

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 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Tuesday, February 28, 2017 WELL WORK PERMIT Horizontal 6A / New Drill

EQT PRODUCTION COMPANY (A) 120 PROFESSIONAL PLACE BUILDING II BRIDGEPORT, WV 26330

Re: Permit approval for 514368

47-103-03175-00-00

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: 514368 Farm Name: E. T. BLUE GRASS LLC

U.S. WELL NUMBER: 47-103-03175-00-00

Horizontal 6A / New Drill

Date Issued: 2/28/2017

Promoting a healthy environment.

API Number:	
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PERMIT CONDITIONS 47 10 0 0 0 0 1 1 5

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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

CONDITIONS

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

API Number:

PERMIT CONDITIONS 47 10 0 0 0 1 1 7 5

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



west virginia department of environmental protection

Shallow Gas Well Review Board 601 57th Street, SE Charleston, WV 25304 (304)926-0499, Ext 1656

Jim Justice, Governor Barry K Lay, Chairman

BEFORE THE SHALLOW GAS WELL REVIEW BOARD OF THE STATE OF WEST VIRGINIA

IN THE MATTER OF THE OBJECTIONS FROM WESTERN POCAHONTAS PROPERTIES, LP REGARDING THE DRILLING BY EQT PRODUCTION COMPANY FOR THE PROPOSED WELLS IDENTIFIED AS THE BIG 209 #515590 AND #515591 TO BE LOCATED IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA.

DOCKET NO. 254 ORDER NO. 1

AND

IN THE MATTER OF THE OBJECTIONS FROM WESTERN POCAHONTAS PROPERTIES, LP REGARDING THE DRILLING BY EQT PRODUCTION COMPANY FOR THE PROPOSED WELLS IDENTIFIED AS THE BIG 245 #514366, #514367, #514368 AND #514369 TO BE LOCATED IN GRANT DISTRICT, WETZEL COUNTY, WEST VIRGINIA.

DOCKET NO. 255 ORDER NO. 1

ORDER

These matters came on for hearing on January 5, 2017, on the objection of Western Pocahontas Properties, LP ("WPP") to oil and gas well permits submitted to the West Virginia Department of Environmental Protection ("WV DEP") by EQT Production Company ("EQT"). With the agreement of the parties, Dockets 254 and 255 were consolidated for purposes of the statutorily required settlement conference, and failing settlement, for hearing.

Specifically, EQT submitted the following applications:

a. With respect to wells to be drilled on the Big 209 drilling pad to be located in Grant District, Wetzel County, West Virginia, EQT submitted applications for Well Numbers 515590 (API No. 47-103-03160) and 515591 (API No. 47-103-03161) (the "Big 209 Wells"); and b. With respect to wells to be drilled on the Big 245 drilling pad to be located in

Grant District, Wetzel County, West Virginia, EQT submitted applications for Well

Numbers 514366 (API No. 47-103-03173), 514367 (API No. 47-103-03174), 514368

(API No. 47-103-03175), and 514369 (API No. 47-103-03176) to be located in Grant

District, Wetzel County, West Virginia (the "Big 245 Wells").

WPP objected to all of the foregoing permit applications. At the pre-hearing conference, the

Parties reached an agreement to resolve these matters, as follows:

1. EQT cancels and withdraws the pending permit applications for the Big 209 Wells.

2. WPP cancels and withdraws its objections to the pending permit applications for the

Big 245 Wells.

The Board having no objection to the agreement of the parties, does hereby ORDER that the

permit applications for Big 209 Wells, Well Numbers 515590 (API No. 47-103-03160) and 515591 (API

No. 47-103-03161), are withdrawn and cancelled.

The Board further Orders that the permit applications for the Big 245 Wells, being Well Numbers

514366 (API No. 47-103-03173), 514367 (API No. 47-103-03174), 514368 (API No. 47-103-03175), and

514369 (API No. 47-103-03176) are hereby REMANDED to the West Virginia Department of

Environmental Protection Office of Oil and Gas for review.

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SHALLOW GAS WELL REVIEW BOARD

Barry K. Lay, Chairman

03/03/2017



Western Pocahontas Properties

Limited Partnership

5260 Irwin Road Huntington, WV 25705-3247 304-522-5757 • Fax 304-522-5401; 304-302-2370

Certified Mail No. 7015 1730 0000 4756 7384

> November 21, 2016 File: 42-09

Mr. James Martin Chief – West Virginia Department of Environmental Protection Office of Oil and Gas 601 57th Street Charleston, WV 25304

Re: EQT Production Company

Notice of Permit Application for the following BIG 245 gas wells:

- Well No. 514366, Grant District, Wetzel County Marcellus Formation 41-163-63173
- Well No. 514367, Grant District, Wetzel County Marcellus Formation 41-103-03174

 Well No. 514367, Grant District, Wetzel County Marcellus Formation 41-103-03174

 Well No. 514367, Grant District, Wetzel County Marcellus Formation 41-103-03174

 Well No. 514367, Grant District, Wetzel County Marcellus Formation 41-103-03174

 Well No. 514367, Grant District, Wetzel County Marcellus Formation 41-103-03174
- Well No. 514368, Grant District, Wetzel County Marcellus Formation 41-103-03175
- Well No. 514369, Grant District, Wetzel County Marcellus Formation 47-103-03176

Dear Mr. Martin:

Western Pocahontas Properties Limited Partnership respectfully objects to the drilling of the wells represented by the above referenced well drilling applications at this time, pending an opportunity to discuss the well applications in detail with EQT Production Company.

Subject wells are all planned into the Marcellus Formation in close proximity to existing wells (situated within 1500' spacing) and will have a substantial impact to our coal reserves and future mineability. The proposed gas wells are planned in an area of proven Coal Reserves. The gas wells, as proposed will interfere with the development of our Pittsburgh Seam of coal which is currently being developed in the surrounding area and would interfere with the future development of the Pittsburgh Seam of coal in this area.

Western Pocahontas is seeking a dialog with EQT for locating and approving future wells to include a methodology addressing relocation and or mine-through procedures relating to the future development of our coal reserves.

Respectfully submitted,

George Angus

Vice President & Regional Manager

cc: Rick Johnson, GISP, RL
Landman - Coal
EQT Production - Land Department
Building 1 - Schedule 'A'
15 Professional Place
P.O. Box 280
Bridgeport, WV 26330

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WV Department of Environments, riplection

4710303175

API NO. 47- <u>103 </u> -	
OPERATOR WEL	L NO. 514368
Well Pad Name	: BIG245

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

1) Well Operat	or: EQT Pr	oduction C	ompany	306686	Wetzel	Grant	Big Run
				Operator ID	County	District	Quadrangle
2) Operator's V	Well Number	514368		Well Pac	Name: BIG24	45	
3) Farm Name	/Surface Owr	ner: E.T. BI	ue Grass	LLC Public Roa	d Access: Rt 1	9/2	
4) Elevation, co	urrent ground	l: <u>1480</u>	Ele	evation, proposed	post-construction	on: 1430	
5) Well Type	(a) Gas	<u> </u>	_ Oil	Unde	erground Storag	ge	
	Other						
	(b)If Gas	Shallow	X	Deep			
		Horizontal	X				Dat
6) Existing Pad							Din H 11-14-16
// Proposed Ta	irget Formatio 532, 53, 2620	on(s), Depth PSI Top of	n(s), Antici Marcellus 7	pated Thickness a	nd Expected Pr	essure(s):	•
				011			
 8) Proposed To 9) Formation at 		• —	Marcellus				
10) Proposed T			14082				
11) Proposed H	Horizontal Le	g Length:	5261				
12) Approxima	ite Fresh Wat	er Strata De	pths:	229, 507, 662, 7	52, 1011		
13) Method to	Determine Fr	esh Water I	Depths: F	rom offset wells	-		
14) Approxima	ite Saltwater	Depths: No	one				
15) Approxima	ite Coal Seam	Depths: 9	25, 1024,	1123			
16) Approxima	ite Depth to P	Possible Voi	id (coal mi	ne, karst, other):	None		
17) Does Propo directly overlyi				ns Yes	No	X	
(a) If Yes, pro	ovide Mine Ir	nfo: Name	:				
		Depth	n:				
		Seam					
		Owne	er:				
				_			

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(04/15)

API NO. 47-103 -

4710303175

OPERATOR WELL NO. 514368

Well Pad Name: BIG245

18)

CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	A-500	78.6	40	40	60 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	1179	1179	1026 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	2925	2925	1136 ft^3 / CTS
Production	5 1/2	New	P-110	20	14082	1.000	500' above top producing zone
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40'	
Liners						above top perf or 80° inclination.	

Dmlt 11-14-16

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	20	26	.375	1378	1102	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2700	2160	See Variance	1.19
Coal							1.,0
Intermediate	9 5/8	12 3/8	.395	3950	3160	Class H	1.07
Production	5 1/2	8 1/2	.361	12640	10112	Class H	1.123/2.098
Tubing	2 3/8	NA	.19	7700			20,2.000
Liners							

PACKERS

Kind:		
Sizes:		
Depths Set:		
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WW-6B	
(10/14)	

API NO. 47-103 OPERATOR WELL NO. 514368
7 Fell Pad Name: BIG245

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 3969'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

DAH 11-14-16

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 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, 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 200,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 36.41
- 22) Area to be disturbed for well pad only, less access road (acres): 32.63
- 23) Describe centralizer placement for each casing string:
- Surface: Bow spring centralizers One at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers- One cent at the shoe and one spaced every 500'.
- Production: One solid body cent 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 sturnes, .25% Flake Loss Circulation Material (LCM) is used to combat the loss of the cement sturny to a thief zone.
the loss of whole drilling fluid or cement sturny (not fittrate) to a thief zone.

Production:

Lead (Type H 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 (Type 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

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.

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EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: BIG245

Wetzel County, WV

11/8/16

4710303175

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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 BIG245 pad: 514366, 514367, 514368, 514369

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:

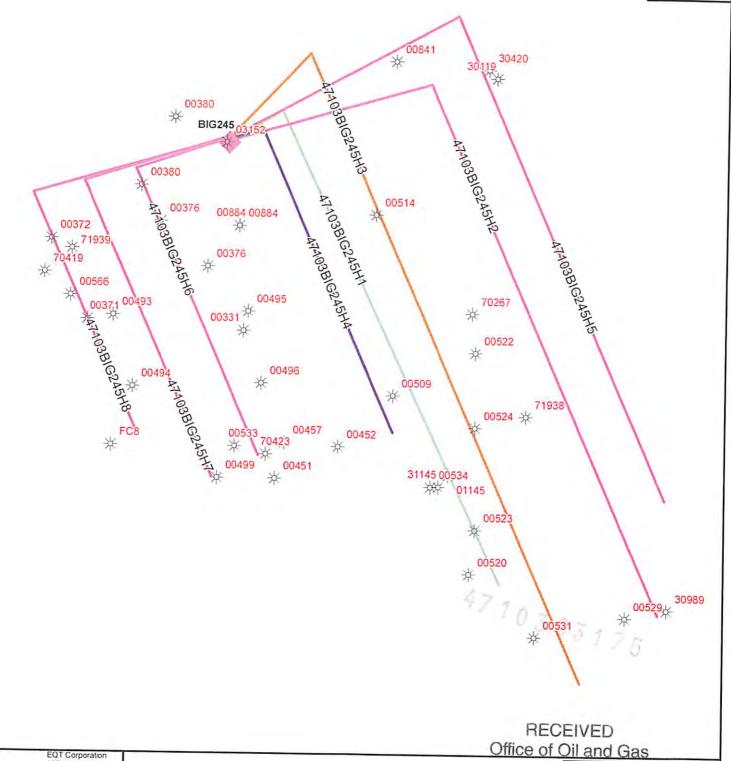
- Inspect their surface equipment prior to fracturing to establish integrity and establish pre-frac well conditions
- Observe wells closely during and after fracturing and monitor for abnormal increases in water, gas or pressure
- Inspect or install master valves or other necessary equipment for wellhead 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.

