridgeport, WV 26330  
 DESIGNATED AGENT: Jason Ranson  
 ADDRESS: 115 Professional Place PO Box 280 Bridgeport, WV 26330

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION: ELEVATION: As Built: 1246.8' WATERSHED: Waley Fork QUADRANGLE: Big Run  
 DISTRICT: Grant COUNTY: Wetzel SURFACE OWNER: Coastal Forest Resources Company d/b/a Coastal Timberlands Company  
 ROYALTY OWNER: Ridgeloop Royalties LLC, et al LEASE NO: 707114 ACRES: 542.5  
 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: 7,419'

FILE NO: 125-16 DRAWING NO: 125-16 BIG464H26 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

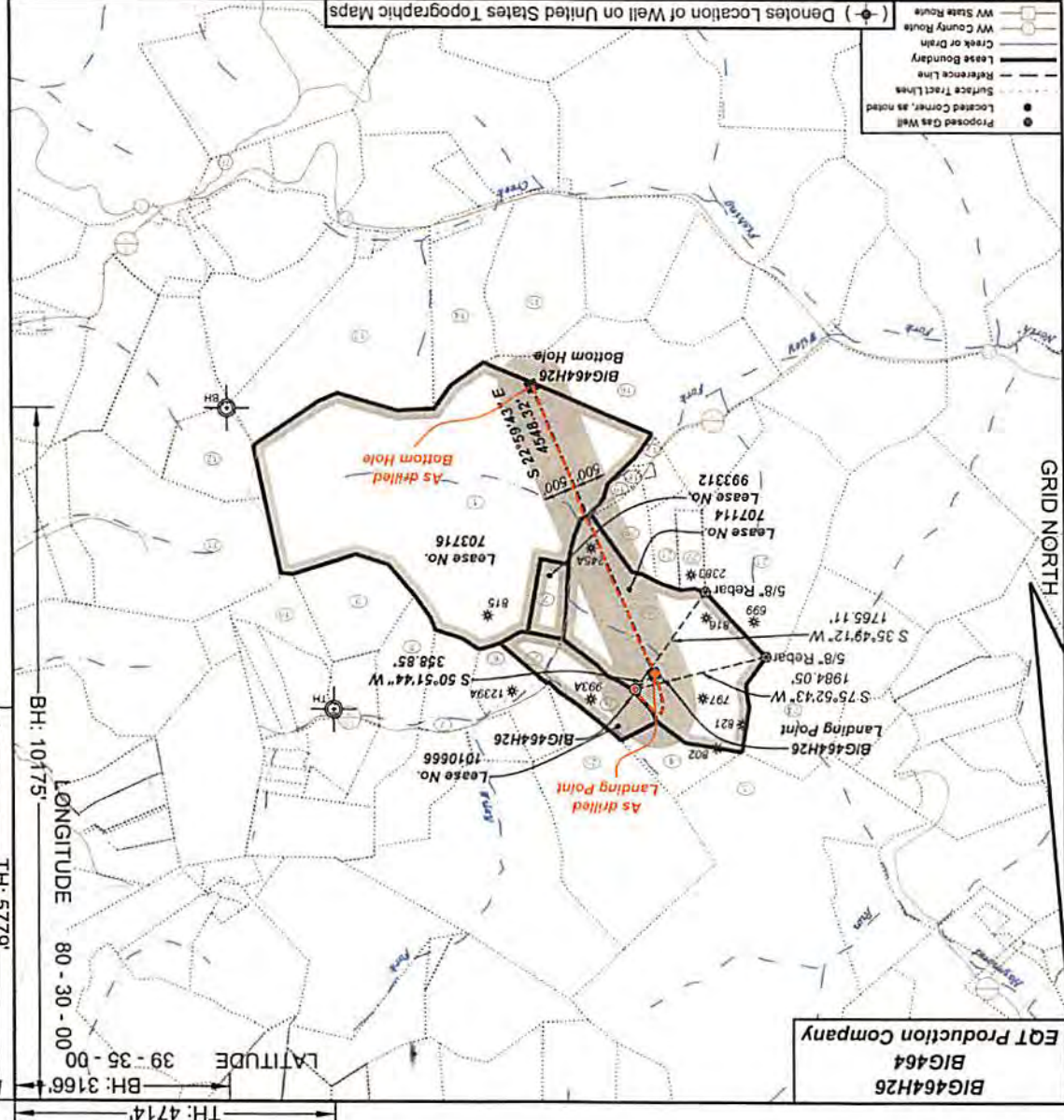
DATE: July 24 2018 OPERATORS WELL NO.: BIG464H26 API WELL NO: 103 03213 STATE COUNTY PERMIT

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.

