

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

API 47-103-03214 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 BIG464H27 (519447)
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 4,379,869.60 Easting 541,529.87
Landing Point of Curve Northing 4,379,872.30 Easting 541,646.49
Bottom Hole Northing 4,377,401.37 Easting 542,743.58

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, banum sulfate, calcium chloride, organophylic 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 07/04/2018
Date completion activities began 8/31/2018 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

Reviewed

RECEIVED
Office of Oil and Gas
JAN 2 2018

Reviewed by:
DMH
2-21-18

WR-35
Rev. 8/23/13

API 47-103 - 03214

Farm name COASTAL FOREST RESOURCES COMPANY D/B/A COSTAL TIMBERLANDS CO Well number BIG464H27 (519447)

| 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" | 1020' | NEW | J-55 54.5# | 231' | Y |
| Coal | | | | | | | |
| Intermediate 1 | 12-3/8" & 12-1/4" | 9-5/8" | 2841' | NEW | A-500 40# | 1702' | Y |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | 8-3/4" & 8-1/2" | 5 1/2" | 16804' | NEW | P-110 20# | N/A | N |
| Tubing | | | | | | | |
| Packer type and depth set | | | | | | | |

Comment Details Production Cement job has calculated TOC of 3446' 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 ³ /sks) | Volume (ft ³) | 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 | 1076 | 15.6 | 1.19 | 1280 | 0 | 8 |
| Intermediate 2 | | | | | | | |
| Intermediate 3 | | | | | | | |
| Production | Class A | 2625 | 15.6 | 1.19 | 3124 | 3446' | 8+ |
| Tubing | | | | | | | |

Drillers TD (ft) 16832' 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) 5786' 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 8828'

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 _____

RECEIVED
Office of Oil and Gas

JAN 2 2018

API 47- 103 - 03214

Farm name COASTAL FOREST RESOURCES COMPANY D/B/A COASTAL TIMBERLANDS

Well number BIG464H27 (519447)

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.

RECEIVED
Office of Oil and Gas

JAN 2 2018

WV Department of Environmental Protection

WR-35
Rev. 8/23/13

API 47- 103 - 03214 Farm name COASTAL FOREST RESOURCES COMPANY D/B/A COASTAL TIMBERLANDS COMPANY Well number BIG464H27 (519447)

| <u>PRODUCING FORMATION(S)</u> | <u>DEPTHS</u> | |
|-------------------------------|-------------------|------------------|
| <u>MARCELLUS</u> | <u>7,395'</u> TVD | <u>7,831'</u> MD |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump

SHUT-IN PRESSURE Surface 2,400 psi Bottom Hole N/A psi DURATION OF TEST 171.5 hrs

OPEN FLOW Gas Oil NGL Water GAS MEASURED BY

14,769 mcfpd N/A bpd 0 bpd 3,013.18 bpd 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

JAN 2 2018

WV Department of
Environmental Protection

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

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

05/03/2019

WR-35
Rev. 8/23/13

Page ___ of ___

API 47- 103 - 03214 Farm name COASTAL FOREST RESOURCES COMPANY D/B/A COASTAL TIMBERLANDS Well number BIG464H27 (519447)

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

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

Logging Company Scientific Drilling International
Address 124 Vista Drive City Charleroi State PA Zip 15022

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

RECEIVED
Office of Oil and Gas

JAN 2 2018

WV Department of
Environmental Protection

519447 47-103-03214-00-00 Perforations

| Stage Number | Perforation Date | Top Perf Depth (ftKB) | Bottom Perf Depth (ftKB) | Number of Shots | Formation |
|--------------|------------------|-----------------------|--------------------------|-----------------|-----------|
| 1 | 8/6/2018 | 16,777 | 16,779 | 0 | MARCELLUS |
| 2 | 9/1/2018 | 16,529 | 16,691 | 40 | MARCELLUS |
| 3 | 9/1/2018 | 16,329 | 16,491 | 40 | MARCELLUS |
| 4 | 9/1/2018 | 16,129 | 16,291 | 40 | MARCELLUS |
| 5 | 9/2/2018 | 15,929 | 16,091 | 40 | MARCELLUS |
| 6 | 9/2/2018 | 15,729 | 15,891 | 40 | MARCELLUS |
| 7 | 9/3/2018 | 15,529 | 15,691 | 40 | MARCELLUS |
| 8 | 9/3/2018 | 15,329 | 15,491 | 40 | MARCELLUS |
| 9 | 9/4/2018 | 15,129 | 15,291 | 40 | MARCELLUS |
| 10 | 9/5/2018 | 14,929 | 15,091 | 40 | MARCELLUS |
| 11 | 9/5/2018 | 14,729 | 14,891 | 40 | MARCELLUS |
| 12 | 9/6/2018 | 14,529 | 14,691 | 40 | MARCELLUS |
| 13 | 9/6/2018 | 14,329 | 14,491 | 40 | MARCELLUS |
| 14 | 9/7/2018 | 14,129 | 14,290 | 40 | MARCELLUS |
| 15 | 9/8/2018 | 13,929 | 14,091 | 40 | MARCELLUS |
| 16 | 9/8/2018 | 13,729 | 13,891 | 40 | MARCELLUS |
| 17 | 9/9/2018 | 13,529 | 13,691 | 40 | MARCELLUS |
| 18 | 9/10/2018 | 13,329 | 13,491 | 40 | MARCELLUS |
| 19 | 9/10/2018 | 13,129 | 13,291 | 40 | MARCELLUS |
| 20 | 9/11/2018 | 12,929 | 13,091 | 40 | MARCELLUS |
| 21 | 9/12/2018 | 12,729 | 12,891 | 40 | MARCELLUS |
| 22 | 9/12/2018 | 12,529 | 12,691 | 40 | MARCELLUS |
| 23 | 9/13/2018 | 12,329 | 12,491 | 40 | MARCELLUS |
| 24 | 9/14/2018 | 12,129 | 12,291 | 40 | MARCELLUS |
| 25 | 9/15/2018 | 11,929 | 12,091 | 40 | MARCELLUS |
| 26 | 9/17/2018 | 11,729 | 11,891 | 40 | MARCELLUS |
| 27 | 9/17/2018 | 11,529 | 11,691 | 40 | MARCELLUS |
| 28 | 9/19/2018 | 11,329 | 11,491 | 40 | MARCELLUS |
| 29 | 9/19/2018 | 11,129 | 11,291 | 40 | MARCELLUS |
| 30 | 9/20/2018 | 10,929 | 11,091 | 40 | MARCELLUS |
| 31 | 9/21/2018 | 10,729 | 10,886 | 40 | MARCELLUS |
| 32 | 9/22/2018 | 10,529 | 10,691 | 40 | MARCELLUS |
| 33 | 9/23/2018 | 10,329 | 10,491 | 40 | MARCELLUS |
| 34 | 9/24/2018 | 10,129 | 10,291 | 40 | MARCELLUS |
| 35 | 9/25/2018 | 9,929 | 10,091 | 40 | MARCELLUS |
| 36 | 9/26/2018 | 9,729 | 9,891 | 40 | MARCELLUS |
| 37 | 9/27/2018 | 9,529 | 9,691 | 40 | MARCELLUS |
| 38 | 9/28/2018 | 9,329 | 9,491 | 40 | MARCELLUS |
| 39 | 9/29/2018 | 9,129 | 9,291 | 40 | MARCELLUS |
| 40 | 9/29/2018 | 8,929 | 9,091 | 40 | MARCELLUS |
| 41 | 9/30/2018 | 8,729 | 8,891 | 40 | MARCELLUS |
| 42 | 9/30/2018 | 8,529 | 8,691 | 40 | MARCELLUS |
| 43 | 10/1/2018 | 8,329 | 8,491 | 40 | MARCELLUS |
| 44 | 10/2/2018 | 8,129 | 8,291 | 40 | MARCELLUS |
| 45 | 10/3/2018 | 7,929 | 8,091 | 40 | MARCELLUS |