4710303





EQT Corporation 625 Liberty Avenue Pittsburgh, PA 1522 EQT BIG245 Vertical Offsets and Foreign Laterals within 500'

1,200 600 BIG245 Vertical Offsets GENESEO Disclaimer MARCELLUS MIDDLESEX POINT PLEASANT UTICA

WV Depa This map is confidential and is to be used only for the expression in the purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well-or pipeline facilities, property boundaries, topography, roadways, or valency as the map used to the map way not have been placed on the map used to the map items should be determined by a field survey performed by a licensed surveyor upon consultation with EQT.

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NO PERFORATION DATA ON IHS

WellID	Wel	liStatus	Comp Date	Permit	Operator	Latitude	Longitude	Datum Eleva	SS Depth	TotalDepth	
47103003	31 GAS	5	11/17/1903	00331	PGH & WV GAS	39.588300	-80.568000	110	9 -1176	5	2285
47103003	72 GAS	5-P	3/10/1951	00372	FOSTER MCKENZIE	39.591700	-80.577300	84	12		
47103003	76 GAS		4/11/1952	00376	P C MCKENZIE	39.590700	-80.569800	126	55		
47103003	80 DRY	<i>r</i> :	5/23/1952	00380	P C MCKENZIE	39.596200	-80.571400	126	57		
471030049	9S STO	RAGE :	3/15/1963	00495	EPC	39.589000	-80.567800	110	9 -101:	l	2120
47103FC8	P&A	4		FC8	UNK	39.584100	-80.574400				
47103003	710000 GAS	-C8	2/1/1951	00371	J C R PETROLEUM INCORPORATED	39.588715	-80.575575	82	!5		530 CONEMAUGH /SERIES/
471030049	930000 ABD	o-GW	12/30/1915	00493	EQUITABLE GAS COMPANY	39.588872	-80.574319	116	i3		2234 BIG INJUN /SD/
471030049	960000 ABD)-GW	8/4/1902	00496	PITTSBURGH & W VA GAS	39.586405	-80.567188	84	4		2785 HAMPSHIRE
471030050	090000 ABD)-GW	8/4/1919	00509	DUNN-MAR OIL & GAS COMPANY	39.585976	-80.560835	115	5		3243 CHEMUNG
47103005	200000 ABD)-GW	8/2/1919	00520	HOPE NATURAL GAS	39.579415	-80.557138	93	:7		2025 BIG INJUN /SD/
47103005	240000 GAS	•	4/5/1919	00524	EQUITABLE GAS COMPANY	39.584808	-80.556866	97	'2		2882 CHEMUNG
47103005	330000 ABD	-GW	12/11/1902	00533	PITTSBURGH & W VA GAS	39.584071	-80.568456	82	9		1928 POCONO
471030056	660000 GAS	-CB	1/1/1965	00566	J C R PETROLEUM INCORPORATED	39.589598	-80.576384	88	0		548 CONEMAUGH /SERIES/
471033098	890000 ABD	-GW	1/17/1917	30989	CARNEGIE NATURAL GAS CORPORATION	39.578108	-80.547584	120	0		3221 HURON LOWER
471030052	220000 UNK	WN		00522	UNKNOWN	39.587566	-80.556866	121	4		3154 CHEMUNG
471030052	290000 GST0	G	5/1/1963	00529	EQUITABLE GAS COMPANY	39.577815	·80.549603	120	0		3228 FIFTH SAND
471030315	520000 PERM	MIT		03152	EQT PRODUCTION COMPANY	39.595246	-80.568931	143	0		
47103005	310000 PSEL	nbo		00531	EQUITABLE GAS COMPANY	39.577092	-80.553953	109	8		
471030084	410000 PSEL	OGU		00841	UNKNOWN	39.598294	-80.560775				
471030114	450000 PSEL	UDO		01145	MEADOW RIDGE DEVELOPMENT LLC	39.583043	-80.558152				
471033011	190000 PSEL	UDO		30119	CARNEGIE NATURAL GAS CORPORATION	39.597714	-80.555904				
471033114	450000 PSEU	UDO		31145	EQUITABLE GAS COMPANY	39.582608	-80.558637				
471037026	570000 PSEU	NDO		70267	HOPE NATURAL GAS	39.589006	-80.557028				
471037041	190000 PSEU	UDO		70419	HOPE NATURAL GAS	39.590457	-80.577635				
471037042	230000 PSEU	UDO		70423	PHILADELPHIA OIL	39.583781	-80.566957				
471030037	760000 GAS-	-CB	4/1/1952	00376	J C R PETROLEUM INCORPORATED	39.592356	-80.572067	126	5		1008 CONEMAUGH /SERIES/
471030038	300000 D&A	N-OG	5/1/1952	00380	UNKNOWN	39.593662	-80.573006	126	7		1185 CONEMAUGH / SERIES /
471030045	570000 D&A	1-G	1/1/1958	00457	UNKNOWN	39.584228	-80.566062	110	8		859 AMES /LM/
	10000 ABD-		7/1/1957	00451	NORTH FORK DEVELOPMENT	39.582898	-80.566505	81	7		529 PENNSYLVANIAN
	20000 GAS-		8/1/1957		NORTH FORK DEVELOPMENT	39.584072	-80.563459	88	6		614 PITTSBURGH COAL
	940000 GSTG			00494	EQUITABLE GAS COMPANY	39.586260	-80.573381	108	6		2088 CHEMUNG
	90000 GSTG			00499	EQUITABLE GAS COMPANY	39.582898	-80.569315	92	3		2712 CHEMUNG
	40000 GSTG				EQUITABLE GAS COMPANY	39.582608	-80.559011	106	7		2880 CHEMUNG
	40000 GSTG				UNKNOWN	39.592199	-80.568269	116			
	40000 GSTG		5/1/1962		J A & M OIL & GAS	39.592630	-80.561681	110			BIG INJUN /SD/
	30000 GSTG		1/1/1963		EQUITABLE GAS COMPANY	39.581035	-80.556866	84			BIG INJUN /SD/
	00000 ABD-		2/16/1918		UNKNOWN	39.598016	-80.556303	1310	ס		3226 HURON LOWER
	80000 UNK				HOPE NATURAL GAS	39.585232	-80.554406				
	90000 UNK			71939	UNKNOWN	39.591328	-80.576324				
471030088	40001 D&A		11/7/1989	00884	EQUITRANS INCORPORATED	39.592199	-80.568269	1167	7		2211 GREENBRIER /LM/

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WV Department of
Environmental Protection

Well

514368(BIG245H7)

EQT Production

Big Run Quad Wetzel County, WV

Azimuth 157 Vertical Section 4540

Note: Diagram is not to scale

Note: Diagram is not to scale	Top Base			Casing and Cementing			Deepest Fresh Water:	1,011'
Formations	TVD TVD			Туре	Conductor	Surface	Intermediate	Production O
Conductor	40			Hole Size, In.	26	17 1/2	12 3/8	8 1/20 0
		411111	-	Casing Size, OD In.	20	13 3/8	9 5/8	5 1/2
				Casing Wall Thickness, In.	0.375	0.380	0.395	0.3612
Base Red Rock	967			Depth, MD	40'	1,179'	2,925'	14,082
Base Fresh Water	1011	111111		Weight	78.6#	54.5#	40#	20#
Surface Casing	1179	A		Grade	A-500	J-55	A-500	P-110 >
				New or Used	New	New	New	New S
Maxton	2332 - 2426	73.11		Burst (psi)	1378	2,700	3,950	12,640
Big Lime	2463 - 2659	4.4.1.1		Cement Class	Α	A / Type 1	Н	н 🛬
Weir	2783 - 2875			Cement Yield	1.18	1.19	1.07	1.123/2.098
Intermediate Casing Gantz	2925 2982 - 3055	4		Top of Cement (Planned)	Surface	Surface	Surface	500' above top Producing Zone
Fifty foot	3108 - 3161			Method	Displacement	Displacement	Displacement	Displacement
Thirty foot	3195 - 3234			Est. Volume (cu ft)	60	1,026	1,136	1,646
Gordon Forth Sand Bayard Warren Speechley	3249 - 3297 3307 - 3320 3124 - 3486 3884 - 3931 4034 - 4067		KOP @ 3,969'	Possible Additives	N/A	Calcium Chloride	Calcium Chloride, Fluid Loss, Defoamer, Dispersant, POZ, Bonding Agent, Extender, Retarder, Flake/LCM	Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent
Riley Benson Alexander Sonyea Middlesex Genesee Geneseo Tully Hamilton Marcellus Production Casing Onondaga	4897 - 4939 5529 - 5586 5882 - 5941 7087 - 7241 7241 - 7287 7287 - 7370 7370 - 7403 7403 - 7421 7421 - 7511 7511 - 7564 14082 MD			Dinit 11-14-14	and the state of t	Mary Secretary		1

Land curve @

7,532' TVD 8,821' MD

Est. TD@

7,532' TVD 14,082' MD

Proposed Well Work:

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

Drill the vertical to an approximate depth of 3969'.
Kick off and drill curve. Drill lateral in the Marcellus. Cement casing.

5,261' Lateral



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

4710305173

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.

1 0

James Peterson

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

MEGEIVED
Office of Oil and Gas

NOV 0 9 2016



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.

Promoting a healthy environment.

REGEIVED
Office of Oil and Gas

NOV 0 9 2016

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

REGEIVED
Office of Oil and Gas

4710303175

NOV 0 9 2016

4710303175

API Number 47 - 103

Operator's Well No. 514368

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code 306686	
Watershed (HUC 10) Rockcamp Run of Wiley Fork Quadrangle Big Run	_
Do you anticipate using more than 5 000 kbls - 5	-
Will a pit be used? Yes No 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.?	,
Proposed Disposal Method For Treated Pit Wastes:	DAH
Land Application	11-14-16
Underground Injection (UIC Permit Number 0014, 8462, 4037 Reuse (at API Number Various	٠, ٠,٠
Off Site Disposal (Supply form WW-9 for disposal location))
Other (Explain	
Will closed loop system be used? If so, describe: Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared to	or
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached	
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud	
Additives to be used in drilling medium? See Attached	_
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill	_
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A	
-Landfill or offsite name/permit number? See Attached List	
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disc where it was properly disposed.	any lose
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMI on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other against a certify under penalty of law that I have personally examined and am familiar with the information submitted application form and all attachments thereto and that, based on my inquiry of those individuals immediately respons obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are signed penalties for submitting false information, including the possibility of fine or imprisonment.	that the oplicable
Company Official Signature Received	
Company Official (Typed Name) Victoria J. Roark Office of Oil & C	- 3as
Company Official Title Permitting Supervisor NOV 1 7 2016	-
Subscribed and sworn before me this 3 day of October, 20 16	 -
Aurecca & Wandreet Notary Public That Traffic	FICIAL SEAL ARY PUBLIC OF WEST VIRGINIA
My commission expires 4-7-2020	A L. WANSTREET
My commission	PORT WV SATA

Operator's Well No. 514368

EQT. Production Co	ompany	4710	303175
Proposed Revegetation Trea	atment: Acres Disturbed 3	2.63 Prevegetation p	H 6.3
	Tons/acre or to corre		
Fertilizer type Gra	anular 10-20-20		
Fertilizer amount_	1/3	lbs/acre	
Mulch 2		_Tons/acre	
		Seed Mixtures	
T	emporary	Perm	anent
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		
Plan Approved by:	h		
_			
			
Title: 01 + Gc 5 In	spects	Date: //-14-//	
Field Reviewed?	Y Yes) No	_
·			eived
		Office of	Oil & Gas

03/03/2017

NOV 17 2016

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.

