

west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary 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 BIG333H11 47-103-03293-00-00

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: BIG333H11

Farm Name: COASTAL FOREST RESOUR

U.S. WELL NUMBER: 47-103-03293-00-00

Horizontal 6A New Drill Date Issued: 4/26/2019

API Number: 4710303293

04/26/2019

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

 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.

API Number: 47/0303293

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, cessation of drilling, sending an email to DEPOOGNotify@wv.gov.

EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: BIG333

County: Wetzel

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 SHR60 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**.

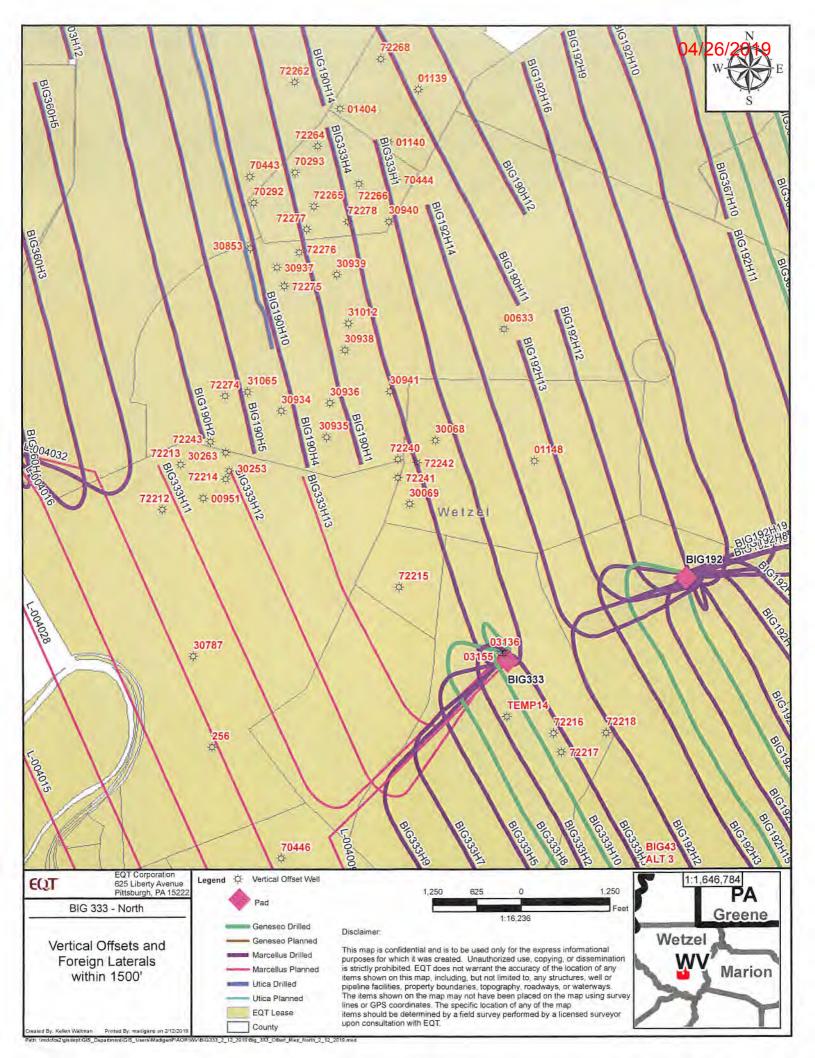
EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

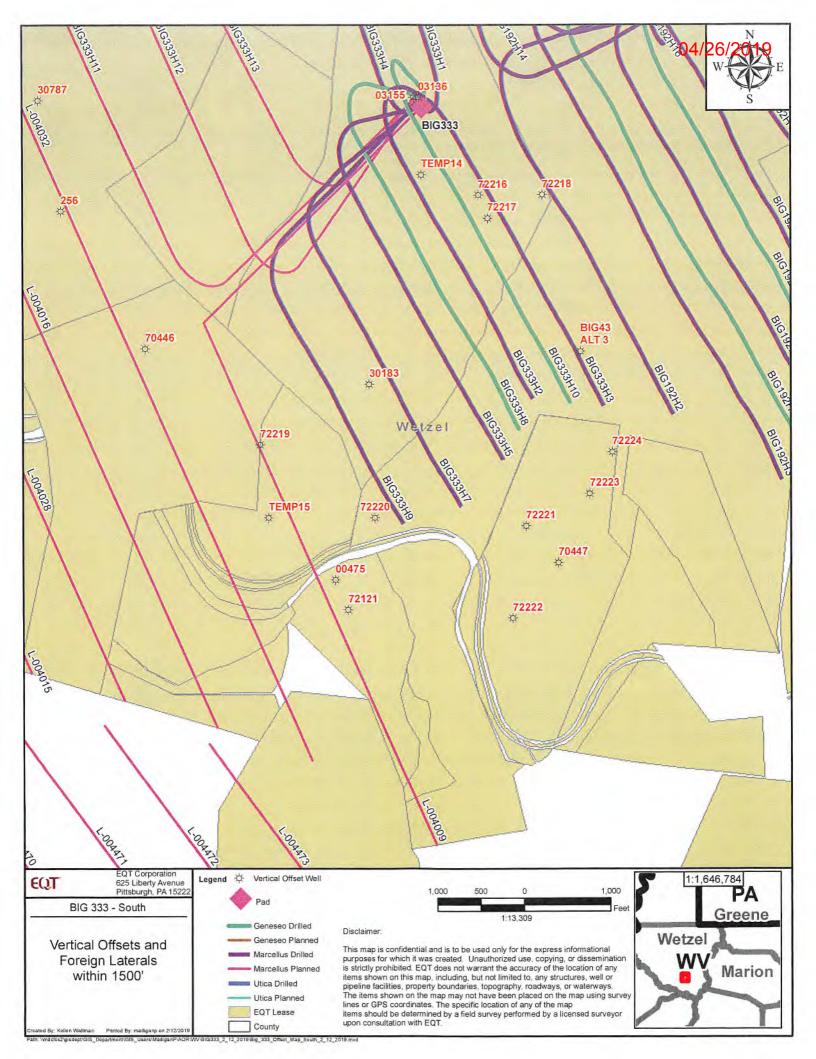
EQT will recommend to these operators at a minimum to:

- Inspect their surface equipment prior to fracturing to establish integrity and establish prefrac well conditions
- 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.





1969 1969	API Number	Abandoned Date Co	mpletion Date County	Operator	Elevation Datum	Final Status	Latitude L	ongitude Lease	Permit Date Projected Formation	Projected TD Spud Date State	TD Formation	Total Depth Well Number	Permit
March Marc					GR	ABDOGW	39.5157	-80.5940 ALEX HART	1/26/1923	2/10/1923 WEST VIRGINIA		2190 5337	30183
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1411 1411	47103722680000											-	
Part											HAMPSHIKE		
1969 1969													
1975 1975											HAMPSHIRE		
1997-1999-1999-1999-1999-1999-1999-1999													72217
WITH MONTH									9/20/1978 BAYARD	3200 9/30/1978 WEST VIRGINIA	DEVONIAN /SD/	3199 A-758	01148
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17/109704700000						GAS	39.5372	-80.5918 MILLS WETZEL LANDS	9/29/1977 BIG INJUN /SD/		FIFTH SAND	3400 A-695	
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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 Produc	ction Company	306686	Wetzel	Grant	Big Run
	7000	Operator ID	County	District	Quadrangle
2) Operator's Well Number: BIC	9333H11	Well P	ad Name: BIC	9333	
3) Farm Name/Surface Owner:	Coastal Forest Resources Co., o Coastal Timberlands Co.	Public R	oad Access: C	R 20	×
4) Elevation, current ground:	As built - 1,451' E1	evation, propose	ed post-constru	ction: 1,451	t I
5) Well Type (a) Gas X	Oil	Ur	nderground Sto	rage	
Other	٧				
(b)If Gas Shal	llow X izontal X	Deep	_		D. II
6) Existing Pad: Yes or No Yes					7-44C
7) Proposed Target Formation(s)	# # # T #	inated Thickness	e and Evnected	Pressure(s)	7717
Target formation: Marcellus Depth: 764				111055010(5):	
8) Proposed Total Vertical Depth	1: 7,643'				
9) Formation at Total Vertical D	The second second second	3			
10) Proposed Total Measured De	epth: 14,113'				
11) Proposed Horizontal Leg Le	ngth: 4,852'				
12) Approximate Fresh Water St	rata Depths:	581', 753'			
13) Method to Determine Fresh	Water Depths:	By offset wells			
14) Approximate Saltwater Dept	hs: 2,257', 2,33	3', 2,370', 2,657	T.		
15) Approximate Coal Seam Dep	pths: 743', 883',	919', 1,011', 1	,240', 1,333'		
16) Approximate Depth to Possi	ble Void (coal mi	ine, karst, other)	: None repor	ted	
17) Does Proposed well location directly overlying or adjacent to		ms Yes		No X	
(a) If Yes, provide Mine Info:	Name:				
MANY AND ARTHUR OF A LEGISLATION	Depth:				
	Seam:				RECEIVED
	Owner:				Office of Oil and Gas

