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 west virginia department of environmental protection
 

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Office of Oil and Gas  
 601 57<sup>th</sup> Street, S.E.  
 Charleston, WV 25304  
 (304) 926-0450  
 fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, April 26, 2019  
 WELL WORK PERMIT  
 Horizontal 6A / New Drill

EQT PRODUCTION COMPANY  
 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for BIG333H13  
 47-103-03295-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin  
 Chief

Operator's Well Number: BIG333H13  
 Farm Name: COASTAL FOREST RESOURC  
 U.S. WELL NUMBER: 47-103-03295-00-00  
 Horizontal 6A New Drill  
 Date Issued: 4/26/2019

# PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

## CONDITIONS

1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

## PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to [DEPOOGNotify@wv.gov](mailto:DEPOOGNotify@wv.gov).

04/26/2019  
4710303295

EQT Production  
Hydraulic Fracturing Monitoring Plan  
Pad ID: BIG333  
County: Wetzel

RECEIVED  
Office of Oil and Gas

FEB 25 2019

WV Department of  
Environmental Protection

February 13, 2019

## Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Wetzel County, WV prior to hydraulic fracturing at the following EQT wells on the BIG333 well site.

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation.

A report is required to be submitted along with a well work permit application.

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include coordination with well operators of the timing and location of the hydraulic fracturing, establishment of measures well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

### 1. Communications with Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known wells and well operators within 500 feet of this pad and the lateral sections that are known or could reasonably be expected to be within range of the fracture propagation. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

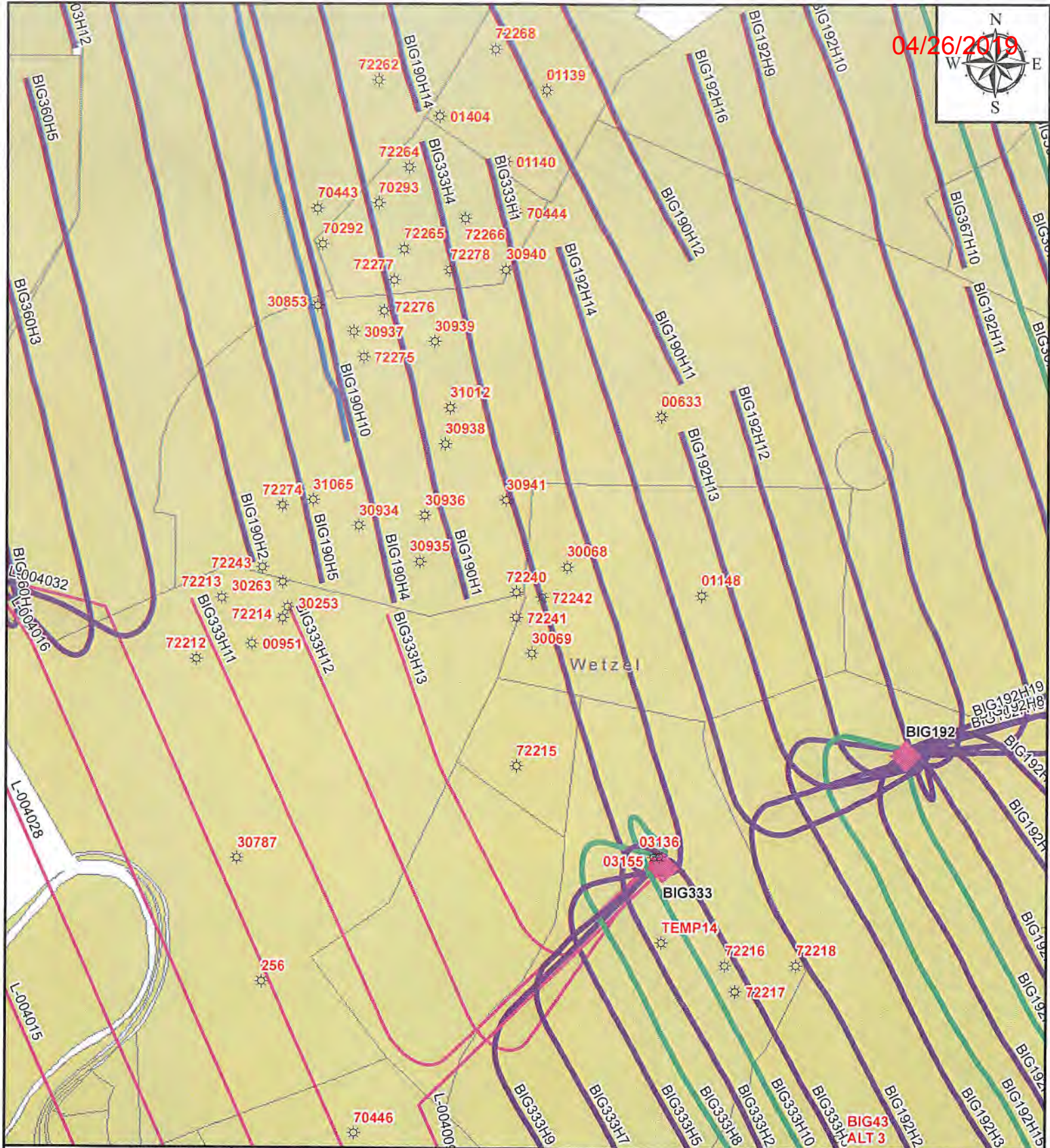
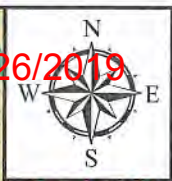
EQT will recommend to these operators at a minimum to:

1. Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
2. Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
3. Inspect or install master valves or other necessary equipment for wellhead integrity capable of a pressure recommended by EQT
4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified

### 2. Reporting

EQT will provide information relating to the hydraulic fracturing schedule, communication with other operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.

04/26/2019



**EQT**  
 EQT Corporation  
 625 Liberty Avenue  
 Pittsburgh, PA 15222

**BIG 333 - North**

**Vertical Offsets and Foreign Laterals within 1500'**

Created By: Kellen Waltman    Printed By: madiganp on 2/12/2019

**Legend**

- Vertical Offset Well
- Pad
- Geneseo Drilled
- Geneseo Planned
- Marcellus Drilled
- Marcellus Planned
- Utica Drilled
- Utica Planned
- EQT Lease
- County

**Disclaimer:**

This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed surveyor upon consultation with EQT.

1,250    625    0    1,250  
 Feet  
 1:16,236

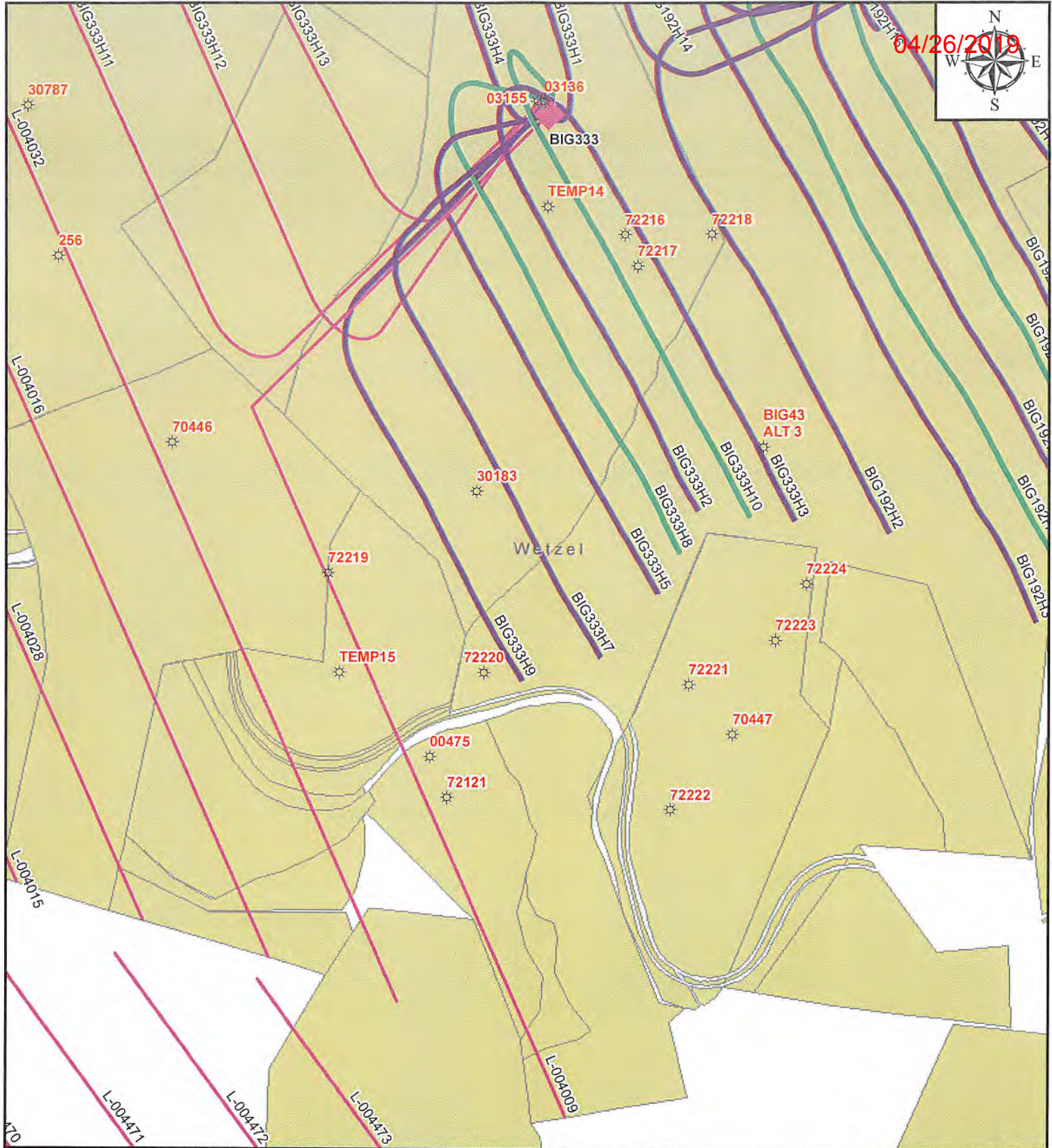
1:1,646,784

**PA**  
Greene

**WV**  
Marion

Wetzel

04/26/2019



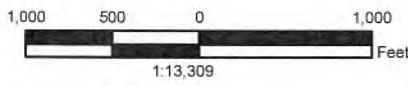
**EQT**  
EQT Corporation  
625 Liberty Avenue  
Pittsburgh, PA 15222