RECEIVED
Office of Oil and Gas

NOV 0 9 2016



October 11, 2016

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

Re: Casing plan on Wells (BIG245)

Dear Mr. Smith,

EQT is requesting the 13-3/8" surface casing be set at 1179' KB, 50' below the deepest mineable Pittsburgh Coal. We will set the 9-5/8" intermediate string at 2925' KB, 50' below the base of the Weir formation.

If you have any questions, please do not hesitate to contact me at (304) 848-0076.

Sincerely, L

Vicki Roark

Permitting Supervisor

Enc.

EQT Production Water plan

Offsite disposals for Marcellus wells

CWS TRUCKING INC.

P.O. Box 391 Williamstown, WV 26187 740-516-3586 Noble County/Noble Township Permit # 3390

LAD LIQUID ASSETS DISPOSAL INC.

226 Rankin Road Washington, PA 15301 724-350-2760 724-222-6080 724-229-7034 fax Ohio County/Wheeling Permit # USEPA WV 0014

TRI COUNTY WASTE WATER MANAGEMENT, INC.

1487 Toms Run Road Holbrook, PA 15341 724-627-7178 Plant 724-499-5647 Office Greene County/Waynesburg Permit # TC-1009

Waste Management - Meadowfill Landfill

Rt. 2, Box 68 Dawson Drive Bridgeport, WV 26330 304-326-6027 Permit #SWF-1032-98 Approval #100785WV

Waste Management - Northwestern Landfill

512 E. Dry Road Parkersburg, WV 26104 304-428-0602 Permit #SWF-1025 WV-0109400 Approval #100833WV

BROAD STREET ENERGY LLC

37 West Broad Street
Suite 1100
Columbus, Ohio 43215
740-516-5381
Washington County/Belpre Twp.
Permit # 8462

TRIAD ENERGY

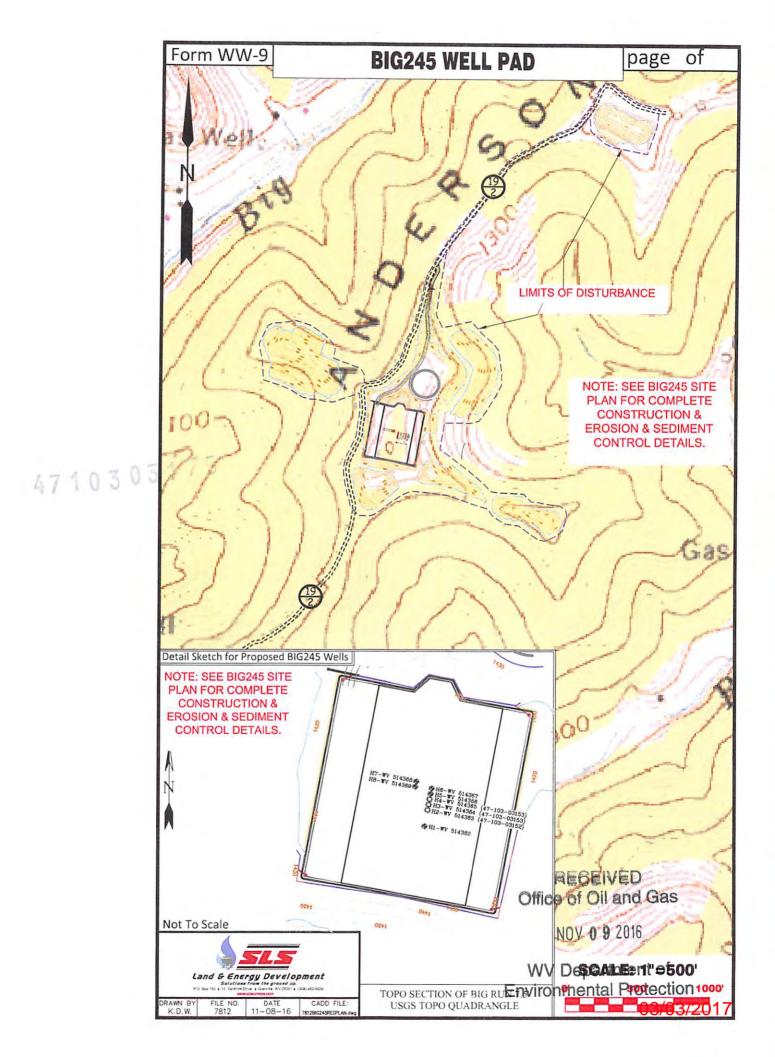
P.O. Box 430
Reno, OH 45773
740-516-6021 Well
740-374-2940 Reno Office Jennifer
Nobel County/Jackson Township
Permit # 4037

KING EXCAVATING CO.

Advanced Waste Services 101 River Park Drive New Castle, Pa. 16101 Facility Permit# PAR000029132

> 무통이팅IVED Office of Oil and Gas

> > NOV 0 9 2016





Site Specific Safety Plan

EQT BIG 245 Pad

Burton Wetzel County, WV

_514366	514367 514368 5	: 14369
-		
1/1/	Date Prepared:	April 4, 2016
T Production		WV Oil and Gas Inspector
leponiting Sup	scensor	Title
10-13-16 te		
		Received

Office of OII & Gas

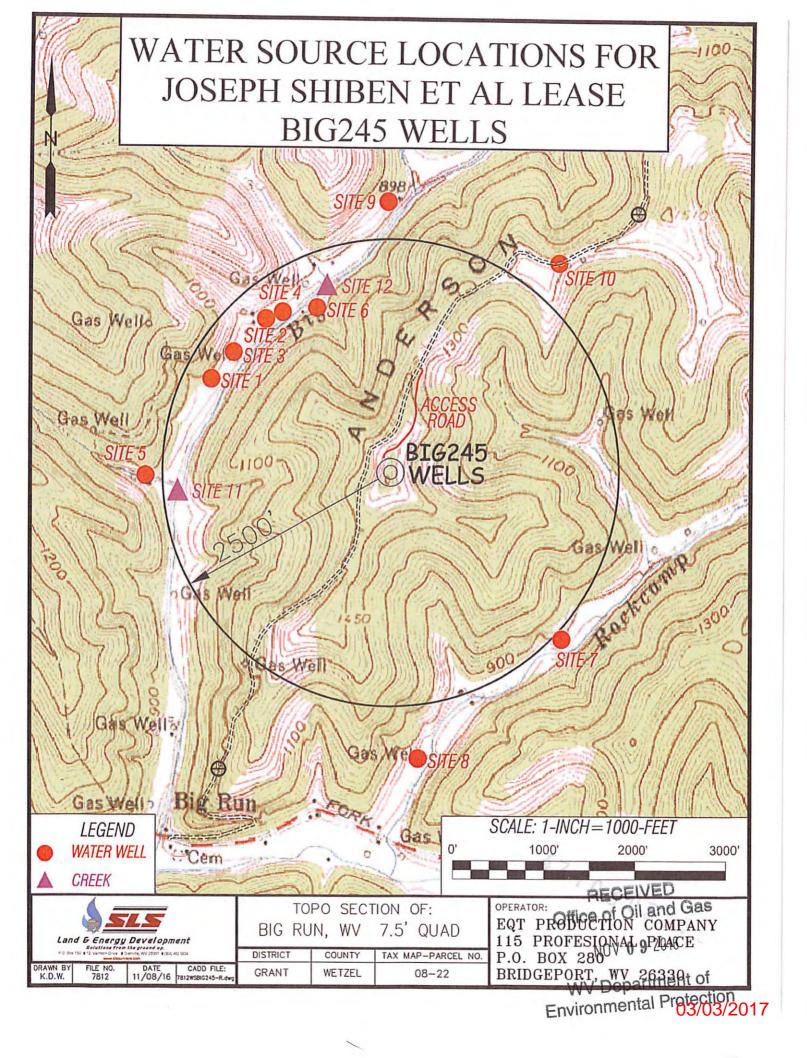
NOV 17 2016

Anticipated Frac Additives Chemical Names and CAS numbers 47 1 0 3 0 3 1 7 5

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

Dart 11-14-16

Received
Office of Oil & Gas NOV 17 2016



G-TM-3-30	THOMAS & CHERYL LEASURE	51.80 ACRES±
G-TM-8-1	DANNY STOCKSLAGER ET AL	170 ACRES±
G-TM-8-2	MIKE & MADELINE WHITE	40.13 ACRES±
G-TM-8-7	JAMES & MARTIN STONEKING	19.12 ACRES±
G-TM-8-8	WANDA BYARD	59.16 ACRES±
G-TM-8-8.1	GARNET GAS CORPORATION	0.47 ACRES±
G-TM-8-10	GARLAND MINOR	48.1 ACRES±
G-TM-8-11	BONNIE HENTHORNE	63.5 ACRES±
G-TM-8-12	SHIRLEY TITUS	41.9 ACRES±
G-TM-8-12.1	DALE SAPP ET AL	10.1 ACRES±
G-TM-8-13	NEAL UTT	3.75 ACRES±
G-TM-8-13.1	DUANE GOODRICH	3.56 ACRES±
G-TM-8-14	NEAL UTT	51 ACRES±
G-TM-8-15	JOHN M. BYARD	71.60 ACRES±
C 774 (0.10	COASTAL FOREST RESOURCES CO.	
G-TM-8-18	d/b/a COASTAL TIMBERLANDS CO.	337 ACRES±
G-TM-8-19	PHILLIP & KIMBERLY SHREVE	46.45 ACRES:
G-TM-8-21	IKEY JOE WILLEY	76.27 ACRES
G-TM-8-22	ET BLUE GRASS LLC	138.93 ACRES
G-TM-8-23	DALE DULANEY ET AL	70.81 ACRES
G-TM-8-23.1	JAMES DULANEY	3.19 ACRES±
G-TM-8-24	DORN HIGGINBOTHAM ET AL	7.1 ACRES±
G-TM-8-25	JAMES YOHO	6.25 ACRES±
G-TM-8-26	JAMES YOHO	23.25 ACRES
G-TM-8-27	JAMES YOHO	21.75 ACRES
G-TM-8-28	JAMES & FLORENCE YOHO	61 ACRES±
G-TM-8-30	JAMES & JIM YOHO	7.50 ACRES±
G-TM-8-32	JOE PIGG	82.4 ACRES±
G-TM-8-38	DALE & SHERRY DULANEY	28.82 ACRES
G-TM-8-38.1	JAMES DULANEY	0.137 ACRES
G-TM-8-39	DORN HIGGINBOTHAM ET AL	23.62 ACRES
G-TM-8-39.1	HENRY WILLEY	0.12 ACRES±
G-TM-8-40	JAMES & JIM YOHO	0.50 ACRES±
G-TM-8-41	DORN HIGGINBOTHAM ET AL	72 SO. RODS±
G-TM-8-44	ELIAS LEASURE JR	1.6 ACRES±
G-TM-8-51	HENRY WILLEY	2.34 ACRES±
G-TM-8-51.1	HENRY WILLEY	0.19 ACRES±
G-TM-8-51.2	GERALD & EMMA WHITE	2.82 ACRES±
G-TM-8-52	HENRY WILLEY	0.26 ACRES±
G-TM-8-53	DORN HIGGINBOTHAM	196.21 ACRES
G-TM-8-55	MANSEL McDIFFTTT ET AL	9.25 ACRES±
G-TM-13-07	MANSEL McDIFFITT ET AL	51.8 ACRES±
G-TM-13-08	ROBERT & ALFRED COLE	36 ACRES±
G-TM-13-09	MARY HIGGINBOTHAM	30.1 ACRES±
G-TM-13-17	MARY HIGGINBOTHAM	112 ACRES±

ROYALT	YOWNERS	
SHIBEN ESTATES, INC. ET AL	160 AC.±	LEASE NO. 102836
DEWEY J. TAYLOR ET AL	3 AC.±	LEASE NO. 125370
MARGARET DOUGLAS MASTIN ELROD ET AL	52 AC.±	LEASE NO. 125430
BONNIE M. HENTHORNE	64 AC.±	LEASE NO. 125426
ACROPOLIS INC. ET AL	74 AC.±	LEASE NO. 121160
TRIO PETROLEUM AND WACO OIL & GAS	26 AC.±	LEASE NO. 125383
FREDRIC G. RICHTER ET AL	40 AC.±	LEASE NO. 106285
ERNA E. SOLE JR.	10 AC.±	LEASE NO. 125369



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 DIVISION OF ENVIRONMENTAL PROTECTION. P.S.

