

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 514367

47-103-03174-00-00

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: 514367 Farm Name: E. T. BLUE GRASS LLC

U.S. WELL NUMBER: 47-103-03174-00-00

Horizontal 6A / New Drill

Date Issued: 2/24/2017

Promoting a healthy environment.

API Number:	
-------------	--

PERMIT CONDITIONS 7 1 0 3 0 3 1 7 4

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 CONDITIONS47 10305174

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.

Dated this 3/54 day of January, 2017.

SHALLOW GAS WELL REVIEW BOARD

By: Barry K Lay, Chairman



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

031

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

4710305174

Re: EQT Production Company

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

Well No. 514366, Grant District, Wetzel County – Marcellus Formation 41-163-03173

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 41-103-03176

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

RECEIVED Office of Oil and Gas

NOV 9 2 318

WV Declaration of Environmental Attaction

WW-6B (04/15)

,,		_	60w	_				ΑI	PI NO. 47- <u>103</u> -
4 /	7	0	3	0	3	1	7	4	OPERATOR WELL NO. 514367
								_	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 Company	306686	Wetzel	Grant	Big Run
			Operator ID	County	District	Quadrangle
2) Operator's V	Vell Number:	514367	Well Pa	d Name: BIG		4Bio
3) Farm Name/	Surface Own	er: E.T. Blue Grass				
4) Elevation, cu	irrent ground	: 1480 El	evation, proposed	nost-construc	stion: 1430	
5) Well Type	<i>(</i>) 0	Oil		erground Stor	-	
	Other				age	
	(b)If Gas	Shallow x	Deep			
		Horizontal X	·			D4.11
6) Existing Pad	•			_		DA 4 11-14-16
7) Proposed Tai Marcellus, 75	rget Formatio 32', 53', 2620	on(s), Depth(s), Antici PSI, Top of Marcellus	pated Thickness a 7511	and Expected	Pressure(s):	, , , ,
8) Proposed Tot	al Vertical D	epth: 7532				
9) Formation at						
10) Proposed To	otal Measured	1 Depth: 12931				
11) Proposed Ho	orizontal Leg	Length: 4487				
12) Approximat	e Fresh Wate	r Strata Depths:	229, 507, 662, 7	52, 1011	•	
13) Method to D	etermine Fre	sh Water Depths: F	rom offset wells			
14) Approximate						
15) Approximate	e Coal Seam	Depths: 925, 1024,	1123			
16) Approximate	Depth to Po	ssible Void (coal mir	ne, karst, other):	None		
17) Does Propos	ed well locat	ion contain coal seam to an active mine?			o X	
(a) If Yes, prov	ide Mine Inf	o: Name:		_		
		Depth:				
		Seam:				
		Owner:				
			Rece	eived		

Heceived Office 수 이 요 Gas

NOV 17 2016

WW-6B (04/15)

API NO. 47- 103

OPERATOR WELL NO. 514387
Well Pad Name: BIG245

18)

, ,

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	A-500	78.6	40	40	60 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	1179		1026 ft^3 / CTS
Coal							102011 37 013
Intermediate	9 5/8	New	A-500	40	2925	2925	1136 ft^3 / CTS
Production	5 1/2	New	P-110	20	12931	10001	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.	

Dm H 11-14-16

TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	26	.375	1378	1102	Class A	
Fresh Water	13 3/8	17 1/2	.38	2700	2160	See Variance	
Coal							1.10
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:		

Received
Office of Oil & Gas

NOV 1 7 2016

WW-6B	
(10/14)	

4710303174

API NO. 47- 103

OPERATOR WELL NO. 514367

Well 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 5133'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

DMH 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 sluries, .25% Flake Loss Circulation Material (LCM) is used to combat the loss of the cement slurry to a third zone.
Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temperature formations to speed the setting of cement slurries. 0.25% flake. Loss Circulation Material (LCM) is used to combat 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 (Rotarder). 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.

*Note: Attach additional sheets as needed.

Received Office क ा श Gas

Received
Office of Oli R Gas
NOV 17 2016

Well

514367(BIG245H6)

EQT Production

Big Run Quad Wetzel County, WV

Azimuth 157 Vertical Section

Note: Disgram is not to ecole

Note: Diagram is not to scale					•						
	Тор	Base				Casing and Cementing			Deepest Fresh Water:	1,011'	
Formations	TVD	TVD				Type	Conductor	Surface	Intermediate	Production	
Conductor	•	40				Hole Size, In.	26	17 1/2	12 3/8	8 1/2	
						Casing Size, OD In.	20	13 3/8	9 5/8	5 1/2	
			111			Casing Wall Thickness, In.	0.375	0.380	0.395	0.361	
Base Red Rock		67	111	3 6 1		Depth, MD	40°	1,179'	2,925'	12,931'	
Base Fresh Water		011	111			Weight	78.6#	54.5#	40#	20#	
Surface Casing	11	179	4			Grade	A-500	J-55	A-500	P-110	
] [New or Used	New	New	New	New	
Maxton		- 2426	11			Burst (psi)	1378	2,700	3,950	12,640	
Blg Lime	2463		i i	11.		Cement Class	Α	A / Type 1	Н	Н	
Welr		- 2875	- 11	11		Cement Yield	1.18	1.19	1.07	1.123/2.098	
Intermediate Casing Gantz	2982	925 - 3055	4			Top of Cement (Planned)	Surface	Surface	Surface	500' above top Producing Zone	
Fifty foot		- 3161	j	Į.		Method	Displacement	Displacement	Displacement	Displacement	
Thirty foot	3195	- 3234			/	Est. Volume (cu ft)	60	1,026	1,136	1.356	
Gordon Forth Sand	3249 · 3307 ·	- 3297 - 3320				Possible Additives	N/A		Calcium Chloride, Fluid	Calcium Carbonate, Fluid Loss,	
Bayard Warren Speechley	3124 3884 4034	- 3486 - 3931			_			Calcium Chloride	Loss, Defoamer, Dispersant, POZ, Bonding Agent, Extender, Retarder,	Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension	
•		- 4067	i	KOP	@ 5,133'				Flake/LCM	Agent	
Riley Benson	4897 · 5529 ·	- 5586									
Alexander Sonyea	5882 -	- 5941	ı	1							
Middlesex	7087 -		ſ	1							
Genesee	7241 -		l	Dm1+11-14-16							
Geneseo	7287 - 7370 -	7370	<i>\</i>								
Tully				1/-14/16							
Hamilton	7403 -										
Marcellus	7421 -										
Production Casing		7564	SAMPERON.								
Froduction Casing	12931	MD				CONTRACT AND CONTRACT PROCESS	A PROPERTY OF		Solder and the second second		

Land curve @

7,532' TVD 8,443' MD

· Est. TD@

7.532' TVD 12,931' MD

Proposed Well Work:

Onondaga

Drill and complete a new horizontal well in the Marcellus formation. Drill the vertical to an approximate depth of 5133'.