BIG 333 - South

### Vertical Offsets and Foreign Laterals within 1500'

Created By: Kellen Waltman Printed By: madigamp en 2/12/2019  
Path: \\endcfa2\gisdept\GIS\_Department\GIS\_Users\Madigan\PAOR\WV\BIG333\_2\_12\_2019\Big\_333\_Offset\_Map\_south\_2\_12\_2019.mxd

- Legend**
- Vertical Offset Well
  - Pad
  - Genesee Drilled
  - Genesee Planned
  - Marcellus Drilled
  - Marcellus Planned
  - Utica Drilled
  - Utica Planned
  - EQT Lease
  - County



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STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

1) Well Operator: EQT Production Company

<u>306686</u>	<u>Wetzel</u>	<u>Grant</u>	<u>Big Run</u>
---------------	---------------	--------------	----------------

  
Operator ID County District Quadrangle

2) Operator's Well Number: BIG333H13 Well Pad Name: BIG333

3) Farm Name/Surface Owner: Coastal Forest Resources Co., d/b/a Coastal Timberlands Co. Public Road Access: CR 20

4) Elevation, current ground: 1451' (as-built) Elevation, proposed post-construction: 1451'

5) Well Type (a) Gas  Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_  
Other \_\_\_\_\_  
(b) If Gas Shallow  Deep \_\_\_\_\_  
Horizontal

6) Existing Pad: Yes or No Yes

*DNH  
3-4-19*

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Target formatin: Marcellus Depth: 7643' Anticipated Thickness: 51' Anticipated Target Pressure: 2620 PSI

8) Proposed Total Vertical Depth: 7643'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 11,998'

11) Proposed Horizontal Leg Length: 3410'

12) Approximate Fresh Water Strata Depths: 581', 753'

13) Method to Determine Fresh Water Depths: By offset wells

14) Approximate Saltwater Depths: 2257', 2333', 2370', 2657'

15) Approximate Coal Seam Depths: 743', 883', 919', 1011', 1240', 1333'

16) Approximate Depth to Possible Void (coal mine, karst, other): None reported

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes \_\_\_\_\_ No

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

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18)

**CASING AND TUBING PROGRAM**

<b>TYPE</b>	<b>Size (in)</b>	<b>New or Used</b>	<b>Grade</b>	<b>Weight per ft. (lb/ft)</b>	<b>FOOTAGE: For Drilling (ft)</b>	<b>INTERVALS: Left in Well (ft)</b>	<b>CEMENT: Fill-up (Cu. Ft.)/CTS</b>
Conductor	26	New	A-500	85.6	40	40	49 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	985	985	924 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	3042	3042	1189 ft^3 / CTS
Production	5 1/2	New	P-110	20	11998	11998	500' above top producing zone
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40' above top perf or 80° inclination.	
Liners							

*DmH  
3-4-19*

<b>TYPE</b>	<b>Size (in)</b>	<b>Wellbore Diameter (in)</b>	<b>Wall Thickness (in)</b>	<b>Burst Pressure (psi)</b>	<b>Anticipated Max. Internal Pressure (psi)</b>	<b>Cement Type</b>	<b>Cement Yield (cu. ft./k)</b>
Conductor	26	30	.312	884	18	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2700	2160	See Variance	1.19
Coal							
Intermediate	9 5/8	12 3/8	.395	3950	3160	See Variance	1.19
Production	5 1/2	8 1/2	.361	12640	10112	Class A/H	1.123/2.098
Tubing	2 3/8	NA	.19	7700			
Liners							

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical to an approximate depth of 5336'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

DMH  
3-4-19

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.1%) of chemicals (including 15% Hydrochloric acid, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 400,000 pounds of proppant per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): \_\_\_\_\_

22) Area to be disturbed for well pad only, less access road (acres): \_\_\_\_\_

23) Describe centralizer placement for each casing string:

- Surface: Bow spring centralizers – One centralizer at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers– One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

24) Describe all cement additives associated with each cement type:

Conductor: Class A no additives  
Surface (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries  
Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries.  
Production:  
Lead (Class A Cement): 0.2% CD-20 (dispersant makes cement easier to mix). .15% SuperFL-300 (fluid loss/lengthens thickening time) .15% SEC-10 (fluid loss) 50:50 POZ (extender)  
Tail (Class H Cement): 0.2% Super CR-1 (Retarder). Lengthens thickening time. .3% Super FL-200 (fluid loss) .2% SEC-10 (Fluid loss). .2% SuperFL-350 (fluid loss) Reduces amount of water lost to formation. 60 % Calcium Carbonate. Acid solubility.

25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume. Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean.  
Check volume of cuttings coming across the shakers every 15 minutes.

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\*Note: Attach additional sheets as needed.

MAR 20 2019



west virginia department of environmental protection

Office of Oil and Gas  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
dep.wv.gov

March 18, 2014

Nabors Completion & Production Services Company  
1380 Route 286 Hwy E #121  
Indiana PA 15701

Re: Cement Variance Request

Dear Sir or Madam,

This agency is approving a variance request for the cement blend listed below to be used on surface and coal protection strings for the drilling of oil and gas wells in the state of West Virginia. The variance cannot be used without requesting its use on a permit application and approval by this agency:

- Type 1 (2% Calcium Chloride-Accelerator, 0.25% Super Flake-Lost Circulation, 5.2% Water, 94% Type "1" Cement)

If you have any questions regarding this matter feel free to contact me at 304-926-0499, ext. 1653.

Sincerely,

James Peterson  
Environmental Resources Specialist / Permitting

Promoting a healthy environment.

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FEB 25 2019  
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Environmental Protection



west virginia department of environmental protection

Office of Oil and Gas  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
dep.wv.gov

**BEFORE THE OFFICE OF OIL AND GAS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
STATE OF WEST VIRGINIA**

**IN THE MATTER OF A VARIANCE FROM ) ORDER NO. 2014 - 17**  
**REGULATION 35 CSR § 4-11.4/11.5/14.1 )**  
**AND 35 CSR § 8-9.2.h. 4/5/6/8 OF THE )**  
**THE OPERATIONAL )**  
**REGULATIONS OF CEMENTING OIL )**  
**AND GAS WELLS )**

**REPORT OF THE OFFICE**

Nabors Completion & Production Services Co. requests approval of a different cement blend for use in cementing surface and coal protection casing of oil and gas wells.

**FINDINGS OF FACT**

- 1.) Nabors Completion & Production Services Co. proposes the following cement blend:
  - 2% Calcium Chloride (Accelerator)
  - 0.25 % Super Flake (Lost Circulation)
  - 94% Type "1" Cement
  - 5.20 % Water
- 2.) Laboratory testing results indicate that the blend listed in Fact No.1 will achieve a 500 psi compressive strength within 6 hours and a 2,435 psi compressive strength within 24 hours.

Promoting a healthy environment.

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FEB 25 2019  
WV Department of  
Environmental Protection

**CONCLUSIONS OF LAW**

Pursuant to Articles 6 and 6A, Chapter 22 of the Code of West Virginia, the Office of Oil and Gas has jurisdiction over the subject matter embraced in said notice, and the persons interested therein, and jurisdiction to promulgate the hereinafter prescribed Order.

Pursuant to 35 CSR § 4-11.5 and 35 CSR § 8-9.2.h.8 the Chief of the Office of Oil and Gas may approve different cement blends upon the well operator providing satisfactory proof that different cement types are adequate.

**ORDER**

It is ordered that Nabors Completion & Production Services Co. may use the cement blend listed in Findings of Fact No.1 for the cementing of surface and coal protection casing of oil and gas wells in the State as may be requested by oil and gas operators. The waiting time on the cement blend shall be 8 hours. The cement blend shall be mixed in strict accordance with the specifications for each blend and weight measurements made on-site to assure the cement slurries meet the minimum weight specifications. A sample shall be collected and, if after 8 hours the cement is not set up, additional time will be required. Nabors Completion & Production Services Co. shall keep a record of cement blend jobs in which the cement blend approved under this order is to be used and made available to the Office of Oil and Gas upon request.

Dated this, the 18th day of March, 2014.

IN THE NAME OF THE STATE OF WEST VIRGINIA

OFFICE OF OIL AND GAS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OF THE STATE OF WEST VIRGINIA



James Martin, Chief  
Office of Oil and Gas

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WV Department of  
Environmental Protection

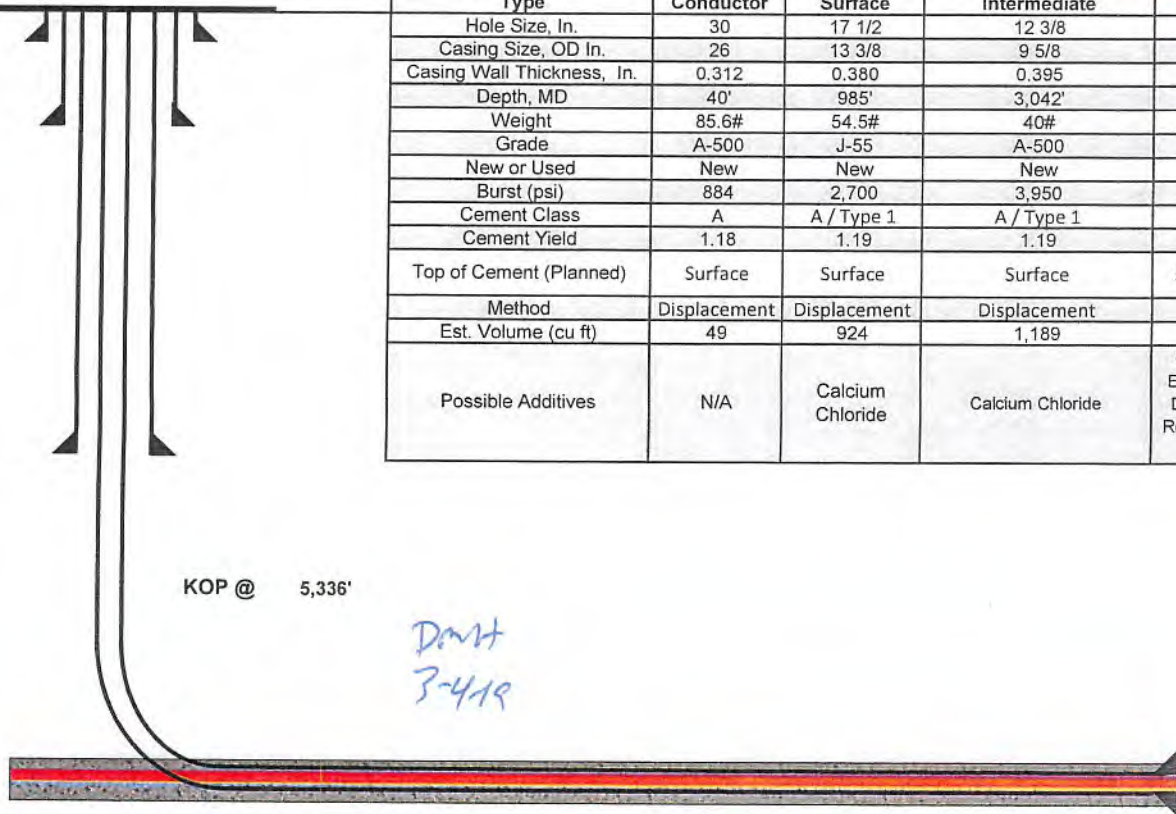
**Well** **BIG333H13**  
**EQT Production**  
**Big Run Quad Quad**  
**Wetzel County, WV**