No. 849
STATE OF
VIRCHIA 849 MINIMUM DEGREE FILE NO.

le, WV 26351 4 (304) 462-5634

7812P514368R.dwg 1/2500 OF ACCURACY SEE NOTE 2 SCALE HORIZONTAL & VERTICAL

CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)

147 **P**384 80°32'30" ∑ 386 517 BOTTOM HOLE LONGITUDE 380 0841-P X SEE REFERENCE BOX 884 **376** NOTES ON SURVEY \triangle^{495} 1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD. 2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

> (S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) NAD'27 S.P.C.(FT) N. 400,756.18 E. 1,698,760.82 LAT-(N) 39.595388 LONG-(W) 80.569007 NAD'27 GEO. N. 4,382,948,80 NAD'83 UTM (M) E. 537,021.90 LANDING POINT

NAD'27 S.P.C.(FT) N. 401,064.77 E. 1,696,488.05 NAD'27 GEO. LAT-(N) 39.596161 LONG-(W) 80.577084 NAD'83 UTM (M) N. 4.383,031.23 E. 536,327.90 **BOTTOM HOLE**

NAD'27 S.P.C.(FT) E. 1,698,543.83 NAD'27 GEO. LAT-(N) 39.582933 LONG-(W) 80.569585 NAD'83 UTM (M) N. 4.381.566.22 E. 536,978,80

> BIG245 WELLS H1-WV 514362 STAKE A H2-WV 514363 H3-WV 514364 H4-WV 514365 H5-WV 514366 H6-WV 514367 H7-WV 514368 18-WV 514369 407 (OHI

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS. OCTOBER 04 , 20 _16 DATE

, 20 _ REVISED_

103

COUNTY

OPERATORS WELL NO. WV 514368 API WELL

STATE STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION

OFFICE OF OIL AND GAS



03175 M

PERMIT

TOP HOLE LONGITUDE 80°32'30"

WASTE IF LIQUID WELL GAS_X_ INJECTION "GAS" PRODUCTION_X_ STORAGE_ _ DEEP_ SHALLOW_ TYPE: LOCATION: (GROUND) (PROPOSED) TRIBUTARY OF ROCKCAMP RUN 1.480' 1,430' WATERSHED_ ELEVATION _ **BIG RUN 7.5'** WETZEL

TH

GRANT COUNTY QUADRANGLE _ DISTRICT ET BLUE GRASS LLC 138.93± ACREAGE -SURFACE OWNER -

SHIBEN ESTATES INC ACREAGE -ROYALTY OWNER -125397 LEASE NO. _

FRACTURE OR STIMULATE X PLUG OFF OLD DRILL X CONVERT ____ DRILL DEEPER_ REDRILL. CLEAN OUT AND REPLUG_____ OTHER FORMATION ____ PERFORATE NEW FORMATION ___ PLUG AND ABANDON.

MARCELLUS TARGET FORMATION . PHYSICAL CHANGE IN WELL (SPECIFY) ESTIMATED DEPTH_

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY

ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 ADDRESS

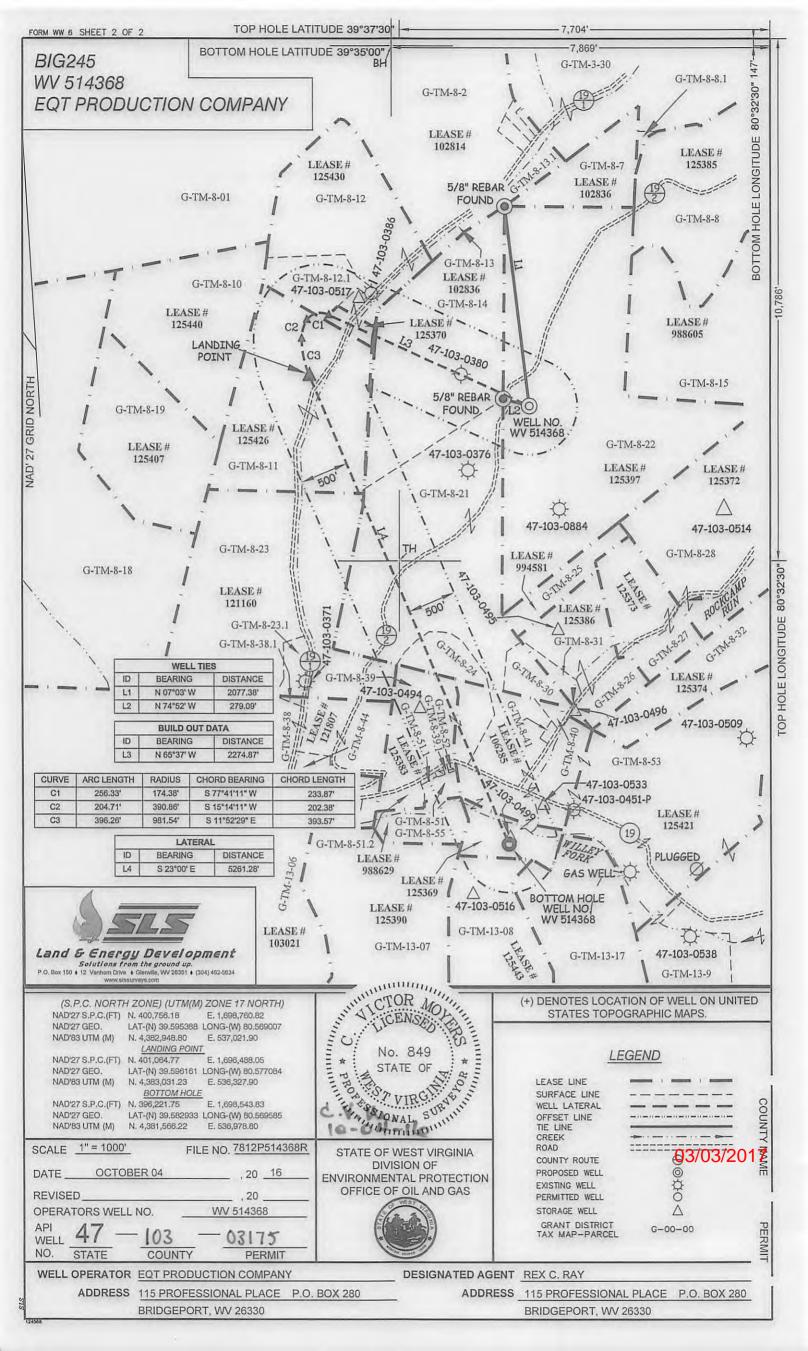
BRIDGEPORT, WV 26330

115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

140±

B

PERMIT



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

Office of Oil and Gas

NOV 0 9 2016

WV Department of Envi

The applicant further acknowledges that any Office of Oil and Gas permit in no wayard prides 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: Victoria J Roark

Its: Permitting Supervisor

Page 1 of 2

Lease No.	Grantor, Lessor, etc.	Granton Lennes etc	D 15	
20000 110.	Grantor, Leader, Gib.	Grantee, Lessee, etc.	Royalty	Book/Page
125397	ET Blue Grass LLC, et al. (current royalty owner)		***	
	Joseph Shiben, et al.	Equitable Gas Company		DB 44A/224
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453
	Equitrans, Inc.	Equitrans, LP		DB 105/908
	Equitrans, LP	EQT Production Company		O&G 131A/81
		. ,	•	
	Shiben Estates, Inc. (Current Royalty Owner)		***	
<u>102836</u>	S I Robinson	The Philadelphia Company		DB 47/469
	The Philadelphia Company	Pittsburgh and West Virginia Gas Co.		DB 146/98
	Pittsburgh and West Virginia Gas Co.	Equitable Gas Company		DB 187/374
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453
	Equitrans, Inc. Equitrans, LP	Equitrans, LP		DB 105/908
	Equilais, CF	EQT Production Company		O&G 131A/81
	Dewey J. Taylor, et al. (Current Royalty Owner)		***	
<u>125370</u>	Austa B. Utt, et al.	Equitable Gas Company		DB 52A/173
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453
	Equitrans, Inc.	Equitrans, LP		DB 105/908
	Equitrans, LP	EQT Production Company		O&G 131A/81
400400	Margaret Douglas Mastin Eirod, et al. (Current Royalty		***	•
<u>125430</u>	Marion D. Smith, et al.	P.C. McKenzie Co.		LB 40A/331
	P.C. McKenzie Co.	Perico Gas Incorporated		LB 43A/118
	Period Gas Incorporated	Equitable Gas Company		LB 44A/445
	Equitable Gas Company Equitrans, Inc.	Equitrans, Inc.		O&G 71A/453
	Equitrans, LP	Equitrans, LP EQT Production Company		DB 105/908 O&G 131A/81
	Equitatio, E	EQ11 location company		044 1317/01
	Bonnie M. Henthorne (Current Royalty Owner)		***	
125426	William Swisher, et ux.	Hope Natural Gas Company		LB 5A/128
	Hope Natural Gas Company	Equitable Gas Company		LB 44A/380
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453
	Equitrans, Inc.	Equitrans, LP		DB 105/908
	Equitrans, LP	EQT Production Company		O&G 131A/81
	Acropolis, Inc., et al. (Current Royalty Owner)		***	
121160	A. C. Higginbotham, et al.	Pittsburgh & West Virginia Gas Company		LB 39A/236
IZIIOU	Pittsburgh & West Virginia Gas Company	Equitable Gas Company		LB 187/374
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453
	Equitrans, Inc.	Equitrans, LP		DB 105/908
	Equitrans, LP	EQT Production Company		O&G 131A/81
	•			*
·	Trio Petroleum and Waco Oil and Gas (Current Royalty	Owner)	***	
<u>125383</u>	Dora Kohn, et al.	Equitable Gas Company		LB 44A/87
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453
	Equitrans, Inc.	Equitrans, LP		08G 71A/453 DB 105/@#ICO OF OIL
	Equitrans, LP	EQT Production Company		
	Fredric G. Richter, et al. (Current Royalty Owner)		***	O&G 71A/453 DB 105/@ffice of Oil and Gas NOV 0 9 2016
106285	John E. Snider & Mahala A. Snider	John Lävelle		DR 76/230 1 201C
	John Lavelle	PH Glover		Unrecoded Assignment Emperged Assignment Assignment Of O&G 2ZASIM Mental D
	PH Glover	The Philadelphia Co of West Virginia		Egrecorded Assignabart
	The Philadelphia Co of West Virginia	Pittsburgh and West Virginia Gas Co.		Ose 2249 Mental Protection Ose 714/453
	Pittsburgh and West Virginia Gas Co.	Equitable Gas Company		DB 187/374 Protection
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453
	Equitrans, Inc.	Equitrans, LP		DB 105/908
	Equitrans, LP	EQT Production Company		O&G 131A/81
	***We certify that we will pay a minimum one-eighth of the			

ASSIGNMENT OF LEASE.

