

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 www.dep.wv.gov

June 21, 2016

WELL WORK PERMIT Horizontal 6A Well

This permit, API Well Number: 47-10303153, issued to EQT PRODUCTION COMPANY, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

Operator's Well No: 514364

Farm Name: BLUE GRASS ET LLC

James Martin

Chief

API Well Number: 47-10303153

Permit Type: Horizontal 6A Well

Date Issued: 06/21/2016

API	Number:	
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PERMIT CONDITIONS 47 1 0 3 0 3 1 5 3

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. 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.
- 8. 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.
- 9. 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, 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.

WW-6B (04/15)

API NO. 47- <u>103</u>	
OPERATOR WELL NO. 514364	
Well Pad Name: BIG245	

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

1) Well Operator: EQT Production Co 306686 Wetzel Grant Big Run
3) Farm Name/Surface Owner: ET Blue Grass LLC Public Road Access: Rt 19/2 4) Elevation, current ground: 1482 Elevation, proposed post-construction: 1430 5) Well Type (a) Gas X Oil Underground Storage Other (b) If Gas Shallow X Deep Horizontal X No Oil H-120-1/6
4) Elevation, current ground: 1482 Elevation, proposed post-construction: 1430 5) Well Type (a) Gas X Oil Underground Storage Other (b) If Gas Shallow X Deep Horizontal X No
5) Well Type (a) Gas X Oil Underground Storage Other (b) If Gas Shallow X Deep Horizontal X No Oil Underground Storage Underground Storage Horizontal X Deep Horizontal X Deep Horizontal X Deep
Other (b) If Gas Shallow X Deep Horizontal X 6) Existing Pad: Yes or No No H-22-16
(b) If Gas Shallow X Deep Horizontal X 6) Existing Pad: Yes or No No H-22-16
Horizontal X 6) Existing Pad: Yes or No No Horizontal X Horizontal X Horizontal X Horizontal X
6) Existing Pad: Yes or No No 4-22-16
6) Existing Pad: Yes or No No 4-22-16
7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Geneseo, 7384, 33, 2620 PSI; Top of Geneseo 7370
8) Proposed Total Vertical Depth: 7384 47 9
9) Formation at Total Vertical Depth: Geneseo '03031
8) Proposed Total Vertical Depth: 7384 9) Formation at Total Vertical Depth: Geneseo 10) Proposed Total Measured Depth: 17645
11) Proposed Horizontal Leg Length: 9233
12) Approximate Fresh Water Strata Depths: 229, 507, 662,752,1011
13) Method to Determine Fresh Water Depths: From offset wells
14) Approximate Saltwater Depths: None
15) Approximate Coal Seam Depths: 925, 1024, 1123
16) Approximate Depth to Possible Void (coal mine, karst, other): None
17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No _x
(a) If Yes, provide Mine Info: Name:
Depth:
Seam:
Owner:

· ~ ww-6B (04/15)

API NO. 47-103 -	
OPERATOR WELL	L NO. 514364
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	1179	1026 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	2925	2925	1136 ft^3 / CTS
Production	5 1/2	New	P-110	20	17645	17645	500' above top producing zone
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40' above top perf or 80° inclination	
Liners		-				47	

Dm17 4-27-14 4710303153

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	26	.375	1378	1102	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2700	2160	See Variance	1.19
Coal							
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	1.07/1.86
Tubing	2 3/8	NA	.19	7700			
Liners							

PACKERS

Kind:		
Sizes:		
Depths Set:		

·- WW-6B (10/14)

API NO. 47-103 -	
OPERATOR WELL	NO. 514364
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 Geneseo Formation. Drill the vertical to an approximate depth of 4638'. Kick off and drill curve. Drill the lateral in the Geneseo. Cement casing.

Dr.17 4-27-16

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): 38.4
- 22) Area to be disturbed for well pad only, less access road (acres): 35.3
- 23) Describe centralizer placement for each casing string:

4710303153

- 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 (Typo 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement sturnes, .25% Flake Loss Circulation Material (LCM) .6% Super FL-300 (fluid loss/fengthens thickening time) intermediate (Class H Cement): 0-3% Calcium Chloride. Used to speed the setting of cement sturnes, 0.25% flake, Loss Circulation Material (LCM) .6% Super FL-300 (fluid loss/fengthens thickening time) .15% SEC-10 (fluid loss) 50.50 POZ (extender)
Lead (Type H Cement): 0.2% CD-20 (dispersant makes cement easier to mix) .15% Super FL-300 (fluid loss/fengthens thickening time) .15% SEC-10 (fluid loss) 50.50 POZ (extender)
Lead (Type H Cement): 0.2% Super CR-1 (Relarder). 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 for the content of the conte

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.

514364(BIG245H3) Well **EQT** Production 157 1 Azimuth Big Run Quad Vertical Section Wetzel County, WV Note: Diagram is not to scale Deepest Fresh Water: 1,011' Casing and Cementing Top Base Production Intermediate Surface Туре Conductor TVD TVD Formations 8 1/2 12 3/8 17 1/2 26 Hole Size, In. 40 Conductor 5 1/2 9 5/8 13 3/8 Casing Size, OD In. 20 0.361 0.395 Casing Wall Thickness, In. 0.375 0.380 17,645 2.925 Depth, MD 40' 1,179 967 Base Red Rock 20# 54.5# 40# 78.6# Weight 1011 Base Fresh Water A-500 P-110 A-500 J-55 Grade 1179 Surface Casing New New New New New or Used 12.640 3,950 Burst (psi) 1378 2,700 Maxton 2332 - 2426 H A / Type 1 H A Cement Class 2463 - 2659 Blg Lime 1.07/1.86 1.07 1.18 1.19 Cement Yield 2783 - 2875 Weir 500' above top Producing 2925 Intermediate Casing Surface Surface Surface Top of Cement (Planned) TVD Zone 2982 - 3055 Gantz Displacement Displacement Method Displacement Displacement 3108 - 3161 Fifty foot 2.594 1,026 1,136 60 Est. Volume (cu ft) 3195 - 3234 Thirty foot 47-103-03153 Calcium Chloride, Fluid Calcium Carbonate, Fluid 3249 - 3297 Gordon Loss, Extender, Dispersent, Loss, Defoamer, Forth Sand 3307 - 3320 Viscosifier, Defoamer, Dispersant, POZ, 3124 - 3486 Bayard Calcium Chloride N/A Possible Additives POZ, Bonding Agent, Bonding Agent, 3884 - 3931 Warren Retarder, Anti-Extender, Retarder, KOP@ 4034 - 4067 4,638 Speechley Settling/Suspension Agent Flake/LCM 4897 - 4939 Riley 5529 - 5586 Benson 5882 - 5941 Alexander 7087 - 7241 Sonyea Middlesex 7241 - 7287 7287 - 7370 Genesee 7370 - 7403 Geneseo 17645 MD Production Casing 7403 - 7421 Tully Hamilton 7421 - 7511 7511 - 7564 Marcellus Onondaga 7564 7.384' TVD Est. TD @ 7,384' TVD Land curve @ 17,645' MD B,412' MD

M

Proposed Well Work:

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

Drill the vertical to an approximate depth of 4638'

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

9.233' Lateral



August 24, 2015

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

4710303153

Re: Casing plan on Wells 514363, 514364, 514365 (BIG245)

Dear Mr. Smith,

EQT is requesting the 13-3/8" surface casing be set at 1179' KB, 50' below the base of Pittsburgh Coal at 1123-1129' KB without setting below elevation. This will be 168' below the deepest fresh water. 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.