MAR 2 0 2019

WW-6B	
(04/15)	

API NO. 47		-0.4.00.400.4.0
OPERATOR WELL	NO.	BW33340/2019
Well Pad Name		

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
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	924ft^3 / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	3,042	3,042	1189 ft^3 / CTS
Production	5 1/2	New	P-110	20	14,113	14,113	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

ТҮРЕ	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	26	30	.312	884	18	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2,700	2,184	See Variance	1.19
Coal							
Intermediate	9 5/8	12 3/8	.395	3,950	3,160	See Variance	1.19
Production	5 1/2	8 1/2	.361	12,640	10,112	Class A/H	1.123/2.098
Tubing	2 3/8	NA	.19	7700			
Liners							

PACKERS

Kind:		
Sizes:		
Depths Set:		
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WV Department of Environmental Protection Page 2 of 3

API NO. 47	0.4/0.0/0.40
OPERATOR WELL N	O. 04/26/2019
Well Pad Name: BI	G333

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 3284'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

Dm H 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 % Calcuim 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 2 0 2019



February 12, 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 has been 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,

John Zavatchan

Landman - Permitting

Enc.

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MAR 2 0 2019



west virginia department of environmental protection

Office of Oil and Gas 601 57th 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.

Francisco Pd Gas



west virginia department of environmental protection

Office of Oil and Gas 601 57th 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
- 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.

Office of Oil and Gas
FEB 2 5 2019
WV Department of Environmental Protection

Promoting a healthy environment.

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

Office of Oil and Gas
FEB 2 5 2019

WY Department of Environmental Protection

Well

BIG333H11

EQT Production

Big Run Quad Quad Wetzel County, WV

Azimuth 336.3 **Vertical Section** 5533 Enertia # 516335

Note: Diagram is not to scale

Note: Diagram is not to scale	Top Base			Casing and Cementing			Deepest Fresh Wat	or 752
Formations	TVD TVD			Type	Conductor	Surface		
Conductor	40	TITT	TITE	Hole Size, In.	30	17 1/2	Intermediate 12 3/8	Production
	10	4		Casing Size, OD In.	26	13 3/8	9 5/8	8 1/2 5 1/2
Base Fresh Water	753	111		Casing Wall Thickness, In.	0.312	0.380	0.395	0.361
STATE STATE STATE	2.55	111		Depth, MD	40'	985'	3,042'	14,113'
Surface Casing	985	411		Weight	85.6#	54.5#	40#	20#
Coronerous		-11		Grade	A-500	J-55	A-500	P-110
Base Red Rock	update	- 11		New or Used	New	New	New	New
		- 11	11	Burst (psi)	884	2.700	3,950	12,640
Big Lime	2526 - 2621	- 11		Cement Class	A	A/Type 1	A / Type 1	A/H
Big Injun	2636 - 2743	- 11		Cement Yield	1.18	1.19	1.19	1.123 / 2.098
Weir	2875 - 2992	- 11	L	The state of the s				
Gantz	3285 - 3340	- 11	11	Top of Cement (Planned)	Surface	Surface	Surface	500' above top Producing Zone
		- 11		Method	Displacement	Displacement	Displacement	Displacement
Fifty foot	3381 - 3431	- 11	11	Est. Volume (cu ft)	49	924	1,189	#N/A
Thirty foot	3442 - 3475	- 11						Calcium Carbonate, Fluid Loss,
Gordon	3500 - 3516	- 11				Calaina		Extender, Dispersent, Viscosifie
Fourth Sand	3534 - 3544	11	11	Possible Additives	N/A	Calcium	Calcium Chloride	Defoamer, POZ, Bonding Agent
Bayard	3627 - 3661					Chloride		Retarder, Anti-Settling/Suspension
Intermediate Casing	3042	4						Agent

Speechley	4029 - 4097							
Balltown A	4112 - 4250	- 1						
Riley	5005 - 5064							
Benson	5570 - 5663	1		7)-				
Alexander	5965 - 6012		KOP @ 3,284'	Par H				
Sonyea	7180 - 7341	1		7				
Middlesex	7341 - 7389			2410				
Genesee	7389 - 7475	1	1	17				
Geneseo	7475 - 7501	1	1					
Tully	7501 - 7521	1	1					
Hamilton	7521 - 7609	,						
Marcellus	7609 - 7660		11					4
Production Casing	14113 MD				The Paris of Street, Square,			
Onondaga	7660	"是有有效。""S	AND THE PERSON NAMED IN					The state of the s
		Land curv	ve @ 7,643' TVD			Est. TD @	7,643'	TVD
			9,261' MD			LSI. ID W	14,11:	
OT DU OT HOLES			Open inc				14,11.	3 IVID

<NOT PILOT HOLE>

Proposed Well Work:

Proposed Well Work:
Drill and complete a new horizontal well in the Marcellus formation.
Drill the vertical to an approximate depth of 3284'.

Environmental Protection

Proposed Well Work:
Drill and complete a new horizontal well in the Marcellus formation.

Cement casing.

Proposed Well Work:
Drill and complete a new horizontal well in the Marcellus formation.

Cement casing.

Proposed Well Work:

Drill and complete a new horizontal well in the Marcellus formation.

Cement casing.

Proposed Well Work:

Drill and complete a new horizontal well in the Marcellus formation.

Cement casing.

4,852' Lateral

WEST VIRGINIA GEOLOGICAL PROGNOSIS

Horizontal Well BIG333H11

v 2017.4 Enertia # 516335

Drilling Objectives: County:

Quad:

Elevation:

Surface location

Landing Point

Toe location

Marcellus

Wetzel

Big Run Quad

1465 KB

375141.45

335.6 Degrees

1452 GL 1692010.51

Northing: Northing: Northing:

373236.03 377817.84

Easting:

Easting:

Easting:

1689178.81 1687167.82

TVD: 7643 Recommended LP to TD: 5,004

Recommended Azimuth Proposed Logging Suite:

Please have gamma tool behind bit with geosteerers 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 C		
Waynesburg Coal	883	885 C		
Coal	919	920 C		
Uniontown Coal	1011	1012 C		
Pittsburgh Coal	1240	1245 C		No past, present, or permitted mine
Coal	1333	1337 C		SW @ 2257,2333,2370,2657
Big Lime	2526		imestone	
Big Injun	2636	2743 S	andstone	
Weir	2875	2992 S	andstone	Storag is NOT of concern
Int. csg pt	3042			Below Weir
Gantz	3285	3340 S	ilty Sand	
Fifty foot	3381	3431 S	ilty Sand	
Thirty foot	3442	3475 S	ilty Sand	And The Control of th
Gordon	3500	3516 S	ilty Sand	Offset gas production
Fourth Sand	3534	3544 S	ilty Sand	Offset gas production
Fifth Sand	3561	3600 S	ilty Sand	Offset gas production
Bayard	3627	3661 S	ilty Sand	Base of Offset Well Perforations at 3672' TVD
Speechley	4029	4097 S	ilty Sand	2 10 10 10 10 10 10 10 10 10 10 10 10 10
Balltown A	4112	4250 S	ilty Sand	
Riley	5005	5064 S	ilty Sand	
Benson	5570	5663 S	ilty Sand	
Alexander	5965	6012 S	ilty Sand	
Elks	6012	7180 C	iray Shales and Silts	
Sonyea	7180	7341 G	Gray shale	
Middlesex	7341	7389 S	hale	
Genesee	7389	7475 G	ray shale interbedded	
Geneseo	7475	7501 B	Black Shale	
Tully	7501	7521 L	imestone	
Hamilton	7521	7609 C	dray shale with some	
Marcellus	7609	7660 B	llack Shale	
Purcell	7615	7621 L	imestone	
-Lateral Zone	7643			Start Lateral at 7643'
Cherry Valley	7638	7640 L	imestone	The state of the s
Onondaga	7660	L	imestone	