,	KNOW ALL MEN BY THESE PRESENTS, That John Lavelle	
	party of the first part, for and in	
	consideration of the sum of One Dollars,	
	lauful money of the United States, to him duly paid, by PA Gloves	
	Dunty of William Sound State of West Vinginia	
	have sold, and by these presents do grant, convey, assign, transfer and set over unto the said. PH GLoven.	
	party of the second part, a certain indenture of lease, bearing date the 1/th day of	
	January 1882, made by John to Smider & Mahalia	
	Sunder his wife whereby they lease to said folm Lavelle	
-	all that certain leasehold estate situate in the	
	District of Grant County of Wily and State of Linguis bounded and described as follows, to wit:	
	On the North by the lands of John It Sanda	
	On the East by the lands of Leace Higginbothoms heirs	
.var	On the West by the lands of Kerley Willer	
	On the world Drighe lands of 11226 Sander	
ar sentile	containingacres, be the same more or less, with all and singular the premises	
	therein mentioned and described, together with the appurtenances thereto and therewith	
	belonging.	
	To have and to hold the same unto the said party of the second part and his assigns, from the 15th day of August 186, for and during all the	
	rest and residue and remainder yet to come, of and in the term of	
	years mentioned in said lease, and all rights and privileges of the party of the first part	
	in and under said lease; subject, nevertheless, to the rents, covenants, conditions and	
33-3	provisions (herein also mentioned.	
-	15/h day of Asymet 480	• ;
	0 0 0	J
	Sealed and delivered in the presence of	
	Anthon Phillips	
	- Statistation 1971 - RECEIVED	
	Office of Oil and G	as

NOV 0 9 2016

I,	a Bar	inia, Coun	a_/	Valan	Bubl		
of the said cour	ity of V		do certif	y that	Olasa	<u> zaveu</u>	
and				.his-wife, v	vhose nam	es/are signed	
to the writing a	bove, bearing	date the 15-70	day of	· Ing	mst	1903 189 , have	
this day acknow	vledged the sa	me before me in	ı my said c	ounty.			
		his_16 The	day of	nynä	1. 1.2.	2.00	or 3≛
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THIS INDENTURE, Made this 25th day of August, A. D. 1902, between P. H. GLOVER, of Uniontown, Wetzel County, West Virginia, party of the first part, and THE PHILADELPHIA COMPANY OF WEST VIRGINIA, a corporation of West Virginia, party of the second part;

WITNESSETH, That the said party of the first part, for and in consideration of the sum of One Dollar (\$1.00), to him in hand paid by the said party of the second part, at and before the sealing and delivery hereof, the receipt whereof is hereby acknowledged, and other considerations to him moving, has granted, bargained, sold, assigned and transferred, and by these presents does grant, bargain, sell, assign and transfer unto the said The Philadelphia Company of West Virginia, its successors and assigns, the two (2) following described leases, for oil and gas purposes, of lands situate in Grant District, Wetzel County, West Virginia, containing 65 acres, more or less, to-wit:

| St. | Lease of E. K. Willey and Drusilla Willey, his wife, to W. J. Anderson, of a tract of land containing 25 acres, more or less, deted August 8th, 1902;

2nd. Lease of John E. Snider and Mahala A. Snider, his wife, to John Lavelle, of a tract of land containing 40 acres, more or less, dated January 11th, 1902;

claim and demand thereby granted to the said lessees in, of and to the said tracts of land, leaseholds and term of years therein mentioned; reserving, however, an undivided one-sixteenth (1/16) part or share of all the oil which may be produced and saved from said leases, or either of them, after the royalty under the same due and payable to the lessors has been deducted; the said one-sixteenth (1/16) part or share of the bedelivered, free of charge, to the party of the fighter of Oil and Gas in the pipe lines and tanks of the Company or Companies transporting and storing the oil produced from either or both of the said leases. NOV 0 9 2016

TO HAVE and TO HOLD the leasehold gas and gas rights and hoperatment of rights hereby conveyed in the said leases unto and for the name of Protection said The Philadelphia Company of West Virginia, its successors and assigns, under the rents, agreements and covenants reserved and contained, on the part of the lessees therein named to be paid, kept and performed.

AND FURTHER IT IS UNDERSTOOD BETWEEN THE PARTIES HERETO, That the

party of the second part shall commence a well upon some one of the above leases within sixty (60) days from the date hereof, and complete the same without unnecessary delay; it is also understood that, before abandoning the wells that may be drilled upon said premises by the party of the second part, one well shall be drilled through what is known as the Gordon sand.

IN WITNESS WHEREOF, The said P. H. Glover has hereunto set his hand and seal, and the said The Philadelphia Company of West Virginia has caused this indenture to be signed by its General Manager, the day and year first above written.

Signed, sealed and delivered

in the presence of

THE PHILADELPHIA COMPANY
OF WEST VIRGINIA

By Maysh of General Manager.

State of Pennsylvania,)
(ss.
County of Allegheny.)

I, E. W. Newell, a Notary Public of said County, do certify that P. H. Glover, whose name is signed to the writing above, bearing date the 25th day of August, A. D. 1902, has this day acknowledged the same before me in my said County.

Given under my hand this 25th day of August, A. D. 1902.

Motary Public.

Motary Public.

ABOSIVED

MY COUMISSION EXPIRES FEEDMING OF OIL and Gas

NOV 0 9 2016

(SEAL)

Consideration \$50 Pen Leads

Consideration \$50 Pen Leads

(as // b)

Consideration \$50

REGEIVED Office of Oil and Gas

NOV 0 9 2016



October 12, 2016

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

Re: BIG245 well pad, well number 514368 Grant District, Wetzel County

Dear Mr. Martin,

EQT Production Company is submitting an application for a new well work permit for the above well number. Upon information and belief, 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,

Vicki Roark

Permitting Supervisor-WV

REGEIVED
Office of Oil and Gas

NOV 0 9 2016

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

Date of Notic	ce Certification: 11-8-16	API N	io. 47- 103 -	
			tor's Well No. 5143	68
			Pad Name: BIG245	
Notice has l				
Pursuant to th	ne provisions in West Virginia Code	§ 22-6A, the Operator has provided the	ne required parties v	with the Notice Forms listed
below for the	tract of land as follows:			
State:	<u>w</u>	UTM NAD 83 Eastin	g: 537021.90	
County:	Wetzel	Northi	ing: 4382948.80	
District:	Grant	Public Road Access:	Rt 19/2	
Quadrangle:	Big Run	Generally used farm nan	ne: E.T. Bluegrass L	LC
Watershed:	Rockcamp Run of Wiley Fork			
prescribed by it has provide information re of giving the requirements Virginia Code	the secretary, shall be verified and sed the owners of the surface described and (c), sequired by subsections (b) and (c), surface owner notice of entry to sof subsection (b), section sixteen of	every permit application filed under shall contain the following information bed in subdivisions (1), (2) and (4), ection sixteen of this article; (ii) that the survey pursuant to subsection (a), section this article were waived in writing tender proof of and certify to the secretart.	n: (14) A certificati subsection (b), see he requirement was tion ten of this arti g by the surface ov	on from the operator that (i) ction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice vner; and Pursuant to West
Pursuant to that the Ope	West Virginia Code § 22-6A, the Orrator has properly served the require	perator has attached proof to this Noticed parties with the following:	ice Certification	
*PLEASE CHE	ECK ALL THAT APPLY			OOG OFFICE USE ONLY
☐ 1. NO1	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BE SEISMIC ACTIVITY WAS CONI		☐ RECEIVED/ NOT REQUIRED
☐ 2. NO	TICE OF ENTRY FOR PLAT SUR	VEY or 🔳 NO PLAT SURVEY WA	S CONDUCTED	☐ RECEIVED
■ 3. NO	FICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRED BE NOTICE OF ENTRY FOR PLATS WAS CONDUCTED or		☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY SUI (PLEASE ATTACH)	RFACE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION			RECEIVED
■ 5. PUE	BLIC NOTICE			☐ RECEIVED
■ 6. NO	TICE OF APPLICATION			☐ RECEIVED

Required Attachments:

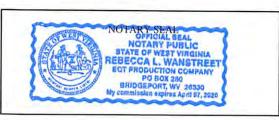
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall and the Class II Legal Advertisement with publication date verification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

WV Department of Environmental Protection

Certification	of Notice is	s hereby given.
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THEREFORE, I , 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 CompanyAddress:115 Professional Place PO Box 280By:Victoria J RoarkBridgeport WV 26330Its:Permitting SupervisorFacsimile:304-848-0041Telephone:304-848-0076Email:vroark@eqt.com



Subscribed and sworn before me this 13 day of October 2016

Delleca I wanstreed

Notary Public

My Commission Expires 4-7-2020

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.

REGEIVED
Office of Oil and Gas

NOV 0 9 2016

WV Department of Environmental Protection

API NO. 47- 103 -	
OPERATOR WELL NO.	514368
Well Pad Name: BIG245	

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 11 8 110 Date Permit Application Filed: 11 8 110 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ PERSONAL REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A **SERVICE** MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice ☐ Well Plat Notice is hereby provided to: ☑ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: See Attached Name: See Attached Address: Address: ☐ COAL OPERATOR Name: Name: ______Address: _____ Address: ☐ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: See Attached ☑ SURFACE OWNER OF WATER WELL Address: AND/OR WATER PURVEYOR(s) Name: _____Address: ____ Name: ______Address: _____ □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: RECEIVED Name: See Attached Address: _____ Address: Office of Oil and Gas *Please attach additional forms if necessary

NOV **0 9** 2016

API NO. 47- <u>103</u> -	
OPERATOR WELL NO. 514368	
Well Pad Name: BIG245	

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending an stream 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 management and applicates 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, gording 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 while least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by Properties The Properties and the residence of the secretary shall, by Properties and the residence of the secretary shall, by Properties and the secretary shall 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

WW-6A (8-13)

API NO. 47- 103

OPERATOR WELL NO. 514368

Well Pad Name: BIG245

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

RESEIVED
Office of Oil and Gas

NOV 0 9 2016

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.

WV Departmental Protection

Fourionmental Protection

WW-6A (8-13)

API NO. 47- 103 -	
OPERATOR WELL NO. 5	14368
Well Pad Name: BIG245	

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.