7564

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

4.487' Lateral

EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: BIG245

Wetzel County, WV

11/8/16

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

2. Reporting

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

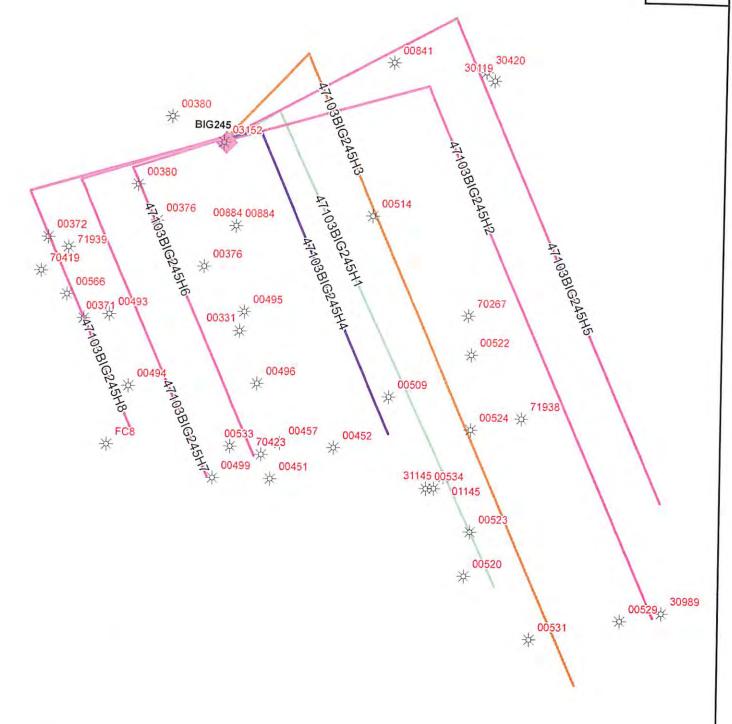
RECEIVED
Office of Oil and Gas

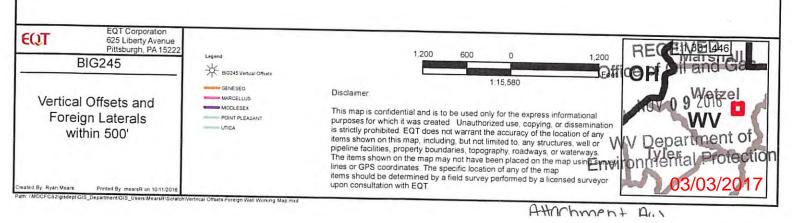
NOV 0 9 2016

WV 恒野雄相nent of Environmental Protection 03/03/2017

4. 10303174







	~
	J
_	0
•	ها
	0
	CN
	

Melicula	Well ID	WellStatus	Comp Date	Permit	Operator	Latitude	Longitude	Datum Eleva		C D + b	T		
### PROPREGNATION DATA ON INSTALLATION DATA ON INST							•				•	2205	
1710 1003150 Color 1710 175 Color 1710 17								_		-11/6		2285	
471000089 DP													*NO PERFORATION DATA ON IHS*
AT 10000495 STORAGE 31/5/993 0095 FC. 39.58000 40.57700 109 1019 1011 2120 2120													
### ### ### ### ### ### ### ### ### ##										1011		2120	
47101009710000 AB-GW 17/1915 0098 CUITABLE GAS COMPANY 39.588715 40.575875 81.5 31.00			5,55,5555					-	1109	-1011		2120	
4710300499000 ABO-W 47190009900 ABO-W 4719000990 ABO-W 4719000990 ABO-W 4719000990 ABO-W 47190009900 ABO-W 47190009900 ABO-W 4719000990 ABO-W 4719000990 ABO-W 4719000990 ABO-W 4719000990 ABO-W 4719000990 ABO-W 471900990 ABO-W 471900990 ABO-W 4719000990 ABO-W 4719000990 ABO-W 471900990 ABO-W 4719009090 ABO-W 4719009090 ABO-W 471900990 ABO-W 471900990 ABO-W 4719009090 ABO-W 4719009090 ABO-W 471900990 ABO-W 4719009090 ABO-W 47190090900 ABO-W 47190090900 ABO-W 47190090900 ABO-W 47190090900 ABO-W 47190090900 ABO-W 47190090900 ABO-W 471900909000 ABO-W 471900090000			2/1/1951						015			E20 CONSTANTION (CERTICAL)	
4710300590000 ABD-W \$1/4199 00590 UNN-MAR OIL & GAS COMPANY 39.58905 -80.587188 9.4 278 MAMPSHIRE \$170.000500000 ABD-W \$1/41910 00590 UNN-MAR OIL & GAS COMPANY 39.58408 -80.58605 115 3242 CHENUNG \$171000520000 GAS -48.71919 00524 CHENUNG \$15.00053000 GAS -49.71919 00525 CHENUNG \$15.00053000 GAS -49.71919 CHENUNG \$15.000	47103004930000	ABD-GW											
47130005090000 ABD-W \$1/1919 00509 DUNN-MAR OIL & GAS COMPANY 39.58976 -80.580815 1155 3.243 CHEMUNE 4713000540000 ABD-GW \$1/1919 00504 APRIL 6AS COMPANY 39.58408 -80.56666 972 382 CHEMUNE 4713000540000 ABD-GW \$1/19190 00504 APRIL 6AS COMPANY 39.58408 -80.56666 972 382 CHEMUNE 4713000540000 ABD-GW \$1/19190 00504 APRIL 6AS COMPANY 39.58408 -80.56666 972 382 CHEMUNE 4713000540000 ABD-GW \$1/19190 00504 APRIL 6AS COMPANY 39.58408 -80.56666 972 382 CHEMUNE 4713000540000 ABD-GW \$1/19190 00504 APRIL 6AS COMPANY 39.58768 -80.58666 1214 380 3221 HURON LOWER 4713000520000 UNKWN \$1/1919 30050								_				• •	
4710300520000 ABC-W	47103005090000	ABD-GW											
4713005340000 GAS	47103005200000	ABD-GW						_					
#1710303330000 AB-GW 12/11/1932 00533 PITSBURGH & W VA GAS	47103005240000	GAS	4/5/1919	00524	EQUITABLE GAS COMPANY								
47130305650000 GAS-GB 1/1/1955 00566	47103005330000	ABD-GW											
47103039890000 AB-O-B	47103005660000	GAS-CB	1/1/1965	00566	J C R PETROLEUM INCORPORATED								
47103005220000 LNKWN 00522 UINKNOWN 39.587566 -80.558665 1214 3154 CHEMUNG 4710300530000 CSTG 5/1/1950 00525 EQUITABLE GAS COMPANY 39.577612 -80.548963 1.200 3228 FIFTH SAND	47103309890000	ABD-GW	1/17/1917	30989	CARNEGIE NATURAL GAS CORPORATION							• • • •	
47103005390000 GSTG	47103005220000	UNKWN											
47103031520000 PSEUDO 00531 EQUITABLE GAS COMPANY 39.595246 40.568931 1430 4710300310000 PSEUDO 00531 EQUITABLE GAS COMPANY 39.596279 40.559075 4710301450000 PSEUDO 01145 MEADOW RIDGE DEVELOPMENT LLC 39.583043 40.558152 47103311450000 PSEUDO 30119 CARRIEGE ASTORIUS 39.58711 40.555904 47103311450000 PSEUDO 30119 CARRIEGE ASTORIUS 39.58711 40.555904 47103311450000 PSEUDO 7047 HOPE NATURAL GAS 39.58006 80.558637 47103704130000 PSEUDO 70419 HOPE NATURAL GAS 39.58006 80.557038 47103704130000 PSEUDO 70423 PHILADELPHIA OIL 39.583781 80.566937 47103704230000 PSEUDO 70423 PHILADELPHIA OIL 39.583781 80.566937 47103003800000 BAS-CG 4/1/1952 00380 UNKNOWN 39.58428 80.566062 1108 859 AMES / LLM/ 47103004510000 ABC-CB 7/1/1957 00451 NORTH FORK DEVELOPMENT 39.58208 80.566052 1108 859 AMES / LLM/ 47103004510000 GSTG 00495 EQUITABLE GAS COMPANY 39.58208 80.566052 1108 859 AMES / LLM/ 47103004500000 GSTG 00495 EQUITABLE GAS COMPANY 39.58208 80.566052 1108 859 AMES / LLM/ 47103004500000 GSTG 00495 EQUITABLE GAS COMPANY 39.58208 80.566052 1108 859 AMES / LLM/ 47103004500000 GSTG 00495 EQUITABLE GAS COMPANY 39.58208 80.566052 1108 859 AMES / LLM/ 47103004500000 GSTG 00496 EQUITABLE GAS COMPANY 39.58208 80.566052 1108 859 AMES / LLM/ 4710300450000 GSTG 00496 EQUITABLE GAS COMPANY 39.58208 80.566052 817 52.9 PENNSYLVANIAN 4710300450000 GSTG 00496 EQUITABLE GAS COMPANY 39.58208 80.566052 817 52.9 PENNSYLVANIAN 4710300450000 GSTG 00496 EQUITABLE GAS COMPANY 39.58208 80.566052 8167 91750000 EACH GAS AND EACH GAS A	47103005290000	GSTG	5/1/1963	00529	EQUITABLE GAS COMPANY	39.577815		_					
47103005310000 PSEUDO 00841 UNKNOWN 39.57702 40.553953 1098 4710301450000 PSEUDO 01145 MEADOW RIDGE DEVELOPMENT LLC 39.583043 40.5560775 47103011450000 PSEUDO 30119 CARREGIE NATURAL GAS CORPORATION 39.597114 40.555904 4710311450000 PSEUDO 70114 HOPE NATURAL GAS 39.58006 40.5560574 47103704190000 PSEUDO 70267 HOPE NATURAL GAS 39.58006 40.557028 47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.58006 40.557028 47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.590457 40.5776695 47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.590457 40.5776695 47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.590457 40.5776695 47103003760000 GAS-CB 41/1952 00376 I CR PETROLEUM INCORPORATED 39.592356 40.572067 1265 1008 CONEMAUGH /SERIES/ 47103004570000 DBA-C 1/1/1958 00457 UNKNOWN 39.594272 80.556002 1108 89.540405 89.540405 41.7100404570000 GAS-CB 81/1959 00457 UNKNOWN 39.582788 80.566002 1108 89.540405 41.7100404570000 GAS-CB 81/1959 00457 UNKNOWN 39.582788 80.566002 1108 89.540405 41.7100404570000 GAS-CB 81/1959 00452 VORTH-FORK DEVELOPMENT 39.582098 80.566005 117 529 PENNSYLVANIAN NORTH-FORK DEVELOPMENT 39.582008 80.559015 1067 2800 CHEMUNG 110000450000 11000450000 11000450000 11000450000 11000450000 1100	47103031520000	PERMIT		03152	EQT PRODUCTION COMPANY	39.595246	-80.568931					3223 TH TH 3AND	
47103005410000 PSEUDO 00145 MEADOW RIDGE DEVELOPMENT LLC 39.5804 -80.5580152 4710331190000 PSEUDO 31145 MEADOW RIDGE DEVELOPMENT LLC 39.58043 -80.5580152 47103704190000 PSEUDO 31145 COLITABLE GAS COMPORATION 39.582708 -80.5580637 47103704190000 PSEUDO 70479 HORPORT LLC 39.58006 80.5580637 47103704190000 PSEUDO 70479 HORPORT SEUDO 70479 HORPORT LLC 39.58006 80.5580637 47103704190000 PSEUDO 70479 HORPORT SEUDO 70479 HORPORT	47103005310000	PSEUDO		00531	EQUITABLE GAS COMPANY	39.577092	-80.553953						
47103301190000 PSEUDO 3019 CARNEGIE NATURAL GAS CORPORATION 39.597714 -80.555904 47103311450000 PSEUDO 70267 HOPE NATURAL GAS 39.589006 -80.557028 47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.59057 -80.577635 47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.59057 -80.577635 47103704190000 PSEUDO 70413 PHILADELPHIA OIL 39.583781 -80.566957 47103003800000 D&A-G 4710300380000 D&A-G 771/1952 00350 UNKNOWN 39.593662 -80.57306 1267 1185 CONEMAUGH /SERIES/ 47103004570000 GAS-G 8/1/1959 00451 VINKNOWN 39.58428 -80.566062 1108 859 AMES /LM/ 47103004570000 GSTG 00494 EQUITABLE GAS COMPANY 39.584260 -80.573381 1086 2088 CHEMUNG 4710300990000 GSTG 00494 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 4710300840000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 4710300840000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 4710300830000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 4710300530000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 47103005320000 GSTG 5/1/1962 00514 JA & M OIL & GAS 39.592199 -80.568269 1167 47103005320000 GSTG 5/1/1963 00523 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 47103005320000 GSTG 5/1/1963 00523 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 47103005320000 GSTG 5/1/1963 00523 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 380 CHEMUNG 47103005320000 GSTG 5/1/1963 00523 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 41000000000000000000000000000000000000	47103008410000	PSEUDO		00841	UNKNOWN	39.598294	-80.560775	_					
47103704570000 PSEUDO 70419 HOPE NATURAL GAS 39.582608 -80.557038 -80.557038 -80.577635 -80.577637 -80.577637 -80.577635 -80.577635 -80.577637 -80.577637 -80.577635 -80.577635 -80.577637	47103011450000	PSEUDO		01145	MEADOW RIDGE DEVELOPMENT LLC	39.583043	-80.558152						
47103702670000 PSEUDO 70267 HOPE NATURAL GAS 39.583006 80.557028 47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.590457 80.577635 47103003760000 GAS-CB 4/1/1952 00376 1 C R PETROLEUM INCORPORATED 39.592356 80.572067 1265 1008 CONEMAUGH /SERIES/ 47103003800000 D&A-G 5/1/1952 00380 UNKNOWN 39.593662 80.573006 1267 1185 CONEMAUGH /SERIES/ 47103004570000 D&A-G 1/1/1958 00457 UNKNOWN 39.594622 80.573006 1267 1185 CONEMAUGH /SERIES/ 47103004570000 D&A-G 7/1/1957 00451 UNKNOWN 39.584228 80.566062 1108 89.04655 ///////////////////////////////////	47103301190000	PSEUDO		30119	CARNEGIE NATURAL GAS CORPORATION	39.597714	-80.555904						