Top RR Base RR 315

919 Base of Red Rock

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

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

RECOMMENDED CASING POINTS

Fresh Water/Coal CSG OD 13 3/8 Intermediate 1: CSG OD 9 5/8 Production: CSG OD 5 1/2

CSG DEPTH: CSG DEPTH: CSG DEPTH:

985 3042 @ TD

below deepest RR, as set in previou Beneath the Weir formation

Office of Oil and Gas

FEB 2 5 2019 En accomment of Protection

ADI	Num	hon	47	
AFI	Num	ber	4/	-

Operator's Well No. BIG333H11 STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

PEUIDS/ CUTTINGS DISPOS	AL & RECLAMATION PLAN
Operator Name EQT Production Company	OP Code 306686
Watershed (HUC 10) Aunty Run of South Fork Fishing Creek	Quadrangle Big Run
Do you anticipate using more than 5,000 bbls of water to complete	e the proposed well work? Yes / No 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:	DAH
Land Application	3-4-15
Underground Injection (UIC Permit N	umber See Attached
Reuse (at API Number Various	
Off Site Disposal (Supply form WW-9 Other (Explain	for disposal location)
Will closed loop system be used? If so, describe: Yes, The closed loot then prepared for tr	op system will remove drill cuttings from the drilling fluid. The drill cuttings are ansportation 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	netic Mud
Additives to be used in drilling medium? See Attached	
Drill cuttings disposal method? Leave in pit, landfill, removed of	fsite, etc. Landfill
-If left in pit and plan to solidify what medium will be us	ed? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? See Attached Lie	st
Permittee shall provide written notice to the Office of Oil and Gas West Virginia solid waste facility. The notice shall be provided with where it was properly disposed.	of any load of drill cuttings or associated waste rejected at any thin 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the West Virgi provisions of the permit are enforceable by law. Violations of a law or regulation can lead to enforcement action. I certify under penalty of law that I have personally e application form and all attachments thereto and that, based of	ditions of the GENERAL WATER POLLUTION PERMIT issued in Department of Environmental Protection. I understand that the my term or condition of the general permit and/or other applicable examined and am familiar with the information submitted on this on my inquiry of those individuals immediately responsible for exacurate, and complete. I am aware that there are significant of fine or imprisonment. RECEIVED Office of Oil and Gas
Company Official (Typed Name) John Zavatchan	MAD 9 0 2010
Company Official Title Landman - Permitting	MAR 2 0 2019
Subscribed and sworn before me this 22 day of	February , 20 19 Environmental Protection
	GILL & BOTARY PUBLIC
My commission expires 1/19/2021	Notary Public STATE OF REST VINCANA ADAM L. STOVER Rt. 1. Stat Not. A. Green, W. 2516 My Commencer Express January 18, 2

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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		lo additional disturbance Prevegetation pl	I
Lime 3	Tons/acre or to corre	ct to pH 6.5	
Fertilizer type Gr			
Fertilizer amount_	1/3	lbs/acre	
Mulch 2		_Tons/acre	
		Seed Mixtures	
T	emporary	Perma	nent
Seed Type KY-31	lbs/acre 40	Seed Type Orchard Grass	lbs/acre
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		
Maps(s) of road, location, p provided). If water from the acreage, of the land applicat	pit will be land applied, inclination area	d application (unless engineered plans included limensions (L x W x D) of the pit, and	ding this info have been d dimensions (L x W), and
provided). If water from the acreage, of the land applicate Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
Maps(s) of road, location, p provided). If water from the acreage, of the land applicat Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
Maps(s) of road, location, p provided). If water from the acreage, of the land applicat Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
Maps(s) of road, location, p provided). If water from the acreage, of the land applicat Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
Maps(s) of road, location, p provided). If water from the acreage, of the land applicat Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
Maps(s) of road, location, p provided). If water from the acreage, of the land applicat Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
Maps(s) of road, location, p provided). If water from the acreage, of the land applicat Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
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Maps(s) of road, location, p provided). If water from the acreage, of the land applicat Photocopied section of invo	pit will be land applied, incion area lved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	l dimensions (L x W), and
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MAR 2 0 2019