RECEIVED
Office of Oil and Gas

JAN 2 2018

WV Department of
Environmental Protection

519447 47-103-03214-00-00 - 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 (bbbls) | Amount of Nitrogen/other (units) |
|--------------|------------------|---------------------|------------------------------|------------------------------|------------|--------------------------|-------------------------|----------------------------------|
| 1 | 9/1/2018 | 67 | 8,945.00 | 9,304.00 | 5,349.00 | 180,900.00 | 4,998.30 | 0 |
| 2 | 9/1/2018 | 71 | 8,981.00 | 9,351.00 | 5,647.00 | 450,870.00 | 8,089.80 | 0 |
| 3 | 9/1/2018 | 73 | 9,002.00 | 9,286.00 | 5,561.00 | 452,500.00 | 7,882.00 | 0 |
| 4 | 9/2/2018 | 72 | 8,987.00 | 9,318.00 | 5,857.00 | 451,000.00 | 8,183.50 | 0 |
| 5 | 9/2/2018 | 73 | 9,027.00 | 9,321.00 | 6,088.00 | 452,030.00 | 8,288.00 | 0 |
| 6 | 9/3/2018 | 79 | 9,096.00 | 9,416.00 | 5,892.00 | 451,660.00 | 7,889.40 | 0 |
| 7 | 9/3/2018 | 83 | 9,064.00 | 9,316.00 | 5,783.00 | 450,560.00 | 8,110.00 | 0 |
| 8 | 9/4/2018 | 86 | 9,031.00 | 9,269.00 | 5,797.00 | 450,980.00 | 7,724.00 | 0 |
| 9 | 9/4/2018 | 88 | 9,114.00 | 9,304.00 | 5,873.00 | 450,460.00 | 8,113.00 | 0 |
| 10 | 9/5/2018 | 85 | 9,007.00 | 9,430.00 | 5,821.00 | 450,340.00 | 7,942.20 | 0 |
| 11 | 9/6/2018 | 83 | 8,976.00 | 9,188.00 | 5,597.00 | 450,440.00 | 8,052.00 | 0 |
| 12 | 9/6/2018 | 86 | 9,072.00 | 9,420.00 | 5,984.00 | 452,520.00 | 7,684.70 | 0 |
| 13 | 9/7/2018 | 82 | 9,170.00 | 9,408.00 | 5,848.00 | 450,480.00 | 9,359.50 | 0 |
| 14 | 9/7/2018 | 85 | 9,029.00 | 9,301.00 | 5,762.00 | 450,640.00 | 8,312.00 | 0 |
| 15 | 9/8/2018 | 89 | 8,980.00 | 9,347.00 | 5,701.00 | 450,580.00 | 7,534.10 | 0 |
| 16 | 9/9/2018 | 82 | 9,028.00 | 9,538.00 | 5,647.00 | 450,300.00 | 8,696.40 | 0 |
| 17 | 9/10/2018 | 92 | 9,017.00 | 9,295.00 | 5,744.00 | 450,760.00 | 9,743.50 | 0 |
| 18 | 9/10/2018 | 94 | 9,075.00 | 9,310.00 | 5,787.00 | 450,660.00 | 7,930.00 | 0 |
| 19 | 9/11/2018 | 91 | 9,112.00 | 9,412.00 | 5,618.00 | 450,460.00 | 7,709.20 | 0 |
| 20 | 9/12/2018 | 83 | 8,953.00 | 9,427.00 | 5,729.00 | 450,580.00 | 9,343.00 | 0 |
| 21 | 9/12/2018 | 79 | 9,124.00 | 9,413.00 | 5,781.00 | 453,520.00 | 7,844.00 | 0 |
| 22 | 9/13/2018 | 78 | 9,142.00 | 9,502.00 | 5,816.00 | 453,920.00 | 8,922.30 | 0 |
| 23 | 9/13/2018 | 63 | 8,811.00 | 9,607.00 | 5,736.00 | 451,240.00 | 10,850.60 | 0 |
| 24 | 9/14/2018 | 76 | 8,886.00 | 9,204.00 | 5,839.00 | 452,130.00 | 8,471.20 | 0 |
| 25 | 9/17/2018 | 74 | 8,928.00 | 9,385.00 | 5,378.00 | 450,826.00 | 8,022.00 | 0 |
| 26 | 9/17/2018 | 89 | 9,032.00 | 9,523.00 | 5,734.00 | 240,000.00 | 4,999.00 | 0 |
| 27 | 9/17/2018 | 95 | 9,200.00 | 9,523.00 | 6,603.00 | 209,660.00 | 10,087.70 | 0 |
| 28 | 9/19/2018 | 82 | 8,916.00 | 9,305.00 | 5,683.00 | 450,340.00 | 8,634.00 | 0 |
| 29 | 9/19/2018 | 75 | 8,714.00 | 9,440.00 | 5,781.00 | 450,180.00 | 9,173.00 | 0 |
| 30 | 9/20/2018 | 76 | 8,678.00 | 9,361.00 | 5,383.00 | 450,780.00 | 9,131.90 | 0 |
| 31 | 9/21/2018 | 91 | 8,837.00 | 9,345.00 | 5,912.00 | 450,520.00 | 9,130.00 | 0 |
| 32 | 9/22/2018 | 79 | 8,805.00 | 9,249.00 | 4,932.00 | 453,740.00 | 10,090.00 | 0 |
| 33 | 9/22/2018 | 98 | 9,108.00 | 9,443.00 | 5,942.00 | 450,880.00 | 7,689.00 | 0 |
| 34 | 9/23/2018 | 98 | 9,011.00 | 9,308.00 | 5,305.00 | 450,560.00 | 7,594.00 | 0 |
| 35 | 9/25/2018 | 84 | 9,027.00 | 9,401.00 | 5,844.00 | 449,580.00 | 7,970.00 | 0 |
| 36 | 9/26/2018 | 91 | 9,017.00 | 9,475.00 | 5,758.00 | 430,690.00 | 7,466.00 | 0 |
| 37 | 9/27/2018 | 100 | 8,971.00 | 9,293.00 | 6,241.00 | 450,300.00 | 7,279.00 | 0 |
| 38 | 9/28/2018 | 92 | 8,266.00 | 9,176.00 | 6,076.00 | 450,300.00 | 7,783.50 | 0 |
| 39 | 9/29/2018 | 100 | 8,823.00 | 9,146.00 | 6,220.00 | 450,900.00 | 7,365.00 | 0 |
| 40 | 9/29/2018 | 98 | 8,640.00 | 9,107.00 | 6,204.00 | 451,580.00 | 7,570.00 | 0 |
| 41 | 9/30/2018 | 101 | 8,502.00 | 9,156.00 | 5,705.00 | 451,560.00 | 7,388.00 | 0 |
| 42 | 9/30/2018 | 100 | 8,532.00 | 8,715.00 | 5,963.00 | 450,900.00 | 7,118.00 | 0 |
| 43 | 10/1/2018 | 97 | 8,788.00 | 9,232.00 | 6,286.00 | 450,480.00 | 7,453.00 | 0 |
| 44 | 10/2/2018 | 99 | 8,472.00 | 9,180.00 | 5,962.00 | 450,500.00 | 7,421.00 | 0 |
| 45 | 10/3/2018 | 99 | 8,497.00 | 9,304.00 | 6,099.00 | 450,020.00 | 7,306.00 | 0 |
| 45 | 10/4/2018 | 100 | 8,781.00 | 9,228.00 | 5,658.00 | 451,800.00 | 7,187.00 | 0 |