RECEIVED
Office of Oil and Gas

APR 1 1 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

4710303153

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.

a mat o

James Peterson Environmental Resources Specialist / Permitting

Promoting a healthy environment.

Office of Oil and Gas

APR 1 1 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.

Office of Oil and Gas

APR 1 1 2016

CONCLUSIONS OF LAW

4710303153

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

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

ORDER

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

James Martin, Chief Office of Oil and Gas

> Office of Oil and Gas APR 1 1 2016

~ ww-9 (4/16)

API	Number	47	- 103	
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Operator's Well No. 514364

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

FLUIDS/ CUTTINGS DISPOSAI	L & RECLAMATION PLAN
Operator Name EQT Production Company	OP Code <u>306686</u>
Watershed (HUC 10) Tributary of Rockcamp Run	Quadrangle Big Run
Do you anticipate using more than 5,000 bbls of water to complete the	
Will a pit be used? Yes No V	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes No	If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	NA H
Land Application Underground Injection (UIC Permit Num Reuse (at API Number Various Off Site Disposal (Supply form WW-9 for Other (Explain	r disposal location)
Other (Explain	ystem will remove drill cuttings from the chilingfluid. The drill cuttings are portation to an off-site disposal facility.
-If oil based, what type? Synthetic, petroleum, etc. Synthet	
Additives to be used in drilling medium? See Attached	
Drill cuttings disposal method? Leave in pit, landfill, removed offsi	
-1f left in pit and plan to solidify what medium will be used	? (cement, lime, sawdust) N/A
-Landfill or offsite name/permit number? See Attached List	
Permittee shall provide written notice to the Office of Oil and Gas o West Virginia solid waste facility. The notice shall be provided with where it was properly disposed.	f any load of drill cuttings or associated waste rejected at any in 24 hours of rejection and the permittee shall also disclose
on August I, 2005, by the Office of Oil and Gas of the West Virgini provisions of the permit are enforceable by law. Violations of any	mined and am familiar with the information submitted on this my inquiry of those individuals immediately responsible for accurate, and complete. I am aware that there are significant
Subscribed and sworn before me this 8 day of 6 My commission expires 8-34-33	OFFICIAL SEAL STATE OF WEST VIRGINIA NOTARY PUBLIC Pamela Sykes EQT Production PO Box 280 Bridgeport, WV 26330 My Commission Expires Aug. 24, 2022

Operator's	Well	No.	514364
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		204	. 63
		- 38.4 Prevegetation pH	0.5
	Tons/acre or to correc	et to pH 6.5	
Fertilizer type Gra			
Fertilizer amount_	1/3	lbs/acre	
Mulch 2		_Tons/acre	
		Seed Mixtures	
т	emporary	Perma	nent
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		
provided). If water from the acreage, of the land applica	pit will be land applied, inc	d application (unless engineered plans included under the pit, and $(L \times W \times D)$) of the pit, and	ding this info have b d dimensions (L x W
Maps(s) of road, location, p provided). If water from the acreage, of the land applica-	e pit will be land applied, inc tion area olved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have b I dimensions (L x W
Maps(s) of road, location, p provided). If water from the acreage, of the land applica Photocopied section of invo	e pit will be land applied, incition area	clude dimensions (L x W x D) of the pit, and	ding this info have b I dimensions (L x W
Maps(s) of road, location, p provided). If water from the acreage, of the land applica Photocopied section of invo-	e pit will be land applied, incition area	elude dimensions (L x W x D) of the pit, and	dimensions (L x w
Maps(s) of road, location, p provided). If water from the acreage, of the land applica Photocopied section of invo-	e pit will be land applied, incition area	elude dimensions (L x W x D) of the pit, and	dimensions (L x w
Maps(s) of road, location, p provided). If water from the acreage, of the land applica Photocopied section of invo-	e pit will be land applied, incition area	elude dimensions (L x W x D) of the pit, and	dimensions (L x w
Maps(s) of road, location, p provided). If water from the acreage, of the land applica Photocopied section of invo-	e pit will be land applied, incition area	elude dimensions (L x W x D) of the pit, and	i dimensions (L x w
Maps(s) of road, location, p provided). If water from the acreage, of the land applica Photocopied section of invo-	e pit will be land applied, incition area	elude dimensions (L x W x D) of the pit, and	dimensions (L x w

WW-9

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

 Air is used to drill the top-hole sections of the wellbore (surface, intermediate, and pilot). Water based mud may be necessary depending on hole conditions to stabilize and drill the intermediate section. The pilot hole, curve, and lateral sections will be drilled with either air, 4710303153 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.

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

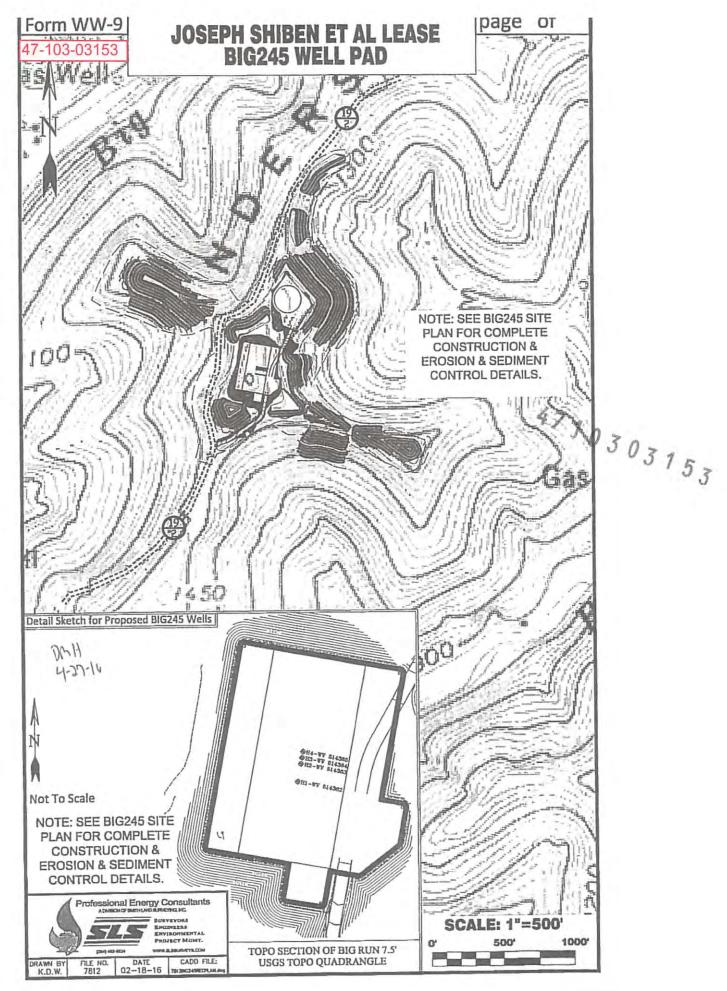
P.O. Box 430 Reno, OH 45773 740-516-6021 Well 740-374-2940 Reno Office Jennifer Nobel County Permit # 4037% > 103 Nobel County/Jackson Township