Azimuth 333/341  
 Vertical Section 3727  
 Enertia # 519711

Note: Diagram is not to scale

Formations	Top TVD	Base TVD
Conductor	40	
<b>Base Fresh Water</b>	<b>753</b>	
Surface Casing	985	
<b>Base Red Rock</b>	<b>update</b>	
Big Lime	2526	2621
Big Injun	2636	2743
Weir	2875	2992
Gantz	3285	3340
Fifty foot	3381	3431
Thirty foot	3442	3475
Gordon	3500	3516
Fourth Sand	3534	3544
Bayard	3627	3661
Intermediate Casing	3042	
Speechley	4029	4097
Balltown A	4112	4250
Riley	5005	5064
Benson	5570	5663
Alexander	5965	6012
Sonyea	7180	7341
Middlesex	7341	7389
Genesee	7389	7475
Geneseo	7475	7501
Tully	7501	7521
Hamilton	7521	7609
Marcellus	7609	7660
Production Casing	11998	MD
Onondaga	7660	

Casing and Cementing				Deepest Fresh Water: 753'
Type	Conductor	Surface	Intermediate	Production
Hole Size, In.	30	17 1/2	12 3/8	8 1/2
Casing Size, OD In.	26	13 3/8	9 5/8	5 1/2
Casing Wall Thickness, In.	0.312	0.380	0.395	0.361
Depth, MD	40'	985'	3,042'	11,998'
Weight	85.6#	54.5#	40#	20#
Grade	A-500	J-55	A-500	P-110
New or Used	New	New	New	New
Burst (psi)	884	2,700	3,950	12,640
Cement Class	A	A / Type 1	A / Type 1	A / H
Cement Yield	1.18	1.19	1.19	1.123 / 2.098
Top of Cement (Planned)	Surface	Surface	Surface	500' above top Producing Zone
Method	Displacement	Displacement	Displacement	Displacement
Est. Volume (cu ft)	49	924	1,189	#N/A
Possible Additives	N/A	Calcium Chloride	Calcium Chloride	Calcium Carbonate, Fluid Loss, Extender, Dispersant, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent



Land curve @ 7,643' TVD  
 8,588' MD

Est. TD @ 7,643' TVD  
 11,998' MD

*DMH*  
*3-4-19*

**<NOT PILOT HOLE>**

Proposed Well Work:  
 Drill and complete a new horizontal well in the Marcellus formation.  
 Drill the vertical to an approximate depth of 5336'.  
 Kick off and drill the curve. Drill lateral in the Marcellus. Cement casing.

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 WV Department of Environmental Protection

3,410' Lateral

**WEST VIRGINIA GEOLOGICAL PROGNOSIS**

Horizontal Well  
BIG333H13

v 2017.4  
Enertia # 519711

**Drilling Objectives:** Marcellus  
**County:** Wetzel  
**Quad:** Big Run Quad  
**Elevation:** 1465 KB 1452 GL  
**Surface location** Northing: 375168.97 Easting: 1692005.33  
**Landing Point** Northing: 374487.80 Easting: 1690513.98  
**Toe location** Northing: 377627.25 Easting: 1689204.11  
**Recommended Azimuth** 333/341 Degrees

TVD: 7643  
Recommended LP to TD: 3,410'

Proposed Logging Suite:

Please have gamma tool behind bit with geosteers and/or mudloggers working by 7125' TVD.

Recommended Gas Tests:

1800, 2050, 2600, Intm Csg. Pt., 3400, 4900, 5250, KOP, (Gas test at any mine void)  
Gas test during any trip or significant downtime while drilling the lateral section.

**ESTIMATED FORMATION TOPS**

Formation	Top (TVD)	Base (TVD)	Lithology	Comments
Fresh Water Zone	1	753		FW @ 581,753,...
Washington Coal	743	745	Coal	
Waynesburg Coal	883	885	Coal	
Coal	919	920	Coal	
Uniontown Coal	1011	1012	Coal	
Pittsburgh Coal	1240	1245	Coal	No past, present, or permitted mine
Coal	1333	1337	Coal	SW @ 2257,2333,2370,2657
Big Lime	2526	2621	Limestone	
Big Injun	2636	2743	Sandstone	
Weir	2875	2992	Sandstone	Storage is NOT of concern
Int. csg pt	3042			<b>Below Weir</b>
Gantz	3285	3340	Silty Sand	
Fifty foot	3381	3431	Silty Sand	
Thirty foot	3442	3475	Silty Sand	
Gordon	3500	3516	Silty Sand	Offset gas production
Fourth Sand	3534	3544	Silty Sand	Offset gas production
Fifth Sand	3561	3600	Silty Sand	Offset gas production
Bayard	3627	3661	Silty Sand	Base of Offset Well Perforations at 3672' TVD
Speechley	4029	4097	Silty Sand	
Balltown A	4112	4250	Silty Sand	
Riley	5005	5064	Silty Sand	
Benson	5570	5663	Silty Sand	
Alexander	5965	6012	Silty Sand	
Elks	6012	7180	Gray Shales and Silts	
Sonyea	7180	7341	Gray shale	
Middlesex	7341	7389	Shale	
Genesee	7389	7475	Gray shale interbedded	
Genesee	7475	7501	Black Shale	
Tully	7501	7521	Limestone	
Hamilton	7521	7609	Gray shale with some	
Marcellus	7609	7660	Black Shale	
Purcell	7615	7621	Limestone	
-Lateral Zone	7643			Start Lateral at 7643'
Cherry Valley	7638	7640	Limestone	
Onondaga	7660		Limestone	

Top RR 315 Base RR 919 Base of Red Rock

Environmental Protection

Target Thickness	51 feet
Max Anticipated Rock Pressure	2620 PSI

**Comments:**

Note that this is a TVD prog for a  
Intermediate casing point is  
The estimated landing point TVD

**LATERAL DRILLING TOLERANCES**

**Mapview - Lateral:** Deviate as little as possible to the left or right of the planned wellbore.  
**Mapview - TD:** DO NOT EXTEND beyond recommended wellbore to avoid lease line.

**RECOMMENDED CASING POINTS**

<b>Fresh Water/Coal</b>	CSG OD	13 3/8	CSG DEPTH:	985	below deepest RR, as set in previous
<b>Intermediate 1:</b>	CSG OD	9 5/8	CSG DEPTH:	3042	Beneath the Weir formation
<b>Production:</b>	CSG OD	5 1/2	CSG DEPTH:	@ TD	





04/26/2019

February 19, 2019

Mr. Taylor Brewer  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304

Re: Casing on BIG333

Dear Mr. Brewer,

The 13-3/8" surface casing will be set at 985' KB, 232' below the deepest fresh water. The 9-5/8" intermediate string will be set at 3,042' KB, 50' below the base of the Weir formation.

If you have any questions, please do not hesitate to contact me at 724-746-9073.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Zavatchan'.

John Zavatchan  
Landman - Permitting

Enc.

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API Number 47 - \_\_\_\_\_  
Operator's Well No. ENG000816

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code 308626

Watershed (HUC 10) Aunty Run of South Fork Fishing Creek Quadrangle Elig Run

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: N/A

Will a synthetic liner be used in the pit? Yes  No  If so, what ml? N/A

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number See Attached )
- Reuse (at API Number Various )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

*DmH  
3-4-19*

Will closed loop system be used? If so, describe: Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached

-If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud

Additives to be used in drilling medium? See Attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

-Landfill or offsite name/permit number? See Attached List

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature [Signature]

Company Official (Typed Name) John Zavatchan

Company Official Title Landman - Permitting

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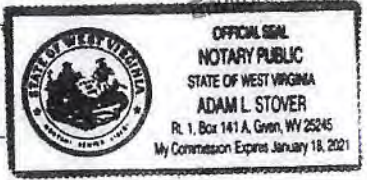
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Environmental Protection

Subscribed and sworn before me this 22nd day of February, 20 19

[Signature]

Notary Public

My commission expires 1/10/2021



WW-9 Attachment

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc.

- Air is used to drill the top-hole sections of the wellbore (surface, intermediate, and pilot). Water based mud may be necessary depending on hole conditions to stabilize and drill the intermediate section. The pilot hole, curve, and lateral sections will be drilled with either air, water based mud, or oil based mud.

Additives to be used in drilling medium?

- Air - biodegradable oil lubricant, detergent, defoaming, water. Water based mud – Barite, viscosifer, alkalinity control, lime, filtration control, deflocculates, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates. Oil based mud – synthetic base oil, emulsifier, salt, lime, viscosifer, alkalinity control, filtration control, deflocculates, biodegradable oil lubricant, defoaming, carbonates.