Office of Oil and Gas

JAN 2 2018

Hydraulic Fracturing Fluid Product Component Information Disclosure

| | |
|--------------------------------|--------------------|
| Job Start Date: | 8/31/2018 |
| Job End Date: | 10/4/2018 |
| State: | West Virginia |
| County: | Wetzel |
| API Number: | 47-103-03214-00-00 |
| Operator Name: | EQT Production |
| Well Name and Number: | 519447 |
| Latitude: | 39.56743600 |
| Longitude: | -80.51669900 |
| Datum: | NAD83 |
| Federal Well: | NO |
| Indian Well: | NO |
| True Vertical Depth: | 7,395 |
| Total Base Water Volume (gal): | 15,604,252 |
| Total Base Non Water Volume: | 0 |

RECEIVED
Office of Oil and Gas
JAN 2 2018
WV Department of
Environmental Protection



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 | ProFrac | Carrier/Base Fluid | Water | 7732-18-5 | 100.00000 | 86.45422 | None |
| Other Chemical (s) | Listed Above | See Trade Name (s) List | Water | 7732-18-5 | 45.00000 | | |

| | | | | | | | | | |
|---|--------------------------|--------------------------|--|-------------|--------------|----------|------|--|--|
| ProFe 105 | ProFrac | Iron Control | | | Listed Below | | | | |
| ProHib 100 | ProFrac | Acid Corrosion Inhibitor | | | Listed Below | | | | |
| Bio Matar 123 | Silverback Chemical, LLC | Biocide | | | Listed Below | | | | |
| Silver FR 543 | Silverback Chemical, LLC | Friction Reducer | | | 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 | 13.28217 | None | | |
| | | | Petroleum Distillates, Hydrotreated Light Naphthenic | 64742-53-6 | 60.00000 | 0.03277 | None | | |
| | | | Petroleum Distillates, Hydrotreated Light Naphthenic | 64742-53-6 | 60.00000 | 0.03277 | | | |
| | | | Proprietary Polymers | Proprietary | 60.00000 | 0.03277 | | | |
| | | | Proprietary Polymers | Proprietary | 60.00000 | 0.03277 | None | | |
| | | | Hydrochloric Acid | 7647-01-0 | 15.00000 | 0.02404 | None | | |
| | | | Non-Hazardous Substances | Proprietary | 90.00000 | 0.01746 | None | | |
| | | | Non-Hazardous Substances | Proprietary | 90.00000 | 0.01746 | | | |
| | | | Polycarboxylic Acid Salt Mixture | Proprietary | 40.00000 | 0.00603 | None | | |
| | | | Glutaraldehyde | 111-30-8 | 20.00000 | 0.00388 | None | | |

RECEIVED
Office of Oil and Gas
JAN 2 2018
WV Department of Environmental Protection

| | | | | | |
|--|--|-------------|-----------|---------|------|
| | Glutaraldehyde | 111-30-8 | 20.00000 | 0.00388 | |
| | Proprietary Mixture | Proprietary | 100.00000 | 0.00324 | |
| | Proprietary Mixture | Proprietary | 100.00000 | 0.00324 | None |
| | Other Components Below Reportable Levels | Proprietary | 60.00000 | 0.00251 | None |
| | Other Components Below Reportable Levels | Proprietary | 60.00000 | 0.00251 | |
| | Distillates (Petroleum), Hydrotreated Light | 64742-47-8 | 30.00000 | 0.00168 | |
| | Distillates (Petroleum), Hydrotreated Light | 64742-47-8 | 30.00000 | 0.00168 | None |
| | Glutaraldehyde | 111-30-8 | 30.00000 | 0.00126 | None |
| | Glutaraldehyde | 111-30-8 | 30.00000 | 0.00126 | |
| | Didecyl Dimethyl Ammonium Chloride | 7173-51-5 | 3.00000 | 0.00058 | |
| | Alkyl Dimethyl Benzyl Ammonium Chloride | 68391-01-5 | 3.00000 | 0.00058 | |
| | Alkyl Dimethyl Benzyl Ammonium Chloride | 68391-01-5 | 3.00000 | 0.00058 | None |
| | Didecyl Dimethyl Ammonium Chloride | 7173-51-5 | 3.00000 | 0.00058 | None |
| | Hydrtreated Light Distillate(Petroleum) | 64742-47-8 | 65.00000 | 0.00055 | None |
| | Gum Guar | 9000-30-0 | 50.00000 | 0.00042 | None |
| | Didecylidimethylammonium Chloride | 7173-51-5 | 10.00000 | 0.00042 | |
| | Quaternary Ammonium Compounds, Benzyl-C12-C16-Alkyldimethyl, Chlorides | 68424-85-1 | 10.00000 | 0.00042 | None |
| | Quaternary Ammonium Compounds, Benzyl-C12-C16-Alkyldimethyl, Chlorides | 68424-85-1 | 10.00000 | 0.00042 | |
| | Didecylidimethylammonium Chloride | 7173-51-5 | 10.00000 | 0.00042 | None |
| | Methanol | 67-56-1 | 90.00000 | 0.00030 | None |
| | Alcohols, C11-14-iso-, C13-Rich, Ethoxylated | 78330-21-9 | 5.00000 | 0.00028 | None |

RECEIVED
Office of Oil and Gas

JAN 2 2018

WV Department of
Environmental Protection

| | | | | | | | | |
|--|--|--|--|--|-------------|-----------|---------|------|
| | | | | Alcohols, C11-14-iso-, C13-Rich, Ethoxylated | 78330-21-9 | 5.00000 | 0.00028 | |
| | | | | Ethanol | 64-17-5 | 5.00000 | 0.00021 | |
| | | | | Ethanol | 64-17-5 | 5.00000 | 0.00021 | None |
| | | | | Citric Acid | 77-92-9 | 100.00000 | 0.00005 | |
| | | | | Citric Acid | 77-92-9 | 100.00000 | 0.00005 | None |
| | | | | Ammonium Persulfate | 7727-54-0 | 100.00000 | 0.00002 | None |
| | | | | Propargyl Alcohol | 107-19-7 | 5.00000 | 0.00002 | None |
| | | | | Isopropanol | 67-63-0 | 5.00000 | 0.00002 | None |
| | | | | Xylene | 1330-20-7 | 5.00000 | 0.00002 | None |
| | | | | Alcohols, C7-9-ISO, C8 Rich | 68526-83-0 | 5.00000 | 0.00002 | None |
| | | | | Imidazoline | 61790-69-0 | 5.00000 | 0.00002 | None |
| | | | | Ethylbenzene | 100-41-4 | 1.00000 | 0.00000 | None |
| | | | | Ammonium Chloride ((NH4)Cl) | 12125-02-9 | 1.00000 | | |
| | | | | Alcohols, C12-16, Ethoxylated | 68551-12-2 | 2.00000 | | |
| | | | | Petroleum Distillate | 64742-47-8 | 20.00000 | | |
| | | | | Copolymer Of 2-Propenamide | Proprietary | 30.00000 | | |
| | | | | Oleic Acid Diethanolamide | 93-83-4 | 2.00000 | | |

* 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)