	Washingotn Ohio Noble Greene Lawrence Harrison	State OH OH OH PA PA WV	Permit Number 3390 8462 USEPA WV 0014 4037 TC-1009 PAR000029132
CWS Trucking Inc.	Noble Washingotn Ohio Noble Greene Lawrence Harrison	OH WV CH PA	3390 8462 USEPA WV 0014 4037 TC-1009
Broad Street Energy LLC 37 West Broad Street Sulte 1100 Columbus OH 4315 740-516-5381	Washingotn Ohio Noble Greene Lawrence Harrison	OH WV OH PA	8462 USEPA WV 0014 4037 TC-1009
LAD Liquid Assets Disposal Inc. 226 Rankin Road Washington PA 15301 74-350-2760 Triad Energy PO Box 430 Reno OH 45773 740-516-6021 740-374-2940 Tri County Waste Water Management, Inc. 1487 Toms Run Road Holbrook PA 15341 724-627-7178 724-499-5647 King Excavating Co. Advance Waste Services 101 River Park Drive New Castle PA 16101 Rt. 2, Box 68 Dawson Drive Bridgeport WV 16330 304-326-6027 Waste Management - Meadowfill Landfill Rt. 2, Box 68 Dawson Drive Bridgeport WV 26104 304-428-0602 APEX Landfill 11 County Road PO Box 57 Amsterdam OH 43903 740-543-4389 Advanced Disposal - Chestnut Valley Landfill 1184 McClellandtown Road McClellandtown PA 15458 724-437-7336 Westmoreland Sanitary Landfill 901 Tyrol Boulevard Belle Vernon PA 15012 724-929-7694 wastin Master Services 801 North 1st Street Martins Ferry OH 43907 740-609-3800 Pales	Ohio Noble Greene Lawrence Harrison	WV OH PA PA	USEPA WV 0014 4037 TC-1009
LAD Liquid Assets Disposal Inc. 226 Rankin Road Washington PA 15301 74-350-2760 Triad Energy PO Box 430 Reno OH 45773 740-516-6021 740-374-2940 Tri County Waste Water Management, Inc. 1487 Toms Run Road Holbrook PA 15341 724-627-7178 724-499-5647 King Excavating Co. Advance Waste Services 101 River Park Drive New Castle PA 16101 Rt. 2, Box 68 Dawson Drive Bridgeport WV 16330 304-326-6027 Waste Management - Meadowfill Landfill Rt. 2, Box 68 Dawson Drive Bridgeport WV 26104 304-428-0602 APEX Landfill 11 County Road PO Box 57 Amsterdam OH 43903 740-543-4389 Advanced Disposal - Chestnut Valley Landfill 1184 McClellandtown Road McClellandtown PA 15458 724-437-7336 Westmoreland Sanitary Landfill 901 Tyrol Boulevard Belle Vernon PA 15012 724-929-7694 wastin Master Services 801 North 1st Street Martins Ferry OH 43907 740-609-3800 Pales	Ohio Noble Greene Lawrence Harrison	WV OH PA PA	USEPA WV 0014 4037 TC-1009
Triad Energy PO Box 430 Reno OH 45773 740-516-6021 Triad Energy PO Box 430 Reno OH 45773 740-516-6021 Triad Energy PO Box 430 Reno OH 45773 740-516-6021 Triad Energy PO Box 430 Reno OH 45773 740-516-6021 Triad Energy Po Box 430 Reno OH 45714 740-609-800 Triad Energy Po Box 430 Reno OH 45714 740-609-800 Triad Energy Po Box 430 Reno OH 45714 740-601-1512 724-69-5647 Triad Energy PO Box 430 Reno OH 45714 740-610-1512 724-69-5647 Triad Energy Po Box 430 Reno OH 45712 304-488-0701 Reno OH 45713 304-488-0701 Triad Energy Po Box 430 Reno OH 45723 304-488-0701 Reno OH 45713 304-488-0701	Noble Greene Lawrence Harrison	OH PA	4037 TC-1009
Triad Energy PO Box 430 Reno OH 45773 740-516-6021 Triad Energy PO Box 430 Reno OH 45773 740-516-6021 Tri County Waste Water Management, Inc. 1487 Toms Run Road Holbrook PA 15341 724-627-7178 Tri County Waste Water Management, Inc. 1487 Toms Run Road Holbrook PA 15341 724-627-7178 Waste Management - Meadowfill Landfill Rt. 2, Box 68 Dawson Drive Bridgeport WV 16330 304-326-6027 Waste Management - Northwestern Landfill S12 E. Dry Road Parkersburg WV 26104 304-428-0602 Waste Management - Northwestern Landfill 11 County Road 78 PO Box 57 Amsterdam OH 43903 740-543-4389 Advanced Disposal - Chestnut Valley Landfill 1184 McClellandtown Road McClellandtown PA 15458 724-437-7336 Westmoreland Sanitary Landfill 901 Tyrol Boulevard Belle Vernon PA 15012 724-929-7694 Austin Master Services 801 North 1st Street Martins Ferry OH 43935 740-609-3800 Delmont Solids Control 77505 Cadiz-New Athers Road Cadiz OH 43907 740-942-1739 Diversified Resources 3111 Braun Rd. Belpre OH 45714 740-401-0413 Luckeye Brine 23986 Airport Road Coolville OH 45723 304-488-0701	Noble Greene Lawrence Harrison	OH PA	4037 TC-1009
Tri County Waste Water Management, Inc. 1487 Toms Run Road Holbrook PA 15341 724-627-7178 724-499-5647 1724-499-56	Greene Lawrence Harrison	PA PA	TC-1009
Tri County Waste Water Management, Inc. 1487 Toms Run Road	Greene Lawrence Harrison	PA PA	TC-1009
Tri County Waste Water Management, Inc. 1487 Toms Run Road Holbrook PA 15341 724-627-7178 724-499-5647 King Excavating Co. Advance Waste Services 101 River Park Drive New Castle PA 16101 Waste Management - Meadowfill Landfill Rt. 2, Box 68 Dawson Drive Bridgeport WV 16330 304-326-6027 Waste Management - Northwestern Landfill 11 County Road 78 PO Box 57 Amsterdam OH 43903 740-543-4389 Advanced Disposal - Chestnut Valley Landfill 1184 McClellandtown Road McClellandtown McClellandtown McClellandtown McClellandtown PA 15458 724-437-7336 Westmoreland Sanitary Landfill 901 Tyrol Boulevard Belle Vernon PA 15012 724-929-7694 Austin Master Services 801 North 1st Street Martins Ferry OH 43907 740-969-3800 Selmont Solids Control 77505 Cadiz-New Athers Road Cadiz OH 43907 740-942-1739 Oliversified Resources 3111 Braun Rd. Belpre OH 45714 740-401-0413 Funkeye Brine 23986 Airport Road Coshocton OH 43812 740-610-1512 724-591-4393 Funkeye Brine Coshocton OH 45714 740-610-1512 724-591-4393 Funkeye Brine Coshocton OH 45713 304-488-0701	Lawrence Harrison	PA	
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Hungery Nichele	Athens	OH	
Nuverra - Nichols 10555 Veto Road Belpre OH 45714 330-232-5041			
	Washington (ОН	34-119-2-8776
Norwich 9350 East Pike Road Norwich OH 43767 330-232-5041	Muskingum	ОН	34-167-2-3862
Juverra - Wolf 5480 State Route 5 Newton Calls IVI 44444 220 223 203			
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luverra - Pander 5310 State Route 5 Newton Falls OH 44444 320,222,5041			
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luversa - AnnaRock D-1 3549 Warner Road Fowler OH 44418 330-232-5041		OUL	24.455.2.2402
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FQ Helen	199 Bowersock Road	Reno	ОН	45773	740-374-2940 412-443-4397 740-236-2135		он	34-167-2-9577
FQ Dexter	38505 Marietta Rd.	Dexter Cit	у ОН	45727	740-374-2940 412-443-4397 740-236-2135	Noble	ОН	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	он	45770	740-374-2940 412-443-4397 740-236-2135	Meigs	ОН	34-105-2-3619 34-105-2-3652 34-105-2-3637 34-105-2-3651
Petta Enterprises - OH	745 North 3rd Street	Cambridge	он	43725	614-477-1368	Guernsey	ОН	Ohio Chiefs Order 25-019
Petta Enterprises - WV	38 Technology Dr.	Tridelphia	wv	26059	740-255-5727	Ohio	wv	
Deep Rock Disposal	2341 OH-821	Marietta	ОН	45750	304-629-0176	Washington	ОН	34-167-2-9766

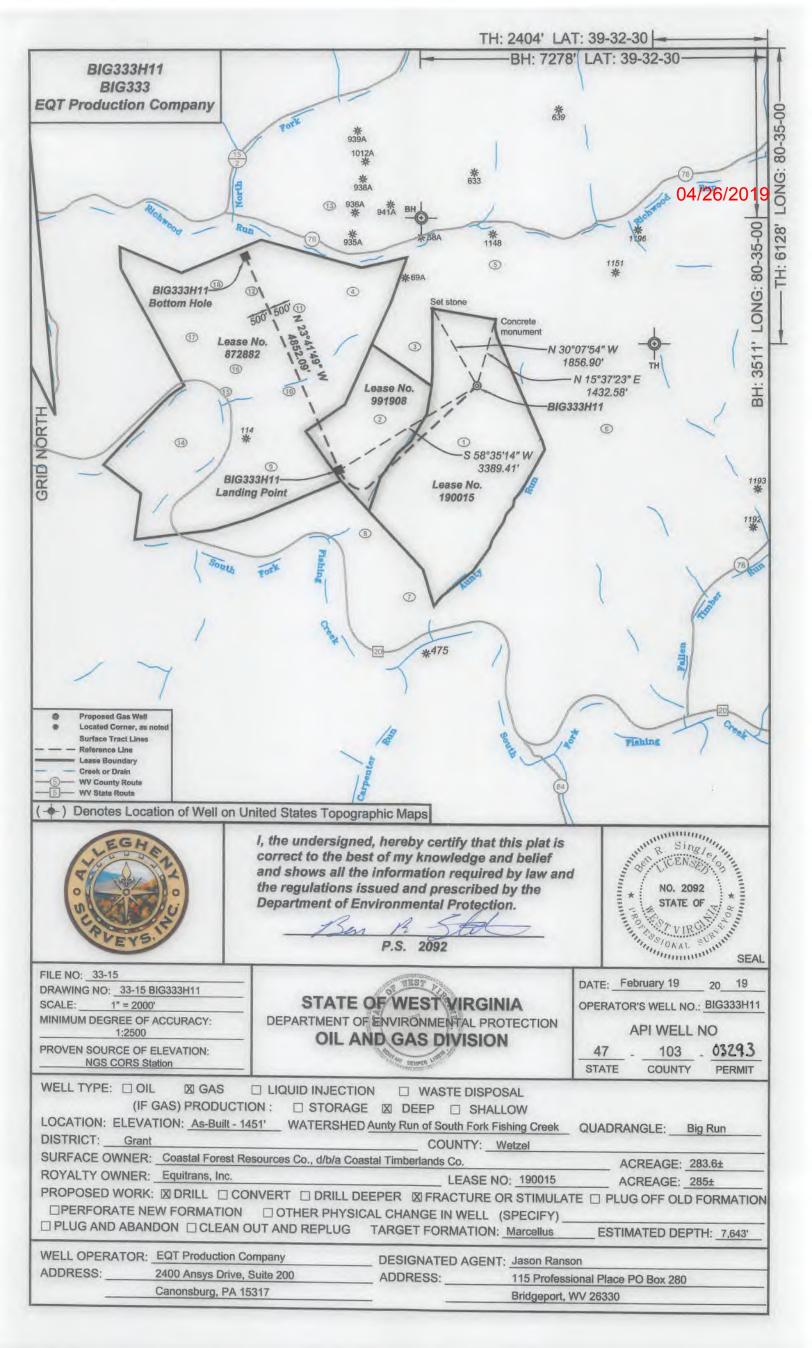


Site Specific Safety and Environmental Plan

EQT
BIG333 Pad
Jacksonburg
Wetzel County, WV

BI6333HU BEG333H12 BEG533H13	For Wells:	
Date Prepared: February 23, 2018 EQT Production Lansman-Parameters Title	WV fil and Gas Inspector Oil 4 Gas Pappede Title	
210119 Date	3-4-19 Date	Office of Oil and Gas