P.S. 2092

Seal of R. Stansel, Licensed Professional Surveyor, State of West Virginia, No. 2092

Seal of Allegany Surveying, Inc.



BIG464H26  
 BIG464  
 EQT Production Company

WELL OPERATOR: EQT Production Company  
 ADDRESS: 115 Professional Place PO Box 280  
 Bridgport, WV 26330

DESIGNATED AGENT: Jason Ranson  
 ADDRESS: 115 Professional Place PO Box 280  
 Bridgport, WV 26330

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: As Built 1246.8' WATERSHED: Waley Fork  
 QUADRANGLE: Big Run

DISTRICT: Grant COUNTY: Wetzel

SURFACE OWNER: Coastal Forest Resources Company d/b/a Coastal Timberlands Company  
 ACRES: 542.5

ROYALTY OWNER: Ridgeloop Royalties LLC, et al  
 LEASE NO: 707114 ACRES: 78

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: 7,419'

FILE NO: 125-16  
 DRAWING NO: 125-16 BIG464H26  
 SCALE: 1" = 2000'  
 MINIMUM DEGREE OF ACCURACY: 1:2500  
 PROVEN SOURCE OF ELEVATION: NGS CORRS Station

STATE: 47 COUNTY: 103 PERMIT: 03213

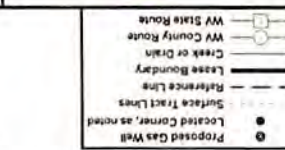
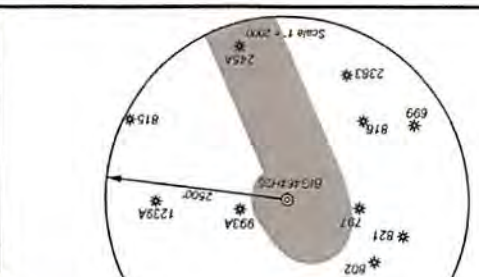
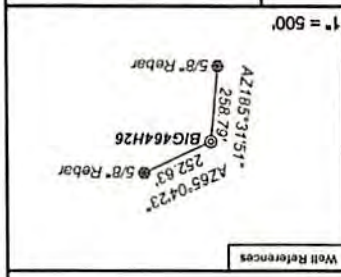
DATE: July 24 OPERATORS WELL NO: BIG464H26

API WELL NO

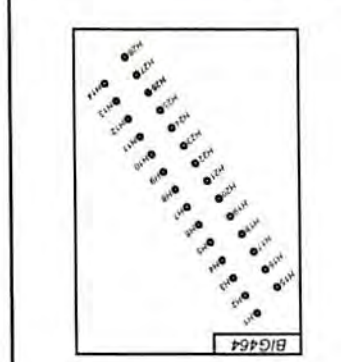


I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

P.S. 2092



Lease No.	Acres	Owner
703716	400	Ridgeloop Royalties LLC, et al
1010666	32	Ridgeloop Royalties LLC, et al



As Printed Well Information:  
 BIG464H26 coordinates are: NAD 83 UTM N 4379.573.12 E 541,527.47  
 NAD 27 N 390,415.46 E 1,713,377.16

BIG464H26 Landing Point coordinates are:  
 NAD 83 UTM N 4379.573.12 E 541,527.47  
 NAD 27 N 390,415.46 E 1,713,377.16

BIG464H26 Boomers Hole coordinates are:  
 NAD 83 UTM N 4379.573.12 E 541,527.47  
 NAD 27 N 390,415.46 E 1,713,377.16

BIG464H26 coordinates are:  
 NAD 83 UTM N 4379.573.12 E 541,527.47  
 NAD 27 N 390,415.46 E 1,713,377.16

Based upon Differential GPS Measurements  
 Plat orientation, corner and well ties are based upon  
 the grid north meridian.  
 Well location references are based upon the grid north  
 meridian.  
 UTM coordinates are NAD83, Zone 17, Meters.