RECEIVED
Office of Oil and Gas

JAN 2 2018

WV Department of
Environmental Protection

05/03/2019

| API# 47-103-03214 | | Final Formations | | Well# BIG464H27 (519447) | |
|-------------------|---------------------|------------------------|---------------------|--------------------------|--|
| 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 | 1816 | |
| MAXTON | 1818 | 1816 | 1997 | 1995 | |
| SAND/SHALE | 1997 | 1995 | 2260 | 2258 | |
| BIG LIME | 2260 | 2258 | 2336 | 2334 | |
| SAND/SHALE | 2336 | 2334 | 2348 | 2346 | |
| BIG INJUN | 2348 | 2346 | 2417 | 2415 | |
| SAND/SHALE | 2417 | 2415 | 2546 | 2544 | |
| WEIR | 2546 | 2544 | 2696 | 2694 | |
| SAND/SHALE | 2696 | 2694 | 2761 | 2759 | |
| GANTZ | 2761 | 2759 | 2797 | 2795 | |
| SAND/SHALE | 2797 | 2795 | 2902 | 2900 | |
| FIFTY FOOT | 2902 | 2900 | 2958 | 2956 | |
| SAND/SHALE | 2958 | 2956 | 2997 | 2995 | |
| THIRTY FOOT | 2997 | 2995 | 3024 | 3022 | |
| SAND/SHALE | 3024 | 3022 | 3053 | 3051 | |
| GORDON | 3053 | 3051 | 3098 | 3096 | |
| SAND/SHALE | 3098 | 3096 | 3123 | 3121 | |
| FORTH SAND | 3123 | 3121 | 3136 | 3134 | |
| SAND/SHALE | 3136 | 3134 | 3195 | 3193 | |
| FIFTH SAND | 3195 | 3193 | 3214 | 3212 | |
| SAND/SHALE | 3214 | 3212 | 3248 | 3246 | |
| BAYARD | 3248 | 3246 | 3266 | 3264 | |
| SAND/SHALE | 3266 | 3264 | 3671 | 3669 | |
| WARREN | 3671 | 3669 | 3695 | 3693 | |
| SAND/SHALE | 3695 | 3693 | 3791 | 3789 | |
| SPEECHLEY | 3791 | 3789 | 3839 | 3837 | |
| SAND/SHALE | 3839 | 3837 | 4149 | 4147 | |
| BALLTOWN A | 4149 | 4147 | 4164 | 4162 | |
| SAND/SHALE | 4164 | 4162 | 4634 | 4632 | |
| RILEY | 4634 | 4632 | 4676 | 4674 | |
| SAND/SHALE | 4676 | 4674 | 5263 | 5261 | |
| BENSON | 5263 | 5261 | 5312 | 5310 | |
| SAND/SHALE | 5312 | 5310 | 5677 | 5675 | |
| ALEXANDER | 5677 | 5675 | 5744 | 5742 | |
| ELKS | 5744 | 5742 | 7111 | 6927 | |
| SONYEA | 7111 | 6927 | 7269 | 7076 | |
| MIDDLESEX | 7269 | 7076 | 7335 | 7134 | |
| GENESEE | 7335 | 7134 | 7498 | 7257 | |
| GENESEO | 7498 | 7257 | 7540 | 7283 | |
| TULLY | 7540 | 7283 | 7762 | 7380 | |
| HAMILTON | 7762 | 7380 | 7831 | 7395 | |
| MARCELLUS | 7831 | 7395 | 16832 | 7637 | |

RECEIVED
Office of Oil and Gas

JAN 2 2018

WV Department of
Environmental Protection

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: Valley Fork
 DISTRICT: Grant COUNTY: Wetzel QUADRANGLE: Big Run

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

ROYALTY OWNER: Ridgetop 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 BIG464H27
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1:2500
 PROVEN SOURCE OF ELEVATION: NGS CORS Station

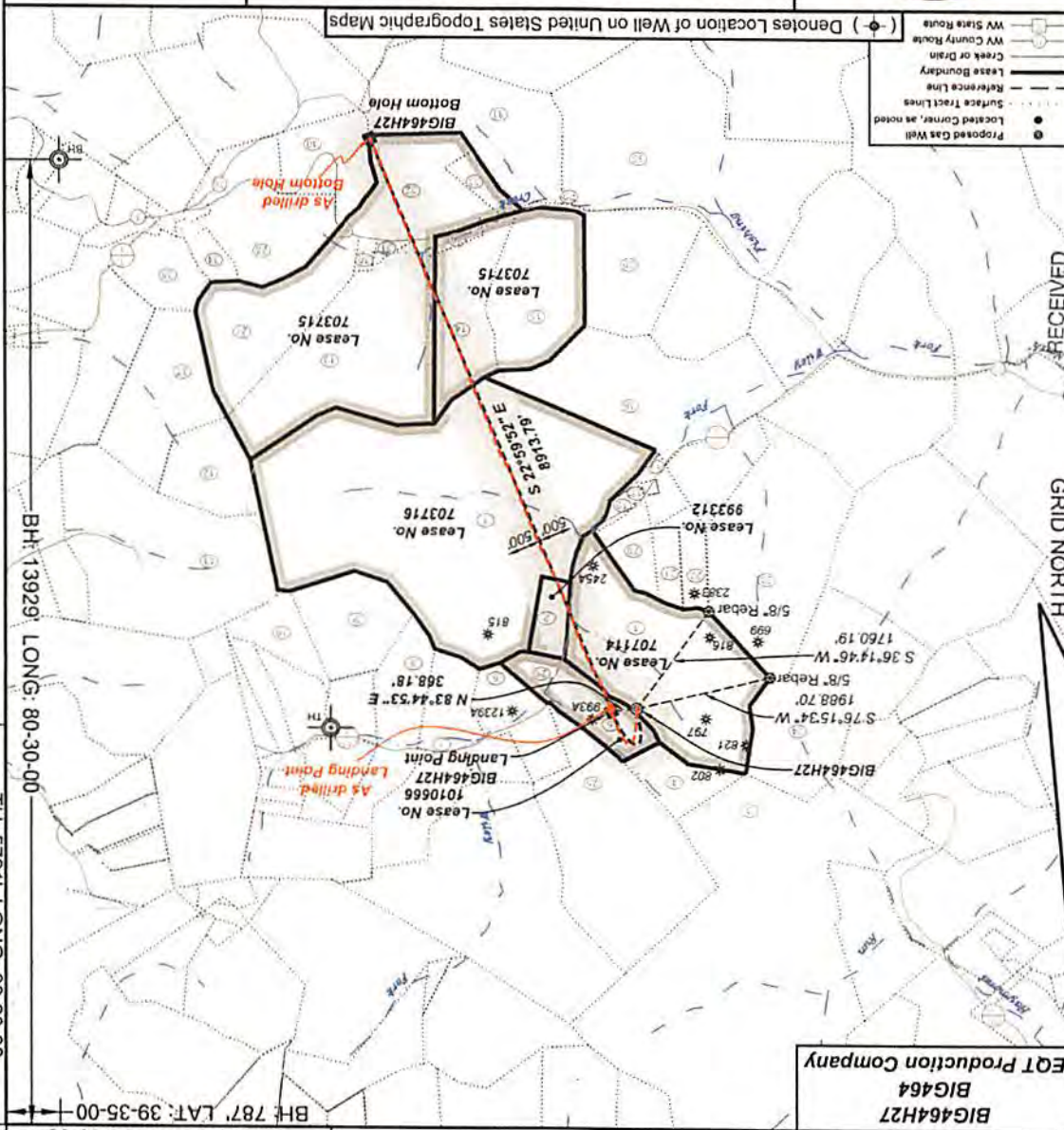
STATE OF WEST VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
OIL AND GAS DIVISION

DATE: July 18 2018
 OPERATOR'S WELL NO: BIG464H27
 API WELL NO: 47 103 03214
 STATE: 47 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



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

WELL TYPE: GAS OIL 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 Timberlands Company
 LEASE NO.: 707114
 ACRES: 542.5

ROYALTY OWNER: RidgeTop Royalties LLC, et al
 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 BIG464H27
 SCALE: 1" = 2000'
 MINIMUM DEGREE OF ACCURACY: 1/2500
 PROVEN SOURCE OF ELEVATION: NGS CORRS Station

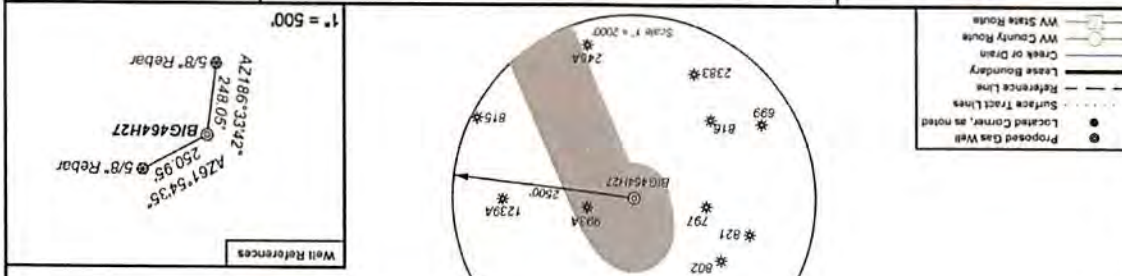
STATE: 47
 COUNTY: 103
 PERMIT: 03214

DATE: July 18 2018
 OPERATOR'S WELL NO.: BIG464H27
 API WELL NO.