MAR 2 0 2019



BIG333H11 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	Af Wyatt Heirs	174.68
б	23	14	Wetzel	Grant	Richard B. Dallison, et al.	879.30
7	28	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 Amolds, Jr.	38.80
13	17	14	Wetzel	Grant	Coastal Forest Resources Co.	1627.60
14	22	44	Wetzel	Grant	Lydle Martyn & Sharon Irvin	68.15
15	23	7	Wetzel	Grant	Marcus E. & Linda S, Derby	3.19
16	23	7.1	Wetzel	Grant	Dallison Lumber, Inc.	49.65
17	23	6	Wetzel	Grant	Dallison Lumber, Inc.	46.62
18	23	1	Wetzel	Grant	Billy Dewayne Amolds, Jr.	16.50

Notes:
BIG333H11 coordinates are
NAD 27 N: 375,141.45 E: 1,692,010.51
NAD 27 Lat: 39.524845 Long: -80.591854
NAD 83 UTM N: 4,375,110.59 E: 535,095.25
BIG333H11 Landing Point coordinates are
NAD 27 N: 373,374.89 E: 1,689,117.86
NAD 27 Lat: 39.519898 Long: -80.602031
NAD 83 UTM N: 4,374,557.66 E: 534,222.92
BIG333H11 Bottom Hole coordinates are
NAD 27 N: 377,817.87 E: 1,697,117.40 O/20 19
NAD 27 N: 377,817.87 E: 1,697,117.40 O/20 19
NAD 37 Lat: 39.532029 Long: -80.609138
NAD 83 UTM N: 4,375,901.33 E: 533,606.28
West Virginia Coordinate system of 1927 (North Zone) based upon Differential GPS Measurements.
Plat orientation, comer and well ties are based upon the grid north meridian.
Well location references are based upon the grid north meridian.
UTM coordinates are NAD83, Zone 17, Meters.

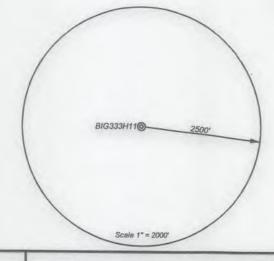


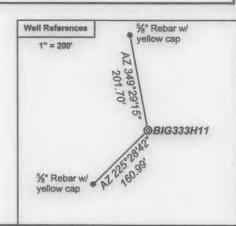
 Lease No.
 Acres
 Owner

 991908
 104.8
 Brian C. Fox, et al.

 872882
 436
 Shiben Estates

Bridgeport, WV 26330







Proposed Gas Well Located Corner, as no

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.

P.S. 2092



FILE NO: _33-15

DRAWING NO: _33-15 BIG333H11

SCALE: ____1" = 2000'

MINIMUM DEGREE OF ACCURACY: _____1:2500

PROVEN SOURCE OF ELEVATION: NGS CORS Station

Canonsburg, PA 15317

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

TEST

DATE: February 19 20 19

OPERATOR'S WELL NO: BIG333H11

API WELL NO

47 - 103 - 03293

STATE COUNTY PERMIT

NGS CORS Station	Sens	The same of the sa	STATE COUN	TY PERMIT
WELL TYPE: □ OIL ☑ GAS	☐ LIQUID INJECTION ☐	WASTE DISPOSAL		
(IF GAS) PRODUCTI	ON: STORAGE DE	EP SHALLOW		
LOCATION: ELEVATION: As-Built - 14			QUADRANGLE:	Big Run
DISTRICT: Grant		COUNTY: Wetzel		
SURFACE OWNER: Coastal Forest Re	sources Co., d/b/a Coastal Timber	lands Co.	ACREAGE	283.6±
ROYALTY OWNER: Equitrans, Inc.		LEASE NO: 190015	ACREAGE	: 285±
PROPOSED WORK: ☑ DRILL ☐ CO ☐ PERFORATE NEW FORMATION	☐ OTHER PHYSICAL CHAN	IGE IN WELL (SPECIFY)	TE PLUG OFF O	LD FORMATION
□ PLUG AND ABANDON □ CLEAN C	OUT AND REPLUG TARGET	FORMATION: Marcellus	ESTIMATED D	EPTH: _7,643'
WELL OPERATOR: EQT Production Co	ompany DESIG	NATED AGENT: Jason Rans	son	
ADDRESS: 2400 Ansys Drive,			sional Place DO Pay 20	00

Operator's Well No. BIG333H11

WW-6A1 (5/13)

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

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 needed 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

FEB 2 5 2019

WW-6A1 attachment BIG333H11

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
190015	(current royalty owner)		**	•
	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
<u>991908</u>	Colleen Ann Chapman	EQT Production Company		134A/805
<u>872882</u>	Shiben Estates, Inc (current royalty owner)			
	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
	Ascent Resources- Marcellus, LLC	EQT Production Company		182A/183

^{**} Per West Virginia Code Section 22-6-8.



710308298



47103042672019

2400 Ansys Drive, Suite 200 Canonsburg, PA 15317 www.eqt.com

John Zavatchan Landman - Permitting O:724-746-9073 jzavatchan@eqt.com

February 12, 2019

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

Re: BIG333H11 (516335) 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,

John Zavatchan

Landman - Permitting

Office of Gil and Gas
FEB 2 5 2019
WV Department of Environmental Protection

Date of Notice Certification: 02/22/2019

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

PLEASE CHECK ALL THAT APPLY ONLY 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 RECEIVED RECEIVED	Date of Notic	ce Certification: 02/22/2019	API No. 47	7	
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 below for the tract of land as follows: State:			Operator's	Well No. BIGS	333H11
Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms below for the tract of land as follows: State:			Well Pad N	Name: BIG333	
State: West Virginia West Virginia West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as r prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of sect 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: 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: OOG OFFICE US ONLY 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: OOG OFFICE US ONLY WAS CONDUCTED OOG OFFICE US ONLY RECEIVED NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED RECEIVED NOT REQUIRE A. NOTICE OF PLANNED OPERATION RECEIVED RECEIVED RECEIVED RECEIVED					
State: West Virginia UTM NAD 83 Northing: 555056.25 555056.2	Pursuant to th	ne provisions in West Virginia Code	22-6A, the Operator has provided the req	uired parties v	with the Notice Forms listed
County: District: Grant					
District: Grant Quadrangle: Big Run Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as represcribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of sect 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 NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR 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) RECEIVED 4. NOTICE OF PLANNED OPERATION				4375110.59	
Quadrangle: Watershed: Aunty Run of South Fork Fishing Creek Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as represcribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article requirements of subsection (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to Virginia Code § 22-6A-1(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of subsection that the Operator has properly served the required parties with the following: 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: 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: 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: 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: 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: Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that	•		Nortning:		
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5. PUBLIC NOTICE	■ 4. NOT	TICE OF PLANNED OPERATION			□ RECEIVED
	■ 5. PUB	BLIC NOTICE			RECEIVED
■ 6. NOTICE OF APPLICATION	■ 6. NOT	TICE OF APPLICATION			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, RECEIVED
Office of Oil and Gas the return receipt card or other postal receipt for certified mailing.

FEB 2 5 2019

WW-6AC (1/12)

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: EQT Production Company

John Zavatchan

STARY PUBLIC

Its: Telephone:

By:

Landman - Permitting 724-746-9073

Address:

2400 Ansys Drive, Suite 200

Canonsburg, PA 15317

Facsimile:

Email:

724-745-2418 jzavatchan@eqt.com

Subscribed and sworn before me this 2

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.