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EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed No additional disturbance Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type Granular 10-20-20

Fertilizer amount 1/3 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type	lbs/acre
KY-31	40
Alsike Clover	5
Annual Rye	15

Seed Type	lbs/acre
Orchard Grass	15
Alsike Clover	5

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Oil + Gas Inspector

Date: 3-4-19

Field Reviewed?  Yes  No

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EQT Production Water Plan									
Offsite Disposals for Unconventional Wells									
Facility Name	Address	Address 2	City	State	Zip	Phone	County	State	Permit Number
CWS Trucking Inc.	P.O. Box 391		Williamstown	WV	26187	740-516-3586	Noble	OH	3390
Broad Street Energy LLC	37 West Broad Street	Suite 1100	Columbus	OH	43215	740-516-5381	Washington	OH	8462
LAD Liquid Assets Disposal Inc.	226 Rankin Road		Washington	PA	15301	724-350-2760	Ohio	WV	USEPA WV 0014
Triad Energy	PO Box 430		Reno	OH	45773	740-516-6021 740-374-2940	Noble	OH	4037
Tri County Waste Water Management, Inc.	1487 Toms Run Road		Holbrook	PA	15341	724-627-7178 724-499-5647	Greene	PA	TC-1009
King Excavating Co. Advance Waste Services	101 River Park Drive		New Castle	PA	16101		Lawrence	PA	PAR000029132
Waste Management - Meadowfill Landfill	Rt. 2, Box 68 Dawson Drive		Bridgeport	WV	16330	304-326-6027	Harrison	WV	SWF-1032-98 Approval #100785WV
Waste Management - Northwestern Landfill	512 E. Dry Road		Parkersburg	WV	26104	304-428-0602	Wood	WV	SWF-1025 WV-0109400
APEX Landfill	11 County Road 78	PO Box 57	Amsterdam	OH	43903	740-543-4389	Jefferson	OH	06-08438
Advanced Disposal - Chestnut Valley Landfill	1184 McClellandtown Road		McClellandtown	PA	15458	724-437-7336	Fayette	PA	100419
Westmoreland Sanitary Landfill	901 Tyrol Boulevard		Belle Vernon	PA	15012	724-929-7694	Westmoreland	PA	100277
Austin Master Services	801 North 1st Street		Martins Ferry	OH	43935	740-609-3800	Belmont	OH	2014-541
Belmont Solids Control	77505 Cadiz-New Athers Road		Cadiz	OH	43907	740-942-1739	Harrison	OH	2015-511
Diversified Resources	3111 Braun Rd.		Belpre	OH	45714	740-401-0413	Washington	OH	
Buckeye Brine	23986 Airport Road		Coshocton	OH	43812	740-610-1512 724-591-4393	Coshocton	OH	34-031-27177 34-031-27178 34-031-27241
Central Environmental Services	28333 West Belpre Pike		Coolville	OH	45723	304-488-0701	Athens	OH	
Nuverra - Nichols	10555 Veto Road		Belpre	OH	45714	330-232-5041	Washington	OH	34-119-2-8776
Nuverra - Goff	9350 East Pike Road		Norwich	OH	43767	330-232-5041	Muskingum	OH	34-167-2-3862
Nuverra - Wolf	5480 State Route 5		Newton Falls	OH	44444	330-232-5041	Trumbull	OH	34-155-2-1893
Nuverra - Pappier	5310 State Route 5		Newton Falls	OH	44444	330-232-5041	Trumbull	OH	34-155-2-3795
Nuverra - Ann	3549 Warner Road		Fowler	OH	44418	330-232-5041	Trumbull	OH	34-155-2-2403

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FQ Helen	199 Bowersock Road		Reno	OH	45773	740-374-2940 412-443-4397 740-236-2135	Washington	OH	34-167-2-9577
FQ Dexter	38505 Marietta Rd.		Dexter City	OH	45727	740-374-2940 412-443-4397 740-236-2135	Noble	OH	34-121-24037 34-121-24086
FQ Ritchie	122 Lonesome Pine Rd		Ellenboro	WV	26346	740-374-2940 412-443-4397 740-236-2135	Ritchie	WV	47-085-09721
FQ Mills	53610 TS Rd 706		Portland	OH	45770	740-374-2940 412-443-4397 740-236-2135	Meigs	OH	34-105-2-3619 34-105-2-3652 34-105-2-3637 34-105-2-3651
Petta Enterprises - OH	745 North 3rd Street		Cambridge	OH	43725	614-477-1368	Guernsey	OH	Ohio Chiefs Order 25-019
Petta Enterprises - WV	38 Technology Dr.		Tridelpia	WV	26059	740-255-5727	Ohio	WV	
Deep Rock Disposal	2341 OH-821		Marietta	OH	45750	304-629-0176	Washington	OH	34-167-2-9766

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Where energy meets innovation.

# Site Specific Safety and Environmental Plan

EQT

BIG333 Pad

Jacksonburg

Wetzel County, WV

For Wells:

BIG333H11 BIG333H12 BIG333H13

Date Prepared: February 23, 2018

[Signature]  
EQT Production

Lawson-Permon  
Title

2/23/18  
Date

[Signature]  
WV Oil and Gas Inspector

Oil & Gas Inspector  
Title

3-4-19  
Date

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MAR 20 2019

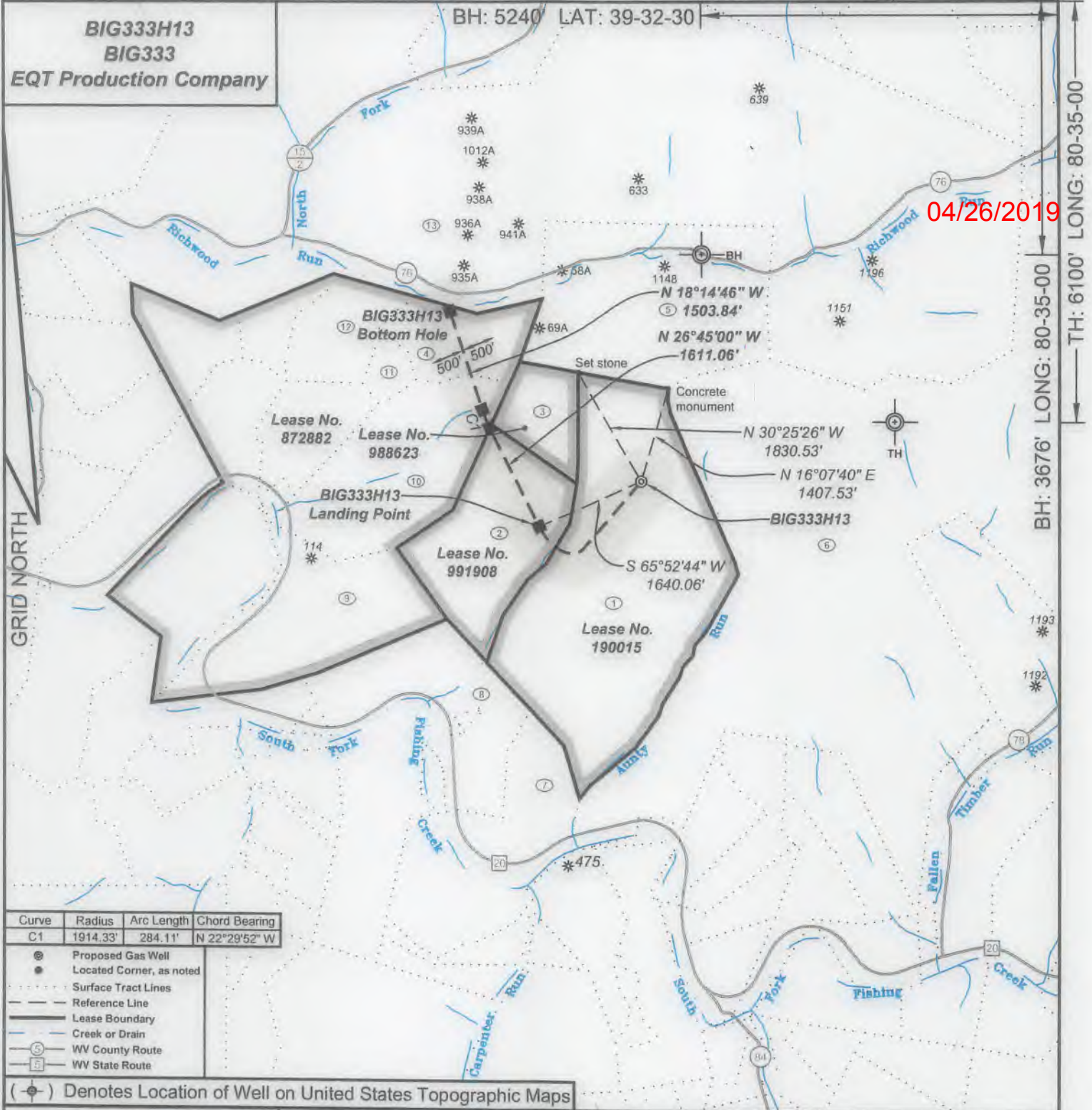
WV Department of  
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TH: 2409' LAT: 39-32-30

BH: 5240' LAT: 39-32-30

TH: 6100' LONG: 80-35-00  
BH: 3676' LONG: 80-35-00

04/26/2019



Curve	Radius	Arc Length	Chord Bearing
C1	1914.33'	284.11'	N 22°29'52\" W

- 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: 33-15  
 DRAWING NO: 33-15 BIG333H13  
 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: February 19 20 19  
 OPERATOR'S WELL NO.: BIG333H13  
 API WELL NO  
 47 - 103 - 03295  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION: ELEVATION: As-Built - 1451' WATERSHED Aunty Run of South Fork Fishing Creek QUADRANGLE: Big Run  
 DISTRICT: Grant COUNTY: Wetzel  
 SURFACE OWNER: Coastal Forest Resources Co., d/b/a Coastal Timberlands Co. ACREAGE: 283.6±  
 ROYALTY OWNER: Equitrans, Inc. LEASE NO: 190015 ACREAGE: 285±  
 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: 7,643'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson  
 ADDRESS: 2400 Ansys Drive, Suite 200 ADDRESS: 115 Professional Place PO Box 280  
 Canonsburg, PA 15317 Bridgeport, WV 26330

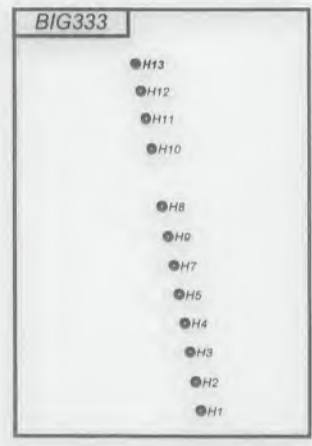


**BIG333H13**  
**BIG333**  
**EQT Production Company**

Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	23	13	Wetzel	Grant	Coastal Forest Resources Co.	283.60
2	23	12	Wetzel	Grant	Larry Larew, et al.	104.80
3	23	9	Wetzel	Grant	Larry Larew, et al.	31.50
4	23	4	Wetzel	Grant	Dallison Lumber, Inc.	36.10
5	23	5	Wetzel	Grant	Al Wyatt Heirs	174.68
6	23	14	Wetzel	Grant	Richard B. Dallison, et al.	879.30
7	26	8	Wetzel	Grant	Joseph W. Carlin	112.90
8	28	6	Wetzel	Grant	Joseph W. Carlin	190.74
9	23	11.4	Wetzel	Grant	Richard & Roxanne Funk, et al.	88.21
10	23	8	Wetzel	Grant	Richard & Roxanne Funk, et al.	113.81
11	23	3	Wetzel	Grant	Dallison Lumber, Inc.	15.00
12	23	2	Wetzel	Grant	Billy Dewayne Arnolds, Jr.	38.80
13	17	14	Wetzel	Grant	Coastal Forest Resources Co.	1627.60

**Notes:**  
 BIG333H13 coordinates are  
 NAD 27 N: 375,168.97 E: 1,692,005.33  
 NAD 27 Lat: 39.524920 Long: -80.591874  
 NAD 83 UTM N: 4,375,118.95 E: 535,093.53  
 BIG333H13 Landing Point coordinates are  
 NAD 27 N: 374,498.73 E: 1,690,508.47  
 NAD 27 Lat: 39.523030 Long: -80.597151  
 NAD 83 UTM N: 4,374,907.13 E: 534,640.89  
 BIG333H13 Bottom Hole coordinates are  
 NAD 27 N: 377,627.25 E: 1,689,204.11  
 NAD 27 Lat: 39.531575 Long: -80.601910  
 NAD 83 UTM N: 4,375,853.63 E: 534,227.63  
 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.