WW-6A (8-13)

API NO. 47- 103 OPERATOR WELL NO. 514368 Well Pad Name: BIG245

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 304-848-0076

Email: vroark@eqt.com

Address: 115 Professional Place PO Box 280

Bridgeport WV 26330

Facsimile: 304-848-0041

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 13 day of October 2016

My Commission Expires

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NOV 0 9 2016

WV Department of Environmental Protection

Surface Owners:

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222

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Office of Oil and Gas

NOV 0 9 2016

WV Department of Environmental Protestion 2017

API NO. 47-103 -		
OPERATOR WELL NO.	514368	-
Well Pad Name: BIG245		٠

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

Comment and Waiver Provisions

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.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: Provided, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

VOLUNTARY STATEMENT OF NO OBJECTION

required, and State: County: District: Quadrangle: Watershed:	attachments consisting of pages one (1) thre well plat, all for proposed well work on the well well well work on the well well work on the wel	a Notice of A ough tract of land UTM NAD Public Roa Generally	pplication, an Application, including as follows: 83 Easting: Northing: d Access: used farm name:	the erosion and sediment control plan, if 537021.90 4382948.80 Rt 19/2 E.T. Bluegrass LLC
I further state issued on thos	that I have no objection to the planned work dematerials.	escribed in the	ese materials, and	I have no objection to a permit being
*Please check	the box that applies		FOR EXECUT	ION BY A NATURAL PERSON
SURFACE SURFACE	CE OWNER CE OWNER (Road and/or Other Disturban	nce)	Print Name:	
■ SURFAC	CE OWNER (Impoundments/Pits)		Date	
	WNER OR LESSEE		FOR EXECUT Company: ET Blue By: John Damato	ION BY A CORPORATION, ETC. Grass LLC
☐ COAL O	PERATOR		Its: Regional Land Di	irector
□ WATER	PURVEYOR		Signature:	M
☐ OPERAT	TOR OF ANY NATURAL GAS STORAC	GE FIELD	Date:	11. 7-16
Oil and Gas	Privacy Notice:			REGEIVED

The Office of Oil and Gas processes your personal information, such as name, address and telephone number of Oil and Gas processes 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 of Carl 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.

WV Department of **Environmental Protection**

Surface Owners (Road or other Disturbance):

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222



Wanda L. Byard 1250 Meadowlane Drive Lewisport KY 42351

Neal Utt 1204 Big Run Road Burton WV 26562



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Office of Oil and Gas

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WV Department of
Environmental Protection 03/03/2017

API NO. 47-103 -	
OPERATOR WELL NO.	514368
Well Pad Name: BIG245	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJEC'

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VOLUNTARY STATEMENT OF NO OBJECTION

ww-oA and	, hereby state that I have reated above, and that I have received copies of attachments consisting of pages one (1) threwell plat, all for proposed well work on the WW Wetzet Grant Big Run Rockcamp Run of Wiley Fork	a Notice of A ough e tract of land UTM NAI Public Roa	pplication, an Appin including as follows: Easting: Northing:	the erosion and sediment control plan, if 537021.90 4382948.80 Rt 19/2
I further state issued on thos	that I have no objection to the planned work dee materials.	lescribed in the	ese materials, and	I have no objection to a permit being
*Please check	the box that applies		FOR EXECUT	ION BY A NATURAL PERSON
■ SURFAC	CE OWNER			
■ SURFAC	CE OWNER (Road and/or Other Disturbar	nce)	Print Name:	
■ SURFAC	CE OWNER (Impoundments/Pits)			
■ COAL C	WNER OR LESSEE		Company: ET Blue	ION BY A CORPORATION, ETC. Grass LLC
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□ WATER	PURVEYOR		Signature:	M
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Environmental Protection

Surface Owners (Pits, Impoundments, or AST):

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222

W

Office of Oil and Gas

NOV 0 9 2016

WV Department of
Environmental Protection

API NO. 47- 103 -	
OPERATOR WELL NO.	514368
Well Pad Name: BIG245	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJECT

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VOLUNTARY STATEMENT OF NO OBJECTION

State:	w	— UTM NAD	83 Easting:	537021.90
County:	Wetzel		Northing:	4382948.80
District:	Grant	Public Road		Rt 19/2
Quadrangle:	Big Run	Generally u	sed farm name:	E.T. Bluegrass LLC
Watershed:	Rockcamp Run of Wiley Fork			
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*Please check	the box that applies			
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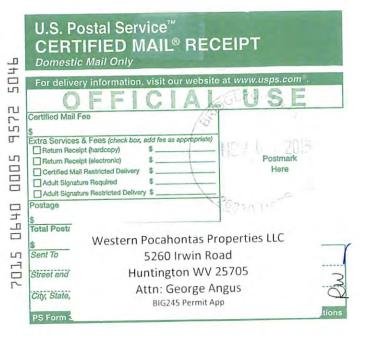
WV Department of Environmental Proteon 3/2017

Coal Owner

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222

Western Pocahontas Properties LLC 5260 Irwin Road Huntington WV 25705

CNX Land LLC
Engineering Operations Support Dept. Coal
1000 Consol Energy Drive
Canonsburg PA 15317



39	U.S. Postal Service [™] CERTIFIED MAIL® RECEIPT Domestic Mail Only	
50	For delivery information, visit our website at www.usps.com OFFICIAL USE	
0005 9572	Certified Mail Fee \$ Extra Services & Fees (check box, add fee as appropriate) Return Receipt (hardcopy) \$ Return Receipt (electronic) \$ Certified Mail Restricted Delivery \$ Adult Signature Required \$ Adult Signature Restricted Delivery \$	
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7	Canonsburg PA 15317 City, Sta Attn: Ryan Arp BIG245 Permit App	uctions

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WV Department of Environmental Projection 17

API NO. 47- <u>103</u>	
OPERATOR WELL NO.	514368
Well Pad Name: BIG245	

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJECT

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VOLUNTARY STATEMENT OF NO OBJECTION

County: District: Quadrangle: Watershed:	Rockcamp Run of Wiley Fork		Northing: d Access: used farm name:	
issued on tho		ork described in the		
*Please checl	k the box that applies		FOR EXECUT	ON BY A NATURAL PERSON
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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 Noti	Requirement: Notice shall be poe: 09/30/2016	provided at least TEN (10) days prior to filing a Date Permit Application Filed: 10/10/2016	permit application.
Delivery me	thod pursuant to West Virgini	a Code § 22-6A-16(b)	
☐ HAND	■ CERTIFIED M	AIL	
DELIV		EIPT REQUESTED	
receipt reque drilling a hor of this subsec subsection m	sted or hand delivery, give the sizontal well: <i>Provided</i> , That no ction as of the date the notice was be waived in writing by the size.	east ten days prior to filing a permit application, urface owner notice of its intent to enter upon the stice given pursuant to subsection (a), section tends provided to the surface owner: <i>Provided, how</i> urface owner. The notice, if required, shall including mail address of the operator and the operator	e surface owner's land for the purpose of n of this article satisfies the requirements ever, That the notice requirements of this ide the name, address, telephone number,
	reby provided to the SURF.	ACE OWNER(s):	
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Address:		Address:	
the surface o ^r State: County:	wner's land for the purpose of dr wv Wetzel	UIM NAD 83	llows: 537021.90 4382948.80
District:	Grant	Public Road Access:	Rt 19/2
Quadrangle: Watershed:	Big Run Rockcamp Run of Wiley Fork	Generally used farm name:	E.T. Bluegrass LLC
	Shall Include:	6(b), this notice shall include the name, addre	ass talenhone number and if available
facsimile nur related to hor	nber and electronic mail addresticontal drilling may be obtained	ss of the operator and the operator's authorize d from the Secretary, at the WV Department of V 25304 (304-926-0450) or by visiting <a href="https://www.de.gov/www.g</td><td>d representative. Additional information Environmental Protection headquarters.</td></tr><tr><td>facsimile nur
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Notice is he</td><td>nber and electronic mail addrestizental drilling may be obtained 57<sup>th</sup> Street, SE, Charleston, WV reby given by:</td><td>d from the Secretary, at the WV Department of 25304 (304-926-0450) or by visiting <a href=" https:="" td="" ww.<="" www.de.gov="" www.gov=""><td>d representative. Additional information Environmental Protection headquarters.</td>	d representative. Additional information Environmental Protection headquarters.
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Bridgeport WV 2</td><td>nber and electronic mail addressized drilling may be obtained 57th Street, SE, Charleston, WN reby given by: The Eqt Production Company 115 Professional Place PO Box 280 6330</td><td>d from the Secretary, at the WV Department of V 25304 (304-926-0450) or by visiting <a href=" https:="" td="" www.de-de<="" www.de-department.com=""><td>d representative. Additional information Environmental Protection headquarters, p.wv.gov/oil-and-gas/pages/default.aspx. Victoria Roark 115 Professional Place PO Box 280</td>	d representative. Additional information Environmental Protection headquarters, p.wv.gov/oil-and-gas/pages/default.aspx. Victoria Roark 115 Professional Place PO Box 280

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WV Department of Environmental Protection 17

Surface Owners:

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222



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NOV 0 9 2016

WV Department of Environmental Property 2017

Surface Owners (Pits, Impoundments, or AST):

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222

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Office of Oil and Gas

NOV 0 9 2016

WV Department of Environmental Protection/2017

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

WAIVER

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

County: Wetzel UTM NAD 83 Northing: 4382948.80 District: Grant Public Road Access: Rt 19/2 Quadrangle: Big Run Generally used farm name: E.T. Bluegrass LLC Watershed: Rockcamp Run of Wiley Fork	Northing: 4382948.80
Quadrangle: Big Run Generally used farm name: E.T. Bluegrass LLC	Grant Public Road Access: Rt 19/2
	. Botte Rolla / Recess. Re 15/2
Watershed: Rockcamp Run of Wiley Fork	: Big Run Generally used farm name: E.T. Bluegrass LLC
The state of the s	Rockcamp Run of Wiley Fork
	Rockcamp Run of Wiley Fork

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Office of Oil and Gas

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WV Department of
Environmental Protection
03/03/2017

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ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222

Wanda L. Byard 1250 Meadowlane Drive Lewisport KY 42351

Neal Utt 1204 Big Run Road Burton WV 26562

> RECEIVED Office of Oil and Gas

NOV 0 9 2016

WV Department of Environmental Protection 03/03/2017

Operator	Well No.	514368

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

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County: We			Easting:	537021.90
County. <u>we</u>	tzel	UTM NAD 83	Northing:	4382948.80
District: Gra	ant	Public Road Acc	cess:	Rt 19/2
Quadrangle: Big	Run	Generally used f	arm name:	E.T. Bluegrass LLC
Watershed: Roo	ckcamp Run of Wiley Fork	_		

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RECEIVED Office of Oil and Gas NOV 0 9 2016

WV Department of Environmental Protection 03/03/2017

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

WAIVER

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

State:	W	UTM NAD 83	Easting:	537021.90	
County:	Wetzel	UTWINAD 83	Northing:	4382948.80	
District:	Grant	Public Road Acc	cess:	Rt 19/2	
Quadrangle:	Big Run	Generally used f	arm name:	E.T. Bluegrass LLC	
Watershed:	Rockcamp Run of Wiley Fork				

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
Office of Oil and Gas
NOV 0 9 2016
WV Department of
Environmental Protection

WW-6A5 (1/12)