RECEIVED

FEB 2 5 2019

WW-6A (9-13)

API NO. 47-		04/26/2010
OPERATOR	WELL NO.	04/26/2019 BIG333H11
Well Pad Na	me: BIG333	

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

Noti	ice Time Requirem	ent: notice shall be provi	ided no later thar	the filing date of permit application.	
	e of Notice: 02/22/201 ice of:	9 Date Permit Applica	tion Filed: 02/22	/2019	
☑	PERMIT FOR AN			ROVAL FOR THE IN IMPOUNDMENT OR PIT	
Deli	very method pursi	ıant to W <u>e</u> st Virginia C	ode § 22-6A-10((b)	
	PERSONAL	REGISTERED	✓ METHO	DD OF DELIVERY THAT REQUIRES A	
	SERVICE	MAIL	RECEI	PT OR SIGNATURE CONFIRMATION	
certi regis sedin the s soil a desc oper more well impe have prov prop substrectory code.	ficate of approval for stered mail or by any ment control plan reconsurface of the tract or and gas leasehold being the fibed in the erosion at a tor or lessee, in the erosion can be expected in the surface oundment or pit as done a water well, spring yide water for consumptions of the sheriff requision of this article to the R. § 35-8-5.7.a reconstruction in the surface of the sheriff requision of this article to the R. § 35-8-5.7.a reconstruction in the surface of the sheriff requision of this article to the R. § 35-8-5.7.a reconstruction in the surface of the sheriff requision of this article to the R. § 35-8-5.7.a reconstruction in the sheriff requision of th	r the construction of an immethod of delivery that required by section seven of a which the well is or is prong developed by the proposand sediment control plan event the tract of land on the cowners of record of the stract is to be used for the pescribed in section nine of gor water supply source lonption by humans or dome vity is to take place. (c)(1) thion hold interests in the lauired to be maintained pur o the contrary, notice to a quires, in part, that the ope	epoundment or pit equires a receipt of this article, and the oposed to be localled well work, if submitted pursually which the well prourface tract or tra- placement, construction of this article; (5) A cated within one the estic animals; and If more than three ands, the applicant resuant to section elien holder is not crator shall also presents.	of the application, the applicant for a permit for any as required by this article shall deliver, by personal r signature confirmation, copies of the application, the well plat to each of the following persons: (1) The ted; (2) The owners of record of the surface tract or the surface tract is to be used for roads or other land into subsection (c), section seven of this article; (3) oposed to be drilled is located [sic] is known to be uncts overlying the oil and gas leasehold being developated on, enlargement, alteration, repair, removal or about thousand five hundred feet of the center of the well proceed to the operator of any natural gas storage field with the tenants in common or other co-owners of interests at may serve the documents required upon the person soight, article one, chapter eleven-a of this code. (2) Notice to a landowner, unless the lien holder is the later of the Well Site Safety Plan ("WSSP") to the surface provided in section 15 of this rule.	service or by he erosion and c owners of record of tracts overlying the d disturbance as The coal owner, underlain by one or bed by the proposed candonment of any of the applicant to pad which is used to hin which the described in described in the Jotwithstanding any andowner. W. Va.
			&S Plan Notice	☑ Well Plat Notice is hereby provided to:	
	URFACE OWNER	(s)		COAL OWNER OR LESSEE Name: See Attached List	
	ne: See Attached List lress:			Address:	- -
Nar				COAL OPERATOR	_
			_	Name:	
				Address:	_
		(s) (Road and/or Other D	isturbance)		
	ne: See Attached List			☐ SURFACE OWNER OF WATER WELL	
Ado	dress:		<u>—</u>	AND/OR WATER PURVEYOR(s)	
				Name: N/A	
Nar	ne:		_	Address:	_
Ado	iress:		_	OPERATOR OF ANY NATURAL GAS STO	 DRAGE FIELD
	LIDEACE OWNER	(s) (Impoundments or Pit	-		
		• •	·	Name: N/A Address:	
			_	*Please attach additional forms if necessary	FEB 2 5 2019

19

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 Fload 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

RECEIVED Gas

FEB 2 5 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

> RECEIVED Office of Oil and Gas

FEB 2 5 2019

Owners of Water Wells N/A

RECEIVED Office of Oil and Gas

FEB 2 5 2019

WW-6A (8-13)

API NO. 47-OPERATOR WELL NO. BIG333H Well Pad Name: BIG333

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 Additional information related to horizontal drilling may be obtained from the Secretary, at the non-secretary, at the non-secretary, at the non-secretary and the non-secretary and the non-secretary at the non-secretary and-gas/pages/default.aspx.

Well Location Restrictions

Environmental Faccion 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

API NO. 47-OPERATOR WELL NO. BIG333H11

Well Pad Name: BIG333

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 57th St. SE Charleston, WV 25304 (304) 926-0450

PECEIVED
Office of Oil and Gas

FEB 2 5 2019

WV Department of

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.

WW-6A (8-13) API NO. 47-____- 04/26/2019
OPERATOR WELL NO. BIG333H11
Well Pad Name: BIG333

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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WW-6A (8-13)

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.



Subscribed and sworn before me this

Notary Public

My Commission Expires

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FEB 2 5 2019

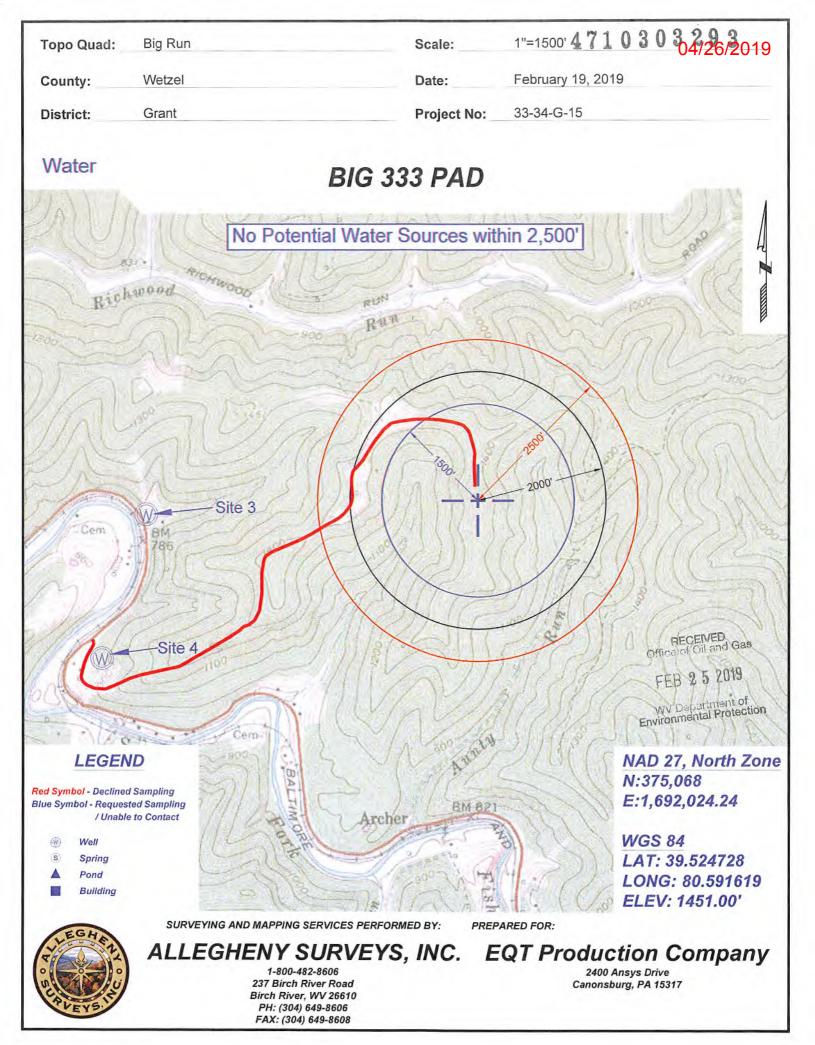




Table 1 - Water Source Identification

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 Reso	ources Co.	☐ Landowner Requested			
Address: PO BOX 709 BUCKHANNON WV 2620	Sampling				
Field Located Date: Owner h	Sampling Unable to Contact				
Coordinates:	(decimal degrees – NAD 83)	(Further contact attempts to b made by EQT's third party			
Contact Attempts (Date): 1st: 10/12/2018 2nd:	Door Hanger Left:	nro drill compline lah)			
Comments: Certified letter sent October 12, 20 declining sampling, signed by Matt Cornett.	18. Signed for by Nathan Feather. L	etter returned			
Site Number: 2 Distance from Gas Well (feet):					
Surface Owner / Occupant: Richard and Jaynee	Dallison	☐ Landowner Requested			
Address: 28855 Shortline Hwy. Folsom WV 263	48-6021 Phone #:	Sampling			
Field Located Date: Owner h	nome during survey (yes/no):	Sampling ☐ Unable to Contact			
Coordinates:	(decimal degrees - NAD 83)	(Further contact attempts to be made by EQT's third party			
Contact Attempts (Date): 1st: 10/12/2018 2nd:	Door Hanger Left:	pre-drill sampling lab)			
Comments: Certified letter sent October 12, 20 declining sampling and indicated that there is	18. Signed for by Richard Dallison. no well, singed by Jaynee Dallison	Letter returned on 10/30/2018.			
Site Number: 3 Distance from Gas Well (feet): 5,	100 ±				
Surface Owner / Occupant: Richard and Roxann	ne Funk	☐ Landowner Requested			
Address: 12750 MIDDLETOWN RD. SALEM OH	44460 Phone #: 304-889-2215	Sampling Landowner Decline			
Field Located Date: Owner h	nome during survey (yes/no):	Sampling ⊠ Unable to Contact			
Coordinates: 39.523752, -80.609663 (decimal de	(Further contact attempts to be made by EQT's third party				
Contact Attempts (Date): 1st: 10/12/2018 2nd:		non delli annocitor inti			

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 a previous report, water well was sampled 03/2013.