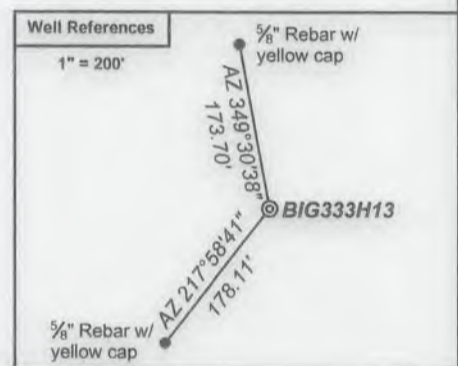
04/26/2019



Lease No.	Acres	Owner
991908	104.8	Brian C. Fox, et al.
988623	31.5	Larry Larew, et al.
872882	436	Shiben Estates



- ⊗ 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. Seltzer*  
 P.S. 2092



FILE NO: 33-15  
 DRAWING NO: 33-15 BIG333H13  
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 MINIMUM DEGREE OF ACCURACY: 1:2500  
 PROVEN SOURCE OF ELEVATION: NGS CORS Station



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 STATE COUNTY PERMIT

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 ROYALTY OWNER: Equitrans, Inc. LEASE NO: 190015 ACREAGE: 285±  
 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: 7,643'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson  
 ADDRESS: 2400 Ansys Drive, Suite 200 ADDRESS: 115 Professional Place PO Box 280  
Canonsburg, PA 15317 Bridgeport, WV 26330

WW-6A1  
(5/13)

Operator's Well No. BIG333H13

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6A, Section 5(a)(5)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Attached				

**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

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FEB 25 2019

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all necessary permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: EQT Production Company  
By: John Zavatchan  
Its: Landman - Permitting

<b>Lease No.</b>	<b>Grantor, Lessor, etc.</b>	<b>Grantee, Lessee, etc.</b>	<b>Royalty</b>	<b>Book/Page</b>
<b><u>190015</u></b>	<b><u>(current royalty owner)</u></b>		**	
	Alex Hart, et al. (original lessor)	The Philadelphia Company of West Virginia		DB 93/392
	The Philadelphia Company of West Virginia	Pittsburgh & West Virginia Gas Company		DB 146/98
	Pittsburgh & West Virginia Gas Company	Equitable Gas Company		DB 187/321
	Equitable Gas Company	Equitrans, Inc.		DB 71A/453
	Equitrans, Inc.	Equitrans, L.P		DB 105/908
	Equitrans, L.P	Equitable Production-Eastern States, Inc.		DB 320/607
	Equitable Production-Eastern States, Inc.	Equitable Production Company		CB13/14
	Equitable Production Company	EQT Production Company		CB13/14
<b><u>991908</u></b>	Colleen Ann Chapman	EQT Production Company		134A/805
<b><u>988623</u></b>	Richard P Funk, Jr	EQT Production Company		132A/59
<b><u>872882</u></b>	<b><u>Shiben Estates, Inc (current royalty owner)</u></b>			
	David Cox and Samantha Cox (original lessor)	Greenlee and Forst		39/109
	Forst	Greenlee		46/511
	Greenlee	United States Oil Company		46/411
	United States Oil Company	South Penn Oil Company		88/208
	South Penn Oil Company	South Penn Natural Gas Company		33A/455
	South Penn Natural Gas Company	South Penn Oil Company (Pennzoil Company)		215/478
	Pennzoil Company	Pennzoil Products Company		319/397
	Pennzoil Products Company	Pennzoil Exploration and Production Company		363/384
	Pennzoil Exploration and Production Company	Devon Energy Produciton Company, L.P.		12/278 merger
	Devon Energy Produciton Company, L.P.	East Resources, Inc		370/580
	East Resources, Inc	HG Energy, LLC		118A/253
	East Resources, Inc/HG Energy	American Energy - Marcellus, LLC		153A/238
	American Energy - Marcellus, LLC	Ascent Resources - Marcellus LLC		114/619 name change
	Ascent Resources- Marcellus, LLC	EQT Production Company		182A/183

\*\* Per West Virginia Code Section 22-6-8.

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WV Department of  
Environmental Protection



04/26/2019  
EQT Production Company  
2400 Ansys Drive, Suite 200  
Canonsburg, PA 15317  
www.eqt.com

John Zavatchan  
Landman - Permitting  
O:724-746-9073  
[jjavatchan@eqt.com](mailto:jjavatchan@eqt.com)

February 19, 2019

Mr. Taylor Brewer  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304

Re: BIG333H13 Gas Well  
Grant District, Wetzel County

Dear Mr. Brewer,

EQT Production Company is applying for a new well work permit for the well referenced above. Upon information and belief, the Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Zavatchan', is written over a light blue horizontal line.

John Zavatchan  
Landman - Permitting

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Environmental Protection

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE CERTIFICATION**

Date of Notice Certification: 02/22/2019

API No. 47- \_\_\_\_\_ - \_\_\_\_\_  
Operator's Well No. BIG333H13  
Well Pad Name: BIG333

**Notice has been given:**

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>4,375,118.95</u>
County: <u>Wetzel</u>		Northing: <u>535,093.53</u>
District: <u>Grant</u>	Public Road Access: <u>CR 20</u>	
Quadrangle: <u>Big Run</u>	Generally used farm name: <u>Coastal Forest Resources Co., d/b/a Coastal Timberlands Co.</u>	
Watershed: <u>Aunty Run of South Fork Fishing Creek</u>		

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

\*PLEASE CHECK ALL THAT APPLY

- 1. NOTICE OF SEISMIC ACTIVITY or  NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED
- 2. NOTICE OF ENTRY FOR PLAT SURVEY or  NO PLAT SURVEY WAS CONDUCTED
- 3. NOTICE OF INTENT TO DRILL or  NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or  
 WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)
- 4. NOTICE OF PLANNED OPERATION
- 5. PUBLIC NOTICE
- 6. NOTICE OF APPLICATION

**OOG OFFICE USE ONLY**

- RECEIVED/ NOT REQUIRED
- RECEIVED
- RECEIVED/ NOT REQUIRED
- RECEIVED
- RECEIVED
- RECEIVED

**Required Attachments:**

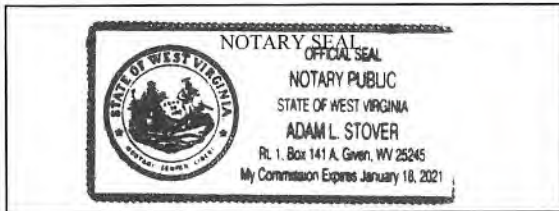
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

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WV Department of  
Environmental Protection

**Certification of Notice is hereby given:**

THEREFORE, I John Zavatchan, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator:	<u>EQT Production Company</u>	Address:	<u>2400 Ansys Drive, Suite 200</u>
By:	<u>John Zavatchan</u>		<u>Canonsburg, PA 15317</u>
Its:	<u>Landman - Permitting</u>	Facsimile:	<u>724-745-2418</u>
Telephone:	<u>724-746-9073</u>	Email:	<u>jzavatchan@eqt.com</u>



Subscribed and sworn before me this 27<sup>th</sup> day of February 2019.

[Signature] Notary Public

My Commission Expires 1/18/2021

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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WW-6A  
(9-13)

4710303295  
API NO. 47- - - - -  
OPERATOR WELL NO. BIG333F16 **04/26/2019**  
Well Pad Name: BIG333

**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF APPLICATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**

**Date of Notice:** 02/22/2019 **Date Permit Application Filed:** 02/22/2019

Notice of:

- PERMIT FOR ANY WELL WORK       CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

- PERSONAL SERVICE       REGISTERED MAIL       METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice    WSSP Notice    E&S Plan Notice    Well Plat Notice   is hereby provided to:

SURFACE OWNER(s)  
Name: See Attached List  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: See Attached List  
Address: \_\_\_\_\_  
\_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: See Attached List  
Address: \_\_\_\_\_  
\_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OPERATOR  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)  
Name: See Attached List  
Address: \_\_\_\_\_  
\_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: N/A  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: N/A  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary      RECEIVED  
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WV Department of  
Environmental Protection

04/26/2019

4710303295

**Surface Owners:**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

**Surface Owners (road or other disturbance):**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

Richard B. and Jaynee C. Dallison  
28855 Shortline Hwy.  
Folsom, WV 26348

Thomas P. Dallison  
452 Trader Fork Road  
Smithfield, WV 26437

Trenton D. Dallison  
2975 Barker Run Road  
Pine Grove, WV 26419

Richard and Roxanne Funk  
4832 Fairport Road  
Newton Falls, OH 44444

Larry Larew  
12750 W Middletown Road  
Salem, OH 44460

Lydle M. Martyn  
P.O. Box 7  
Jacksonburg, WV 26377

**Surface Owners (Pits or impoundments):**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

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Environmental Protection



04/26/2019

**Coal Owner**

CNX Land LLC  
Attn: Analyst Engineering and Operations Support Dept. Coal  
CNX Center  
1000 Consol Energy Drive  
Canonsburg, PA 15317 – 6506

Roxanna Yost Hafer  
460 N Main Street  
New Martinsville, WV 26155

Betty Jean Woods  
7 Ross Street  
New Martinsville, WV 26155

Forrest O. Miller  
P.O. Box 1664  
Lexington, KY 40588

Murray American Energy, Inc.  
1 Bridge Street  
Monongah, WV 26554

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04/26/2019

Owners of Water Wells  
N/A

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WV Department of  
Environmental Protection

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

**This Notice Shall Include:**

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va. Code R. § 35-8-5.7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**FEB 26 2019**  
WV Department of Environmental Protection

**Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

**Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

**Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

**Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

**Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

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Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. **NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.**

**Time Limits and Methods for Filing Comments.**

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

**Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

**Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

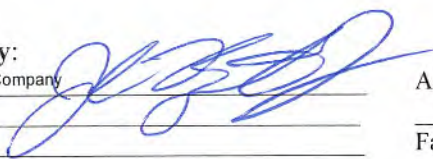
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WV Department of  
Environmental Protection

WW-6A  
(8-13)

API NO. 47- \_\_\_\_\_ - \_\_\_\_\_ **04/26/2019**  
OPERATOR WELL NO. BIG333H13  
Well Pad Name: BIG333

**Notice is hereby given by:**

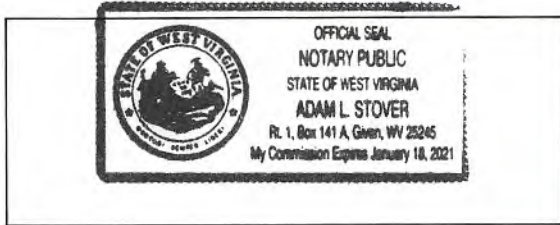
Well Operator: EQT Production Company  
Telephone: 724-746-9073  
Email: jzavatchan@eqt.com



Address: 2400 Ansys Drive, Suite 200  
Canonsburg, PA 15317  
Facsimile: 724-745-2418

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).