Operator	Well	No.	514368	

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

Date of Notice	:: 1118/110 Date Permi	1 -	
Delivery meth	od pursuant to West Virginia Code	e § 22-6A-16(c)	
	IED MAIL [N RECEIPT REQUESTED	□ HAND DELIVERY	
return receipt re the planned op required to be published drilling of a ho damages to the	requested or hand delivery, give the soperation. The notice required by this provided by subsection (b), section teorizontal well; and (3) A proposed soperates affected by oil and gas operates.	urface owner whose land will s subsection shall include: (1 in of this article to a surface ow urface use and compensation tions to the extent the damage.	rmit application, an operator shall, by certified mail be used for the drilling of a horizontal well notice of) A copy of this code section; (2) The information wner whose land will be used in conjunction with the agreement containing an offer of compensation for are compensable under article six-b of this chapter. address listed in the records of the sheriff at the time
(at the address Name: See Attach	by provided to the SURFACE OW! listed in the records of the sheriff at t	he time of notice): Name: See Alta	* -
Address:		Δ ddrocc·	
Notice is hereb	oy given:		
Pursuant to We operation on the State: County: District: Quadrangle:		ce is hereby given that the und se of drilling a horizontal well	lersigned well operator has developed a planned on the tract of land as follows: Casting: 537021.90 Northing: 4382948.80 S: Rt 19/2
Pursuant to We operation on the State: County: District: Quadrangle: Watershed: Fhis Notice She Pursuant to We to be provided thorizontal well; surface affected information related the eadquarters, let	est Virginia Code § 22-6A-16(c), notice surface owner's land for the purpose we weeker land for the purpose weeker land for the purpose weeker land for the purpose we weeker land for the purpose weeker lan	ce is hereby given that the und se of drilling a horizontal well UTM NAD 83 Public Road Access Generally used farm notice shall include: (1)A cop a surface owner whose land compensation agreement content the damages are compensitent the damages are compensitent the Secretary, as	lersigned well operator has developed a planned on the tract of land as follows: Casting: 537021.90 Northing: 4382948.80 S: Rt 19/2
Pursuant to We operation on the State: County: County: District: Quadrangle: Watershed: This Notice She Pursuant to We to be provided the horizontal well; surface affected information relations and the sadquarters, legas/pages/defau	est Virginia Code § 22-6A-16(c), notion e surface owner's land for the purpose www. Wetzel Grant Big Run Rockcamp Run of Wiley Fork all Include: est Virginia Code § 22-6A-16(c), this by W. Va. Code § 22-6A-10(b) to; and (3) A proposed surface use and d by oil and gas operations to the exated to horizontal drilling may be o ocated at 601 57th Street, SE, Chalt.aspx.	ree is hereby given that the und se of drilling a horizontal well UTM NAD 83 Name Public Road Access Generally used farm notice shall include: (1)A cop a surface owner whose land compensation agreement content the damages are compensitent the damages are compensitent the damages are compensitent the Secretary, and sarleston, WV 25304 (304-9)	dersigned well operator has developed a planned on the tract of land as follows: Easting: 537021.90 Northing: 4382948.80 S: Rt 19/2 E.T. Bluegrass LLC Dy of this code section; (2) The information required will be used in conjunction with the drilling of a taining an offer of compensation for damages to the isable under article six-b of this chapter. Additional at the WV Department of Environmental Protection
operation on the State: County: District: Quadrangle: Watershed: This Notice Sh Pursuant to We to be provided horizontal well: surface affected information reliable headquarters, legas/pages/defau	est Virginia Code § 22-6A-16(c), notion e surface owner's land for the purpose www. Wetzel Grant Big Run Rockcamp Run of Wiley Fork all Include: est Virginia Code § 22-6A-16(c), this by W. Va. Code § 22-6A-10(b) to; and (3) A proposed surface use and d by oil and gas operations to the exated to horizontal drilling may be o ocated at 601 57th Street, SE, Chalt.aspx.	ce is hereby given that the und se of drilling a horizontal well UTM NAD 83 Public Road Access Generally used farm notice shall include: (1)A cop a surface owner whose land compensation agreement content the damages are compensitent the damages are compensitent the damages are compensitent the Secretary, at a largest on, WV 25304 (304-9) Address: 115 Processors	lersigned well operator has developed a planned on the tract of land as follows: Sasting: 537021.90 Northing: 4382948.90 S: Rt 19/2 In name: E.T. Bluegrass LLC By of this code section; (2) The information required will be used in conjunction with the drilling of a staining an offer of compensation for damages to the isable under article six-b of this chapter. Additional to the WV Department of Environmental Protection (226-0450) or by visiting www.dep.wv.gov/oil-and-ofessionalPlace PO Box 280 Port WV 26330

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.

Office of Oil and Gas NOV 0 9 2016

WV Department of Environmental Protection /2017

Surface Owners:

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222

API NO. 47- 103			
OPERATOR WEL	L NO.	514368	
Well Pad Name: B	IG245		

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS VOLUNTARY STATEMENT OF NO OBJECTION

Instructions to Persons Named on Page WW-6A

The well operator named on page WW-6A is applying for a permit from the State of West Virginia to conduct oil or gas well work. Well work permits are valid for twenty-four (24) months. Please contact the listed well operator and the Office of Oil and Gas if you do not own any interest in the listed surface tract.

Comment and Waiver Provisions

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.

Pursuant to West Virginia Code § 22-6A-8(b) No permit may be issued less than thirty days after the filing date of the application for any well work except plugging or replugging; and no permit for plugging or replugging may be issued less than five days after the filing date of the application except a permit for plugging or replugging a dry hole: *Provided*, That if the applicant certifies that all persons entitled to notice of the application under the provisions of subsection (b), section ten of this article have been served in person or by certified mail, return receipt requested, with a copy of the well work application, including the erosion and sediment control plan, if required, and the well plat, and further files written statements of no objection by all such persons, the secretary may issue the well work permit at any time.

VOLUNTARY STATEMENT OF NO OBJECTION

WW-6A and required, and State: County: District: Quadrangle: Watershed:	, hereby state that I have rea ted above, and that I have received copies of attachments consisting of pages one (1) throthe well plat, all for proposed well work on the www. Wetzet Grant Big Run Rockcamp Run of Wiley Fork that I have no objection to the planned work dese materials.	a Notice of A ough tract of land UTM NAD Public Roa Generally	pplication, an App including (as follows: Easting: Northing: d Access: used farm name:	blication for a Well Work Permit on Form the erosion and sediment control plan, if 537021.90 4382948.80 Rt 19/2 E.T. Bluegrass LLC
*Please check	the box that applies		FOR EXECUTI	ON BY A NATURAL PERSON
■ SURFAC	CE OWNER		Signature:	
■ SURFAC	CE OWNER (Road and/or Other Disturban	ıce)	Signature: Print Name:	
_	CE OWNER (Impoundments/Pits)		Date:	
	WNER OR LESSEE		Company: ET Blue	ON BY A CORPORATION, ETC. Grass LLC
□ COAL O	PERATOR		By: John Damato Its: Regional Land Di	rector
□ WATER	PURVEYOR		Signature:	MI
□ OPERAT	TOR OF ANY NATURAL GAS STORAC	GE FIELD	Date:	11. 7-16

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Surface Owners (Road or other Disturbance):







0.0

API NO. 47- 103 -	
OPERATOR WELL NO.	514368
Well Pad Name: BIG245	

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VOLUNTARY STATEMENT OF NO OBJECTION

John Damaeto hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows: State: W	I, John Damato	, hereby state that I have rea	ad the Instruct	ions to Persons No	amad on Dago WW 64 and the area 14.1
w w-AA and attachments consisting of pages one (1) through	provisions lis	sted above, and that I have received copies of	a Notice of A	pplication, an Ani	olication for a Well Work Permit on Form
Total county: Wetzel UTM NAD 83 Easting: 537021.90 Sage 48.80	ww-bA and	attachments consisting of pages one (1) thr	rough	including	the erosion and sediment control plan, if
County: Wetzel District: Grant Quadrangle: Big Run Watershed: Rockcamp Run of Wiley Fork I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials. *Please check the box that applies SURFACE OWNER SURFACE OWNER (Road and/or Other Disturbance) SURFACE OWNER (Impoundments/Pits) COAL OWNER OR LESSEE COAL OPERATOR WATER PURVEYOR OPERATOR OF ANY NATURAL GAS STORAGE FIELD OPERATOR OF ANY NATURAL GAS STORAGE FIELD OUTM NAD 83 Northing: Northing: 4882948.90 Right 3882948.90 Right 4882948.90 Ri	required, and	the well plat, all for proposed well work on the	e tract of land	as follows:	
Northing: A382948.80			UTM NAT) X (537021.90
Quadrangle: Big Run	•			Northing:	4382948.80
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*Please check the box that applies SURFACE OWNER SURFACE OWNER (Road and/or Other Disturbance) SURFACE OWNER (Impoundments/Pits) COAL OWNER OR LESSEE COAL OPERATOR WATER PURVEYOR OPERATOR OF ANY NATURAL GAS STORAGE FIELD *FOR EXECUTION BY A NATURAL PERSON Signature: Print Name: Date: FOR EXECUTION BY A CORPORATION, ETC. Company: ET Blue Grass LLC By: John Damato Its: Regional Land Director Signature: Date: 1/- 7-/6	watershed:	Rockcamp Run of Wiley Fork			
■ SURFACE OWNER (Road and/or Other Disturbance) ■ SURFACE OWNER (Impoundments/Pits) ■ COAL OWNER OR LESSEE □ COAL OPERATOR □ WATER PURVEYOR □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD Signature: Print Name: Date: Print Name: Print Name: Date: Dat	I further state issued on thos	that I have no objection to the planned work described se materials.	lescribed in the	ese materials, and	I have no objection to a permit being
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☐ COAL OPERATOR ☐ WATER PURVEYOR ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD ☐ COAL OPERATOR ☐ Uts: Regional Land Director Signature: Date: /// 7-/6	■ COALC	WNER OR LESSEE			
□ WATER PURVEYOR □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD Signature: □ 1/. 7-(6	□ COAL O	PERATOR		-,	rector
OPERATOR OF ANY NATURAL GAS STORAGE FIELD Date: 11. 7-16 RECEIVED	□ WATER	PURVEYOR			M
OH: HEGEIVED	□ OPERA?	TOR OF ANY NATURAL GAS STORAC	GE FIELD		11.7-16
					- DAN MEGEINED

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Surface Owners (Pits, Impoundments, or AST):

ET Blue Grass LLC 625 Liberty Ave Suite 1700 Pittsburgh PA 15222

67:0503123

API NO. 47- <u>103</u>	
OPERATOR WELL NO.	514368
Well Pad Name: BIG245	

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

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*Please check	the box that applies		FOR EXECU	TION BY A NATURAL PERSON
■ SURFAC	CE OWNER			
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	CE OWNER (Impoundments/Pits)		Date:	
	WNER OR LESSEE		FOR EXECUTE Company: ET Blo	FION BY A CORPORATION, ETC.
□ COAL O	PERATOR		By: John Damato Its: Regional Land	
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				Office of Oil and Gas

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

1900 Kanawha Boulevard East . Building Five . Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

November 7, 2016

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 BIG245 Pad Site, Wetzel County

514362 BIG245H1	514363 BIG245H2	514364 BIG245H3	514365BIG245H4
514366 BIG245H5	514367 BIG245H6	514368 BIG245H7	514369 BIG245H8
514370 BIG245H9	514371 BIG245H10	514372 BIG245H11	514373 BIG245H12
515606 BIG245H13	515607 BIG245H14	515608 BIG245H15	515609 BIG245H16
516520 BIG245H17	516521 BIG245H18	516522 BIG245H19	516523 BIG245H20
516524 BIG245H21		516526 BIG245H23	516527 BIG245H24
516528 BIG245H25		516530 BIG245H27	516531 BIG245H28
516532 BIG245H29	516533 BIG245H30	0.0000 0.02 (0112)	510551 DIG2451120

Dear Mr. Martin.