47103704190000 PSEUDO 70419 HOPE NATURAL GAS 39.590457 880.577635 47103704230000 PSEUDO 70423 PHILADELPHIA OIL 39.583781 80.566957 47103003760000 GAS-CB 4/1/1952 00376 JC R PETROLEUM INCORPORATED 39.592356 80.573006 1267 1185 CONEMAUGH /SERIES/ 47103004570000 D&A-OG 5/1/1952 00380 UNKNOWN 39.593662 80.573006 1267 1185 CONEMAUGH /SERIES/ 47103004570000 D&A-OG 1/1/1958 00457 UNKNOWN 39.584228 80.566062 1108 859 AMES /LM/ 47103004570000 ABD-CB 7/1/1957 00451 UNKNOWN 39.58428 80.566050 817 529 PENNSYLVANIAN 47103004520000 GAS-CB 8/1/1957 00452 NORTH FORK DEVELOPMENT 39.584072 80.563459 886 614 PITTSBURGH COAL 47103004940000 GSTG 00494 EQUITABLE GAS COMPANY 39.586260 80.573381 1086 2088 CHEMUNG 47103005430000 GSTG 00495 EQUITABLE GAS COMPANY 39.58288 80.5660915 923 2712 CHEMUNG 47103005430000 GSTG 00884 UNKNOWN 39.59199 80.566269 1167 47103005430000 GSTG 5/1/1962 00514 J A & M OIL & GAS 39.59219 80.556303 1310 3226 HURON LOWER 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.59232 80.556406 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.59232 80.556406 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.59232 80.556303	47103311450000	PSEUDO		31145	EQUITABLE GAS COMPANY	39.582608	-80.558637						
47103704230000 PSEUDO 70423 PHILADELPHIA OIL 39.583781 80.566957 47103003760000 GAS-CB 4/1/1952 00380 UNKNOWN 39.593562 80.573006 1267 1185 CONEMAUGH /SERIES/ 47103004570000 D&A-G 1/1/1958 00457 UNKNOWN 39.584228 80.566062 1108 859 AMES /LM/ 47103004510000 ABD-CB 7/1/1957 00451 NORTH FORK DEVELOPMENT 39.58298 80.566505 817 529 PENNSYLVANIAN 4710300450000 GSTG 00494 EQUITABLE GAS COMPANY 39.582620 80.57381 1086 2088 CHEMUNG 47103005340000 GSTG 00495 EQUITABLE GAS COMPANY 39.582680 80.59011 1067 2880 CHEMUNG 47103005340000 GSTG 00534 UNKNOWN 39.591299 80.566505 1107 47103005340000 GSTG 00534 UNKNOWN 39.591299 80.566505 80.57381 1086 47103005340000 GSTG 00495 EQUITABLE GAS COMPANY 39.582680 80.59011 1067 2880 CHEMUNG 47103005340000 GSTG 00534 UNKNOWN 39.591299 80.56629 1167 47103005340000 GSTG 00534 UNKNOWN 39.591299 80.566269 1167 47103005340000 GSTG 00534 UNKNOWN 39.591299 80.566269 1167 47103005340000 GSTG 00544 UNKNOWN 39.591299 80.566269 1167 47103005240000 GSTG 00544 UNKNOWN 39.591299 80.566269 1167 47103005240000 GSTG 00544 UNKNOWN 39.591299 80.566269 1167 47103005240000 UNKWN 71938 HOPE NATURAL GAS 39.585232 80.556866 846 BIG INJUN /SD/ 47103719380000 UNKWN 71939 UNKNOWN 39.591260 80.556303 1310 3226 HURON LOWER	47103702670000	PSEUDO		70267	HOPE NATURAL GAS	39.589006	-80.557028						
47103003760000 GAS-CB	47103704190000	PSEUDO		70419	HOPE NATURAL GAS	39.590457	-80.577635						
47103003800000 D&A-OG 5/1/1952 00380 UNKNOWN 39.593662 -80.573006 1267 1185 CONEMAUGH /SERIES/ 471030045700000 D&A-OG 1/1/1958 00457 UNKNOWN 39.584228 -80.566062 1108 859 AMES /LM/ 47103004520000 GAS-CB 8/1/1957 00451 NORTH FORK DEVELOPMENT 39.58298 -80.566505 817 529 PENNSYLVANIAN 471030049400000 GSTG 00494 EQUITABLE GAS COMPANY 39.582898 -80.563459 886 614 PITSBURGH COAL 471030049400000 GSTG 00494 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 47103005340000 GSTG 00534 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 4710300840000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 47103005340000 GSTG 00884 UNKNOWN 39.592199 -80.568269 1167 47103005340000 GSTG 5/1/1962 00514 JA & M OIL & GAS 39.592630 -80.556866 846 BIG INJUN /SD/ 47103005230000 GSTG 1/1/1963 00523 EQUITABLE GAS COMPANY 39.581035 -80.556866 846 BIG INJUN /SD/ 47103304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39.591328 -80.556303 1310 3226 HURON LOWER 47103719390000 UNKWN 71939 HOPE NATURAL GAS 39.58232 -80.55406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.556324	47103704230000	PSEUDO		70423	PHILADELPHIA OIL	39.583781	-80.566957						
47103003800000 D&A-G 5/1/1952 00380 UNKNOWN 39.593662 -80.573006 1267 1185 CONEMAUGH/SERIES/ 47103004570000 D&A-G 1/1/1958 00457 UNKNOWN 39.584228 -80.566062 1108 859 AMES/LM/ 47103004520000 GAS-GB 8/1/1957 00451 NORTH FORK DEVELOPMENT 39.582898 -80.566505 817 529 PENNSYLVANIAN 47103004520000 GSTG 00494 EQUITABLE GAS COMPANY 39.586260 -80.573381 1086 2088 CHEMUNG 47103004940000 GSTG 00494 EQUITABLE GAS COMPANY 39.586260 -80.573381 1086 2088 CHEMUNG 4710300490000 GSTG 00534 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 4710300840000 GSTG 00534 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 47103005140000 GSTG 00534 EQUITABLE GAS COMPANY 39.592199 -80.568269 1167 47103005140000 GSTG 00534 UNKNOWN 39.592199 -80.568269 1167 47103005140000 GSTG 5/1/1962 00514 JA & M OIL & GAS 39.592630 -80.561681 1107 BIG INJUN /SD/ 47103005230000 GSTG 1/1/1963 00523 EQUITABLE GAS COMPANY 39.581035 -80.556866 846 BIG INJUN /SD/ 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.585232 -80.556406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324	47103003760000	GAS-CB	4/1/1952	00376	J C R PETROLEUM INCORPORATED	39.592356	-80.572067	12	265			1008 CONEMAUGH /SERIES/	
47103004570000 D&A-G 1/1/1958 00457 UNKNOWN 39.584228 -80.566062 1108 859 AMES /LM/ 47103004520000 ABD-CB 7/1/1957 00451 NORTH FORK DEVELOPMENT 39.58288 -80.566055 817 529 PENNSYLVANIAN 614 PITSBURGH COAL 4710300490000 GSTG 00494 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 4710300490000 GSTG 00534 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 4710300840000 GSTG 00534 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 4710300840000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.569315 923 2712 CHEMUNG 4710300840000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.569315 1067 2880 CHEMUNG 4710300840000 GSTG 00534 UNKNOWN 39.592199 -80.568269 1167 47103005140000 GSTG 5/1/1962 00514 JA & M OIL & GAS 39.592630 -80.561681 1107 BIG INJUN /SD/ 47103304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39.59105 -80.556866 846 BIG INJUN /SD/ 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.58232 -80.554406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324					UNKNOWN	39.593662	-80.573006	13	267				
47103004520000 GAS-CB						39.584228	-80.566062	11	108				
47103004940000 GSTG 00494 EQUITABLE GAS COMPANY 39.58260 -80.573381 1086 2088 CHEMUNG 47103004940000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.569315 923 2712 CHEMUNG 47103005340000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 4710300840000 GSTG 00584 UNKNOWN 39.592199 -80.568269 1167 47103005140000 GSTG 5/1/1962 00514 JA & M OIL & GAS 39.592630 -80.561681 1107 BIG INJUN /SD/ 47103005230000 GSTG 1/1/1963 00523 EQUITABLE GAS COMPANY 39.58105 -80.556866 846 BIG INJUN /SD/ 47103304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39.598016 -80.556303 1310 3226 HURON LOWER 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.58232 -80.554406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324						39.582898	-80.566505	8	B17			529 PENNSYLVANIAN	
47103004990000 GSTG 00499 EQUITABLE GAS COMPANY 39.582898 -80.569315 923 2712 CHEMUNG 47103005340000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 4710300540000 GSTG 00884 UNKNOWN 39.592199 -80.568269 1167 47103005140000 GSTG 5/1/1962 00514 JA & MOIL & GAS 39.592630 -80.561681 1107 BIG INJUN /SD/ 47103005230000 GSTG 1/1/1963 00523 EQUITABLE GAS COMPANY 39.581035 -80.556866 846 BIG INJUN /SD/ 4710304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39.599016 -80.556303 1310 3226 HURON LOWER 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.58232 -80.554406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324							-80.563459	8	B86			614 PITTSBURGH COAL	
47103005340000 GSTG 00534 EQUITABLE GAS COMPANY 39.582608 -80.559011 1067 2880 CHEMUNG 47103005340000 GSTG 00884 UNKNOWN 39.592199 -80.568269 1167 47103005140000 GSTG 5/1/1962 00514 J A & M OIL & GAS 39.592630 -80.561681 1107 BIG INJUN /SD/ 47103005230000 GSTG 1/1/1963 00523 EQUITABLE GAS COMPANY 39.581035 -80.556866 846 BIG INJUN /SD/ 47103304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39.589016 -80.556303 1310 3226 HURON LOWER 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.585232 -80.554406 471037193900000 UNKWN 71939 UNKNOWN 39.5991328 -80.576324						39.586260	-80.573381	10	086			2088 CHEMUNG	
4710300840000 GSTG 00884 UNKNOWN 39.592199 -80.568269 1167 47103005140000 GSTG 5/1/1962 00514 J & M OIL & GAS 39.592630 -80.561681 1107 BIG INJUN /SD/ 47103005230000 GSTG 1/1/1963 00523 EQUITABLE GAS 00MPANY 39.581035 -80.556866 846 BIG INJUN /SD/ 47103304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39.598016 -80.556303 1310 3226 HURON LOWER 47103719390000 UNKWN 71938 HOPE NATURAL GAS 39.585232 -80.554406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324							-80.569315	9	923			2712 CHEMUNG	
47103005140000 G5TG 5/1/1962 00514 J A & M OIL & GAS 39.592630 -80.561681 1107 BIG INJUN /SD/ 47103005230000 G5TG 1/1/1963 00523 EQUITABLE GAS COMPANY 39.581035 -80.556866 846 BIG INJUN /SD/ 47103304200000 ABD-OW 2/16/1918 30420 UNKWN 71938 HOPE NATURAL GAS 39.585232 -80.55406 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.585232 -80.554406 47103719390000 UNKWN 71939 UNKNOWN 39.598108 -80.576324								10	067			2880 CHEMUNG	
47103005230000 GSTG 1/1/1963 00523 EQUITABLE GAS COMPANY 39,581035 -80,556866 846 BIG INJUN /SD/ 47103304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39,598016 -80,556303 1310 3226 HURON LOWER 471037193800000 UNKWN 71938 HOPE NATURAL GAS 39,585232 -80,554406 47103719390000 UNKWN 71939 UNKNOWN 39,591328 -80,576324													
47103304200000 ABD-OW 2/16/1918 30420 UNKNOWN 39.598016 80.556303 1310 3226 HURON LOWER 47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.585232 -80.554406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324												BIG INJUN /SD/	
47103719380000 UNKWN 71938 HOPE NATURAL GAS 39.585232 -80.554406 47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324													
47103719390000 UNKWN 71939 UNKNOWN 39.591328 -80.576324								13	10			3226 HURON LOWER	
47102009240001 DRA 11/7/1000 00094 FQUITDANG INCODED TED													
39.592199 -80.568269 1167 2211 GREENBRIER /LM/													
			*11//1303	~~	EQUITARIO MICORPORATED	39.592199	-80.568269	11	67			2211 GREENBRIER /LM/	