Subscribed and sworn before me this 22nd day of Feb, 2019.

 Notary Public

My Commission Expires 1/18/2021

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Topo Quad: Big Run

Scale: 1"=1500'

04/26/2019

County: Wetzel

Date: February 19, 2019

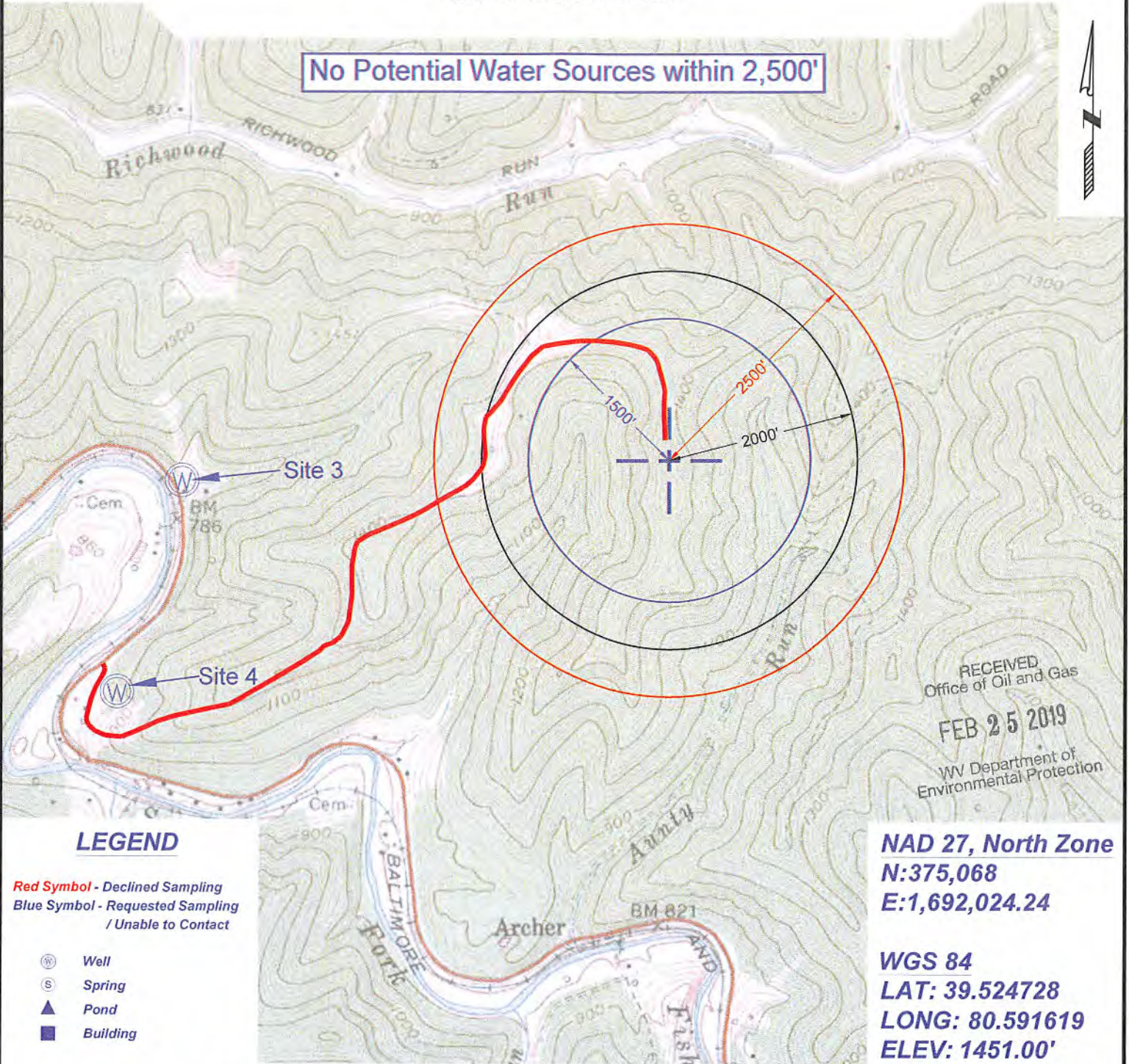
District: Grant

Project No: 33-34-G-15

### Water

## BIG 333 PAD

No Potential Water Sources within 2,500'



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FEB 25 2019  
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Environmental Protection

### LEGEND

Red Symbol - Declined Sampling  
Blue Symbol - Requested Sampling  
/ Unable to Contact

- ⊙ Well
- ⊙ Spring
- ▲ Pond
- Building

**NAD 27, North Zone**  
**N:375,068**  
**E:1,692,024.24**

**WGS 84**  
**LAT: 39.524728**  
**LONG: 80.591619**  
**ELEV: 1451.00'**



SURVEYING AND MAPPING SERVICES PERFORMED BY:

PREPARED FOR:

# ALLEGHENY SURVEYS, INC. EQT Production Company

1-800-482-8606  
237 Birch River Road  
Birch River, WV 26610  
PH: (304) 649-8606  
FAX: (304) 649-8608

2400 Ansys Drive  
Canonsburg, PA 15317



## Table 1 – Water Source Identification

EQT Well Pad Name: **Big 333**

Submittal Date: **February 19, 2019**

EQT Well Number: \_\_\_\_\_

Survey / Engineering Company: **Allegheny Surveys, Inc.**

Site Number: **1** Distance from Gas Well (feet): \_\_\_\_\_

Surface Owner / Occupant: **Coastal Forest Resources Co.**

Address: **PO BOX 709 BUCKHANNON WV 26201** Phone #: **304-460-7000 ext. 130**

Field Located Date: \_\_\_\_\_ Owner home during survey (yes/no): \_\_\_\_\_

Coordinates: \_\_\_\_\_ (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: **10/12/2018** 2<sup>nd</sup>: \_\_\_\_\_ Door Hanger Left: \_\_\_\_\_

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/>            | Landowner Requested Sampling  |
| <input checked="" type="checkbox"/> | Landowner Decline Sampling  |
| <input type="checkbox"/>            | Unable to Contact<br><small>(Further contact attempts to be made by EQT's third party pre-drill sampling lab)</small> |

Comments: **Certified letter sent October 12, 2018. Signed for by Nathan Feather. Letter returned declining sampling, signed by Matt Cornett.**

Site Number: **2** Distance from Gas Well (feet): \_\_\_\_\_

Surface Owner / Occupant: **Richard and Jaynee Dallison**

Address: **28855 Shortline Hwy. Folsom WV 26348-6021** Phone #: \_\_\_\_\_

Field Located Date: \_\_\_\_\_ Owner home during survey (yes/no): \_\_\_\_\_

Coordinates: \_\_\_\_\_ (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: **10/12/2018** 2<sup>nd</sup>: \_\_\_\_\_ Door Hanger Left: \_\_\_\_\_

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/>            | Landowner Requested Sampling  |
| <input checked="" type="checkbox"/> | Landowner Decline Sampling  |
| <input type="checkbox"/>            | Unable to Contact<br><small>(Further contact attempts to be made by EQT's third party pre-drill sampling lab)</small> |

Comments: **Certified letter sent October 12, 2018. Signed for by Richard Dallison. Letter returned declining sampling and indicated that there is no well, signed by Jaynee Dallison on 10/30/2018.**

Site Number: **3** Distance from Gas Well (feet): **5,100 ±**

Surface Owner / Occupant: **Richard and Roxanne Funk**

Address: **12750 MIDDLETOWN RD. SALEM OH 44460** Phone #: **304-889-2215**

Field Located Date: \_\_\_\_\_ Owner home during survey (yes/no): \_\_\_\_\_

Coordinates: **39.523752, -80.609663** (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: **10/12/2018** 2<sup>nd</sup>: \_\_\_\_\_ Door Hanger Left: \_\_\_\_\_

- |                                     |   |
|-------------------------------------|---|
| <input type="checkbox"/>            | Landowner Requested Sampling  |
| <input type="checkbox"/>            | Landowner Decline Sampling  |
| <input checked="" type="checkbox"/> | Unable to Contact<br><small>(Further contact attempts to be made by EQT's third party pre-drill sampling lab)</small> |

Comments: **Certified letter sent October 12, 2018. Was not delivered and returned marked "Insufficient address." Tax records double checked and no other address found. According to previous report, water well was sampled 03/2013.**

(Insert additional pages as needed)

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04/26/2019

Site Number: **4** Distance from Gas Well (feet): **6,361 ±**

Surface Owner / Occupant: **Bryan Brown**

Address: **PO BOX 46 Jacksonburg, WV 26377** Phone #: \_\_\_\_\_

Field Located Date: \_\_\_\_\_ Owner home during survey (yes/no): **No**

Coordinates: **39.517796, -80.612321** (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: **10/12/2018** 2<sup>nd</sup>: \_\_\_\_\_ Door Hanger Left: **Yes**

- |   |
|---|
| <input checked="" type="checkbox"/> Landowner Requested Sampling  |
| <input type="checkbox"/> Landowner Decline Sampling   |
| <input type="checkbox"/> Unable to Contact<br>(Further contact attempts to be made by EQT's third party pre-drill sampling lab) |

Comments: **Certified letter mailed 10/12/2018 and signed for by Tracey Brown. Field visit on 10/15/2018 - doorhanger was left. Received signature page in mail on 11/27/2018 requesting testing, with this note: "Yes, in the house only -- We had to get a whole house system after they caused damage to our well building the road."**

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WW-6A4  
(1/12)

**STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE OF INTENT TO DRILL**

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

**Notice Time Requirement:** Notice shall be provided at least **TEN (10)** days prior to filing a permit application.  
**Date of Notice:** 10/10/2018      **Date Permit Application Filed:** 02/22/2019

**Delivery method pursuant to West Virginia Code § 22-6A-16(b)**

HAND DELIVERY       CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

**Notice is hereby provided to the SURFACE OWNER(s):**

Name: See Attached List      Name: \_\_\_\_\_  
Address: \_\_\_\_\_      Address: \_\_\_\_\_