Earl Ray Tomblin

Governor

This well site will be accessed from existing Permit # 06-2016-0430 issued to EQT Production Company for access to the State Road for a well site located off of Wetzel County Route 19/2 SLS.

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.

RECEIVED Gary K. Clayton, P.E. Regional Maintenance Office of Oil and Gas

Central Office O&G Coordinator

NOV 0 9 2016

Cc: Nick Bumgardner **EQT Production Company** CH, OM, D-6, File

WV Department of Environmental Protection

Anticipated Frac Additives Chemical Names and CAS numbers

<u>Material</u>	Ingredient	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

RECEIVED
Office of Oil and Gas

NOV 0 9 2016

WV Department of Environmental Protection 03/03/2017

TAX PARCEL: GRANT DISTRICT, WEIZEL COUNTY, WY MAP 08 PARCELS 14, 21, 22

SURFACE CHARGE D.

NEAL UTT NEAL UTT
MAP 08, PARCEL 14
GRANT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 51,0 +- ACRES
TOTAL DISTURBANCE AREA: 6.1 +- ACRES

EXEX JOE WILLEY MAP 08, PARCEL 21
GRANT DISTRICT, WETZEL COUNTY, WV
TOTAL PROPERTY AREA: 78,27 +4 ACRES
TOTAL DISTURBANCE AREA: 0.2 +4 ACRES

ET BLUE GRASS LLC. MAP 08, PARCEL 22
GRANT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 138.93 +- ACRES TOTAL DISTURBANCE AREA: 30.5 +4 ACRES

OIL AND GAS ROYALTY OWNER SHIBEN ESTATER, INC.
GRANT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 140.0 +4 ACRES

SITE LOCATION;
THE EQT BIG 245 ACCESS ROAD ENTRANCE IS LOCATED 4.4274/NORTHEAST OF THE JUNCTION OF CO RT, 19 AND CO, RT, 192.
THE WELL PAD IS LOCATED 1.8 NEETS 4- NORTHEAST OF THE JUNCTION OF CO. RT, 15 AND CO. RT, 19.

LOCATION COORDINATES

EQT BIG 245 CONSTRUCTION ENTRANCE LATITUDE: 39.59388 LONGITUDE: 80.569747 (NAD 83)

EQT BIG 245 WELL PAD CENTER LATITUDE: 39.595312 LONGITUDE: 80.568705 (NAD 83)

EQT BIG 245 AST PAD CENTER LATITUDE: 39,545496 LONGITUDE: 80,868501 (NAD 83)

GENERAL DESCRIPTION

THE WELL PAD, ACCESS ROAD AND TANK PAD ARE BEING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS

SITE DISTURBANCE COMPUTATIONS

WELL PAD MAIN ACCESS ROAD = 3.1 +A ACRES
AST PADIAST ACCESS ROAD = 3.1 +A ACRES
STOCKPLES = 30.8 +A ACRES
TOTAL SITE DISTURBANCE AREA = 38.4 +A ACRES

ENTRANCE PERMIT

EQT PRODUCTION COMPANY WILL OBTAIN AN ENCROACHMENT PERMIT (FORM MALE) 199 FROM THE WEST VAIGNEA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION

MISS UTILITY STATEMENT

MESS UTILITY OF WEST VIRIOMA WAS NOTED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN; TICKET #1325M935 HADDITION, MESS UTILITY WILL SE CONTACTED PRIOR TO START OF THE PROJECT.

GEOTECHNICAL NOTES

A SUBSURFACE INVESTIGATION HAS BEEN PERFORMED FOR THIS SITE AND A BUSINE ACE ROYALINATION MAS BEEN PERFORMED FOR THE SITE AND ADMINISTRATION OF THE PROPERTY OF THE PERFORMENT OF THE PERFORMENT OF THE PERFORMENT AND SURFORMENT OF THE PERFORMENT OF THE PERFORMENT AND SURFORMENT OF THE PERFORMENT OF THE PERFORME

ENVIRONMENTAL NOTES

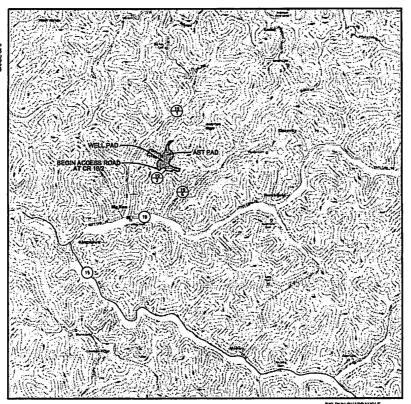
ENVIRONMENTAL NOTES

A WETLAND BELEATION WAS PERFORMED ON JEY 7, 2011, MAY 20, 2012, AUGUST 14,
2012, MARCH 11-13, 2013, APRE, 3, 2015, AND MAY 8, 2015, BY POTESTA & ASSOCIATES TO
REVIEW THE SIET FOR WAITES AND WETLANDS THAT ARE MOST LIKELY WITHIN THE
REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (MACC) AMDOR THE
WEST VIRONIMA OPPARTMENT OF ENVIRONMENTAL PROTECTION (MYDEP). THE MAY, 27
2013 REPORT FOR THE BID 245 BITE WAS PREPARED BY POTESTA & ASSOCIATES, INC.,
BURNAMAZES THE REBULTS OF THE RILD LOBLACTION. THE REPORT DOES NOT, IN, ANY
WAY, REPRESENT A JURISDICTIONAL OF THE FILL DOLLARED NOT THE LAMOWARD LIMITS OF
WAITEN AND WETLANDS WORD HAY SE REQUARTED BY THE SLACE OR THE WYDEP. IT IS
WEST TO GLAN VIRITITIES OCHERNATION OF THE DELINEATION DESCRIBED BY THIS
REPORT FROM TO EDINGALOUS CONSTRUCTION ON THE PROPERTY DESCRIBED HEREIN,
THE DEVELOPER SHALL OSTAIL THE APPROPRIATE PROM THE FEDERAL ANDORS
STATE REGULATORY AGENCES PRICE TO TAKE MY PROPOSED BY MATERS OF THE
U.S., INCLUDING WETLAND FILLS AND STREAM CROSSNOS.

EQT BIG 245 SITE PLAN EQT PRODUCTION COMPANY

PROPOSED WELL NO. H1-WV 514362, H2-WV 514363, H3-WV 514364, H4-WV 514365

SITUATED ON THE WATERS OF BIG RUN, A TRIBUTARY OF WILLEY FORK, GRANT DISTRICT, WETZEL COUNTY, WV



RESTRICTIONS NOTES

IN THERE ARE NO RETRAITEST STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE PROJECT LOD. THERE ARE WELLANDS WITHIN 100 FEET OF THE LOD, AND A WAVER FROM THE WODEF WILL BE APPLIED FOR THROUGHT HE ARMY CORPS OF ENGINEETES BY SET PRODUCTION COLPANY.

2. THERE ARE NO INJURALLY PRODUCING TROUT STREAMS WITHIN 300 FEET OF THE PAD AND LOD.

3. THERE ARE NO ROCKHOMATER WITHIN OR DEVELOPED STREAMS WITHIN 300 FEET OF THE WELLIS BEING DRILLED.

4. THERE ARE NO RESTREAM WATER WITHIN OR DEVELOPED STREAMS WITHIN 300 FEET OF THE WELLIS BEING DRILLED.

5. THERE ARE NO SATING WATER WITHIN OR DEVELOPED STREAMS WITHIN 300 FEET OF THE WELLIS BEING DRILLED.

5. THERE ARE NO SATING WATER WITHIN ORD THE REPORTISHED FOR ANY EXCENTING WATER WELL DRYCHOPED STRIMED.

DISCOVERED DURING CONSTRUCTION.

5. THERE ARE NO OCCUPIED DWELDUS STRUCTURES WITHIN 450 FEET OF THE CENTER OF THE PAD.

6. THERE ARE NO ACCULATURAL BUILDINGS LARGER THAN 2500 SQUARE FEET OF THE CENTER OF THE PAD.

BIG RUN CHADRANGLE WEST VIRGINIA 7.5 MINUTE SERIES

MISS Utility of West Virginia 1-800-245-4848

APPROVED **WVDEP OOG**

1/2/ 1 4/28/2016

LIST OF DRAWINGS				
SHEET NO. DESCRIPTION				
1	COVER SHEET			
2	GENERAL NOTES			
3	OVERALL PLAN SHEET INDEX			
4-7	WELL PAD LAYOUT			
	ACCESS ROAD PROFILES			
	WELL PAD PROFILES			
10-12	ACCESS ROAD CROSS SECTIONS			
13-16	WELL PAD CROSS SECTIONS			
17-20	AST TANK PAD GROSS SECTIONS			
21-22	EXCESS MATERIAL STOCKPILE PROFILES			
23-39	EXCESS MATERIAL STOCKPILE CROSS SECTIONS			
40-43	RECLAMATION PLAN			
44	TYPICAL ACCESS ROAD CROSS SECTIONS			
45-47	CONSTRUCTION DETAILS			

CONSTRUCTION QUANTITIES

	LEG	END	
EX. INDEX CONTOUR		PROP, INDEX CONTOUR	1560
EX. INTERMEDIATE CONTOUR	1550	PROP. INTERMEDIATE CONTOUR	
EX, BOUNDARY LINE		PROP, CUT LINE	
EX. EDGE OF ROAD PAVEMENT		PROP. FILL LINE	
EX. GUARDRAIL	·	PROP. LIMITS OF DISTURBANCE	
EX. FENCELINE		ENVIRONMENTAL ASSESSMENT AREA OF DELINEATION	
EX. GATE	••	AREA OF DELINEATION	
EX. OVERHEAD UTILITY	— · —	PROP, WELL HEAD	
EX. OVERHEAD UTILITY RAW			
EX. UTILITY POLE	\rightarrow	PROP. CONTAINMENT BERM	
EX. GUY WIRE	~	PROP. ROAD CENTERLINE	
EX, TELEPHONE LINE	;	PROP, V-DITCH	
EX. GASLINE		WITH CHECK DAMS	
EX. GASLINE RAW		PROP. CULVERT	
EX. WATERLINE	— *	PROP. RIP-RAP OUTLET PROTECT	ION A
EX, WATER WELL	0	PROP. RIP-RAP INLET PROTECTIO	N (5)
	٠.	PROP. COMPOST FILTERSOCK	r#
EDI. OAS WELL	₩		
EX, TREELINE	~~~	PROP. TREELINE	2000
EX. REFERENCE TREE	\Diamond	PROP. STONE CONSTRUCTION ENTRANCE	
EX. DELINEATED STREAM		l	
EX. DELINEATED WETLAND		X-SECTION GRID INDEX	
EL DECTEN ED WEI COND	\	X-SECTION GRID INTERMEDIATE	
EX. BUILDING		X-SECTION PROPOSED GRADE	
		X-BECTION EXISTING GRADE	

OPERATOR

EGT PRODUCTION COMPANY OPERATOR ID: 305685 P.O. SOX 280 BRIDGEPORT, WV 26630 PHONE: (304) 348-3870

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SURVEYOR

SMITH LAND SURVEYING, INC. PO BOX 150 226 WEST MAIN STREET GLENVILLE, WV 26351 PHONE: (304) 462-563Stante









S 24 <u>B</u>G GRANT EQT

DATE: 02-21-2016 SCALE: AS CHOMA DESIGNED: KDS CHECKED: CSH REVSEWED: RLD

FRE NO: ELE-FELZ DEET 1 07 46