Tract ID	Tax Map No	Parcel No	County	District	Surface Tract Owner	Acres
1	20	1	Wetzel	Grant	Coastal Forest Resources Co.	542.50
2	15	27	Wetzel	Grant	William J. Barr	10.00
3	14	6	Wetzel	Grant	Coastal Lumber Co.	332.90
4	14	27	Wetzel	Grant	The E. Lorna Howard Trust, LLC et al	22.00
5	14	34	Wetzel	Grant	The E. Lorna Howard Trust, LLC et al	25.25
6	15	16	Wetzel	Grant	Donald J. Dlusky	25.00
7	15	18	Wetzel	Grant	Donald J. Dlusky	39.50
8	15	29	Wetzel	Grant	Terry W. & Carolyn P. Phillips	40.00
9	15	34	Wetzel	Grant	John C. & Donald J. Dlusky	42.00
10	15	35	Wetzel	Grant	John C. & Donald J. Dlusky	17.50
11	11	11	Marion	Mannington	Robert & Maxine Tankersy	85.00
12	43	43	Marion	Mannington	David A. & Diane E. Floyd	30.00
13	20	3	Wetzel	Grant	Linda Corwin, et al	99.82
14	20	2	Wetzel	Grant	Scott A. Shannon et al	41.40
15	20	21	Wetzel	Grant	Larry & Mary Shimp	63.00
16	19	19	Wetzel	Grant	Richard M. & Mary G. Underwood	99.82
17	19	14	Wetzel	Grant	Mabel F. Barr	1.00
18	19	12	Wetzel	Grant	Mabel F. Barr	1.10
19	19	13	Wetzel	Grant	Mabel F. Barr	2.00
20	14	45	Wetzel	Grant	Coastal Forest Resources Co.	11.05
21	14	44	Wetzel	Grant	Mabel F. Barr	11.00
22	14	43	Wetzel	Grant	Mabel F. Barr	11.01
23	14	47	Wetzel	Grant	Donald J. Dlusky	111.00
24	14	33	Wetzel	Grant	Alice & Hilda Conway	108.00
25	14	20	Wetzel	Grant	The E. Lorna Howard Trust, LLC, et al	126.50
26	none	none	Wetzel	Grant	Unknown	Unknown

EQT Production Company  
 BIG464  
 BIG464H26

RECEIVED  
 Office of Oil and Gas  
 DEC 28 2018  
 WV Department of  
 Environmental Protection

Well Operator's Report of Well Work



Well Number: BIG464H26 (519446)