KING EXCAVATING CO. . 7

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

> HEGEIVED Office of Oil and Gas

APR 1 1 2016





Site Specific Safety Plan

EQT BIG 245 Pad

Burton Wetzel County, WV

For Wells:

_514364		471
		030315
That IL	Date Prepared:	April 4, 2016
Derem. Hing Superevisor	-	WV Oil and Gas Inspector Oil + Gas Inspector Title
4-7-16 Date		<u>4-10-16</u> Date

7.681

LATITUDE 39°37'30"

80°32'30'

ONGITUDE



(00) LEASE # 5/8" REB (1) LANDING (U) (B) 125371 (V) (M) 380-0 5/8" REBAR (LL DD (KK) N LEASE # (D) LEASE 125363 (W) Q (F) (H) JJ (EE) 19 (E) 125425 (FF (II)125421 47-103-05 (BB) PLUGGED 47. WELL TIES DISTANCE BEARING N 07°32' W 2122.27 L LEASE # N 68°28' W 313.95 (GG (NN) 47-103-0529 **BUILD OUT DATA** (K) BEARING DISTANCE 47-103-0 LEASE # N 20°47' E 1615.87 (HH) LEASE # RADIUS CHORD BEARING CHORD LENGTH 191.06 N 74°21' E 250.74 805.07 S 39°56' E 524.81 TO6740 5063.52 S 30°22' E 742.09 SS 2128.06 S 22°27' E 1090.51 4595.94 S 14°57' E

	LATERA	L
ID	BEARING	DISTANCE
L4	S 23°00' E	3045.00'
L5	S 22°59' E	3744.53'



ID

L1

L2

ID

L3

ARC LENGTH

273.51

534.58

742.75

1102.81

599.76

CURVE

C1

C2

C3

C4

C5

Land & Energy Development

WV 26351 • (304) 462-5634

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) NAD'27 S.P.C.(FT) N. 400,713.83 E. 1,698,783.45 NAD'27 GEO.

LAT-(N) 39.595273 LONG-(W) 80.568924 N. 4,382,936.01 E. 537,029.01 NAD'83 UTM (M) LANDING POINT

NAD'27 S.P.C.(FT) N. 401,889.67 E. 1,699,935.17 NAD'27 GEO. NAD'83 UTM (M) LAT-(N) 39.598538 LONG-(W) 80.564887 N. 4,383,300.11 E. 537,373.94

BOTTOM HOLE E. 1,703,533.57 NAD'27 S.P.C.(FT) N. 393,412.37 LAT-(N) 39.575382 LONG-(W) 80.551766 N. 4,380,735.73 E. 538,513.26 NAD'27 GEO NAD'83 UTM (M)

1" = 2000' SCALE

41

DECEMBER 10 DATE , 20 12

12/11/15, 02/16/16 & 04/04/16

REVISED . OPERATORS WELL NO. WV 514364

103 STATE COUNTY PERMIT

DESIGNATED AGENT REX C. RAY

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

No. 2288
* STATE OF TOWN OF THE STATE OF THE

599.35

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



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

LEGEND

LEASE LINE SURFACE LINE WELL LATERAL OFFSET LINE TIE LINE CREEK ROAD 06/24/201 SAME. COUNTY ROUTE ○\$0 PROPOSED WELL EXISTING WELL PERMITTED WELL STORAGE WELL Δ GRANT DISTRICT TAX MAP-PARCEL G-00-00

WELL OPERATOR EQT PRODUCTION COMPANY

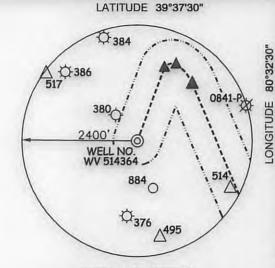
ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280