RECEIVED
Office of Oil and Gas
NOV 0 9 2016
NOV Department of
WV Department of
A HARMINAPPRENTAL Protection

WW-9 (4/16)

API Number 47 - 103	•
Operator's Well No.	. 514367

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 bbls of water to comp	plete the proposed well work? Yes V No
Will a pit be used? Yes No V	
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	11-14-11
Underground Injection (UIC Permi	it Number_0014, 8462, 4037)
Off Site Disposal (Supply form WV	V-9 for disposal location)
Other (Explain	
Will closed loop system be used? If so, describe: Yes, The closed in for transportation	oop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared to an off-site disposal facility.
Drilling medium anticipated for this well (vertical and horizont	al)? Air, freshwater, oil based, etc. See Attached
-If oil based, what type? Synthetic, petroleum, etc. Sy	
Additives to be used in drilling medium? See Attached	
Drill cuttings disposal method? Leave in pit, landfill, removed	offsite etc. Landfill
	used? (cement, lime, sawdust)_N/A
-Landfill or offsite name/permit number? See Attached	used? (cement, lime, sawdust) N/A
Permittee shall provide written notice to the Office of Oil and O West Virginia solid waste facility. The notice shall be provided where it was properly disposed.	ias of any load of drill cuttings or associated waste rejected at any within 24 hours of rejection and the permittee shall also disclose
provisions of the permit are enforceable by law. Violations of law or regulation can lead to enforcement action. I certify under penalty of law that I have personally application form and all attachments thereto and that based	conditions of the GENERAL WATER POLLUTION PERMIT issued reginia Department of Environmental Protection. I understand that the any term or condition of the general permit and/or other applicable examined and am familiar with the information submitted on this is on my inquiry of those individuals immediately responsible for the accurate, and complete. I am aware that there are significant lity of fine or imprisonment
Company Official (Typed Name) Victoria J. Roark	Received
Company Official Title Permitting Supervisor	Office of Oil & Gas
	NOV 1 7 2016
Subscribed and sworn before me this \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	hatalana.a
Rebecca & manstreet	Notary Public
My commission expires 4-7-2020	OPPIGIAL SEAL
7 7 20 20	NOTARY PUBLIC PATATI OF WEST AREST REBECCA LL YMAST AREST EQT PRODUCTION COMPANY PO BOX 280 SHIDQUEPORT, WY 20330 My countietes applies April 07, 1038

WW-9 Attachment

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater of the notice and horizontal

 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

WV Department of Environmental Pro03/09/2017

Proposed Revegetation Tre	eatment: Acres Disturbed 3	2.63 Prevegetation	_{oH} 6.3
	Tons/acre or to corre		
Fertilizer type G	ranular 10-20-20		
Fertilizer amount_	1/3	lbs/acre	
Mulch2		_Tons/acre	
		<u>Seed Mixtures</u>	
ר	Гетрогагу	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		
acreage, of the land applica	P PIL WIII DE IANU ADDINEU. INC	I application (unless engineered plans included dimensions (L x W x D) of the pit, an	ding this info have been d dimensions (L x W), an
Maps(s) of road, location, pprovided). If water from the acreage, of the land application of involved the complete section of involv	tion area.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, pprovided). If water from the acreage, of the land application of involved the complete section of involv	tion area.	l application (unless engineered plans inclu lude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	tion area.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, porovided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved and approved by: Comments:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an
Maps(s) of road, location, provided). If water from the acreage, of the land applical Photocopied section of involved Approved by:	olved 7.5' topographic sheet.	nude dimensions (L x W x D) of the pit, an	d dimensions (L x W), an

NOV 17 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

March 18, 2014

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

4710303174

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.

James Peterson

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

RECEIVED
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.

RECEIVED
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

4710303174

Office of Oil and Gas



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,

Vicki Roark

Permitting Supervisor

Enc.

4710303174

Office of Oil and Gas

NOV 0 9 2016

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

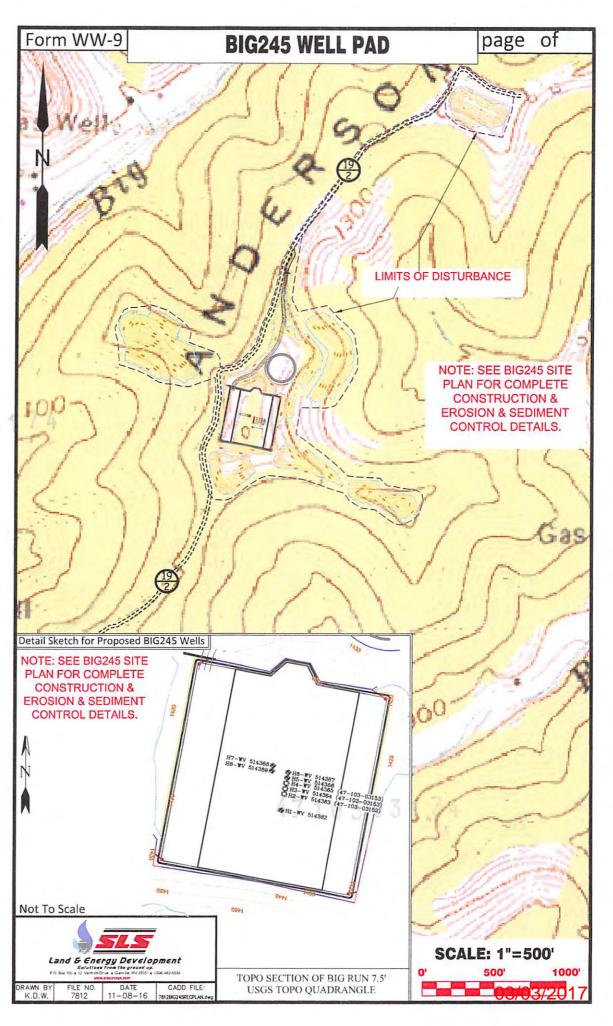
P.O. Box 430
Reno, OH 45773
740-516-6021 Well
740-374-2940 Reno Office Jennifer
Nobel County/Jackson Township
Permit # 4037

KING EXCAVATING CO.

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

REGEIVED
Office of Oil and Gas

NOV 0 9 2016





Site Specific Safety Plan

EQT BIG 245 Pad

Burton Wetzel County, WV

<u>514366</u> <u>514367</u> <u>514368</u> <u>5</u>	514369
	4710303174
Date Prepared:	April 4, 2016
Dermitting Species or	WV Oil and Gas Inspector Oil + 6sr Jage + tr Title
10-13-16 Date	Date Received

NOV 1 7 2016

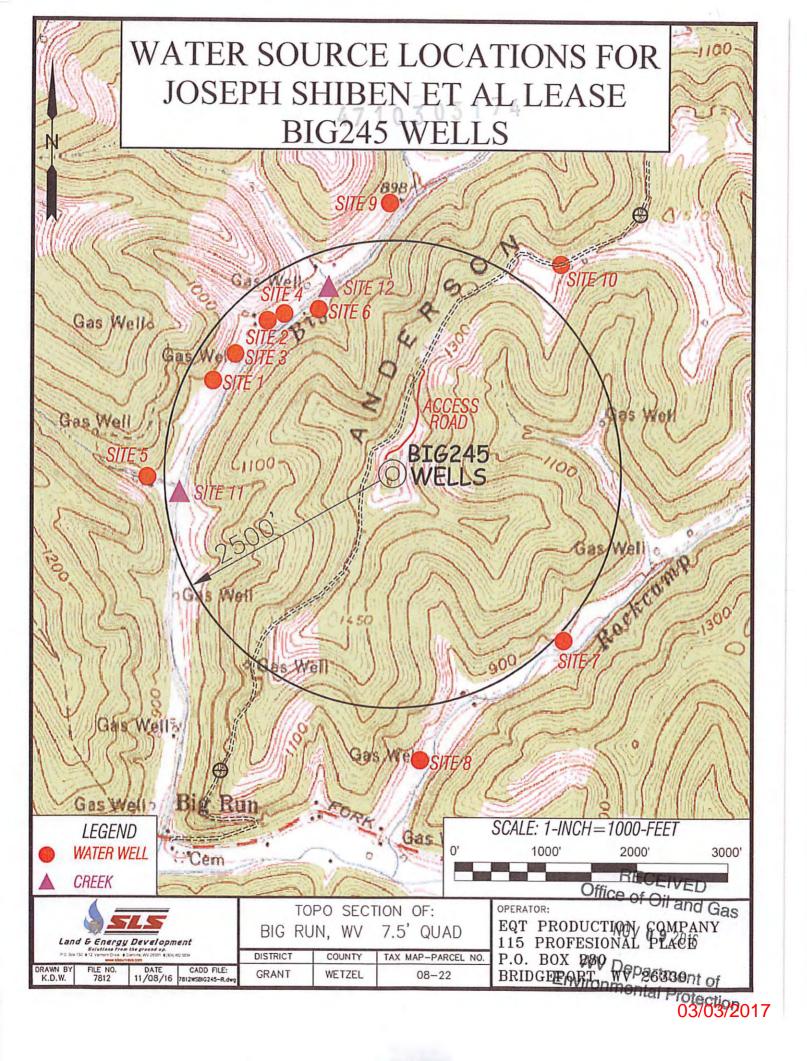
Anticipated Frac Additives Chemical Names and CAS numbers

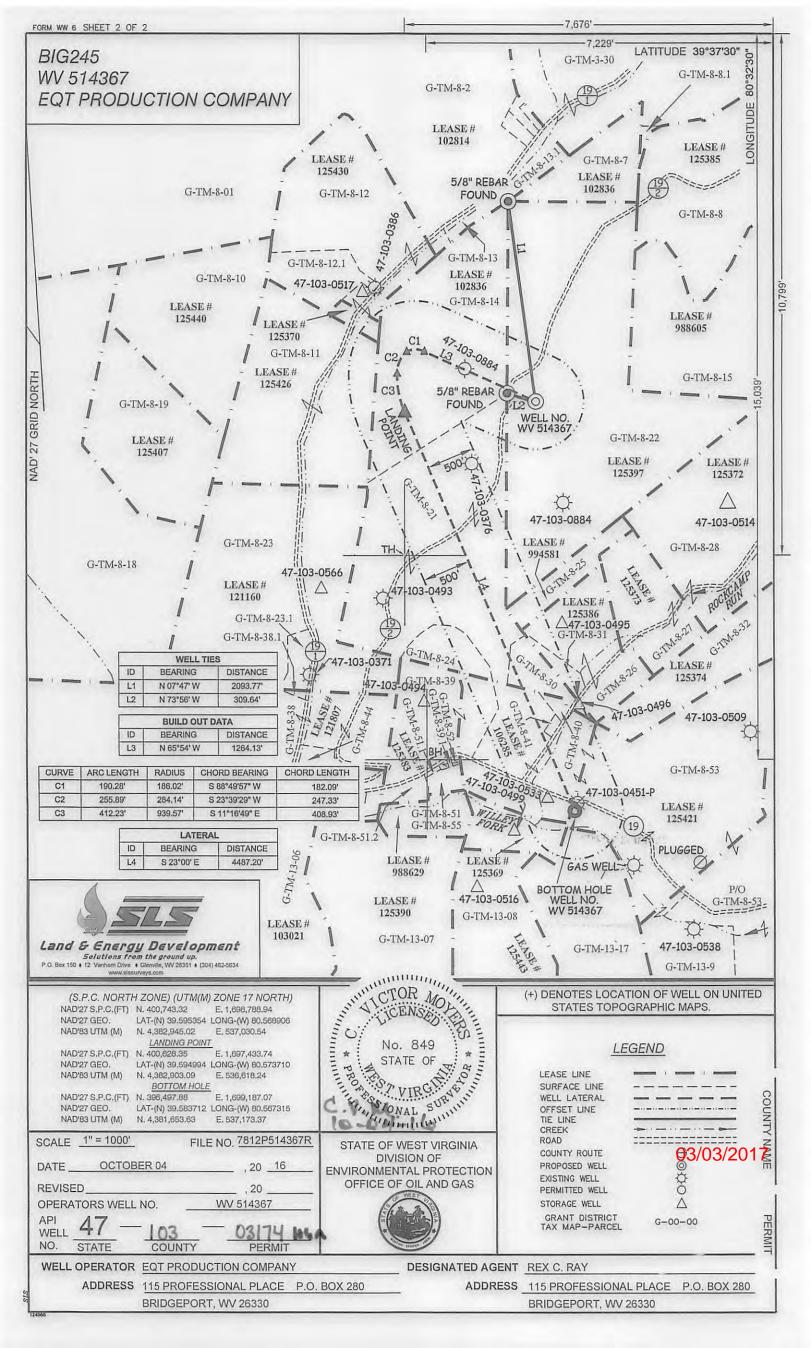
4710303174

<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

DMH 11-14-16

Received
Office of Oil & Gas
NOV 1 7 2016





7,229'-

LATITUDE 39°37'30"