API: 47 - 103 - 03213

Submission:  Initial  Amended

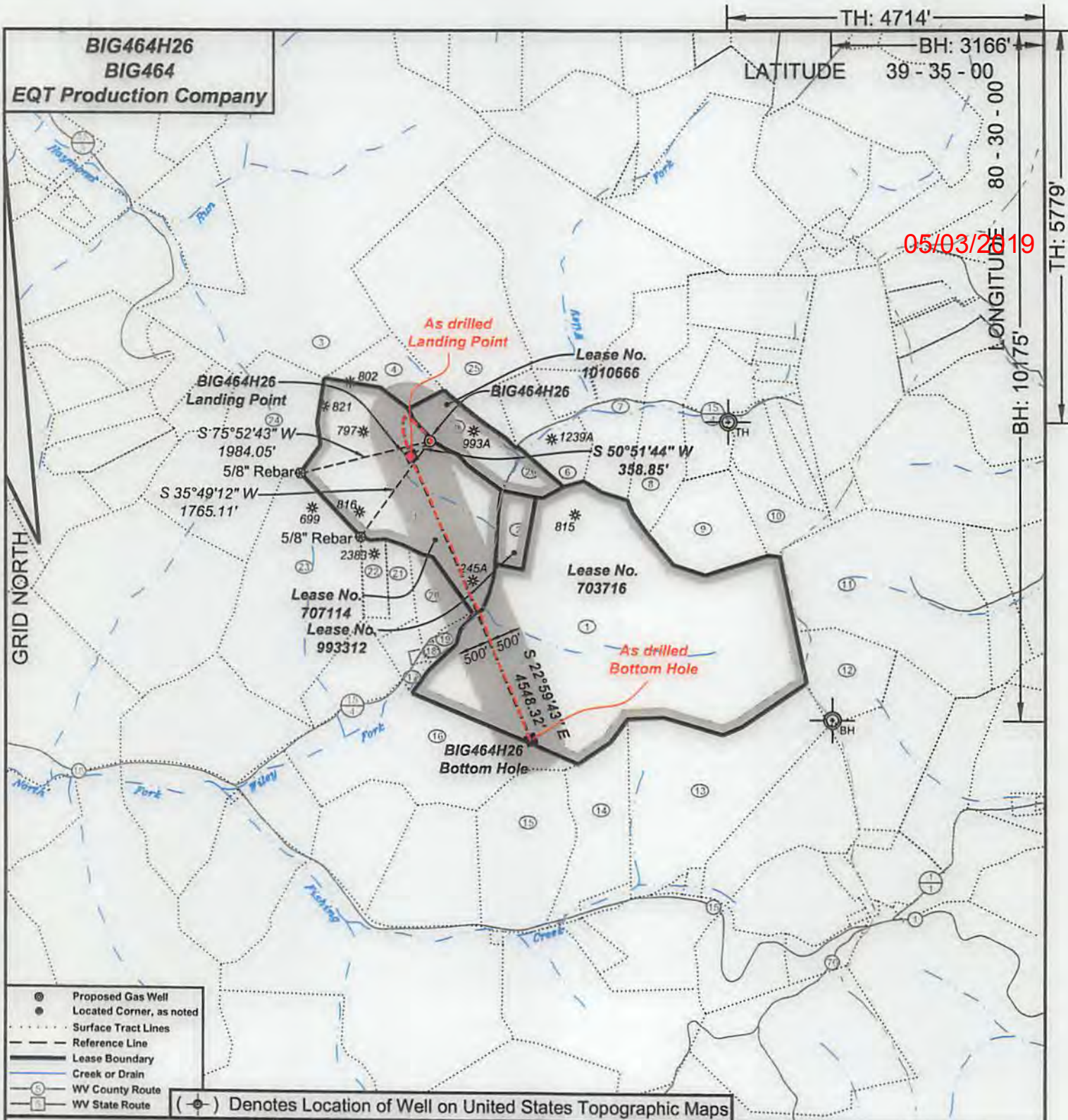
Notes:

RECEIVED  
Office of Oil and Gas

DEC 28 2018

WV Department of  
Environmental Protection





05/03/2019

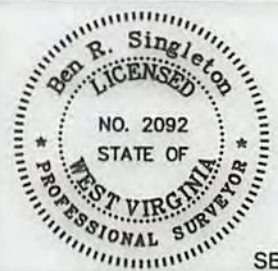
- ⊙ Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- - - Reference Line
- Lease Boundary
- Creek or Drain
- ⊙ WV County Route
- ⊙ WV State Route

(⊙) 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.*

*Ben R. Singleton*  
P.S. 2092



SEAL

FILE NO: 125-16  
DRAWING NO: 125-16 BIG464H26  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station