FEB 2 5 2019

Site Number: 4 Distance from Gas Well (feet): 6,3	61 ±	
Surface Owner / Occupant: Bryan Brown		□ Landowner Requested
Address: PO BOX 46 Jacksonburg, WV 26377 Pt	Sampling ☐ Landowner Decline	
Field Located Date: Owner ho	ome during survey (yes/no): No	Sampling ☐ Unable to Contact
Coordinates: 39.517796, -80.612321 (decimal deg	(Further contact attempts to be made by EQT's third party	
Contact Attempts (Date): 1st: 10/12/2018 2nd:	Door Hanger Left: Yes	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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Office of Oil and Gas

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WW-6A4 (1/12)

Operator Well No. BIG 4/26/2019

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 Date of Notic	Requiremen e: 10/10/2018	t: Notice shall be p		st TEN (10) days prior to filing a Application Filed: 02/22/2019	a permit application.
Delivery met	od pursuar	t to West Virgini	a Code § 22-6	A-16(b)	
☐ HAND	Б	CERTIFIED M	ΔП		
DELIVE		RETURN REC		STED	
DELIVE	K.I	KETUKN KEC	EIPT REQUE	STED	
receipt reques drilling a hori of this subsect subsection ma and if availabl	ted or hand of zontal well: ion as of the y be waived e, facsimile	lelivery, give the s Provided, That no date the notice wa in writing by the s number and electro	urface owner natice given purs s provided to turface owner. onic mail addre	otice of its intent to enter upon a suant to subsection (a), section the surface owner: <i>Provided, ho</i> The notice, if required, shall incess of the operator and the operator	n, an operator shall, by certified mail return the surface owner's land for the purpose of ten of this article satisfies the requirements wever, That the notice requirements of this clude the name, address, telephone number, or's authorized representative.
		led to the SURF			
Name: See Attac Address:	ned List		-	Name:	
Address.				Address:	
the surface ow	est Virginia ner's land fo	Code § 22-6A-16(or the purpose of dr	b), notice is he	ntal well on the tract of land as f	
Pursuant to W	est Virginia	Code § 22-6A-16(or the purpose of di	b), notice is he illing a horizor	ereby given that the undersigned at all well on the tract of land as for the UTM NAD 83 Easting: Northing: Public Road Access:	I well operator has an intent to enter upon follows: 535,095.25 4,375,110.59 CR 20
Pursuant to W the surface ow State: County:	est Virginia ner's land fo West Virginia Wetzel	Code § 22-6A-16(or the purpose of di	b), notice is he illing a horizon	utal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access:	follows: 535,095.25 4,375,110.59
Pursuant to W the surface ow State: County: District:	est Virginia ner's land fo West Virginia Wetzel Grant Big Run	Code § 22-6A-16(or the purpose of di	illing a horizo	ntal well on the tract of land as f UTM NAD 83 Easting: Northing:	ollows: 535,095.25 4,375,110.59 CR 20
Pursuant to We he surface ow State: County: District: Quadrangle: Watershed: Fhis Notice Pursuant to Watershiel numerelated to horie	est Virginia ner's land fo West Virginia Wetzel Grant Big Run Aunty Run of S Shall Inclu /est Virginia ber and electorial drillin	outh Fork Fishing Creek de: a Code § 22-6A-1 ctronic mail addrese ag may be obtaine	6(b), this notices of the operad from the Sec	tatal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ce shall include the name, add ator and the operator's authorize tretary, at the WV Department of	ollows: 535,095.25 4,375,110.59 CR 20
Pursuant to We he surface ow State: County: District: Quadrangle: Watershed: Fhis Notice Pursuant to Watershiel numerelated to horie	est Virginia ner's land fo West Virginia Wetzel Grant Big Run Aunty Run of S Shall Inclu /est Virginia ber and elec zontal drillii 57th Street, S	outh Fork Fishing Creek de: a Code § 22-6A-1 etronic mail addrese ag may be obtaine BE, Charleston, WV	6(b), this notices of the operad from the Sec	tatal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ce shall include the name, add ator and the operator's authorize tretary, at the WV Department of	collows: 535,095.25 4,375,110.59 CR 20 Coastal Forest Resources Co., d/b/a Coastal Timberland Co. dress, telephone number, and if available, and representative. Additional information of Environmental Protection headquarters.
Pursuant to We the surface own State: County: District: Quadrangle: Watershed: This Notice Pursuant to We facsimile numer related to horiocated at 601	est Virginia ner's land for West Virginia Wetzel Grant Big Run Aunty Run of S Shall Inclu / est Virginia ber and elect zontal drillin 57th Street, S eby given	outh Fork Fishing Creek de: a Code § 22-6A-1 etronic mail address g may be obtaine BE, Charleston, WV	6(b), this notices of the operad from the Sec	tatal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ce shall include the name, add ator and the operator's authorize tretary, at the WV Department of	follows: 535,095.25 4,375,110.59 CR 20 Coastal Forest Resources Co., d/b/a Coastal Timberland Co. tress, telephone number, and if available, and representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to We the surface own State: County: District: Quadrangle: Watershed: This Notice Pursuant to We acsimile number of the county of th	est Virginia ner's land fo West Virginia Wetzel Grant Big Run Aunty Run of S Shall Inclu /est Virginia ber and electontal drillin 57th Street, S eby given EQT Product	outh Fork Fishing Creek de: a Code § 22-6A-1 etronic mail address g may be obtaine BE, Charleston, WV	6(b), this notices of the operad from the Sec	tatal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ce shall include the name, add ator and the operator's authorize tretary, at the WV Department of 926-0450) or by visiting www.d	follows: 535,095.25 4,375,110.59 CR 20 Coastal Forest Resources Co., d/b/a Coastal Timberland Co. tress, telephone number, and if available, and representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
Pursuant to We the surface own State: County: District: Quadrangle: Watershed: This Notice Pursuant to We facsimile number of the county of t	est Virginia ner's land fo West Virginia Wetzel Grant Big Run Aunty Run of S Shall Inclu /est Virginia ber and electontal drillin 57th Street, S eby given EQT Product	outh Fork Fishing Creek de: a Code § 22-6A-1 stronic mail addrese g may be obtained E, Charleston, WV Dy: tion Company Drive, Suite 200	6(b), this notices of the operad from the Sec	tatal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ce shall include the name, add ator and the operator's authorize aretary, at the WV Department of 926-0450) or by visiting www.d	ollows: 535,095.25 4,375,110.59 CR 20 Coastal Forest Resources Co., d/b/a Coastal Timberland Co. ress, telephone number, and if available, and representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx. : John Zavatchan
Pursuant to We the surface own State: County: District: Quadrangle: Watershed: This Notice Pursuant to We facsimile number ocated at 601 Notice is here Well Operator Address:	est Virginia ner's land for West Virginia Wetzel Grant Big Run Aunty Run of S Shall Inclu /est Virginia ber and elect zontal drillin 57th Street, S eby given EQT Product 2400 Ansys	or the purpose of disputs for the purpose of disputs for Fishing Creek de: a Code § 22-6A-1 ctronic mail addrese g may be obtained E, Charleston, WV Dy: tion Company Drive, Suite 200 PA 15317	6(b), this notices of the operad from the Sec	tatal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ce shall include the name, add ator and the operator's authorize aretary, at the WV Department of 926-0450) or by visiting www.d	Tollows: 535,095.25 4,375,110.59 CR 20 Coastal Forest Resources Co., d/b/a Coastal Timberland Co. Tress, telephone number, and if available, ted representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx. John Zavatchan 2400 Ansys Drive, Suite 200
Pursuant to We the surface own State: County: District: Quadrangle: Watershed: This Notice Pursuant to We facsimile number of the county of t	est Virginia ner's land for West Virginia Wetzel Grant Big Run Aunty Run of S Shall Inclu /est Virginia ber and elec zontal drillin 57 th Street, S eby given EQT Produc 2400 Ansys Canonsburg,	or the purpose of discrete purpose of discrete purpose of decay and the control of the control o	6(b), this notices of the operad from the Sec	utal well on the tract of land as f UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: ce shall include the name, add ator and the operator's authorize tretary, at the WV Department of 1926-0450) or by visiting www.d Authorized Representative Address:	follows: 535,095.25 4,375,110.59 CR 20 Coastal Forest Resources Co., d/b/a Coastal Timberland Co. Tress, telephone number, and if available, and representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx. John Zavatchan 2400 Ansys Drive, Suite 200 Canonsburg, PA 15317