03153

BRIDGEPORT, WV 26330

A	BLUE GRASS ET LLC	138.93 ACRES±	G-TM-8-22
В	JOHN M. BYARD	71.60 ACRES±	G-TM-8-15
C	JAMES A. & FLORIENCE D. YOHO	61 ACRES±	G-TM-8-28
D	JOE PIGG	82.4 ACRES±	G-TM-8-32
E	DORN & LAVENA HIGGINBOTHAM	196.21 ACRES±	G-TM-8-53
F	SHERILYN SNIDER	55.52 ACRES±	G-TM-9-28
G	SHERILYN SNIDER	20 ACRES±	G-TM-8-54
Н	DONALD DULANY ET AL	22 ACRES±	G-TM-9-40.1
1	MARY & HUGH BYARD HRS	15 ACRES±	G-TM-8-29
J	WANDA BYARD	59.16 ACRES±	G-TM-8-8
K	NORMAN DERBY	83 ACRES±	G-TM-14-7
L	ESTHER COEN	59.5 ACRES±	G-TM-14-8
M	NEAL UTT	51 ACRES±	G-TM-8-14
N	IKEY JOE WILLEY	76.27 ACRES±	G-TM-8-21
0	DORN HIGGINBOTHAM ET AL	7.1 ACRES±	G-TM-8-24
P	JAMES & JIM YOHO	7.5 ACRES±	G-TM-8-30
Q	JAMES & JIM YOHO	3 ACRES±	G-TM-8-31
R	JAMES YOHO	23.25 ACRES±	G-TM-8-26
S	JAMES YOHO	6.25 ACRES±	G-TM-8-25
Т	JAMES YOHO	21.75 ACRES±	G-TM-8-27
U	MARY WRIGHT ET AL	46 ACRES±	G-TM-9-63
V	JAMES & FLORENCE YOHO	27 ACRES±	G-TM-9-13
W	WILLIAM SCHLEICHER	38 ACRES±	G-TM-9-29
Х	SHERIYLN SNIDER	24 ACRES±	G-TM-9-40
Y	NORMAN DERBY	61.51 ACRES±	G-TM-9-52
Z	TERRI DERBY	0.09 ACRES±	G-TM-9-40.2
AA	NORMAN & VIVIAN DERBY	0.005 ACRES±	G-TM-9-40.3
BB	NORMAN & VIVIAN DERBY	1 ACRES±	G-TM-9-52.
CC	TERRI & JASON BEATY	0.61 ACRES±	G-TM-9-65
DD	JAMES & FLORENCE YOHO	17.6 ACRES±	G-TM-9-22
EE	NORMAN & VIVIAN DERBY	32.9 ACRES±	G-TM-9-53
FF	JACK & LEANNA BARNETTE	17.4 ACRES±	G-TM-9-54
GG	LEONARD RICE ET AL	55 ACRES±	G-TM-14-9
HH	JOHN WYCOFF	29 ACRES±	G-TM-14-10
П	JACK & LEANNA BARNETTE	18.4 ACRES±	G-TM-9-55
IJ	WILLIAM SCHLEICHER	11.56 ACRES±	G-TM-9-41
KK	STEPHEN & CAROLYN GANTZ	119 ACRES±	G-TM-9-23
LL	HURSEL WILLEY	20.08 ACRES±	G-TM-9-17
MM	JEREMY COLLINS ET AL	148.7 ACRES±	G-TM-13-27.
NN	MARY HIGGINBOTHAM	30.1 ACRES±	G-TM-13-9
00	MIKE & MADELINE WHITE	40.13 ACRES±	G-TM-8-2
PP	THOMAS & CHERYL LEASURE	51.80 ACRES±	G-TM-3-30
QQ	JAMES & MARTIN STONEKING	19.12 ACRES±	G-TM-8-7
RR	GARNET GAS CORPORATION	0.47 ACRES±	G-TM-8-8.1
SS	COASTAL FOREST RESOURCES CO.	125 1 ACDES	ome is
	d/b/a COASTAL TIMBERLANDS CO.	135.1 ACRES±	G-TM-13-45
TT	JOHN WYCOFF	6.2 ACRES±	G-TM-14-17
UU	JOHN WYCOFF	66.7 ACRES±	G-TM-14-18





NOTES ON SURVEY

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.

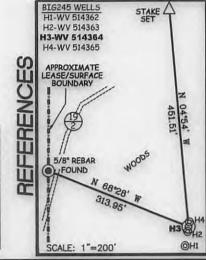
2. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) NAD'27 S.P.C.(FT) N. 400,713.83 E. 1,698,783.45 LAT-(N) 39.595273 LONG-(W) 80.568924 NAD'83 UTM (M) N. 4,382,936.01 E. 537,029.01 LANDING POINT

NAD'27 S.P.C.(FT) N. 401,889.67 E. 1,699,935.17 NAD'27 GEO. LAT-(N) 39.598538 LONG-(W) 80.564887 NAD'83 UTM (M) N. 4,383,300.11 E. 537,373.94 **BOTTOM HOLE**

NAD'27 S.P.C.(FT) N. 393,412.37 E. 1,703,533.57 NAD'27 GEO LAT-(N) 39.575382 LONG-(W) 80.551766 NAD'83 UTM (M) N. 4,380,735.73 E. 538,513.26

LIBERTY HOLDING COMPANY LEASE NO. 988605 RAYMOND & PAMELA GASTON 61 AC.± LEASE NO. 125372 100 AC.± JORDAN Z. PIGG LEASE NO. 125374 SHERILYN SNIDER 80 AC.± LEASE NO. 125424 SHERILYN SNIDER 20 AC.± LEASE NO. 125425 LEASE NO. 116735 F.M. TUTTLE ESTATE ET AL 22 AC.± THOMAS No. 229 62 AC.± LEASE NO. 125375 LEASE NO. 125423 59.5 AC.± LEASE NO. 125394 THOMPSON *



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.

2288

MINIMUM DEGREE OF ACCURACY

1 / 2500

FILE NO.

TO COPS

HORIZONTAL & VERTICAL

SCALE

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

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

DECEMBER 10 DATE

, 20 12

12/11/15, 02/16/16 & 04/04/16 REVISED __

OPERATORS WELL NO.

WV 514364

API

WELL NO.

41 STATE

103 COUNTY 03153 PERMIT

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



The Street Control of Street Street							
WELL TYPE: OIL	GAS_X	LIQUID INJECTION	WASTE DISPOSAL	IF "GAS" PRODUCT	TION_X STORAGE	DEEP	SHALLOW_X
LOCATION: ELEVATION	(GROUND 1,482'	(PROPOSED) 1,430'	_ WATERSHED	TRIBUTARY OF	ROCKCAMP RUN		
DISTRICT	GRANT		COUNTY	WETZEL	QUADRANGLE _	BIG RUN	7.5'
SURFACE OWNER	BLUE G	RASS ET LLC			ACREAGE	138.93±	
ROYALTY OWNER	SHIBEN	ESTATES INC.			ACREAGE	140±	6/24/2016
PROPOSED WORK	:				LEASE NO	125397	
DRILL X C	ONVERT _	DRILL D	EEPER	REDRILL	FRACTURE OR STIMULA	TE_X_P	LUG OFF OLD
FORMATION	PERFOR	ATE NEW FORMA	TION F	LUG AND ABANDON	CLEAN OUT ANI	D REPLUG	OTHER
PHYSICAL CHANG	E IN WELL ((SPECIFY)		Т	ARGET FORMATION	GENESEC	
					ESTIMATED DEPTH	7,370'	

WELL OPERATOR EQT PRODUCTION COMPANY

ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280

BRIDGEPORT, WV 26330

DESIGNATED AGENT REX C. RAY

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, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

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

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

See Attached

\$7,0303,53

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

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

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

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Office of Oll and Gas

APR 1 1 2016

WV Department of

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

Well Operator: EQT Production Company

By:

Victoria Roark

Its:

Permitting Supervisor

Page 1 of 2

	Equitrans, Inc.	Equitrans, LP		DB 105/908	
	Equitrans, LP	EQT Production Company		O&G 131A/81	
<u>988605</u>	Liberty Holding Company	EQT Production Company	1/8 Min Pd	DB 129A/862	
	Raymond P. Gaston, et al. (Current Royalty Owner)		1/8 Min Pd		
125372	C. Amos Long, et ux.	Equitable Gas Company		DB 44A	•
	Equitable Gas Company	Equitrans, Inc.		0&G 71A/483	9
	Equitrans, Inc.	Equitrans, LP		DB 105/908	/ () > a
	Equitrans, LP	EQT Production Company		O&G 131A/81	00034
	Jordan Zachary Pigg, et al. (Current Royalty Owner)		1/8 Min Pd		10303153
125374	Josephine J. Pigg, et vir.	Equitable Gas Company		DB 52A/165	J
1200.4	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	
	Sherilyn Snider (Current Royalty Owner)		1/8 Min Pd		
125424	Francis Shreve, et ux, et al.	Equitable Gas Company		DB 45/106	
100 100	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	•
	Sherilyn Snider (Current Royalty Owner)		1/8 Min Pd		
125425	Adda M. Sole, et al.	Equitable Gas Company		DB 44/493	
	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	
	F.M. Tuttle Estate, et al. (Current Royalty Owner)		1/8 Min Pd		
116735	F.M. Tuttle, et al.	Pittsburgh & West Virginia Gas		DB 46A/392	
	Pittsburgh & West Virginia Gas	Equitable Gas Company		DB 187/321	
	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	Beçéinéd
	Sherilyn Snider (Current Royalty Owner)		1/8 Min Pd		Office of Oil and Gas
125375	Francis Shreve, et ux, et al.	Equitable Gas Company		DB 44A/41	
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453	APR 1 1 2016
	Equitrans, Inc.	Equitrans, LP		DB 105/908	AIN 11 LUIU
	Equitrans, LP	EQT Production Company		O&G 131A/81	
	•		4m kr- ma		WV Department of
	Esther R. Coen, et al. (Current Royalty Owner)		1/8 Min Pd	55 444 455 1	Environmental Protection
125394	Roxie H. Brookhover, et al.	Equitable Gas Company			
	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	
	AMP Fund III, LP, et al. (Current Royalty Owner)		1/8 Min Pd	DD 454/279	
125423	C.E. Brown, et al.	Equitable Gas Company		DB 45A/278	
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453 DB 105/908	
	Equitrans, Inc.	Equitrans, LP		O&G 131A/81	
	Equitrans, LP	EQT Production Company		OEG 1318/81	



April 11, 2016

4710303153

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 numbers 514363, 514364, 514365 Centerville District, Tyler 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

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APR 1 1 2016

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

	ce Certification: 4-1/-16	API No. 47- 103	<u>-</u>
		47 1 0 3 0 3 1 Operator's Well N	
		4 / 1 U J Well Pad Name:	BIG245
Notice has l			
Pursuant to th	ne provisions in West Virginia Code §	22-6A, the Operator has provided the required pa	arties with the Notice Forms listed
	tract of land as follows:		
State:	W	UTM NAD 83 Easting: 537,029	
County:	Wetzel	Northing: 4,382,93	6.01
District:	Grant	Public Road Access: Rt 19/2	
Quadrangle: Watershed:	Big Run	Generally used farm name: ET Blue	grass LLC
watersned:	Rockcamp Run Wiley Fork		
information r of giving the requirements Virginia Cod	equired by subsections (b) and (c), se surface owner notice of entry to su of subsection (b), section sixteen o	bed in subdivisions (1), (2) and (4), subsection (action sixteen of this article; (ii) that the requirement rvey pursuant to subsection (a), section ten of the first this article were waived in writing by the surfacender proof of and certify to the secretary that the st.	nt was deemed satisfied as a result nis article six-a; or (iii) the notice ace owner; and Pursuant to West
	West Virginia Code § 22-6A, the Operator has properly served the require	erator has attached proof to this Notice Certificat	ion
	ECK ALL THAT APPLY	d parties with the following.	OOG OFFICE USE ONLY
*PLEASE CH	ECK ALL THAT APPLY	NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	ONLY
*PLEASE CH	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BECAUSE NO	ONLY RECEIVED/ NOT REQUIRED
*PLEASE CH	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	ONLY RECEIVED/ NOT REQUIRED RECEIVED/ RECEIVED/
*PLEASE CH	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or TICE OF ENTRY FOR PLAT SURV	■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED VEY or ■ NO PLAT SURVEY WAS CONDUCTED NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY	ONLY RECEIVED/ NOT REQUIRED RECEIVED RECEIVED/ NOT REQUIRED Office of Oil and Gas
*PLEASE CH	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or TICE OF ENTRY FOR PLAT SURV	■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED VEY or ■ NO PLAT SURVEY WAS CONDUCTED NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or WRITTEN WAIVER BY SURFACE OW (PLEASE ATTACH)	ONLY ONLY RECEIVED/ NOT REQUIRED RECEIVED/ NOT REQUIRED Office of Oil and Gas NER APR 1 1 2016 V/ DRECEIVED of
*PLEASE CH 1. NO 2. NO 3. NO	ECK ALL THAT APPLY TICE OF SEISMIC ACTIVITY or TICE OF ENTRY FOR PLAT SURV	■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED VEY or ■ NO PLAT SURVEY WAS CONDUCTED NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or WRITTEN WAIVER BY SURFACE OW (PLEASE ATTACH)	ONLY RECEIVED/ NOT REQUIRED RECEIVED RECEIVED/ NOT REQUIRED Office of Oil and Gas NER APR 1 1 2016

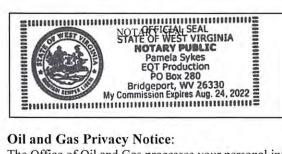
Required Attachments:

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

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 upder 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 Roark Bridgeport WV 26330 Its: Permitting Supervisor Facsimile: 304-848-0041 Telephone: Email: 304-848-0076 vroark@eqt.com



Subscribed and sworn before me this

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.

4710303153

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APR 1 1 2016

WW-6A (9-13)

API NO. 47- 103 OPERATOR WELL NO. 514364
Well Pad Name: BIG245

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 4-11-16 Date Permit Application Filed: 4-11-16 Notice of: PERMIT FOR ANY CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A ☐ PERSONAL SERVICE MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice ☐ Well Plat Notice is hereby provided to: ☑ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: See Attached Name: See Attached Address: Address: RECEIVED Office of Oil and Gas Name: COAL OPERATOR Name: Address: Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) SURFACE OWNER OF WATER WELL Name: See Attached AND/OR WATER PURVEYOR(s) Address: Environmental Protection Name: N/A Name: Address: Address: ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD SURFACE OWNER(s) (Impoundments or Pits) Name: Name: See Attached - TANK SITE Address: Address: *Please attach additional forms if necessary

WW-6A WELL: 514364

Surface Owner:

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

4710303153

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Office of Oil and Gas

APR 1 1 2016

API NO. 47- 103 -	
OPERATOR WELL	NO. 514364
Well Pad Name: BIG2	45

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

provisions lis WW-6A and	hereby state that I have read ted above, and that I have received copies of a attachments consisting of pages one (1) through the well plat, all for proposed well work on the	a Notice of Apough	pplicat	tion, an App including	olication for a Well Work Permit on Form
State:	wv	UTM NAD		Easting:	537,029.01
County:	Wetzel			Northing:	4,382,936.01
District:	Grant	Public Road			Rt 19/2
Quadrangle:	Big Run	Generally u	ised fa	arm name:	ET Bluegrass LLC
issued on tho	that I have no objection to the planned work do se materials.	escribed in the			I have no objection to a permit being J
/	CE OWNER CE OWNER (Road and/or Other Disturban	ice)	_	ature: Name:	RECEIVED Office of Oil and Gas
	CE OWNER (Impoundments/Pits)				ION BY A CORPORATION, ETC.
	OWNER OR LESSEE		Com By:	John 1	Bluegrass LCC 1 1 2016
Charles A. P. Cont.	PERATOR		Its:	Regional	wand Michapartment of Michapartment of Michapartmental Protection
	PURVEYOR	SE FIEL D	Sign	ature:	4.7-16
☐ OPERA	TOR OF ANY NATURAL GAS STORAC	JE FIELD			

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.