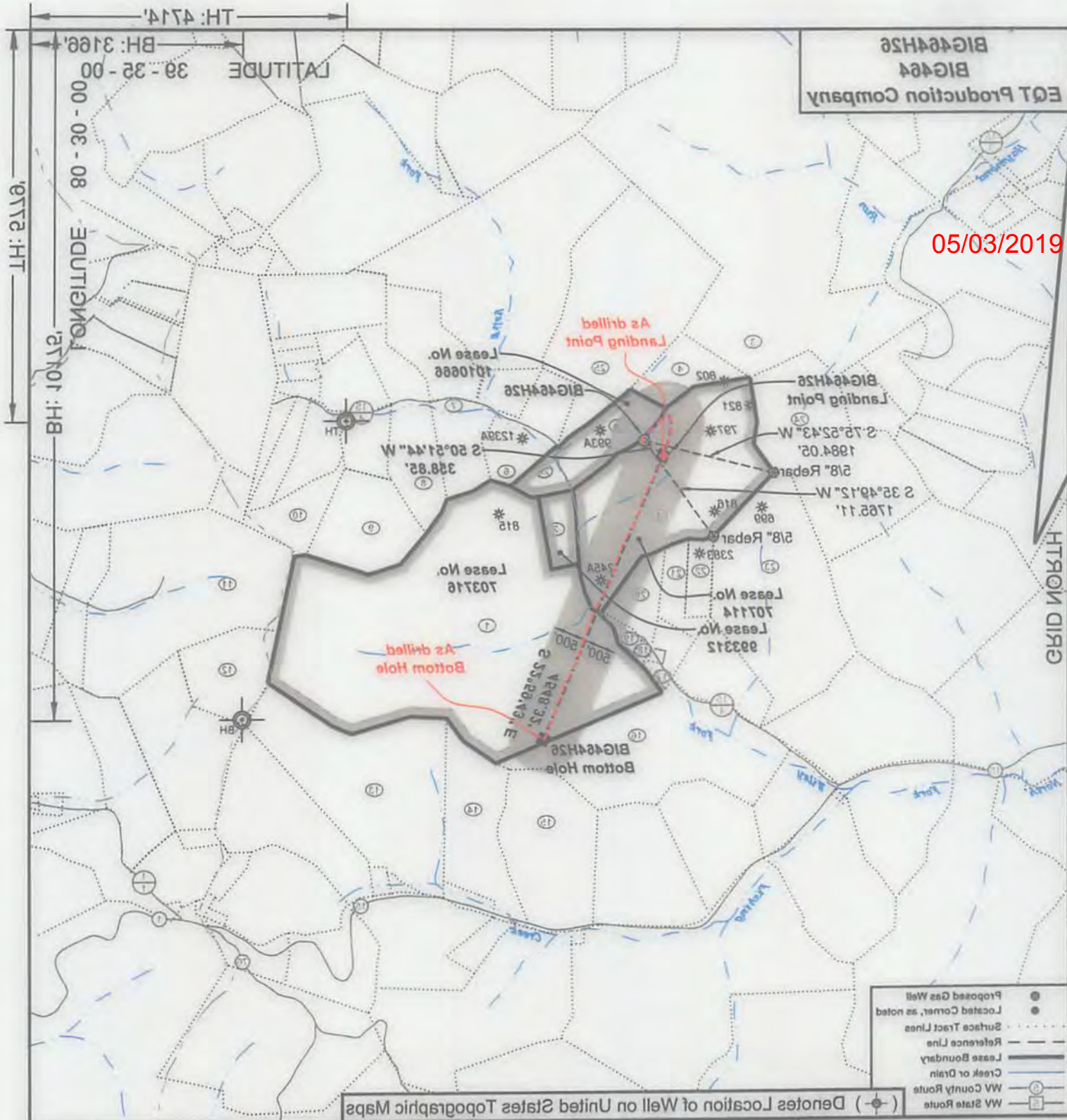
DATE: July 24 20 18  
OPERATOR'S WELL NO.: BIG464H26  
API WELL NO  
47 - 103 - 03213  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION: ELEVATION: As Built: 1246.8' WATERSHED Wiley Fork QUADRANGLE: Big Run  
DISTRICT: Grant COUNTY: Wetzel  
SURFACE OWNER: Coastal Forest Resources Company d/b/a Coastal Timberlands Company ACREAGE: 542.5  
ROYALTY OWNER: Ridgetop Royalties LLC, et al LEASE NO: 707114 ACREAGE: 78  
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: 7.419'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson  
ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280  
Bridgeport, WV 26330 Bridgeport, WV 26330