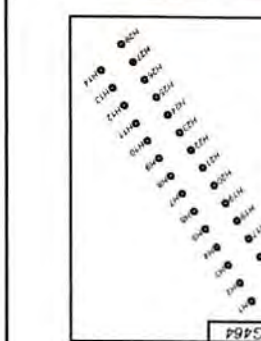
I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

P.S. 2092



Well References

| Owner | Acres | Lease No. |
|-------------------------------|--------|-----------|
| RidgeTop Royalties LLC, et al | 400 | 703716 |
| RidgeTop Royalties LLC, et al | 32 | 1010666 |
| Fancy Jackson, et al | 375.67 | 703715 |
| James S. Allen, et al | 10 | 993312 |



RECEIVED
Office of Oil and Gas
JAN 2 2018
WV Department of Environmental Protection

| Tract ID | Tract Cont | County | Area |
|----------|------------|--------|--------|
| 1 | 1 | Wetzel | 242.50 |
| 2 | 1 | Wetzel | 15.00 |
| 3 | 1 | Wetzel | 302.90 |
| 4 | 1 | Wetzel | 22.00 |
| 5 | 1 | Wetzel | 54.20 |
| 6 | 1 | Wetzel | 52.20 |
| 7 | 1 | Wetzel | 25.00 |
| 8 | 1 | Wetzel | 36.40 |
| 9 | 1 | Wetzel | 42.00 |
| 10 | 1 | Wetzel | 42.00 |
| 11 | 1 | Wetzel | 17.83 |
| 12 | 1 | Wetzel | 68.00 |
| 13 | 1 | Wetzel | 30.00 |
| 14 | 1 | Wetzel | 69.82 |
| 15 | 1 | Wetzel | 63.00 |
| 16 | 1 | Wetzel | 63.00 |
| 17 | 1 | Wetzel | 69.82 |
| 18 | 1 | Wetzel | 69.82 |
| 19 | 1 | Wetzel | 63.00 |
| 20 | 1 | Wetzel | 63.00 |
| 21 | 1 | Wetzel | 63.00 |
| 22 | 1 | Wetzel | 63.00 |
| 23 | 1 | Wetzel | 63.00 |
| 24 | 1 | Wetzel | 63.00 |
| 25 | 1 | Wetzel | 63.00 |
| 26 | 1 | Wetzel | 63.00 |
| 27 | 1 | Wetzel | 63.00 |
| 28 | 1 | Wetzel | 63.00 |
| 29 | 1 | Wetzel | 63.00 |
| 30 | 1 | Wetzel | 63.00 |
| 31 | 1 | Wetzel | 63.00 |
| 32 | 1 | Wetzel | 63.00 |
| 33 | 1 | Wetzel | 63.00 |
| 34 | 1 | Wetzel | 63.00 |
| 35 | 1 | Wetzel | 63.00 |
| 36 | 1 | Wetzel | 63.00 |
| 37 | 1 | Wetzel | 63.00 |
| 38 | 1 | Wetzel | 63.00 |
| 39 | 1 | Wetzel | 63.00 |
| 40 | 1 | Wetzel | 63.00 |
| 41 | 1 | Wetzel | 63.00 |
| 42 | 1 | Wetzel | 63.00 |
| 43 | 1 | Wetzel | 63.00 |
| 44 | 1 | Wetzel | 63.00 |
| 45 | 1 | Wetzel | 63.00 |
| 46 | 1 | Wetzel | 63.00 |
| 47 | 1 | Wetzel | 63.00 |
| 48 | 1 | Wetzel | 63.00 |
| 49 | 1 | Wetzel | 63.00 |
| 50 | 1 | Wetzel | 63.00 |
| 51 | 1 | Wetzel | 63.00 |
| 52 | 1 | Wetzel | 63.00 |
| 53 | 1 | Wetzel | 63.00 |
| 54 | 1 | Wetzel | 63.00 |
| 55 | 1 | Wetzel | 63.00 |
| 56 | 1 | Wetzel | 63.00 |
| 57 | 1 | Wetzel | 63.00 |
| 58 | 1 | Wetzel | 63.00 |
| 59 | 1 | Wetzel | 63.00 |
| 60 | 1 | Wetzel | 63.00 |
| 61 | 1 | Wetzel | 63.00 |
| 62 | 1 | Wetzel | 63.00 |
| 63 | 1 | Wetzel | 63.00 |
| 64 | 1 | Wetzel | 63.00 |
| 65 | 1 | Wetzel | 63.00 |
| 66 | 1 | Wetzel | 63.00 |
| 67 | 1 | Wetzel | 63.00 |
| 68 | 1 | Wetzel | 63.00 |
| 69 | 1 | Wetzel | 63.00 |
| 70 | 1 | Wetzel | 63.00 |
| 71 | 1 | Wetzel | 63.00 |
| 72 | 1 | Wetzel | 63.00 |
| 73 | 1 | Wetzel | 63.00 |
| 74 | 1 | Wetzel | 63.00 |
| 75 | 1 | Wetzel | 63.00 |
| 76 | 1 | Wetzel | 63.00 |
| 77 | 1 | Wetzel | 63.00 |
| 78 | 1 | Wetzel | 63.00 |
| 79 | 1 | Wetzel | 63.00 |
| 80 | 1 | Wetzel | 63.00 |
| 81 | 1 | Wetzel | 63.00 |
| 82 | 1 | Wetzel | 63.00 |
| 83 | 1 | Wetzel | 63.00 |
| 84 | 1 | Wetzel | 63.00 |
| 85 | 1 | Wetzel | 63.00 |
| 86 | 1 | Wetzel | 63.00 |
| 87 | 1 | Wetzel | 63.00 |
| 88 | 1 | Wetzel | 63.00 |
| 89 | 1 | Wetzel | 63.00 |
| 90 | 1 | Wetzel | 63.00 |
| 91 | 1 | Wetzel | 63.00 |
| 92 | 1 | Wetzel | 63.00 |
| 93 | 1 | Wetzel | 63.00 |
| 94 | 1 | Wetzel | 63.00 |
| 95 | 1 | Wetzel | 63.00 |
| 96 | 1 | Wetzel | 63.00 |
| 97 | 1 | Wetzel | 63.00 |
| 98 | 1 | Wetzel | 63.00 |
| 99 | 1 | Wetzel | 63.00 |
| 100 | 1 | Wetzel | 63.00 |

As Delineated Well Information:
 BIG464H27 coordinates are NAD 83 UTM N. 390,404.77 E. 1,713,384.86
 BIG464H27 landing point coordinates are NAD 83 UTM N. 392,238.98 E. 1,717,232.64
 BIG464H27 Bottom Hole coordinates are NAD 83 UTM N. 392,238.98 E. 1,717,232.64
 NAD 83 UTM N. 4,379,869.60 E. 541,529.87
 NAD 83 UTM N. 390,404.77 E. 1,713,384.86
 NAD 83 UTM N. 4,379,869.60 E. 541,529.87
 NAD 83 UTM N. 392,238.98 E. 1,717,232.64
 NAD 83 UTM N. 4,377,401.37 E. 542,743.58
 West Virginia Coordinate System of 1927 (North Zone) based upon Differentiated GPS Measurements. Plus 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.

EQT Production Company
 BIG464
 BIG464H27

Well Operator's Report of Well Work



Where energy meets innovation.