WW-6A WELL: 514364

Surface Owner Access Road:

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

Ikey J Willey 12359 Willey Fork Road Pine Grove WV 26419

Dale & Sherry Dulaney 45 Big Run Road Burton WV 26562

Donald Dulaney 10686 Willey Fork Road Burton WV 26562

Elias Leasure Jr PO Box 156 Big Run WV 26561

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Office of Oil and Gas

APR 1 1 2016

API NO. 47-103 -	
OPERATOR WELL NO.	514364
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 John W Dama to , hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form , including the erosion and sediment control plan, if WW-6A and attachments consisting of pages one (1) through required, and the well plat, all for proposed well work on the tract of land as follows: Easting: 537,029.01 State: w UTM NAD 83 Northing: 4,382,936.01 County: Wetzel **Public Road Access:** Rt 19/2 District: Grant Generally used farm name: ET Bluegrass LLC Ouadrangle: Big Run I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being Watershed: Rockcamp Run Wiley Fork issued on those materials. FOR EXECUTION BY A NATURAL PERSON *Please check the box that applies SURFACE OWNER Signature: Print Name: ☑ SURFACE OWNER (Road and/or Other Disturbance) Date: ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. Company: ET Bluegrass L COAL OWNER OR LESSEE John W Danato □ COAL OPERATOR Its: <u>Regional</u> WATER PURVEYOR Signature:

Oil and Gas Privacy Notice:

□ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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.

Date:

WW-6A WELL: 514364

Surface Owner: TANK SITE

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

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WW-6AW (1-12)

API NO. 47- 103 -	
OPERATOR WELL NO.	514364
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

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Comment and Waiver Provisions

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VOLUNTARY STATEMENT OF NO OBJECTION , hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form , including the erosion and sediment control plan, if WW-6A and attachments consisting of pages one (1) through required, and the well plat, all for proposed well work on the tract of land as follows: 537,029.01 Easting: State: w **UTM NAD 83** Northing: 4,382,936.01 County: Wetzel Rt 19/2 **Public Road Access:** District: Grant ET Bluegrass LLC Generally used farm name: Quadrangle: Big Run Watershed: Rockcamp Run Wiley Fork I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials. FOR EXECUTION BY A NATURAL PERSON *Please check the box that applies SURFACE OWNER Signature: Print Name: SURFACE OWNER (Road and/or Other Disturbance) Date: ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. Company: ET Bluegrass LLC COAL OWNER OR LESSEE ☐ COAL OPERATOR WATER PURVEYOR Signature;

Oil and Gas Privacy Notice:

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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Date:

WW-6A WELL: 514364

Surface Owner: Other

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

Wanda L Byard 1250 Meadowlane Dr Lewisport KY 42351

Neal Utt 1204 Big Run Road Burton WV 26562

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Office of Oil and Gas

APR 1 1 2016

API NO. 47-103	
OPERATOR WELL NO.	514364
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

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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.

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VOLUNTARY STATEMENT OF NO OBJECTION

I, John W Oamato, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form , including the erosion and sediment control plan, if WW-6A and attachments consisting of pages one (1) through __ required, and the well plat, all for proposed well work on the tract of land as follows: Easting: 537,029.01 State: w **UTM NAD 83** Northing: 4,382,936.01 County: Wetzel **Public Road Access:** Rt 19/2 District: Grant ET Bluegrass LLC Generally used farm name: Quadrangle: Big Run Watershed: Rockcamp Run Wiley Fork I further state that I have no objection to the planned work described in these materials, and have no objection to a permit being issued on those materials. FOR EXECUTION BY A NATURAL PERSON *Please check the box that applies SURFACE OWNER Signature: Print Name: SURFACE OWNER (Road and/or Other Disturbance) Date: ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. COAL OWNER OR LESSEE Company: ET Bluegeass LLC John W Danato ☐ COAL OPERATOR WATER PURVEYOR Signature: Date: ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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WW-6A WELL: 514364

Coal Owners:

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

Western Pocahontas Properties LLC 5260 Irwin Road
Huntington WV 25705

CNX Land LLC
Engineering Operations Support Dept, Coal
1000 Consol Energy Dr
Canonsburg PA 15317

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API NO. 47-103		
OPERATOR WELL NO.	514364	
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

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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 W Oamato, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through , including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows: Easting: 537,029.01 State: w UTM NAD 83 Northing: 4,382,936.01 County: Wetzel **Public Road Access:** Rt 19/2 District: Grant Generally used farm name: ET Bluegrass LLC Ouadrangle: Big Run Watershed: Rockcamp Run Wiley Fork I further state that I have no objection to the planned work described in these materials, and I have no objection to the planned work described in these materials, and I have no objection to the planned work described in these materials, and I have no objection to the planned work described in these materials, and I have no objection to the planned work described in these materials, and I have no objection to the planned work described in these materials, and I have no objection to the planned work described in these materials. FOR EXECUTION BY A NATURAL PERSON *Please check the box that applies SURFACE OWNER Signature: Print Name: SURFACE OWNER (Road and/or Other Disturbance) Date: ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. COAL OWNER OR LESSEE Company: ET Bluegrass LLC By: John W Ognato ☐ COAL OPERATOR WATER PURVEYOR Signature: Date: ☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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OPERATOR WELL NO. 514364

Well Pad Name: BIG245

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

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

WW-6A (8-13)

API NO. 47-103 OPERATOR WELL NO. 514364

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 operation 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 apermanent 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. Office of Oil and Gas

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 the location or construction of the applicant's proposed well work within the location or construction of the applicant's proposed well work within the location or construction of the applicant's proposed well work within the location or construction of the applicant's proposed well work within the location or construction of the applicant's proposed well work within the location or construction of the applicant is a second to the location or construction of the applicant is a second to the location or construction of the applicant is a second to the location or construction of the applicant is a second to the location of the applicant is a second to the location of the applicant is a second to the location of the applicant is a second to the location of the applicant is a second to the location of the applicant is a second to the location of the applicant is a second to the location of the location o application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the WV Department of location or construction of the applicant's proposed well work to the Secretary at: Environmental Protection

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

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. 514364
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 by the purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

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

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

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

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

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Office of Oil and Gas

APR 11 2016

API NO. 47- 103 OPERATOR WELL NO. 514364 Well Pad Name: BIG245

Notice is hereby given by:

Well Operator: EQT Production Company Telephone: 304-848-0076

Address: 115 Professional Place PO Box 280 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 depprivacyofficer@wv.gov.