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>535,093.53</u>
County: <u>Wetzel</u>		Northing: <u>4,375,118.95</u>
District: <u>Grant</u>	Public Road Access: <u>CR 20</u>	
Quadrangle: <u>Big Run</u>	Generally used farm name: <u>Coastal Forest Resources Co., d/b/a Coastal Timberland Co.</u>	
Watershed: <u>Aunty Run of South Fork Fishing Creek</u>		

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: <u>EQT Production Company</u>	Authorized Representative: <u>John Zavatchan</u>
Address: <u>2400 Ansys Drive, Suite 200</u>	Address: <u>2400 Ansys Drive, Suite 200</u>
<u>Canonsburg, PA 15317</u>	<u>Canonsburg, PA 15317</u>
Telephone: <u>724-746-9073</u>	Telephone: <u>724-746-9073</u>
Email: <u>jzavatchan@eqt.com</u>	Email: <u>jzavatchan@eqt.com</u>
Facsimile: <u>724-745-2418</u>	Facsimile: <u>724-745-2418</u>

RECEIVED  
Office of Oil and Gas  
**FEB 25 2019**

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

WV Department of  
Environmental Protection

**Surface Owners:**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

4710303295 04/26/2019

**Surface Owners (road or other disturbance):**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

Richard B. and Jaynee C. Dallison  
28855 Shortline Hwy.  
Folsom, WV 26348

Thomas P. Dallison  
452 Trader Fork Road  
Smithfield, WV 26437

Trenton D. Dallison  
2975 Barker Run Road  
Pine Grove, WV 26419

Richard and Roxanne Funk  
4832 Fairport Road  
Newton Falls, OH 44444

Larry Larew  
12750 W Middletown Road  
Salem, OH 44460

Lydle M. Martyn  
P.O. Box 7  
Jacksonburg, WV 26377

**Surface Owners (Pits or impoundments):**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

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FEB 25 2019  
WV Department of  
Environmental Protection

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
**NOTICE OF PLANNED OPERATION**

**Notice Time Requirement:** notice shall be provided no later than the **filing date of permit application.**  
**Date of Notice:** 02/22/2019      **Date Permit Application Filed:** 02/22/2019

**Delivery method pursuant to West Virginia Code § 22-6A-16(c)**

- |  |                               |
|--|-------------------------------|
| <input checked="" type="checkbox"/> CERTIFIED MAIL | <input type="checkbox"/> HAND |
| RETURN RECEIPT REQUESTED                           | DELIVERY                      |

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

**Notice is hereby provided to the SURFACE OWNER(s)**  
(at the address listed in the records of the sheriff at the time of notice):

Name: <u>See Attached List</u>	Name: _____
Address: _____	Address: _____

**Notice is hereby given:**

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State: <u>West Virginia</u>	UTM NAD 83 Easting: <u>535,093.53</u>
County: <u>Wetzel</u>	Northing: <u>4,375,118.95</u>
District: <u>Grant</u>	Public Road Access: <u>CR 20</u>
Quadrangle: <u>Big Run</u>	Generally used farm name: <u>Coastal Forest Resources Co., d/b/a Coastal Timberlands Co.</u>
Watershed: <u>Aunty Run of South Fork Fishing Creek</u>	

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: <u>EQT Production Company</u>	Address: <u>2400 Ansys Drive, Suite 200</u>
Telephone: <u>724-746-9073</u>	<u>Canonsburg, PA 15317</u>
Email: <u>jzavatchan@eqt.com</u>	Facsimile: <u>724-745-2418</u>

**Oil and Gas Privacy Notice:**

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

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**FEB 25 2019**  
WV Department of  
Environmental Protection

4710303295  
04/26/2019

**Surface Owners:**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

**Surface Owners (road or other disturbance):**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
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Smithfield, WV 26437

Trenton D. Dallison  
2975 Barker Run Road  
Pine Grove, WV 26419

Richard and Roxanne Funk  
4832 Fairport Road  
Newton Falls, OH 44444

Larry Larew  
12750 W Middletown Road  
Salem, OH 44460

Lydle M. Martyn  
P.O. Box 7  
Jacksonburg, WV 26377

**Surface Owners (Pits or impoundments):**

Coastal Forest Resources dba Coastal Timberlands Company  
P.O. Box 709  
Buckhannon, WV 26201

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WV Department of  
Environmental Protection



## WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

**Division of Highways**1900 Kanawha Boulevard East • Building Five • Room 110  
Charleston, West Virginia 25305-0430 • (304) 558-3505Thomas J. Smith, P. E.  
Secretary of Transportation/  
Commissioner of Highways

November 9, 2018

Jill M. Newman  
Deputy CommissionerJames A. Martin, Chief  
Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304Subject: DOH Permit for the BIG333 Pad Site, Wetzel County  
BIG333H11                      Big333 H12                      Big333 H13

Dear Mr. Martin,

This well site will be accessed from existing Permits # 06-2012-0519 & 06-2014-0558 issued to EQT Production Company for access to the State Road for a well site located off of Wetzel County Route 76 SLS and WV Route 20 F.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

A handwritten signature in blue ink that reads "Gary K. Clayton".

Gary K. Clayton, P.E.  
Regional Maintenance Engineer  
Central Office O&G CoordinatorCc: Nick Bumgardner  
EQT Production Company  
CH, OM, D-6, FileRECEIVED  
Office of Oil and Gas

FEB 25 2019

WV Department of  
Environmental Protection

**Anticipated Frac Additives**  
**Chemical Names and CAS numbers**

<u>Material</u>	<u>Ingredient</u>	<u>CAS Number</u>
Water		
Sand	Hydrotreated light petroleum distillate	14808-60-7
	Tributyl tetradecyl phosphonium	
Friction Reducer	chloride	64742-47-8
Biocide	Ammonium chloride	81741-28-8
Scale Inhibitor	Hydrochloric Acid	12125-02-9
15% Hydrochloric Acid	Propargyl Alcohol	7647-01-0
Corrosion Inhibitor	Methanol	107-19-7
Corrosion Inhibitor	Guar Gum	67-56-1
Gelling Agent	Sodium Persulfate	9000-30-0
Oxidizing Breaker	Potassium Carbonate	7775-27-1
Buffering Agent		584-08-7

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FEB 25 2019

WV Department of  
Environmental Protection

# BIG-333 AS-BUILT SITE PLAN EQT PRODUCTION COMPANY

API NO. 47-103-02851, 47-103-02849, 47-103-02848, 47-103-02850, 47-103-02852,  
47-103-02857, 47-103-02853, & 47-103-03025. PROPOSED WELLS WV 514416 & WV 514419.



### PROJECT INFORMATION

PROJECT NAME: BIG 333 AS BUILT SITE PLAN  
TAX PARCEL: [blank]  
COUNTY DISTRICT: [blank]  
MAP 23 13

### SURFACE OWNER

COASTAL FOREST RESOURCES COMPANY 4/7%  
COASTAL FOREST RESOURCES COMPANY  
GRANT DISTRICT  
WETZEL COUNTY WV  
TOTAL PROPERTY AREA: 283.8 ACRES

### ROYALTY OWNER

ALEX HART ET AL  
GRANT DISTRICT  
WETZEL COUNTY WV  
TOTAL PROPERTY AREA: 283.0 ACRES

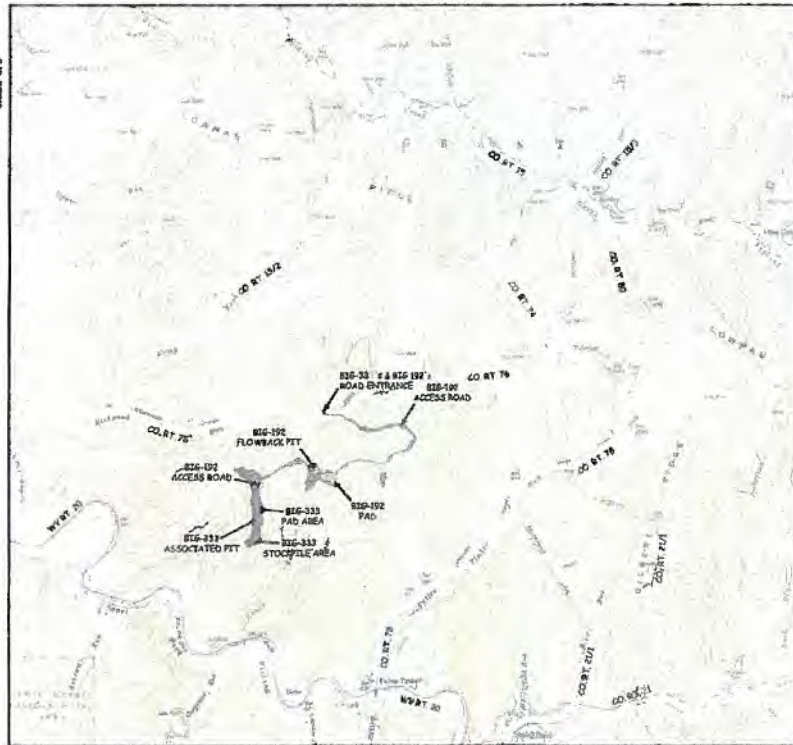
### SITE LOCATION

THE BIG 333 SITE IS LOCATED ON A RIDGE SOUTH OF CO RT 78 AND NORTH OF RT 20 THE SITE IS APPROXIMATELY 7.825 FT NORTHWEST OF THE CO RT 78 AND RT 20 INTERSECTION ACCESS TO THE BIG 333 SITE BEING A COUNTY RT 78 WEST BIG 192 AS BUILT ACCESS ROAD IS INCLUDED IN THIS PLAN

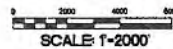
GAS RIGHTS AND RESERVATIONS ESTABLISHED BY SURVEY COMB OGS

SITUATE ON THE WATERS OF TRIBUTARIES OF SOUTH FORK,  
OF FISHING CREEK & AUNTY RUN  
IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA.