BIG464  
BIG464  
EQT Production Company

05/03/2019



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

( ) Denotes Location of Well on United States Topographic Maps



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*[Signature]*  
P.S. 2092



STATE COUNTY PERMIT  
47 103 - 03213  
API WELL NO  
DATE: July 24 2018  
OPERATOR'S WELL NO.: BIG464H26

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

FILE NO: 125-18  
DRAWING NO: 125-18 BIG464H26  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL

(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: As Built: 1248.8' WATERSHED: Wiley Fork QUADRANGLE: Big Run

DISTRICT: Grant COUNTY: Wetzel

SURFACE OWNER: Coastal Forest Resources Company d/b/a Coastal Timbers Company ACREAGE: 542.5  
ROYALTY OWNER: Ridgetop Royalties LLC, et al LEASE NO: 70714 ACREAGE: 78

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: 7,418'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson  
ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280  
Bridgeport, WV 26330 Bridgeport, WV 26330

**BIG464H26**  
**BIG464**  
**EQT Production Company**

Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	20	1	Wetzel	Grant	Coastal Forest Resources Co.	542.50
2	15	27	Wetzel	Grant	William J. Barr	10.00
3	14	6	Wetzel	Grant	Coastal Lumber Co.	332.90
4	14	27	Wetzel	Grant	The E. Lorna Howard Trust, LLC, et al.	22.00
5	14	34	Wetzel	Grant	The E. Lorna Howard Trust, LLC, et al.	25.25
6	15	16	Wetzel	Grant	Donald J. D'Lusky	25.00
7	15	18	Wetzel	Grant	Donald J. D'Lusky	39.50
8	15	29	Wetzel	Grant	Terry W. & Carolyn P. Phillips	40.00
9	15	34	Wetzel	Grant	John C. & Donald J. D'Lusky	42.00
10	15	35	Wetzel	Grant	John C. & Donald J. D'Lusky	17.60
11	43	11	Marion	Mannington	Robert & Maxine Tonkery	85.00
12	43	11.1	Marion	Mannington	David A. & Diane E. Floyd	30.00
13	20	3	Wetzel	Grant	Linda Corwin, et al.	99.82
14	20	2	Wetzel	Grant	Scott A. Shannon, et al.	41.40
15	20	2.1	Wetzel	Grant	Larry & Mary Shimp	63.00
16	19	19.3	Wetzel	Grant	Richard M. & Mary G. Underwood	99.82
17	19	14	Wetzel	Grant	Mabel F. Barr	1.00
18	19	12	Wetzel	Grant	Mabel F. Barr	1.10
19	19	13	Wetzel	Grant	Mabel F. Barr	2.00
20	14	45	Wetzel	Grant	Coastal Forest Resources Co.	11.06
21	14	44	Wetzel	Grant	Mabel F. Barr	11.00
22	14	43	Wetzel	Grant	Mabel F. Barr	11.01
23	14	42	Wetzel	Grant	Donald J. D'Lusky	111.00
24	14	33	Wetzel	Grant	Atlee & Hilda Conaway	108.00
25	14	20	Wetzel	Grant	The E. Lorna Howard Trust, LLC, et al.	126.50
26	none	none	Wetzel	Grant	Unknown	unknown

**As Drilled Well Information:**  
BIG464H26 coordinates are  
NAD 27 N: 390,416.46 E: 1,713,377.16  
NAD 83 UTM N: 4,379,873.12 E: 541,527.47

BIG464H26 Landing Point coordinates are  
NAD 27 N: 390,184.75 E: 1,713,088.65  
NAD 83 UTM N: 4,379,801.06 E: 541,440.74