Well Number: BIG464H27 (519447)

API: 47 - 103 - 03214

Submission: Initial Amended

Notes: Please Note That A Restart Occurred
At Stimulation Stage 26

RECEIVED
Office of Oil and Gas

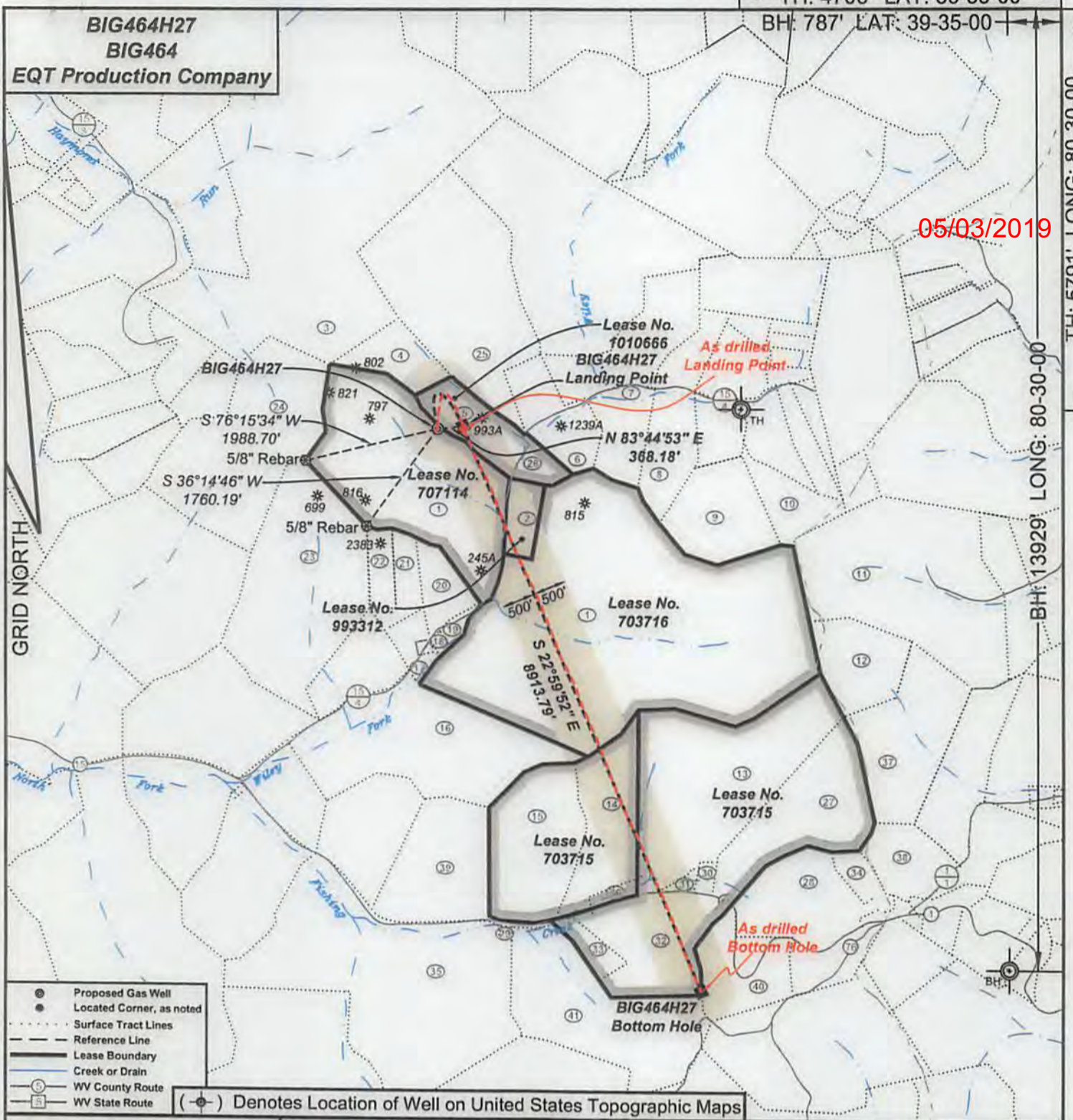
JAN 2 2018

WV Department of
Environmental Protection

TH: 4706' LAT: 39-35-00
 BH: 787' LAT: 39-35-00

BIG464H27
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



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 BIG464H27
 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

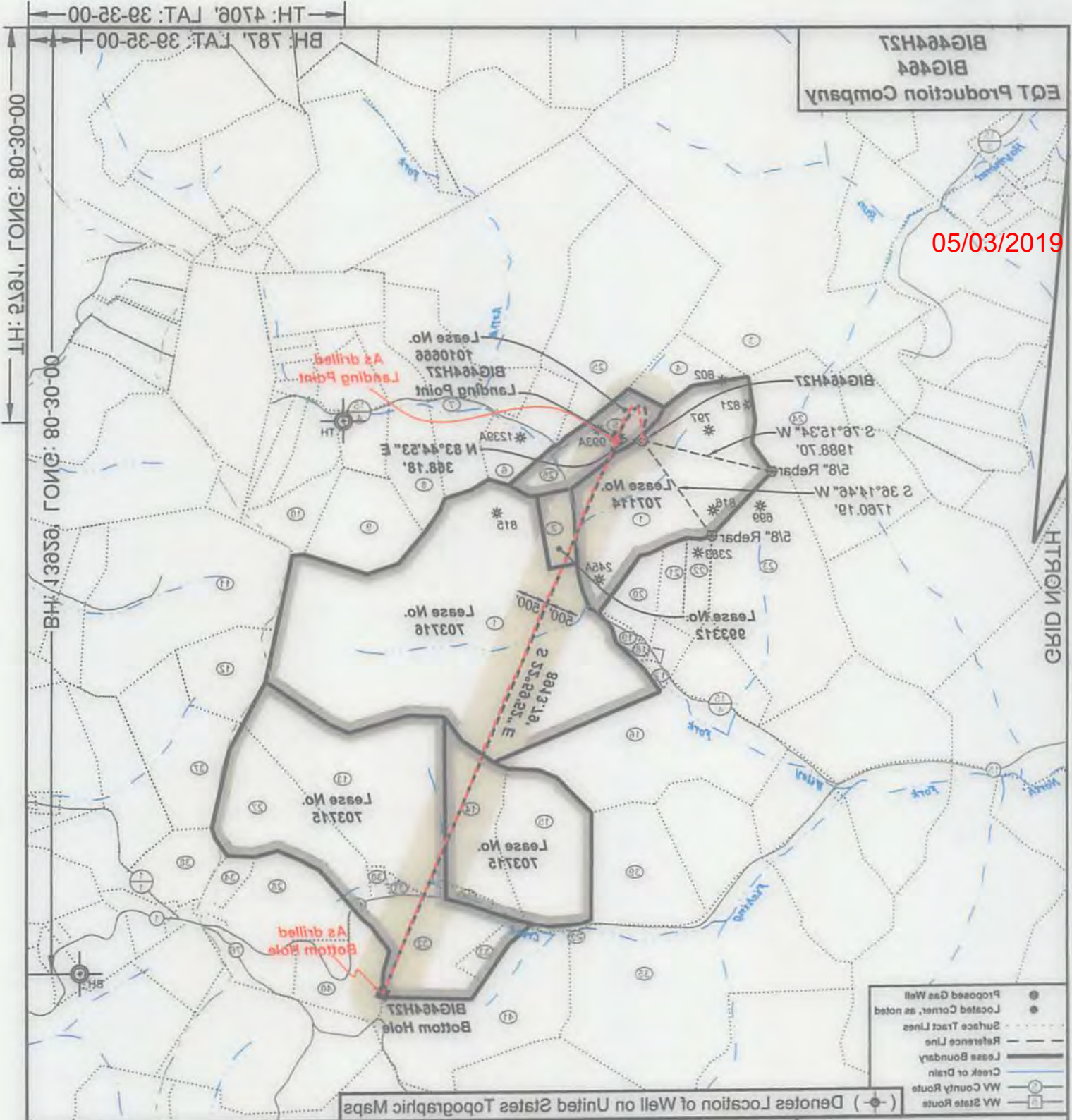
DATE: July 18 20 18
 OPERATOR'S WELL NO.: BIG464H27
 API WELL NO
 47 - 103 - 03214
 STATE COUNTY PERMIT

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
BIG464H27
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



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.