### LOCATION MAP



BIG RUN QUAD



### LIST OF DRAWINGS

- 1 COVER SHEET
- 2 CONSTRUCTION NOTES
- 3 INDEX SHEET
- 4 100-333 SITE AS-BUILT (PAD AND PIT)
- 5 BIG-333 STOCKPILE AS BUILT
- 6 BIG 192 ACCESS ROAD AS BUILT
- 7 BIG 192 ACCESS ROAD AS BUILT
- 8 BIG-192 RT20 AS-BUILT (PAD AND PIT)
- 9 BIG 192 ACCESS ROAD AS BUILT
- 10 BIG-192 ACCESS ROAD AS BUILT
- 11 BIG 192 ACCESS ROAD AS BUILT
- 12 BIG-192 ACCESS ROAD AS BUILT
- 13 BIG 192 ACCESS ROAD AS BUILT
- 14 CONSTRUCTION DETAILS

### LEGEND

- LIMITS OF DISTURBANCE  
COMPOST FILTER BOCK  
EX BOUNDARY LINE  
EX ROAD EDGE OF GRAVEL/DOZ  
EX ROAD EDGE OF PAVEMENT  
EX ROAD CENTERLINE  
EX DIVERSION  
EX CURBLINE  
EX FENCELINE  
EX GATE  
EX OVERHEAD UTILITY  
EX OVERHEAD UTILITY R/W  
EX POWER POLE  
EX GUT VOTE  
EX TELEPHONE LINE  
EX GASLINE  
EX GASLINE R/W  
EX FENCELINE  
EX MONITORING WELL  
EX TRENCH  
EX SEWERAGE TRENCH  
EX DEGRADED STREAM  
EX DEGRADED WETLAND  
EX STRUCTURE  
EX FENCE MARKER  
EX FOOTPRINT  
EDGE OF GRAVEL PAD  
EDGE OF ROCK  
EX SUPER BILT FENCE  
EX REINFORCED BILT FENCE  
ROCK  
GRAVEL  
GENERAL GROUND E CONTROL AS BUILT F CONTROLS  
PHOTO NUMBER & LOCATION  
AS-BUILT WELL LOCATIONS  
PROPOSED WELL LOCATIONS  
WELL RELATIONS  
MATCHLINE

### LOCATION COORDINATES

BIG 333 COUNTY RT 78 ENTRANCE  
LATITUDE: 39.524197 LONGITUDE: 80.882082 (NAD 83)  
BIG 333 WELL PAD  
LATITUDE: 39.524707 LONGITUDE: 80.881618 (NAD 83)  
BIG 333 ASSOCIATED PIT  
LATITUDE: 39.523957 LONGITUDE: 80.881635 (NAD 83)

### SITE DISTURBANCE COMPUTATIONS

ACCESS ROAD AREA: 2.0 ACRES  
PAD AREA: 0.8 ACRES  
PIT & STOCKPILE AREA: 10.7 ACRES  
TOTAL AS-BUILT DISTURBANCE: 17.5 ACRES

### GENERAL DESCRIPTION

THE WELL PAD AND ASSOCIATED PIT HAVE BEEN CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS

MISS Utility of West Virginia  
1-800-245-4848  
West Virginia State Law  
(Section XIV, Chapter 24-C)  
Requires that you call two  
business days before you dig in the  
state of West Virginia  
IT'S THE LAW!!

DmH  
12-17-14



REVISION

DATE

BY

EQT

where energy meets innovation.

Professional Energy Consultants  
A Division of EQT  
10000 West Virginia Turnpike  
Martinsburg, WV 26151  
800-368-3333  
www.eqt.com

THIS DOCUMENT HAS  
BEEN REVIEWED FOR  
COMPLIANCE WITH  
THE WEST VIRGINIA  
CONSTITUTION

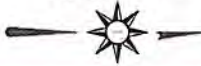
BIG-333  
AS-BUILT SITE PLAN

THIS DOCUMENT WAS PREPARED BY  
THE EQT PRODUCTION COMPANY

DATE: 8-23-14  
BY: [blank]  
SCALE: 1" = 2000'  
DESIGNED BY: YAW  
FILE NO: 7054  
SHEET: 1 OF 14  
NO FILE  
100-333-001-01-001



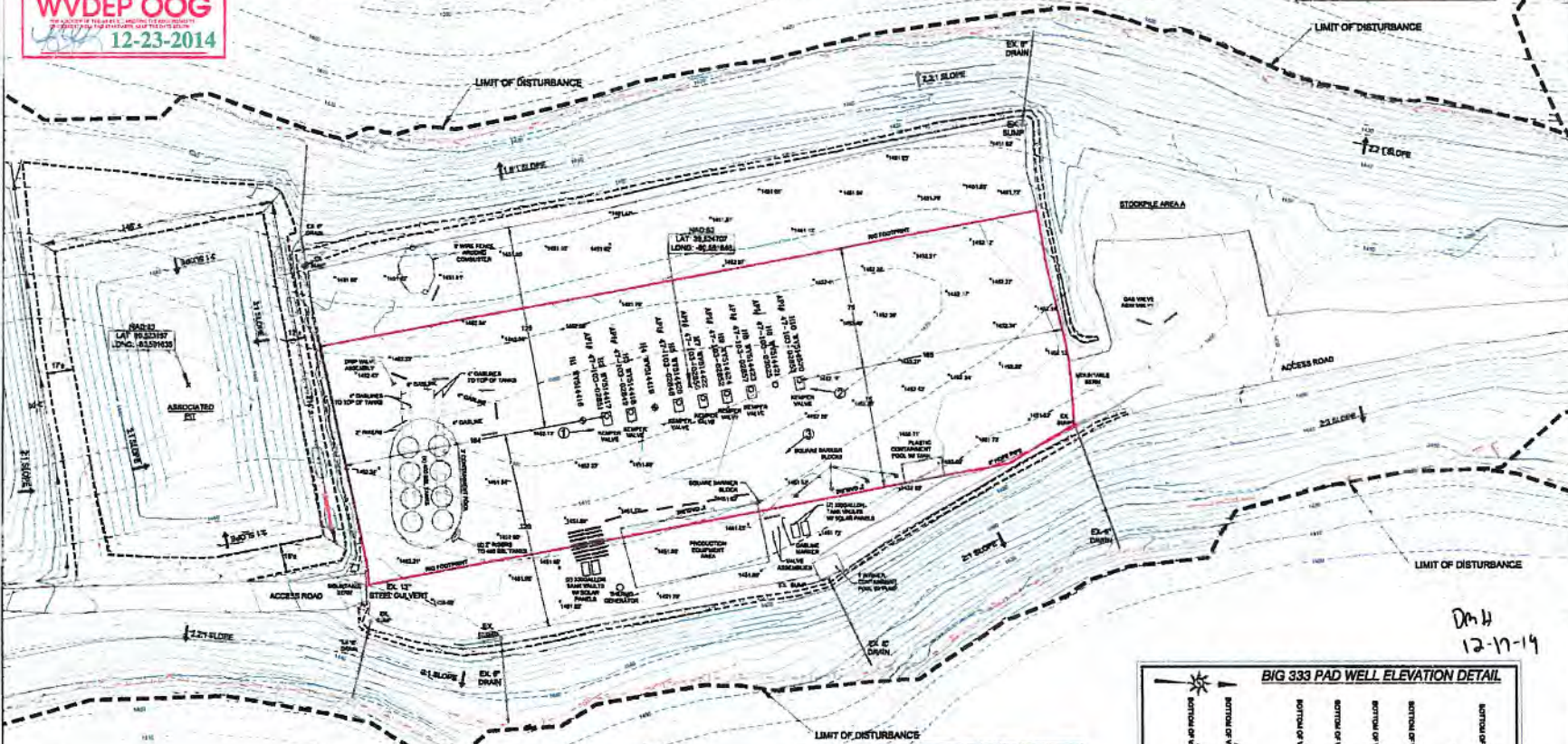
GRID NORTH AND ELEVATIONS SHOWN HEREIN WERE ESTABLISHED BY DIPS SURVEY GRADE



# BIG 333 AS-BUILT SITE PLAN

SITUATE ON THE WATERS OF TRIBUTARIES OF SOUTH FORK,  
OF FISHING CREEK & AUNTY RUN  
IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA.

**APPROVED  
WVDEP OOG**  
12-23-2014



**LEGEND**

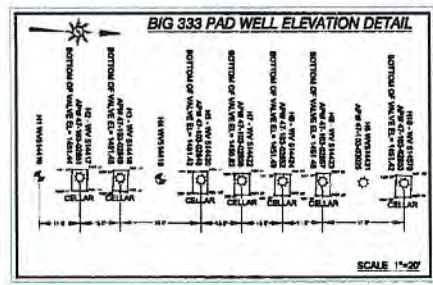
- PROPOSED LIMITS OF DISTURBANCE
- BASELINE JOB CENTER
- JOBBY BOUNDARY
- EDGE OF DRAINAGE
- BASELINE 1" SLOPE
- TOP OF BANK
- DRAINAGE
- AS BUILT CONTOURS
- PROPOSED WELL LOCATIONS
- FORWITTED WELL LOCATIONS
- SPOT ELEVATIONS
- PHOTO NUMBER & LOCATION

1. THE CERTIFICATION OF THIS DRAWING APPLIES ONLY TO THE INFORMATION AND VALUES AS DERIVED FROM THE FIELD DATA OBTAINED AT THE TIME OF THE FIELD SURVEY AND AS SHOWN ON THIS DRAWING. THE SURVEYOR IS NOT RESPONSIBLE FOR ANY CHANGES MADE AFTER THE DATE INDICATED ABOVE THAT AFFECT THE ACCURACY OR VALIDITY OF THIS DRAWING.

2. THIS WELL LOCATION INFORMATION IS FOR INFORMATION ONLY AND DOES NOT CONSTITUTE A GUARANTEE OF THE LOCATION OR DEPTH OF ANY WELL. THE USER OF THIS INFORMATION IS RESPONSIBLE FOR OBTAINING NECESSARY PERMITS AND FOR OBTAINING NECESSARY INFORMATION FROM THE LOCAL HEALTH DEPARTMENT AND OTHER AGENCIES.

**CONSTRUCTION NOTES**

1. THE WELL PAD APPROXIMATE BOUNDARY AND MEASUREMENTS ARE TO BE REFERRED TO AND SHALL BE OBTAINED PRIOR TO COMMENCEMENT OF ANY ADDITIONAL WORK AS SHOWN ON THIS PLAN.



DMH  
12-17-14

DATE: 12/23/14  
REVISION: 1  
DESCRIPTION: UPDATE AND REVISION PLAN VIEW



Professional Energy Consultants  
SUBSERVICES  
ENGINEERS  
ENVIRONMENTAL  
PROJECT MANAGERS  
METEOROLOGISTS

**SES**  
SOUTH EAST SERVICES  
INC.

THIS DOCUMENT WAS PREPARED BY SOUTH EAST SERVICES, INC. FOR EQT.

**BIG 333  
AS-BUILT SITE PLAN**

THIS DOCUMENT WAS PREPARED BY SOUTH EAST SERVICES, INC. FOR WETZEL COUNTY.

DATE: 8-21-14  
JOB: 14-001  
SCALE: 1" = 30'  
DESIGNED BY: DMS  
FILE NO: 7055  
SHEET: 4 OF 14  
DATE: 12-23-14