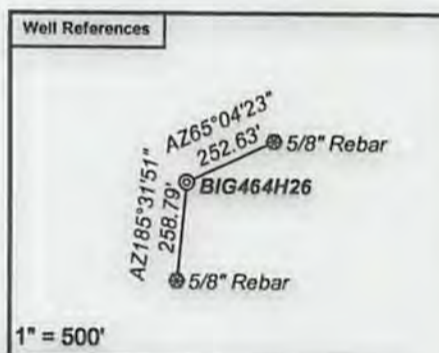
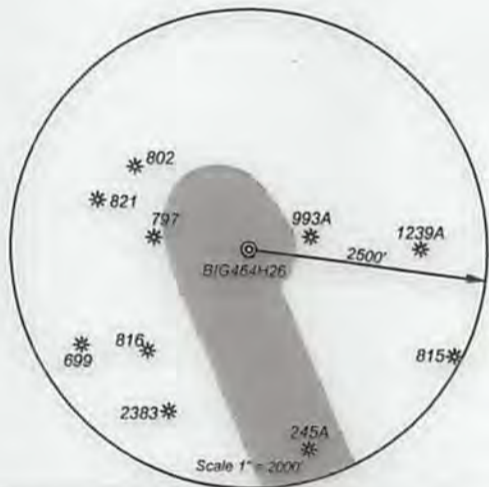
BIG464H26 Bottom Hole coordinates are  
NAD 27 N: 385,999.02 E: 1,713,611.06  
NAD 83 UTM N: 4,378,534.85 E: 542,001.98

West Virginia Coordinate system of 1927 (North Zone) based upon Differential GPS Measurements. Plat orientation, corner and well ties are based upon the grid north meridian. Well location references are based upon the grid north meridian. UTM coordinates are NAD83, Zone 17, Meters.

05/03/2019



Lease No.	Acres	Owner
703716	400	Ridgetop Royalties LLC, et al
1010666	32	Ridgetop Royalties LLC, et al

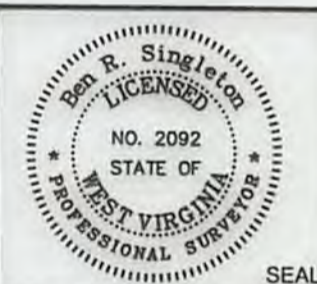


- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- WV County Route
- WV State Route



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*Ben R. Singleton*  
P.S. 2092



FILE NO: 125-16  
DRAWING NO: 125-16 BIG464H26  
SCALE: 1" = 2000'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: July 24 20 18  
OPERATOR'S WELL NO.: BIG464H26  
API WELL NO  
47 - 103 - 03213  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION: As Built: 1246.8' WATERSHED: Wiley Fork QUADRANGLE: Big Run  
DISTRICT: Grant COUNTY: Wetzel

SURFACE OWNER: Coastal Forest Resources Company d/b/a Coastal Timberlands Company ACREAGE: 542.5  
ROYALTY OWNER: Ridgetop Royalties LLC, et al LEASE NO: 707114 ACREAGE: 78

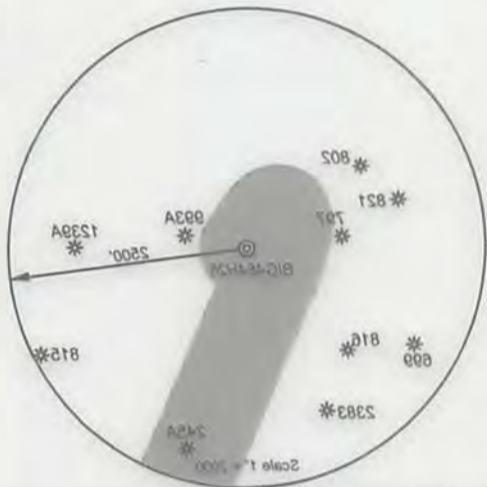
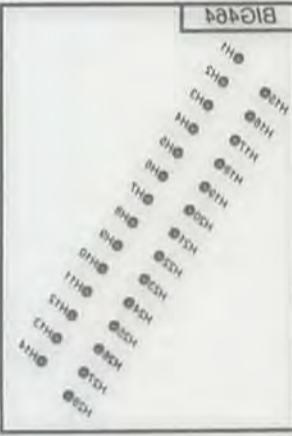
PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 7,419'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson  
ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280  
Bridgeport, WV 26330 Bridgeport, WV 26330