[Signature]
P.S. 2092



PROVEN SOURCE OF ELEVATION: NGS CORS Station
 MINIMUM DEGREE OF ACCURACY: 1:2500
 SCALE: 1" = 2000'
 DRAWING NO.: 125-18 BIG464H27
 FILE NO.: 125-18

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

STATE PERMIT: 03214
 COUNTY: 103
 API WELL NO: 47
 OPERATOR'S WELL NO.: BIG464H27
 DATE: July 18 2018

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL

(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: As Buil: 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: Ridgtop 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
 ADDRESS: 115 Professional Place PO Box 280 Bhdgport, WV 26330

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

BIG464H27
BIG464
EQT Production Company

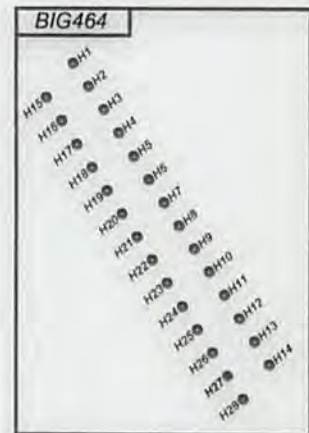
| Tract I.D. | Tax Map No. | Parcel No. | County | District | Surface Tract Owner | Acres |
|------------|-------------|------------|--------|------------|---------------------------------------|---------|
| 1 | 20 | 1 | Wetzel | Grant | Coastal Forest Resources Co. | 542.50 |
| 2 | 15 | 27 | Wetzel | Grant | William J. Barr | 10.00 |
| 3 | 14 | 6 | Wetzel | Grant | Coastal Lumber Co. | 332.90 |
| 4 | 14 | 27 | Wetzel | Grant | The E. Loma Howard Trust, LLC, et al. | 22.00 |
| 5 | 14 | 34 | Wetzel | Grant | The E. Loma 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 | 36.40 |
| 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 | 17.63 |
| 11 | 43 | 11 | Marion | Mannington | Robert & Maxine Tonkery | 85.00 |
| 12 | 43 | 11.1 | Marion | Mannington | David A. & Diane E. Floyd | 20.00 |
| 13 | 20 | 3 | Wetzel | Grant | Chester R. & Audra I. Powell | 99.82 |
| 14 | 20 | 2 | Wetzel | Grant | Marsha L. Barr, et al. | 41.40 |
| 15 | 20 | 2.1 | Wetzel | Grant | Larry & Marry Shimp | 83.00 |
| 16 | 19 | 19.3 | Wetzel | Grant | Richard M. & Mary G. Underwood | 99.82 |
| 17 | 19 | 14 | Wetzel | Grant | William D. & Mabel F. Barr | 1.00 |
| 18 | 19 | 12 | Wetzel | Grant | William D. & Mabel F. Barr | 1.10 |
| 19 | 19 | 13 | Wetzel | Grant | William D. & 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 | Elsie L. Hill Trust | 126.50 |
| 26 | none | none | Wetzel | Grant | Unknown | unknown |
| 27 | 20 | 4 | Wetzel | Grant | Jennifer L. Archer, et al | 70.00 |
| 28 | 20 | 10 | Wetzel | Grant | Chester R. & Sandra L. Craver | 48.78 |
| 29 | 20 | 5 | Wetzel | Grant | Mary G. & Richard M. Underwood | 1.00 |
| 30 | 20 | 3.1 | Wetzel | Grant | Gary F. Fisher | 2.25 |
| 31 | 20 | 3.2 | Wetzel | Grant | Linda Corwin, et al. | 1.18 |
| 32 | 20 | 8 | Wetzel | Grant | Stephen J. & Richard M. Underwood | 84.00 |
| 33 | 20 | 7 | Wetzel | Grant | Bernard D. Holbert, et al. | 8.00 |
| 34 | 20 | 12 | Wetzel | Grant | Beverly Powell, et al. | 6.74 |
| 35 | 19 | 29 | Wetzel | Grant | Michael J. & Doris L. Cegelski | 29.70 |
| 36 | 20 | 7.1 | Wetzel | Grant | John H. Frye, Jr. & Denise Frye | 3.91 |
| 37 | 45 | 29 | Marion | Mannington | Raymond C. Teagarden | 81.017 |
| 38 | 45 | 30 | Marion | Mannington | Kath A. & Rita G. Powell | 21.80 |
| 39 | 19 | 20 | Wetzel | Grant | First Exchange Bank | 49.00 |
| 40 | 20 | 9 | Wetzel | Grant | Roger B. & Marry A. Powell | 24.50 |
| 41 | 20 | 6 | Wetzel | Grant | Bernard D. Holbert, et al. | 102.50 |

As Drilled Well Information:
BIG464H27 coordinates are
NAD 27 N: 390,404.77 E: 1,713,384.86
NAD 83 UTM N: 4,379,869.60 E: 541,529.87

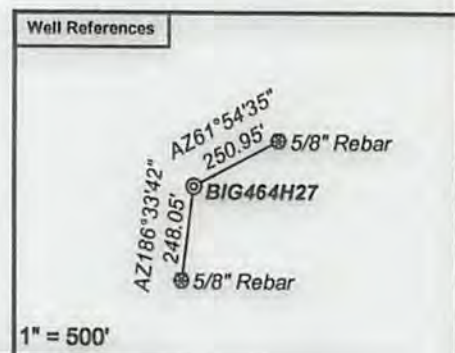
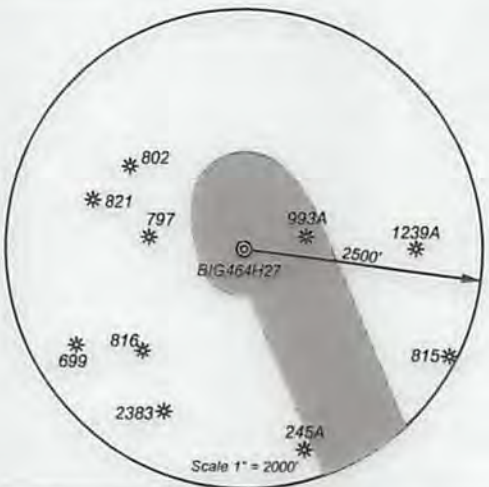
BIG464H27 Landing Point coordinates are
NAD 27 N: 390,407.23 E: 1,713,767.68
NAD 83 UTM N: 4,379,872.30 E: 541,646.49

BIG464H27 Bottom Hole coordinates are
NAD 27 N: 382,238.98 E: 1,713,384.86
NAD 83 UTM N: 4,377,401.37 E: 542,743.58

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.



| Lease No. | Acres | Owner |
|-----------|--------|-------------------------------|
| 703716 | 400 | Ridgetop Royalties LLC, et al |
| 1010666 | 32 | Ridgetop Royalties LLC, et al |
| 703715 | 375.67 | Nancy Hobbs, et al |
| 993312 | 10 | James S. Allen, et al |

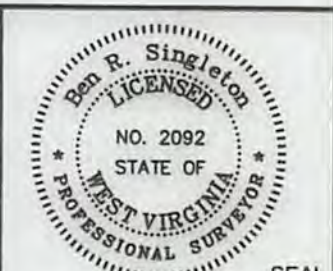


- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- Lease Boundary
- Creek or Drain
- WV County Route
- WV State Route



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



FILE NO: 125-16
DRAWING NO: 125-16 BIG464H27
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1:2500
PROVEN SOURCE OF ELEVATION: NGS CORS Station