15,039'

BIG245 WV 514367 EQT PRODUCTION COMPANY

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±
G-TM-8-18	COASTAL FOREST RESOURCES CO. 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 SQ. 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 McDIFFITT 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±

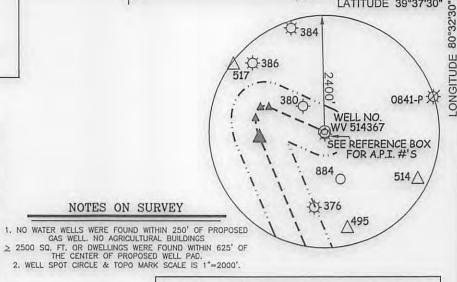
ROYALTY OWNERS
SHIBEN ESTATES, INC. ET AL | 160.12 AC.± | LEASE NO. 102836

40 AC.±

73 AC.±

LEASE NO. 106285

LEASE NO. 125421



(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) NAD'27 S.P.C.(FT) N. 400,743.32 E. 1,698,788.94 NAD'27 GEO. LAT-(N) 39.595354 LONG-(W) 80.568906 NAD'83 UTM (M) N. 4,382,945.02 E. 537,030.54 LANDING POINT NAD'27 S.P.C.(FT) N. 400,628.35 E. 1,697,433.74

NAD'27 GEO. LAT-(N) 39.594994 LONG-(W) 80.573710 NAD'83 UTM (M) N. 4,382,903.09 E. 536,618.24 **BOTTOM HOLE**

NAD'27 S.P.C.(FT) N. 396,497.88 E. 1,699,187.07 NAD'27 GEO. LAT-(N) 39.583712 LONG-(W) 80.567315 NAD'83 UTM (M) N. 4,381,653.63 E. 537,173.37

BIG245 WELLS H1-WV 514362

H2-WV 514363 H3-WV 514364 H4-WV 514365

H5-WV 514366 H6-WV 514367

H7-WV 514368 H8-WV 514369

N 73°56' STAKE 4

WOODS

Land & Energy Development
Solutions from the ground up. Solution
P.O. Box 150 • 12 Vanho ground up. ile, WV 26351 • (304) 462-5634

FREDRIC G. RICHTER ET AL

H. DORN HIGGINBOTHAM ET AL

MINIMUM DEGREE

OF ACCURACY

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

PS 849

1/2500

No. 849
STATE OF
VIRCHAIN
TRIPPINATION
TRIPP 7812P514367R.dwg

SEE NOTE 2

BH

TH

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

OCTOBER 04 , 20 _ 16 DATE

APPROXIMATE LEASE/SURFACE BOUNDARY SCALE: 1"=200"

REVISED , 20 OPERATORS WELL NO. WV 514367

API WELL 103 NO. STATE COUNTY



H4(03154) H5 H3(03153) H2(03152)

STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION



H6

E TIE TO CORS	S NETWORK)	OFFICE OF OIL	AND GAS	A STREET STREET
ASTE SPOSAL	IF "GAS" PRODUCT	TION_X STORAGE	DEEP	SHALLOW_X
VATERSHED_	TRIBUTARY OF	ROCKCAMP RUN		
_ COUNTY_	WETZEL	QUADRANGLE	BIG RUI	
		ACREAGE	138.93±	
		ACREAGE	140±	03/03/2017
		LEASE NO	125397	03/03/20 17
ER I	REDRILL	FRACTURE OR STIMULA	TE X	PLUG OFF OLD
N PLU	JG AND ABANDON.	CLEAN OUT AND	REPLUG	OTHER
	Т	ARGET FORMATION	MARCEL	LUS
		ESTIMATED DEPTH	7,532	LUS
	ASTE SPOSAL VATERSHED COUNTY_	SPOSAL "GAS" PRODUCT VATERSHED TRIBUTARY OF COUNTY WETZEL ER REDRILL N PLUG AND ABANDON.	ASTE IF SPOSAL "GAS" PRODUCTION X STORAGE WATERSHED TRIBUTARY OF ROCKCAMP RUN COUNTY WETZEL QUADRANGLE ACREAGE ACREAGE LEASE NO. — ER REDRILL FRACTURE OR STIMULA TARGET FORMATION —	ASTE IF SPOSAL "GAS" PRODUCTION X STORAGE DEEP WATERSHED TRIBUTARY OF ROCKCAMP RUN COUNTY WETZEL QUADRANGLE BIG RUN ACREAGE 138.93±

ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280

BRIDGEPORT, WV 26330

FILE NO.

SCALE

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

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, 1 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:

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

See Attached

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

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

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

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

Well Operator:

By:

Victoria J Roark

Permitting Supervisor

Environmental Protection

Page 1 of 2

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<u>125397</u>	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)		***	
102836	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		DB 105/908
	Equitrans, LP	EQT Production Company		O&G 131A/81
	Fredric G. Richter, et al. (Current Royalty Owner)		***	
106285	John E. Snider & Mahala A. Snider	John Laveile		DB 76/239
	John Lavelle	PH Glover		Unrecorded Assignmen
	PH Glover	The Philadelphia Co of West Virginia		Unrecorded Assignme
	The Philadelphia Co of West Virginia	Pittsburgh and West Virginia Gas Co.		O&G 22A/352
	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		DB 105/908
	Equitrans, LP	EQT Production Company		O&G 131A/81
	H. Dorn Higginbotham, et al. (Current Royalty Owner)		***	
125421	Elva R. King, et al.	Equitable Gas Company		DB 42A/411
	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 total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, on all such oil or gas to be extracted, produced or marketed from the well.

RECEIVED
Office of Oil and Gas

NOV 0 9 2016

ASSIGNMENT OF LEASE

KNOW ALL MEN BY THESE PRESENTS, The	at John Lavelle
	party of the first part, for and in
consideration of the sum of And	Dollars,
and ather Valuable	and aliano
- lauful money of the United States, to him	duly paid, by OH Gloves
57-43-45-6	of Amontown
- County of William , and	State of West Vingamen
have sold, and by these presents do grant, co	onvey, assign, transfer and set over unto the
said OH Gloves	· · ·
\	T-
	re of lease, bearing date the 1/th day of
farmary 180, made by folm	n & Smides D Mahalia
ander his wife whereby they	lease to said John Lavelle
	ull that certain leasehold estate situate in the
District of Grant County o	
bounded bounded	and described as follows, to-wit:
On the North by the lands of folia 16	Smider
On the East by the lands of Loace H.	rainbathams hens
On the West by the lands of Keller W.	.00
The same of the sa	
On the south by the lands of 12222	midle
containing 4 Q acres, be the same mo	re or less, with all and singular the premises
therein mentioned and described, together w	ith the appurtenances thereto and therewith
belonging.	
	0,
	uid party of the second part and his
assigns, from the 15th day of Aug.	, for and during all the
rest and residue and remainder yet to come,	of and in the term of Live
	s and privileges of the party of the first part
in and under said lease; subject, neverthe	less, to the rents, covenants, conditions and
provisions therein also mentioned.	
TO MUTHESS WHEREOF, A hand h	ereunto set and should and son this
	302
15/h day of durant	0 0 0
Sealed and delivered in the presence of	John Lavell [SEAL]
1	GI FREE CHARLE [SEAL.]
Nathan Philliss	
	Locat.]
	[SEAL.]

RECEIVED
Office of Oil and Gas

NOV 0 9 2016

Use this acknowledgmen	at for Ohio land.	this 16 th	day of_	Valar	0 m	est. Puld	100 m
							personally
	ibove named	***************************************			···		····-
foregoing instr		hat the same w					lid sign the
		I have hereunto					
day of		, A. D.	189				•
	-						2.1
			•				
		89			189	+	-
		1, ,	i			Pag	*
] ¥(ż			ik.	OMPANY COMPANY FILEDS.
MT (49		OCATION		rd	d Book	L LAW NR PUBLI LINO, W.
SIGNMENT			ğ		dimitted to record.	Recorded in Deed	LAW DEAL
SIG		-	s	t of	ted to	ed in	COMP
A		ate	<u> </u>	District of	dmit	ecord	
and the same of th				1 1 0	- -	R	<u></u>
		-				(F.)	
							•

Office of Oil and Gas

NOV 0 9 2016

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: 1st. $\sqrt{}$ 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;

TOGETHER with all the rights, estate, title, interest, property, 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 oil to be delivered, free of charge, to the party of the first part, 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.

TO HAVE and TO HOLD the leasehold gas and gas rights and the oil rights hereby conveyed in the said leases unto and for the use of the CEIVED rights hereby conveyed in the said leases unto and for the associated of Oil and Gas signs, under the rents, agreements and covenants reserved and contained 0 9 2016 on the part of the lessees therein named to be paid, kept and performed.

AND FURTHER IT IS UNDERSTOOD BETWEEN THE PARTIES HERETENVIOLITY the Protection

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

10

L T Denegal/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.

Notary Public.

MY COMMISSION EXPIRES FEBY 26, 1905.

Office of Oil and Gas

NOV 0 9 2016

CONSIDERATION \$50 PER LEASE

CONSIDERATION \$50 PER LEASE

A \$ /16

PECEIVED
Office of Oil and Gas

NOV 0 9 2 016



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 514367 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

Office of Oil and Gas

47103030 c

NOV 0 9 2016

WV Department of Environmental Proteotical Proteotical

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

Date of Notice Certification: 11-8-10	API No. 47- 10	3 -
-	Operator's We	
	Well Pad Name	e: BIG245
Notice has been given:		
Pursuant to the provisions in West Virginia Co	de § 22-6A, the Operator has provided the required	d parties with the Notice Forms listed
below for the tract of land as follows:		
State: w		030.54
County: Wetzel	Northing: 4382	2945.02
District: Grant	Public Road Access: Rt 1	· · · · · · · · · · · · · · · · · · ·
Quadrangle: Big Run	Generally used farm name: E.T.	Bluegrass LLC
Watershed: Rockcamp Run of Wiley Fork		
it has provided the owners of the surface des information required by subsections (b) and (c) of giving the surface owner notice of entry to requirements of subsection (b), section sixteer	Id shall contain the following information: (14) A cribed in subdivisions (1), (2) and (4), subsection, section sixteen of this article; (ii) that the require is survey pursuant to subsection (a), section ten on of this article were waived in writing by the still tender proof of and certify to the secretary that cant.	on (b), section ten of this article, the ment was deemed satisfied as a result of this article six-a; or (iii) the notice surface owner; and Pursuant to West
Pursuant to West Virginia Code § 22-6A, the that the Operator has properly served the requ	Operator has attached proof to this Notice Certificities with the following:	OOG OFFICE USE ONLY
☐ 1. NOTICE OF SEISMIC ACTIVITY	or NOTICE NOT REQUIRED BECAUSE I SEISMIC ACTIVITY WAS CONDUCTED	NO RECEIVED/ NOT REQUIRED
\square 2. NOTICE OF ENTRY FOR PLAT SU	RVEY or 🔳 NO PLAT SURVEY WAS COND	UCTED RECEIVED
3. NOTICE OF INTENT TO DRILL	or D NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	☐ RECEIVED/ NOT REQUIRED
1		
	☐ WRITTEN WAIVER BY SURFACE O (PLEASE ATTACH)	WNER
4. NOTICE OF PLANNED OPERATIO	(PLEASE ATTACH)	WNER
4. NOTICE OF PLANNED OPERATIO5. PUBLIC NOTICE	(PLEASE ATTACH)	

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach property of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication the attached for Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under waf Official 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 receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

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 Company Address: 115 Professional Place PO Box 280 By: Victoria J Roark Bridgeport WV 26330 Its: Permitting Supervisor Facsimile: 304-848-0041 Telephone: 304-848-0076 Email: vroark@eqt.com

NOTARY SEAL OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA REBECCA L. WANSTREET PO BOX 280
BRIDGEPORT, WV 2633
commission expires April 07

Subscribed and sworn before me this 13 day of October 2016.

anstreet

Notary Public

My Commission Expires

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.