05/03/2019

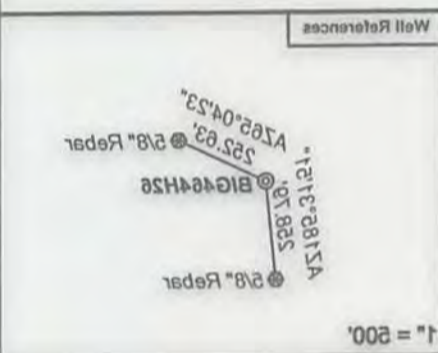
Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
26	none	none	Wetzel	Grant	Unknown	unknown
28	14	20	Wetzel	Grant	The E. Loma Howard Trust, LLC, et al.	126.20
24	14	23	Wetzel	Grant	Atlee & Hilda Conway	108.00
24	14	42	Wetzel	Grant	Donald J. Duszky	111.00
22	14	43	Wetzel	Grant	Mabel F. Barr	11.01
21	14	44	Wetzel	Grant	Mabel F. Barr	11.00
20	14	45	Wetzel	Grant	Coastal Forest Resources Co.	11.06
19	19	13	Wetzel	Grant	Mabel F. Barr	2.00
18	19	12	Wetzel	Grant	Mabel F. Barr	1.10
17	19	14	Wetzel	Grant	Mabel F. Barr	1.00
16	19	19	Wetzel	Grant	Richard M. & Mary G. Underwood	99.82
12	20	21	Wetzel	Grant	Larry & Mary Shimp	63.00
14	20	2	Wetzel	Grant	Scott A. Shannon, et al.	41.40
13	20	3	Wetzel	Grant	Linda Corwin, et al.	99.82
12	43	11.1	Mannington	Mannington	David A. & Diane E. Floyd	30.00
11	43	11	Mannington	Mannington	Robert & Maxine Tonkery	82.00
10	12	32	Wetzel	Grant	John C. & Donald J. Duszky	17.80
9	12	34	Wetzel	Grant	John C. & Donald J. Duszky	42.00
8	12	29	Wetzel	Grant	Terry W. & Carolyn P. Phillips	40.00
7	12	18	Wetzel	Grant	Donald J. Duszky	39.50
6	12	16	Wetzel	Grant	Donald J. Duszky	22.00
2	14	24	Wetzel	Grant	The E. Loma Howard Trust, LLC, et al.	22.25
3	14	6	Wetzel	Grant	Coastal Lumber Co.	232.90
2	12	27	Wetzel	Grant	William J. Barr	10.00
1	20	1	Wetzel	Grant	Coastal Forest Resources Co.	242.20

UTM coordinates are NAD83, Zone 17, Meters.  
Well location references are based upon the grid north  
mehdan.  
Flat orientation, corner and well ties are based upon  
based upon Differential GPS Measurements.  
West Virginia Coordinate system of 1927 (North Zone)  
BIG464H26 Bottom Hole coordinates are  
NAD 27 N: 385,999.02 E: 1,714,881.09  
NAD 83 UTM N: 4,378,524.85 E: 242,001.98  
BIG464H26 Landing Point coordinates are  
NAD 27 N: 390,784.72 E: 1,713,088.85  
NAD 83 UTM N: 4,378,801.08 E: 241,440.74  
As Drilled Well Information:  
BIG464H26 coordinates are  
NAD 27 N: 390,418.48 E: 1,713,377.18  
NAD 83 UTM N: 4,378,873.12 E: 241,227.47



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

Lease No. 400  
Acres 32  
Owner Ridgetop Royalties LLC, et al  
1010886



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.  
P.S. 2092



FILE NO.: 125-18  
DRAWING NO.: 125-18 BIG464H26  
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: July 24 18  
OPERATOR'S WELL NO.: BIG464H26  
API WELL NO. 47  
STATE COUNTY PERMIT 103 - 03213

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION: ELEVATION: As Built: 1248.8' WATERSHED: Wiley Fork  
DISTRICT: Grant COUNTY: Wetzel  
SURFACE OWNER: Coastal Forest Resources Company db/a Coastal Timbhand's Company ACREAGE: 242.5  
ROYALTY OWNER: Ridgetop Royalties LLC, et al LEASE NO.: 707114 ACREAGE: 78  
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: 7419'

WELL OPERATOR: EQT Production Company  
DESIGNATED AGENT: Jason Ranson  
ADDRESS: 115 Professional Place PO Box 280 Bridgeport, WV 26330  
115 Professional Place PO Box 280 Bridgeport, WV 26330