DATE: July 18 20 18
OPERATOR'S WELL NO.: BIG464H27
API WELL NO
47 - 103 - 03214
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

| Well ID | Tax Map No. | Parcel No. | County | District | Owner | Acres |
|---------|-------------|------------|--------|------------|---------------------------------------|---------|
| 1 | 20 | 1 | Wetzel | Grant | Coastal Forest Resources Co. | 242.50 |
| 2 | 23 | 23 | Wetzel | Grant | William J. Barr | 12.00 |
| 3 | 14 | 8 | Wetzel | Grant | Coastal Forest Resources Co. | 322.80 |
| 4 | 24 | 27 | Wetzel | Grant | The E. Lomas Howard Trust, LLC et al. | 22.00 |
| 5 | 24 | 34 | Wetzel | Grant | The E. Lomas Howard Trust, LLC et al. | 22.28 |
| 6 | 25 | 18 | Wetzel | Grant | Donald J. Druky | 28.00 |
| 7 | 27 | 18 | Wetzel | Grant | Donald J. Druky | 36.40 |
| 8 | 19 | 19 | Wetzel | Grant | Tony W. & Carolyn R. Phillips | 40.00 |
| 9 | 19 | 19 | Wetzel | Grant | John C. & Donald J. Druky | 43.00 |
| 10 | 22 | 22 | Wetzel | Grant | John C. & Donald J. Druky | 17.83 |
| 11 | 43 | 21 | Mason | Mannington | Robert & Maxine Tomney | 82.00 |
| 12 | 43 | 11.1 | Mason | Mannington | David A. & Diane E. Floyd | 30.00 |
| 13 | 20 | 3 | Wetzel | Grant | Charles R. & Andrea L. Powell | 99.83 |
| 14 | 20 | 2 | Wetzel | Grant | Martha J. Barr, et al. | 41.40 |
| 15 | 20 | 2.1 | Wetzel | Grant | Larry & Mary Shimp | 83.00 |
| 16 | 19 | 19.3 | Wetzel | Grant | Richard M. & Mary G. Lindwood | 98.23 |
| 17 | 19 | 19 | Wetzel | Grant | William D. & Madalyn Barr | 1.00 |
| 18 | 19 | 19 | Wetzel | Grant | William D. & Madalyn Barr | 1.10 |
| 19 | 19 | 19 | Wetzel | Grant | William D. & Madalyn Barr | 2.00 |
| 20 | 14 | 48 | Wetzel | Grant | Coastal Forest Resources Co. | 11.00 |
| 21 | 14 | 44 | Wetzel | Grant | Madalyn Barr | 11.00 |
| 22 | 14 | 43 | Wetzel | Grant | Madalyn Barr | 11.01 |
| 23 | 14 | 43 | Wetzel | Grant | Donald J. Druky | 11.00 |
| 24 | 14 | 33 | Wetzel | Grant | Atlee & Hilda Conway | 108.00 |
| 25 | 14 | 20 | Wetzel | Grant | Elmer L. Hill Trust | 123.50 |
| 26 | none | none | Wetzel | Grant | Lindwood | unknown |
| 27 | 20 | 4 | Wetzel | Grant | Jennifer L. Archer, et al. | 20.00 |
| 28 | 20 | 10 | Wetzel | Grant | Charles R. & Andrea L. Powell | 48.78 |
| 29 | 20 | 8 | Wetzel | Grant | Mary G. & Richard M. Lindwood | 1.00 |
| 30 | 20 | 3.1 | Wetzel | Grant | Gay R. Fisher | 2.28 |
| 31 | 20 | 3.2 | Wetzel | Grant | Linda Conway, et al. | 1.18 |
| 32 | 20 | 8 | Wetzel | Grant | Stephen L. & Richard M. Lindwood | 44.00 |
| 33 | 20 | 7 | Wetzel | Grant | Edward G. Hobart, et al. | 8.00 |
| 34 | 20 | 12 | Wetzel | Grant | Elizabeth Powell, et al. | 8.74 |
| 35 | 19 | 20 | Wetzel | Grant | Michael J. & Carol J. Campbell | 38.20 |
| 36 | 20 | 1.1 | Wetzel | Grant | John H. Frye, Jr. & Christine Tyler | 2.91 |
| 37 | 48 | 20 | Mason | Mannington | Ryanwood C. Tomney | 81.01 |
| 38 | 48 | 20 | Mason | Mannington | Kella A. Hill & G. Powell | 21.50 |
| 39 | 19 | 20 | Wetzel | Grant | First Exchange Bank | 48.90 |
| 40 | 20 | 6 | Wetzel | Grant | Roger B. & Mary A. Powell | 34.50 |
| 41 | 20 | 8 | Wetzel | Grant | Richard D. Hillier, et al. | 102.90 |

05/03/2019

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

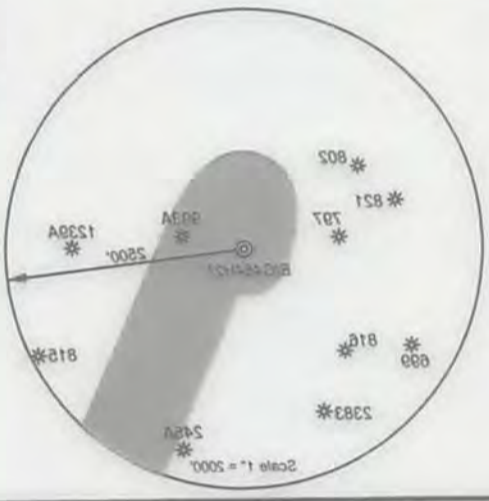
BIG464H27 Bottom Hole coordinates are
 NAD 83 UTM N: 4377401.37 E: 842743.88
 NAD 83 UTM N: 382538.98 E: 1717232.84

BIG464H27 Landing Point coordinates are
 NAD 83 UTM N: 437888.80 E: 841259.87
 NAD 83 UTM N: 390404.77 E: 1713384.88

As Drilled Well Information:
 BIG464H27 coordinates are
 NAD 83 UTM N: 437888.80 E: 841259.87

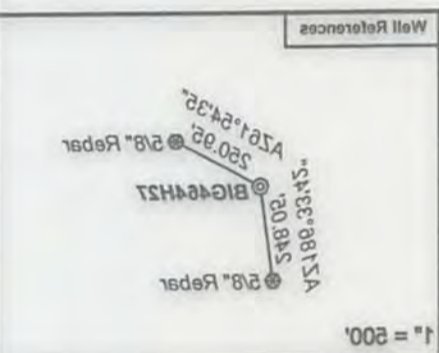


| Owner | Acres | Lease No. |
|-------------------------------|-------|-----------|
| James S. Allen, et al | 10 | 993312 |
| Nancy Hobbs, et al | 32.87 | 707315 |
| RidgeTop Royalties LLC, et al | 32 | 1010888 |
| RidgeTop Royalties LLC, et al | 400 | 707318 |



Legend for the well location diagram:

- Proposed Gas Well (circle with dot)
- Located Corner, as noted (circle with cross)
- Surface Tract Lines (dashed line)
- Reference Line (solid line)
- Lease Boundary (thick solid line)
- Creek or Drain (blue line)
- WV County Route (circle with 'C')
- WV State Route (circle with 'S')



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



STATE PERMIT 03214

API WELL NO. 103

COUNTY: Wetzel

DATE: July 18, 2018

OPERATOR'S WELL NO.: BIG464H27



PROVEN SOURCE OF ELEVATION: NGS CORS Station

MINIMUM DEGREE OF ACCURACY: 1:2500

SCALE: 1" = 2000'

DRAWING NO.: 125-16 BIG464H27

FILE NO.: 125-16

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL

(IF GAS) PRODUCTION: STORAGE DEEP SHALLOW

LOCATION: ELEVATION: As Built: 1248.8' WATERSHED: Willey 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: 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 Bldgport, WV 26330