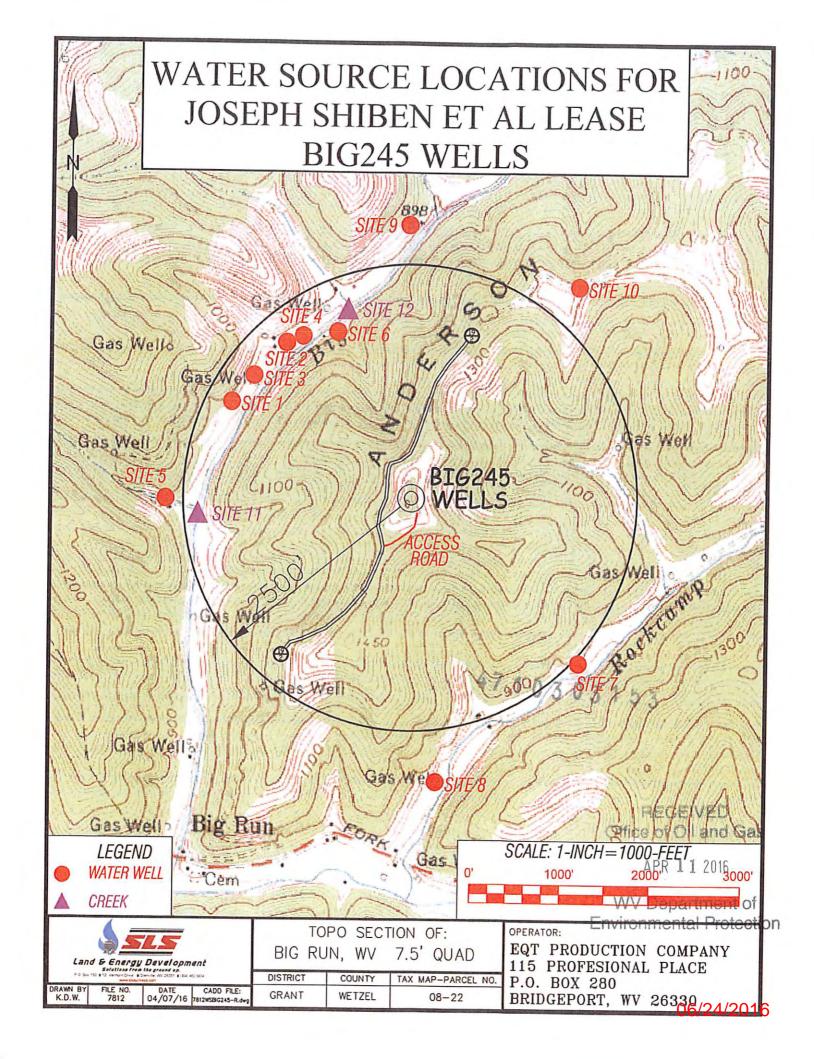
OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Pamela Sykes
EQT Production
PO Box 280
Bridgeport, WY 26330
My Commission Expires Aug. 24, 2022

Subscribed and sworn before me this \(\frac{1}{2} \) day of \(\frac{1}{2} \), 2016

Notary Public

My Commission Expires

4710303153



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

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

Notice Time			
	Requirement: Notice shall be provided		
Date of Noti	ce: 4-1-16 Date Po	ermit Application Filed: 4-11-	16
Delivery me	thod pursuant to West Virginia Code §	22-6A-16(b)	
☐ HAND	■ CERTIFIED MAIL		
DELIVI	ERY RETURN RECEIPT RE	EQUESTED	
receipt reque drilling a hor of this subsec- subsection m and if availab	sted or hand delivery, give the surface over izontal well: <i>Provided</i> , That notice give etion as of the date the notice was provided	when notice of its intent to enter upon the pursuant to subsection (a), section teled to the surface owner: <i>Provided, how</i> when. The notice, if required, shall included address of the operator and the operator	an operator shall, by certified mail return ne surface owner's land for the purpose of n of this article satisfies the requirements vever, That the notice requirements of this ude the name, address, telephone number, r's authorized representative.
Name: See Atta		Name: See Attached	
Address:		Address:	
State: County: District: Quadrangle:	WV Wetzel Grant Big Run	Public Road Access:	537,029.01 4,382,935.01 Rt 19/2 ET Bluegrass LLC
Watershed:	Rockcamp Run Wiley Fork	Generally used farm name:	E Bluegrass LLC
Pursuant to facsimile numericated to ho	mber and electronic mail address of the rizontal drilling may be obtained from the	operator and the operator's authorize ne Secretary, at the WV Department of	ess, telephone number, and if available, ed representative. Additional information f Environmental Protection headquarters, p.wv.gov/oil-and-gas/pages/default.aspx.
	ereby given by:		
	Dr: EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place PO Box 280	Address:	115 Professional Place PO Box 280
Bridgeport WV 2	6330	Bridgeport WV 26330	
Telephone:	304-848-0076	Telephone:	304-848-0076
	vroark@eqt.com	Email:	vroark@eqt.com RECEIVED
Email: Facsimile:	vroark@eqt.com 304-848-0041	Facsimile:	vroark@eqt.com RECEIVED

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 Quertoffice will appropriately secure your personal information. If you have any questions about our use or your personal information DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WW-6A4

Surface Owners

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

Ikey J Willey 12359 Willey Fork Road Pine Grove WV 26419

Dale & Sherry Dulaney / 45 Big Run Road Burton WV 26562

Donald Dulaney 10686 Willey Fork Road Burton WV 26562

Elias Leasure Jr PO Box 156 Big Run WV 26561

Wanda L Byard 1250 Meadowlane Dr Lewisport KY 42351

Neal Utt 1204 Big Run Road Burton WV 26562 4710303153

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APR 1 1 2016

WW-6A-4 WELL: 514364

Surface Owner: TANK SITE

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

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APR 1 1 2016

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

WAIVER

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

hereby state that I have read the notice provisions listed above and hereby waive the

State:	WV	UTM NAD 83	Easting:	537,029.01
County:	Wetzel	— UTWI NAD 63	Northing:	4,382,936.01
District:	Grant	Public Road Acc	cess:	Rt 19/2
Quadrangle:	Big Run	Generally used farm name:		ET Bluegrass LLC
Watershed:	Rockcamp Run Wiley Fork			
Address: 1.0.	n W Damato Box 280 Ageport WV 26330	Signatur	M. 4.	7-16

Oil and Gas Privacy Notice:

Surface Owner Waiver:

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.