Office of Oil and Gas

ASSE JACON OF THE STATE STATE OF THE STATE O

03/03/2017

WW-6A	
(9-13)	

API NO. 47-103 -	
OPERATOR WELL NO. 514367	
Well Pad Name: BIG245	

IJOU	ce Time Requirement	: notice shall be provid	ded no later th	an the filing date of permit	application.	
	e of Notice: <u>11/8/110</u> ce of:	Date Permit Applicat	ion Filed: 11	<u> 8 10</u>		
✓	PERMIT FOR ANY WELL WORK			PROVAL FOR THE AN IMPOUNDMENT OR	PIT	
Deli	very method pursuant	to West Virginia Co	de § 22-6A-1	0(b)		
	PERSONAL SERVICE	REGISTERED MAIL		IOD OF DELIVERY THAT IPT OR SIGNATURE CO		
sedin the si oil ar descrippera more well impo have propo subserecor provi Code water	nent control plan require urface of the tract on what gas leasehold being deribed in the erosion and stator or lessee, in the every coal seams; (4) The ownwork, if the surface tract undment or pit as descripa water well, spring or wide water for consumption of the sheriff required so of the sheriff required in the erosion of this article to the erosion of the surface own purveyor or surface own	ed by section seven of the ich the well is or is propered by the propose sediment control plan sunt the tract of land on where of record of the sunt is to be used for the place of the sunt is to be used for the place of the sunt is to be used for the place of the sunt is to be used for the place of the sunt is to be used for the place of the sunt is to be used for the place of the sunt is to take place. (c)(1) If hold interests in the land to be maintained pursue contrary, notice to a lie s, in part, that the operaner subject to notice and	nis article, and posed to be loced well work, in the well prace tract or tracement, constituted within one tic animals; and more than threads, the application on the holder is not to shall also put water testing	or signature confirmation, co the well plat to each of the fo ated; (2) The owners of record if the surface tract is to be use ant to subsection (c), section roposed to be drilled is locate acts overlying the oil and gas ruction, enlargement, alteration. Any surface owner or water particularly surface owner or water particularly thousand five hundred feet of d (6) The operator of any nature tenants in common or othe not may serve the documents regist, article one, chapter elect anotice to a landowner, unless provide the Well Site Safety Paras provided in section 15 of	ollowing persons: (1) The dof the surface tract of the surface tract of the seven of this article; (3) and [sic] is known to be a leasehold being develor, repair, removal or a purveyor who is known of the center of the well aral gas storage field with the center of interest required upon the persoven-a of this code. (2) as the lien holder is the Plan ("WSSP") to the statistical surface.	he owners of record of or tracts overlying the and disturbance as B) The coal owner, underlain by one or oped by the proposed abandonment of any to the applicant to I pad which is used to ithin which the s described in on described in the Notwithstanding any landowner. W. Va.
	IRFACE OWNER(s)			☑ COAL OWNER OR LE	• •	
	e: See Attached			Name: See Attached		
Addr	ress:			Address:		<u> </u>
Nam Addr	e:			COAL OPERATOR Name:		
7 51	RFACE OWNER(s) (F	Poad and/or Other Dist	turhance)	Address:		
	e: See Atlached	Coad and/or Other Dist	iui bance)	SURFACE OWNER O	F WATER WELL	
Addr	ress:			AND/OR WATER PURV Name:	'EYOR(s)	
Vam	e:			Address:		<u> </u>
Addr	ess:		•			
7 (1)	RFACE OWNER(s) (I	mnoundments or Dital		OPERATOR OF ANY Name:Address: *Please attach additional if	NATURAL GAS STO	DRAGE FIELD
_	a. See Attached	•		Address:	- AECE	TVED.
	ess:				Office of O	il and a
			•	*Please attach additional	forms if necessary	" a nd Gas
					NOV 0 9	2016

WV Department of Environmental Prote**ชสิติ** 3/2017

WW-6/	4
(8-13)	

API NO. 47- <u>103</u> -	
OPERATOR WELL NO.	514367
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/oiland-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 upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Acceptage of the section of the United States Army Corps of Engineers within any waters of the state or within the Oston per areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well part of wast one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31,2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a trinding if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the items of the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the location restrictions regarding occupied dwelling structures are inadequate or otherwise require a least the location restriction regarding occupied dwelling structures are inadequate or otherwise require a least the location restriction regarding occupied dwelling structures are inadequate or otherwise require require require a least the location restriction regarding occupied dwelling structures are inadequate or otherwise require r

API NO. 47- 103

OPERATOR WELL NO. 514367

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

REGEIVED Office of Oil and Gas

(304) 926-0450

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.

WW-6A (8-13)

API NO. 47- 103 OPERATOR WELL NO. 514367
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. 514367
Well Pad Name: BIG245

Notice is hereby given by:	Notice	is	hereb	y given	by:
----------------------------	--------	----	-------	---------	-----

Well Operator: EQT Production Company	Address: 115 Professional Place PO Box 280	
Telephone: 304-848-0076	Bridgeport WV 26330	
Email: vroark@eqt.com	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 deprivacyofficer@wv.gov.

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
REBECCA L. WANSTREET
EQT PRODUCTION COMPANY
PO 80X 280
BRIDGEPORT, WV 26330
My commission expires April 07, 2020

Subscribed and sworn before me this 13 day of Oct, ober 2016

noticed Notary Public

My Commission Expires 4-7 - 2020

Surface Owners:

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

RECEIVED Office of Oil and Gas

NOV 0 9 2016

API NO. 47-103 -	
OPERATOR WELL NO.	514367
Well Pad Name: BIG245	

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

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 attachment required, and the well plastate: County: Wetzel District: Quadrangle: Big Run Rockcamp Ru	s consisting of pages one (1) throat, all for proposed well work on the	tract of land as UTM NAD Public Road Generally us	plication, an App, including to seed farm name:	amed on Page WW-6A and the associated blication for a Well Work Permit on Form the erosion and sediment control plan, if 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC
*Please check the box tha	t applies		FOR EXECUTI	ON BY A NATURAL PERSON
SURFACE OWNE	R	İ		
■ SURFACE OWNE	R (Road and/or Other Disturband	ce)	Print Name:	
■ SURFACE OWNE			Date:	
	-	1	FOR EXECUTI	ON BY A CORPORATION, ETC.
COAL OWNER OF	R LESSEE		Company: ET Blue	Grass LLC
☐ COAL OPERATOR	₹		By: John Damato Its: Regional Land Dir	ector
☐ WATER PURVEY	OR		S:	Deel.
☐ OPERATOR OF A	NY NATURAL GAS STORAG		Signature:	11.7-16

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone ruffice as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of fundescass 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, and the process of the process

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





RECEIVED
Office of Oil and Gas

NOV 0 9 2016

API NO. 47-103	
OPERATOR WELL NO.	514367
Well Pad Name: BIG245	

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:	, hereby state that I have reacted above, and that I have received copies of attachments consisting of pages one (1) three the well plat, all for proposed well work on the wwwwetel Wetzel Grant Big Run Rockcamp Run of Wiley Fork that I have no objection to the planned work desired.	a Notice of A rough e tract of land UTM NAI Public Roa Generally	pplication, an App including to as follows: Basting: Northing: d Access: used farm name:	blication for a Well Work Permit on Form the erosion and sediment control plan, if 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC
issued on thos	se materials.	escribed in the		ON BY A NATURAL PERSON
■ SURFAC	••		1	ON DI ANATURAL PERSON
■ SURFAC	CE OWNER (Road and/or Other Disturbar	nce)	Print Name:	
SURFACE	CE OWNER (Impoundments/Pits)			
COAL O	WNER OR LESSEE		Company: ET Blue	ON BY A CORPORATION, ETC. Grass LLC
□ COAL O	PERATOR		By: John Damato Its: Regional Land Dir	rector
□ WATER	PURVEYOR		Signature:	ale_
□ OPERAT	FOR OF ANY NATURAL GAS STORAG	GE FIELD	Date:	//· 7-/6

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 Active 1989. 2016 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.

Coal Owner

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

/ W

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
20	For delivery information, visit our website at www.usps.com*.
	OFFICIAL USE
572P 5000 0490	Certified Mall Fee \$ Extra Services & Fees (check box, add fee as appropriate) Return Receipt (leactronic) Return Receipt (eleactronic) Certified Mail Restricted Delivery \$ Adult Signature Required Adult Signature Restricted Delivery \$ Postage
1-1-	Total Po CNX Land LLC
	\$ Engineering Operations Support Dept. Coal
7015	1000 Consol Energy Drive Street ai Canonsburg PA 15317
	City, Sta Attn: Ryan Arp BIG245 Permit App uctions

A710303178

RECEIVED
Office of Oil and Gas

NOV 0 9 2016

API NO. 47- 103 -	
OPERATOR WELL NO.	514367
Well Pad Name: BIG245	

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:	ted above, and that I have received copies of attachments consisting of pages one (I) the the well plat, all for proposed well work on the work well work on the work of the well grant Big Run Rockcamp Run of Wiley Fork	Ta Notice of A rough te tract of land UTM NAI Public Roa Generally	pplication, an App including of as follows: 83 Easting: Northing: d Access: used farm name:	the erosion and sediment control plan, if 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC
issued on thos	that I have no objection to the planned work of materials.	described in the	ese materials, and	I have no objection to a permit being
*Please check	the box that applies		FOR EXECUTI	ON BY A NATURAL PERSON
■ SURFAC	CE OWNER			
■ SURFAC	CE OWNER (Road and/or Other Disturbar	nce)	Print Name: Date:	
■ SURFAC	CE OWNER (Impoundments/Pits)			•
■ COALO	WNER OR LESSEE		FOR EXECUTION COMPANY: ET Blue	ON BY A CORPORATION, ETC. Grass LLC
□ COAL O	PERATOR		By: John Damato Its: Regional Land Dir	rector
□ WATER	PURVEYOR		Signature:	Del L
☐ OPERAT	TOR OF ANY NATURAL GAS STORAG	GE FIELD	Date:	11. 7 RÉCEIVED
				Office of Oil and Gas

Oil and Gas Privacy Notice:

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

Fivenomental Protection

API NO. 47-103 -	
OPERATOR WELL NO.	514367
Well Pad Name: BIG245	

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

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

I, John Damato	, hereby state that I have rea	ad the Instruct	ions to Dersons N	amed on Dage WW CA - 1-1
provisions ns	icu above, and mai i nave received conjes of	a Notice of A	nnlication an An	plication for a Wall Work Dameter B
W W-OA allu	attachments consisting of pages one (1) the	rough	including	the erosion and sediment control plan is
required, and	the well plat, all for proposed well work on th	e tract of land	as follows:	the crosion and sediment control plan, if
State:	w		Pastina	537030.54
County:	Wetzel	UTM NAI	Northing:	4382945.02
District:	Grant	Public Roa		Rt 19/2
Quadrangle:	Big Run	Generally	used farm name:	E.T. Bluegrass LLC
Watershed:	Rockcamp Run of Wiley Fork			
I further state issued on thos	that I have no objection to the planned work of the 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 O	WNER OR LESSEE		FOR EXECUT Company: ET Blue	ION BY A CORPORATION, ETC.
□ COAL O	PERATOR		By: John Damato	
_			Its: Regional Land D	rector
⊔ WATER	PURVEYOR		Signature:	sele_
□ OPERAT	FOR OF ANY NATURAL GAS STORAG	GE FIELD	Date:	PECEIVED
Oil and Gas I	Privacy Notice			Office of Oil and Gas

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 purificultary duties. Your personal information may be disclosed to other State agencies or third parties in the normal coarse 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. If you have any questions about our use or your personal information. DEP's Chief Privacy Officer at depprivacyofficer@wv.gov. **Environmental Protection**

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 provided a ce: 09/30/2016 Date Per	t least TEN (10) days prior to filing a rmit Application Filed: 10/10/2016	permit application.
Delivery me	thod pursuant to West Virginia Code §	22-6A-16(b)	
☐ HAND	CERTIFIED MAIL		
DELIVI		QUESTED	
drilling a hor of this subsection m	sted or hand delivery, give the surface own izontal well: <i>Provided</i> , That notice given ction as of the date the notice was provided	ner notice of its intent to enter upon the pursuant to subsection (a), section to to the surface owner: <i>Provided, howers.</i> The notice, if required, shall include.	an operator shall, by certified mail return ne surface owner's land for the purpose of en of this article satisfies the requirements ovever, That the notice requirements of this ude the name, address, telephone number, or's authorized representative.
Notice is he	reby provided to the SURFACE OV		
Name: See Atta Address:	sched	Name: See Attached	
		Address:	
the surface of State: County: District: Quadrangle: Watershed:	Vest Virginia Code § 22-6A-16(b), notice wher's land for the purpose of drilling a how work wetzel Grant Big Run Rockcamp Run of Wiley Fork	is hereby given that the undersigned rizontal well on the tract of land as fo The string: The string: Northing: Public Road Access: Generally used farm name:	well operator has an intent to enter upon llows: 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC
Pursuant to V facsimile nun related to hor	Shall Include: West Virginia Code § 22-6A-16(b), this obser and electronic mail address of the dizzontal drilling may be obtained from the 157th Street, SE, Charleston, WV 25304 (2)	operator and the operator's authorize Secretary, at the WV Department of	d representative. Additional information
	reby given by:		
	r: EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place PO Box 280	Address:	115 Professional Place PO Box 280
Bridgeport WV 26	5330	Bridgeport WV 26330	
Telephone:	304-848-0076	Telephone:	304-848-0076
Email:	vroark@eqt.com	Email:	vroark@eqt.com
Facsimile:	304-848-0041	Facsimile:	304-848-0041 RECEIVED
	Privacy Notice:		Office of Coll and Ga

The Office of Oil and Gas processes your personal information, such as name, address and telephone number to a control of the duties. Your personal information may be disclosed to other State agencies or third parties in the normal of Bousiness or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requesting of personal information. If you have any questions about our use or your personal information, please notice.

DEP's Chief Privacy Officer at deportive conficer www.gov. DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Environmental Protection **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 W Lewisport KY 42351

Neal Utt 1204 Big Run Road Burton WV 26562

> RECEIVED Office of Oil and Gas

NOV 0 9 2016

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:	537030.54
County:	Wetzel	UTWINAD 83	Northing:	4382945.02
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

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.

UTM NAD 83	
County: Wetzel Northing: 4382945.02	
District: Grant Public Road Access: Rt 19/2	
Quadrangle: Big Run Generally used farm name: E.T. Bluegrass L	LC
Watershed: Rockcamp Run of Wiley Fork	
	<u></u>

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at <a href="depth/dept

RECEIVED
Office of Oil and Gas

NOV 0 9 2016

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:	WV	UTM NAD 83	Easting:	537030.54
County:	Wetzel	UTWINAD 83	Northing:	4382945.02
District:	Grant	Public Road Acc	cess:	Rt 19/2
Quadrangle:	Big Run	Generally used t	farm 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.

PECEIVED
Office of Oil and Gas

NOV 0 9 2016

WW-6A5 (1/12)

Operator	Well 1	No.	514367

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

Date of Not	e Requirement: notice shall be provide tice: 11 8 10 Date Permi	it Application Filed: 11 8 \\0	
Delivery m	ethod pursuant to West Virginia Cod	e § 22-6A-16(c)	
	TIFIED MAIL JRN RECEIPT REQUESTED	□ HAND DELIVERY	
return receip the planned required to l drilling of a damages to	of requested or hand delivery, give the some provided by subsection (b), section to horizontal well; and (3) A proposed state surface affected by oil and gas operation.	surface owner whose land will be used for its subsection shall include: (1) A copy on of this article to a surface owner whose surface use and compensation agreementations to the extent the damages are com	ication, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the nt containing an offer of compensation for pensable under article six-b of this chapter. sted in the records of the sheriff at the time
Notice is he (at the addre	reby provided to the SURFACE OW	NER(s) the time of notice):	
Name: S	e Attached	Name: See Atta Address:	ached
Name:Address:	reby given: West Virginia Code § 22-6A-16(c), noting the surface owner's land for the purpo	Name: See Atto Address: ce is hereby given that the undersigned se of drilling a horizontal well on the tra Easting:	well operator has developed a planned
Name: Address: Notice is he Pursuant to operation of State: County:	reby given: West Virginia Code § 22-6A-16(c), noting the surface owner's land for the purpo	Name: See Atto Address: Compared to the undersigned of the see of drilling a horizontal well on the tra Compared to the undersigned of the see of drilling a horizontal well on the tra Compared to the undersigned of the see of drilling a horizontal well on the tra Compared to the undersigned of	well operator has developed a planned act of land as follows: 537030.54 4382945.02
Name: Address: Notice is he Pursuant to operation on State: County: District:	reby given: West Virginia Code § 22-6A-16(c), noting the surface owner's land for the purpo www. Wetzel Grant	Name: _See_ Atto Address: ice is hereby given that the undersigned see of drilling a horizontal well on the tra UTM NAD 83 Easting: Northing: Public Road Access:	well operator has developed a planned act of land as follows: 537030.54 4382945.02 Rt 19/2
Name: Address: Notice is he Pursuant to operation of State: County: District: Quadrangle:	reby given: West Virginia Code § 22-6A-16(c), noting the surface owner's land for the purpo www. Wetzel Grant	Name: See Atto Address: Compared to the undersigned of the see of drilling a horizontal well on the tra Compared to the undersigned of the see of drilling a horizontal well on the tra Compared to the undersigned of the see of drilling a horizontal well on the tra Compared to the undersigned of	well operator has developed a planned act of land as follows: 537030.54 4382945.02
Name:	reby given: West Virginia Code § 22-6A-16(c), noting the surface owner's land for the purpo www. Wetzel Grant Big Run Rockcamp Run of Wiley Fork Shall Include: West Virginia Code § 22-6A-16(c), this led by W. Va. Code § 22-6A-10(b) to ell; and (3) A proposed surface use and cited by oil and gas operations to the expressed of the control of the	Name: See Atto Address: Address: The ce is hereby given that the undersigned see of drilling a horizontal well on the tra LTM NAD 83 Basting: Northing: Public Road Access: Generally used farm name: The compensation agreement containing and the compensation agreement containing	well operator has developed a planned act of land as follows: 537030.54 4382945.02 Rt 19/2
Name:	reby given: West Virginia Code § 22-6A-16(c), noting the surface owner's land for the purpowwwetzel Grant Big Run Rockcamp Run of Wiley Fork Shall Include: West Virginia Code § 22-6A-16(c), this led by W. Va. Code § 22-6A-10(b) to rell; and (3) A proposed surface use and extend by oil and gas operations to the extend to horizontal drilling may be of the contend	Name: See Atto Address: Ice is hereby given that the undersigned see of drilling a horizontal well on the tra UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name: Is notice shall include: (1)A copy of this a surface owner whose land will be a compensation agreement containing and tent the damages are compensable understand from the Secretary, at the WV harleston, WV 25304 (304-926-0450)	well operator has developed a planned act of land as follows: 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC code section; (2) The information required ased in conjunction with the drilling of a noffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-
Name:	reby given: West Virginia Code § 22-6A-16(c), noting the surface owner's land for the purpowwwetzel Grant Big Run Rockcamp Run of Wiley Fork Shall Include: West Virginia Code § 22-6A-16(c), this led by W. Va. Code § 22-6A-10(b) to rell; and (3) A proposed surface use and extend by oil and gas operations to the extend to horizontal drilling may be of the contend	Name: See Atto Address: Address: Lice is hereby given that the undersigned see of drilling a horizontal well on the tra LICH NAD 83 Public Road Access: Generally used farm name: Compensation agreement containing and tent the damages are compensable under the damages are co	well operator has developed a planned act of land as follows: 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC code section; (2) The information required used in conjunction with the drilling of a n offer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-ace PO Box 280

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 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.

NOV 0 9 2016

Surface Owners:

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

API NO. 47-103 -	
OPERATOR WELL NO.	514367
Well Pad Name: BIG245	

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

ייי ייי ייי מווע	, hereby state that I have reted above, and that I have received copies of attachments consisting of pages one (1) the well plat, all for proposed well work on the well plat, all for proposed well work on the well plat.	of a Notice of A hrough the tract of land	pplication, an Ap, including as follows:	amed on Page WW-6A and the associated plication for a Well Work Permit on Forn the erosion and sediment control plan, i
County:	Wetzel	- UTM NAD	Northing:	4382945.02
District:	Grant	- Public Roa		Rt 19/2
Quadrangle:	Big Run	Generally i	used farm name:	E.T. Bluegrass LLC
Watershed:	Rockcamp Run of Wiley Fork	-		
issued on thos	that I have no objection to the planned work se materials. the box that applies			ION BY A NATURAL PERSON
■ SURFAC	CE OWNER			
■ SURFAC	CE OWNER (Road and/or Other Disturbation)	ance)	Print Name:	
SURFACE	CE OWNER (Impoundments/Pits)			
	OWNER OR LESSEE		Company: ET Blue	ION BY A CORPORATION, ETC. Grass LLC
□ COAL O	PERATOR		By: John Damato Its: Regional Land D	irector
□ WATER	PURVEYOR		Signature:	ale
□ OPERAT	TOR OF ANY NATURAL GAS STORA	GE FIELD	Date:	//· 7-16
				HEGEIVED

Oil and Gas Privacy Notice:

Office of Oil and Gas

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 content of the normal con

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

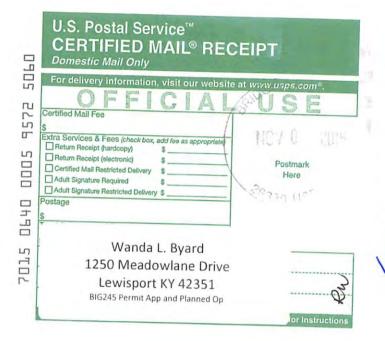
RECEIVED
Office of Oil and Gas

NOV 0 9 2016

WV Department of Environmental Protection

03/03/2017

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





RECEIVED
Office of Oil and Gas

NOV 0 9 2016

API NO. 47- 103 -	
OPERATOR WELL NO.	514367
Well Pad Name: BIG245	

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

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:	ted above, and that I have received copies of attachments consisting of pages one (1) the well plat, all for proposed well work on the well plat, all for proposed well work on the well work on the well plat, all for proposed well well plat, al	t a Notice of A prough he tract of land UTM NAI Public Roa Generally	Application, an Application, including as follows: D 83 Easting: Northing: ad Access: used farm name:	the erosion and sediment control plan, if 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC
I further state issued on thos	that I have no objection to the planned work	described in th	ese materials, and	I have no objection to a permit being
	se materials.			
*Please check	the box that applies		FOR EXECUTI	ION BY A NATURAL PERSON
■ SURFAC	CE OWNER			
STIREAC	FOWNER (Road and/or Other Digturbe		Signature: Print Name:	
SURFACE OWNER (Road and/or Other Disturbance)			Date:	
SURFAC	CE OWNER (Impoundments/Pits)		1	·
■ COAL OWNER OR LESSEE		FOR EXECUTION BY A CORPORATION, ETC. Company: ET Blue Grass LLC		
□ COAL O	PER A TOR		By: John Damato	
	Didirok		Its: Regional Land Di	rector
□ WATER	PURVEYOR		Signature:	sele_
□ OPERAT	TOR OF ANY NATURAL GAS STORA	GE FIELD	Date:	//RECENED
Oil and Car I	Duting and Division			Office of Oil and Gas

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephology the course of business or as duties. Your personal information may be disclosed to other State agencies or third parties in the hormal course of business or as needed to comply with statutory or regulatory requirements, including appropriately secure your personal information. If you have any questions about our use or your personal information. If you have any questions about our use or your personal information. If you have any questions about our use or your personal information, please control of privacy Officer at depprivacyofficer@wv.gov.

Chief Privacy Officer at depprivacyofficer@wv.gov.

WV Department of protection and protection are also protected by the protection and protection are also protected by the personal information in the protection and protection are also protected by the personal information in the protection are also provided by the personal information in the protection are also provided by the personal information in the personal info needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests Surneffice will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact

Environmental Protection 03/03/2017

Surface Owners (Pits, Impoundments, or AST):

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



API NO. 47-103 -	
OPERATOR WELL NO.	514367
Well Pad Name: BIG245	

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

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:	, hereby state that I have reacted above, and that I have received copies of attachments consisting of pages one (1) three the well plat, all for proposed well work on the work work work work work work work work	a Notice of Apprough te tract of land as UTM NAD to Public Road Generally us	plication, an App, including to stollows: Baseling: Northing: Access: ed farm name:	plication for a Well Work Permit on Form the erosion and sediment control plan, if 537030.54 4382945.02 Rt 19/2 E.T. Bluegrass LLC
SURFACE SURFACE	the box that applies CE OWNER CE OWNER (Road and/or Other Disturbar CE OWNER (Impoundments/Pits) OWNER OR LESSEE	nce) !	Signature: Print Name: Date: FOR EXECUTI Company: ET Blue	ION BY A NATURAL PERSON ION BY A CORPORATION, ETC. Grass LLC
	PERATOR PURVEYOR FOR OF ANY NATURAL GAS STORAG		By: John Damato Its: Regional Land Di Signature: Date:	71.7-16
Oil and Gas	Privacy Notice:		•	Office of OHERSIVED

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as pa duties. Your personal information may be disclosed to other State agencies or third parties in the office collise 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 into hadon, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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	516525 BIG245H22	516526 BIG245H23	516527 BIG245H24
516528 BIG245H25	516529 BIG245H26	The state of the s	516531 BIG245H28
516532 BIG245H29	516533 BIG245H30	o root brot istit,	510351 BIG2+51126

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,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

EQT Production Company

CH, OM, D-6, File

Anticipated Frac Additives Chemical Names and CAS numbers

<u>Ingredient</u>	CAS Number
Hydrotreated light petroleum distillate Tributyl tetradecyl phosphonium	14808-60-7
chloride	64742-47-8
Ammonium chloride	81741-28-8
Hydrochloric Acid	12125-02-9
Propargyl Alcohol	7647-01-0
Methanol	107-19-7
Guar Gum	67-56-1
Sodium Persulfate	9000-30-0
Potassium Carbonate	7775-27-1
	584-08-7
	Hydrotreated light petroleum distillate Tributyl tetradecyl phosphonium chloride Ammonium chloride Hydrochloric Acid Propargyl Alcohol Methanol Guar Gum Sodium Persulfate

RECEIVED

Office of Oil and Gas

Office of Oil and Gas

NOV 0 9 2016

WV Department of

WV Propartmental Protection

Environmental Protection

PROJECT NAME: EQT BIG 245 AX PARCEL:
GRANT DISTRICT, WETZEL COUNTY, WV
MAP 08 PARCELS 14, 21, 22

BURFACE OWNER:

NEAL UTT MAP 08, PARCEL 14 MAP 08, PARCEL 14
GRAHT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 51,0 4-ACRES
TOTAL DISTURBANCE AREA: 8.1 4-ACRES

KEY JOE WILLEY
MAP 08, PARCEL 21
GRANT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 78.27 ++ ACRES
TOTAL DISTURBANCE AREA: 0.2 -+ ACRES

ET BLUE GRASS LLC. GRANT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 138.03 -4 ACRES
TOTAL DISTURBANCE AREA: 30.5 -4 ACRES

OIL AND GAS ROYALTY OWNER:

SHBEN ESTATER, INC. GRANT DISTRICT, WETZEL COUNTY, WY TOTAL PROPERTY AREA: 140.0 +4 ACRES

SITE LOCATION

THE LOCATION:
THE EOT BIG 245 ACCESS ROAD ENTRANCE IS LOCATED 4,427+/NORTHEAST OF THE JUNCTION OF CO RT. 19 AND CO, RT. 102.
THE WELL PAD IS LOCATED 1.9 MILES +/- NORTHEAST OF THE
JUNCTION OF CO. RT. 15 AND CO. RT. 10.

LOCATION COORDINATES

EQT BIG 245 CONSTRUCTION ENTRANCE LATITUDE: 39.59386 LONGITUDE: 80.569747 (NAD 83)

EQT BIG 245 WELL PAD CENTER LATITUDE: 39.595312 LONGITUDE: 80.565705 (NAD 83)

EQT BIG 245 AST PAD CENTER LATITUDE: 39.545496 LONGITUDE; 80,866501 (NAD 83)

GENERAL DESCRIPTION

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

SITE DISTURBANCE COMPUTATIONS

WELL PADY MAIN ACCESS ROAD= 4.6 +/- ACRES
AST PADVAST ACCESS ROAD = 3.1 +/- ACRES STOCKPILES = 30.6 + ACRES
TOTAL SITE DISTURBANCE AREA = 38.4 + ACRES

ENTRANCE PERMIT

EGT PRODUCTION COMPANY WILL CRITAIN AN ENCROACHMENT PERMIT (FORM LGA-109) FROM THE WEST VERGINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION

MISS UTILITY STATEMENT

MASS LITELTY OF WEST VINCIBILA WAS NOTED FOR THE LOCATING OF LITELTIES PRIOR TO THIS PROJECT DESIGN; TICKET #132596935 IN ADDITION, MASS LITELTY WILL BE CONTACTED PRIOR TO START OF THE PROJECT.

GEOTECHNICAL NOTES

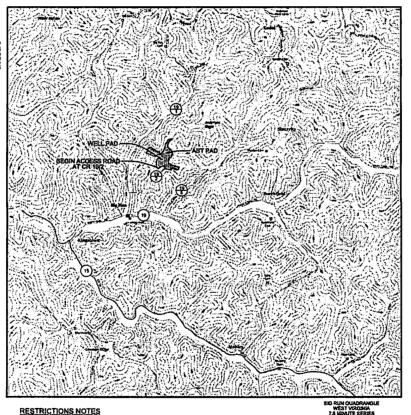
A SUBSURFACE INVESTIGATION HAS BEEN PERFORMED FOR THIS SITE AND GEOTECHNICAL REPORT HAS BEEN PRPARED BY LARSON DESIGN GROUP DATED 10/23/2015. THE ENGINEER AND SURVEYORARE NOT RESPONSIBLE UALD TOZZOTO. INE ENGREEN AND SURVEYCHAVE NOT RESPONSIBLE FOR UNFORSEEN SUBSURFACE RECOULARIESE CAUSING ADDITIONAL WORK OR ADDITIONAL CONSTRUCTION MEASURES REQUIRED BEYOND THOSE STANDARD PRACTICES SHOWN ON THIS PLANAL A REGILT OF AN OTHER GEOTECHRICAL COMPLICATIONS ENCOUNTERED DURING CONSTR

ENVIRONMENTAL NOTES

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

STANTEC AND SMITH LAND SURVEYING ARE NOT RESPONSIBLE FOR ANY EXISTING WATER WELL DEVELOPED SPRING

S. THERE ARE NO OCCUPIED OWELLING STRUCTURES WITHIN 650 FEET OF THE CENTER OF THE PAD.

8. THERE ARE NO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQUARE FEET OF THE CENTER OF THE PAD.

MRSS Utility of West Virginia

APPROVED WVDEP OOG

1/3/3 4/28/2016

LICT OF DRAWNING

	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
9	WELL PAD PROFILES
10-12	ACCESS ROAD CROSS SECTIONS
13-16	WELL PAD CROSS SECTIONS
17-20	AST TANK PAD CROSS 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	1550
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	<u> ε </u>	PROP. WELL HEAD	
EX. OVERKEAD UTILITY RAV		PROP. CONTARMENT BERM	
EX. UTILITY POLE	-	PROP. CONTABBLERT BERM	
EX. GUY WIRE		PROP. ROAD CENTERLINE	
EX, TELEPHONE LIKE	_ ; _	PROP, V-DITCH WITH CHECK DAMS	
EX. GASLINE			
EX. GASLINE R/W		PROP. CULVERT	
EX. WATERLINE	w	PROP. RIP-RAP OUTLET PROTECT	NOT
EX. WATER WELL	0	PROP, RIP-RAP INLET PROTECTIO	N (3)
EX. GAS WELL	*	PROP, COMPOST FILTEREOCK	CF
	<u>ጓ</u> ዯ	PROP. TREELINE	uu.
EX, TREELINE	~~~		AND WELL
EX. REFERENCE TREE	()	PROP. STOME CONSTRUCTION ENTRANCE	
EX. DELINEATED STREAM		l	
EY. DELIMEATED WETLAND		X-SECTION GRID INDEX	
		X-SECTION GRID INTERMEDIATE	
EX. BUILDING		X-SECTION PROPOSED GRADE	
	Ll	X-SECTION EXISTING GRADE	

OPERATOR EQT PRODUCTION COMI OPERATOR ID: 305686 P.O. BOX 260 BRIDGEPORT, WV 26630 PHONE (304) 345-3670

ENGINEER

STANTEC CONSULTINGUIC. 111 ELKINS STREET FAIRMONT, WV 26554 PHONE: (304) 387-040

SURVEYOR

SMITH LAND BURVEYING, INC. PO BOX 150 226 WEST MAIN STREET GLENVILLE, WV 26351 PHONE: (304) 482-6834

Stantec









24 DISTRICT BIG EQT

DATE: 02-21-2016 CALE: AS CHOMA DESIGNED: KD9 CHECKED: CSH REVIEWED: RLO

FILE NO.: 818-7812 SHEET 1 OF 48