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 deprivacyofficer@wv.gov.

FEB 2 5 2019

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

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 2 5 2019

WW-6A5 (1/12)

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

Delivery me	thod pursuant to West Virginia Co	ode § 22-6A-16(c)		
	mod parsuant to west virginia et			
■ CERT	FIED MAIL	☐ HAND		
RETU	RN RECEIPT REQUESTED	DELIVERY		
return receip the planned required to b drilling of a damages to t (d) The notic of notice.	requested or hand delivery, give the operation. The notice required by a provided by subsection (b), section horizontal well; and (3) A propose ne surface affected by oil and gas op	e surface owner whose land this subsection shall include the ten of this article to a surface d surface use and compense terations to the extent the day given to the surface owner a	I will be used for de: (1) A copy ace owner whos sation agreement amages are comp	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information are land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
	is listed in the records of the sheriff			
		the same of the sa		
Name: See Att		Name:		
Name: See Att Address: Notice is her Pursuant to V	reby given: Vest Virginia Code § 22-6A-16(c), n	Address	s: ne undersigned v	well operator has developed a planned
Name: See Att Address: Notice is her Pursuant to V operation or State:	reby given:	Address	ne undersigned v	
Name: See Att Address: Notice is her Pursuant to V operation or State: County: District:	reby given: Vest Virginia Code § 22-6A-16(c), no the surface owner's land for the pur West Virginia	Address notice is hereby given that the rpose of drilling a horizonta UTM NAD 8 Public Road	ne undersigned value well on the tra Easting: Northing: Access:	ct of land as follows: 535,095,25
Name: See Att Address: Notice is her Pursuant to V operation or State: County: District: Quadrangle:	reby given: Vest Virginia Code § 22-6A-16(c), n the surface owner's land for the pur West Virginia Wetzel	Address notice is hereby given that the rpose of drilling a horizonta UTM NAD 8 Public Road	ne undersigned value well on the tra Easting: Northing:	set of land as follows: 535,095.25 4,375,110.59
Name: See Att Address:	reby given: Vest Virginia Code § 22-6A-16(c), n the surface owner's land for the pur West Virginia Wetzel Grant	Address notice is hereby given that the rpose of drilling a horizonta UTM NAD 8 Public Road	ne undersigned value well on the tra Easting: Northing: Access:	10t of land as follows: 535,095,25 4,375,110.59 CR 20
Name: See Att Address: Notice is her Pursuant to Voperation or State: County: District: Quadrangle: Watershed: This Notice Pursuant to Voto be provided horizontal wasurface affectinformation	reby given: Vest Virginia Code § 22-6A-16(c), n the surface owner's land for the pur West Virginia Wetzel Grant Big Run Aunty Run of South Fork Fishing Creek Shall Include: Vest Virginia Code § 22-6A-16(c), n ed by W. Va. Code § 22-6A-10(b) ell; and (3) A proposed surface use ted by oil and gas operations to the related to horizontal drilling may b located at 601 57th Street, SE,	Address notice is hereby given that the repose of drilling a horizonta UTM NAD 8 Public Road A Generally use this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are content of the secret obtained from the Secret	ne undersigned value undersigned value undersigned value and and an and an and an	code section; (2) The information required as offer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection
Name: See Att Address: Notice is her Pursuant to Voperation or State: County: District: Quadrangle: Watershed: This Notice Pursuant to Voto be provided horizontal watershed: watershed: This Notice Pursuant to Voto be provided horizontal watershed: This Notice Pursuant to Voto be provided horizontal watershed: This Notice Pursuant to Voto be provided horizontal watershed:	reby given: Vest Virginia Code § 22-6A-16(c), resurface owner's land for the pure West Virginia Wetzel Grant Big Run Aunty Run of South Fork Fishing Creek Shall Include: Vest Virginia Code § 22-6A-16(c), reed by W. Va. Code § 22-6A-10(b) edl; and (3) A proposed surface use ted by oil and gas operations to the related to horizontal drilling may be located at 601 57th Street, SE, fault, aspx.	Address notice is hereby given that the pose of drilling a horizonta UTM NAD 8 Public Road A Generally use this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are content of the secret charleston, WV 25304	ne undersigned value undersigned value undersigned value and ary, at the WV (304-926-0450)	code section; (2) The information required as din conjunction with the drilling of a offer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting <a 200"="" href="https://www.gov/oil-and-overlap-new-marked-new-mark</td></tr><tr><td>Name: See Att Address:</td><td>reby given: Vest Virginia Code § 22-6A-16(c), resurface owner's land for the pure West Virginia Wetzel Grant Big Run Aunty Run of South Fork Fishing Creek Shall Include: Vest Virginia Code § 22-6A-16(c), red by W. Va. Code § 22-6A-10(b) ell; and (3) A proposed surface use ted by oil and gas operations to the related to horizontal drilling may be located at 601 57th Street, SE, fault.aspx.</td><td>Address notice is hereby given that the repose of drilling a horizonta UTM NAD 8 Public Road A Generally use this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are content of the secret obtained from the Secret</td><td>ne undersigned value undersigned value undersigned value and and an and an and an an</td><td>code section; (2) The information required used in conjunction with the drilling of an offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-suite 200

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.

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Surface Owners:

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

Sur

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

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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

Office of Oil and Gas
FEB 2 5 2019
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) 558-3505

Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

November 9, 2018

Jill M. Newman
Deputy Commissioner

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57th Street, SE Charleston, WV 25304

Subject: 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,

Gary K. Clayton, P.E.

Day K. Clayton

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

EQT Production Company CH, OM, D-6, File

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FEB 2 5 2019

Anticipated Frac Additives Chemical Names and CAS numbers

<u>Material</u>	<u>Ingredient</u>	CAS Number
Water		
Sand	Hydrotreated light petroleum distillate Tributyl tetradecyl phosphonium	14808-60-7
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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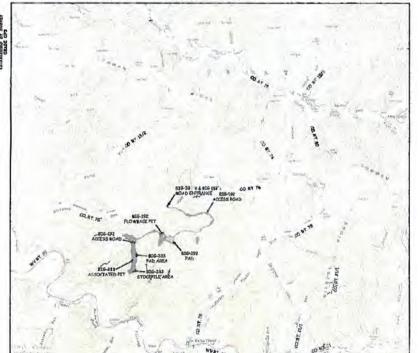
FEB 2 5 2019

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.

> 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



Dny 12-17-14

APPROVED WVDEP OOG 12-23-2014

LIST OF DRAWINGS

- 1 COVER SEE







PROJECT INFORMATION

LOCATION COORDINATES

BIG -333 ASSOCIATED PIT

SITE DISTURBANCE COMPUTATIONS

GENERAL DESCRIPTION

THE WELL PAD AND ASSOCIATED PIT HAVE BEEN CONSTRUCTED TO AID IN THE DEVELOPMENT OF UNDIVIDUAL MARCELLIS 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 T'S THE LAW!











BIG-333 AS-BUILT SITE PLAN