471030315-

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APR 1 1 2016

WW-6A5 (1/12) Operator Well No. 514364

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

Notice Time I Date of Notic	Requirement: notice shall be: D		o later than the filing pplication Filed:	date of permit	application.
Delivery metl	od pursuant to West Virg	ginia Code §	22-6A-16(c)		
CERTIF	TED MAIL		HAND		
	N RECEIPT REQUESTED)	DELIVERY		
return receipt the planned of required to be drilling of a hadamages to the (d) The notice of notice.	requested or hand delivery, peration. The notice requiprovided by subsection (b) orizontal well; and (3) A peroperation and surface affected by oil and surface affected by this section subsection subsection for the surface of the s	give the surf red by this s section ten coroposed surf I gas operationall be given	ace owner whose land ubsection shall include if this article to a surface use and compens as to the extent the date to the surface owner a R(s) time of notice):	will be used for le: (1) A copy ace owner whose ation agreemen mages are comp t the address lis	cation, an operator shall, by certified mail or the drilling of a horizontal well notice of of this code section; (2) The information we land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter, sted in the records of the sheriff at the time
	Control of		-		
Notice is here Pursuant to W	est Virginia Code § 22-6A-	16(c), notice	is hereby given that th	e undersigned	well operator has developed a planned
	the surface owner's land for	the purpose		Facting:	oct of land as follows: 537,029,01
State: County:	Welzel		UTM NAD 8	Northing:	4,382,936.01
District:	Grant		Public Road		Rt 19/2
Quadrangle:	Big Run		Generally use	d farm name:	ET Bluegrass LLC
Watershed:	Rockcamp Run Wiley Fork				
to be provide horizontal wel surface affects information re	est Virginia Code § 22-6A d by W. Va. Code § 22-6 ll; and (3) A proposed surfa ed by oil and gas operation elated to horizontal drilling located at 601 57 th Street	A-10(b) to a ace use and constant to the external may be obtained.	surface owner whose ompensation agreement the damages are continued from the Secret	land will be unit containing arompensable und ary, at the WV	code section; (2) The information required used 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

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.

Environmental Protection

WW-6A5

Surface Owners:

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

Ikey J Willey 12359 Willey Fork Road / Pine Grove WV 26419

Dale & Sherry Dulaney / 45 Big Run Road Burton WV 26562

Donald Dulaney 10686 Willey Fork Road / Burton WV 26562

Elias Leasure Jr PO Box 156 Big Run WV 26561

Wanda L Byard 1250 Meadowlane Dr Lewisport KY 42351

Neal Utt 1204 Big Run Road Burton WV 26562

471030315-

API NO. 47-103 -	
OPERATOR WELL NO.	514364
Well Pad Name: BIG245	

STATE OF WEST VIRGINIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

OLUNTARY 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 I, John W Oamato, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form , including the erosion and sediment control plan, if WW-6A and attachments consisting of pages one (1) through required, and the well plat, all for proposed well work on the tract of land as follows: Easting: 537,029.01 State: w UTM NAD 83 Northing: 4,382,936.01 County: Wetzel Public Road Access: Rt 19/2 District: Grant Generally used farm name: ET Bluegrass LLC Big Run Quadrangle: Watershed: Rockcamp Run Wiley Fork I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials. FOR EXECUTION BY A NATURAL PERSON *Please check the box that applies SURFACE OWNER Signature: Print Name: SURFACE OWNER (Road and/or Other Disturbance) Date: ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. Company: ET Bluegrass LLC COAL OWNER OR LESSEE By: John W Canato ☐ COAL OPERATOR Its: <u>Regiona</u> Object of Oil and Gas WATER PURVEYOR Signature; Date: □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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WW-6A-5 WELL: 514364

Surface Owner: TANK SITE

Waiver

ET Blue Grass LLC 625 Liberty Ave Suite 1700

Pittsburgh PA 15222

471030315

API NO. 47- 103 -	
OPERATOR WELL NO.	514364
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

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VOLUNTARY STATEMENT OF NO OBJECTION

provisions listed WW-6A and att required, and the State: w County: w District: G Quadrangle: B Watershed: Ro	above, and that I have received copies of tachments consisting of pages one (1) the well plat, all for proposed well work on the well plat, all for proposed well work on the vertical rant g Run Dockcamp Run Wiley Fork at I have no objection to the planned work	f a Notice of Aprough ne tract of land a UTM NAD Public Road Generally u	pplication, an App , including us follows: 83 Easting: Northing: d Access: sed farm name:	
*Please check th	e box that applies		FOR EXECUT	ION BY A NATURAL PERSON
SURFACE	OWNER			
☑ SURFACE	OWNER (Road and/or Other Disturba	nce)		
☐ SURFACE	OWNER (Impoundments/Pits)			ION BY A CORPORATION, ETC.
COAL OW	NER OR LESSEE		Company: ET	Bluegrass LLC
☐ COAL OPE	ERATOR		By: John Vits: Regional	
WATER PI	URVEYOR		Signature:	Millen
☐ OPERATO	R OF ANY NATURAL GAS STORA	GE FIELD	Date:	4. 7- B€CEIVED Office of Oil and Gas

Oil and Gas Privacy Notice:

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Earl Ray Tomblin Governor Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

April 1, 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 514365 BIG245H4

Dear Mr. Martin,

This well site will be accessed from existing Permit # 06-2015-0715 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, 7 1 0 3 0 3 1 5 3

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

EQT Production Company

CH, OM, D-6, File

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APR 1 1 2016

WV Department of Environmental Protection

06/24/2016

Anticipated Frac Additives Chemical Names and CAS numbers

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

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APR 11 2016

KEY JOE WILLEY IREY JOE WILLEY
MAP 08, PARCEL 21
GRANT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 76,27 */- ACRES
TOTAL DISTURBANCE AREA: 0.2 */- ACRES

ET BLUE GRASS LLC MAP 08, PARCEL 22 GRANT DISTRICT, WETZEL COUNTY, WV TOTAL PROPERTY AREA: 138,93 +/- ACRES TOTAL DISTURBANCE AREA: 30.5 +/- ACRES

OIL AND GAS ROYALTY OWNER SHIBEN ESTATER, INC. GRANT DISTRICT, WETZEL COUNTY, WY TOTAL PROPERTY AREA: 140,0 -/- ACRES

THE EQT BIG 245 ACCESS ROAD ENTRANCE IS LOCATED 4.4274/-NORTHEAST OF THE JUNCTION OF CO.RT. 19 AND CO.RT. 19/2. THE WELL PAD IS LOCATED 1.9 MILES 4/- NORTHEAST OF THE JUNCTION OF CO. RT. 15 AND CO. RT. 19.

LOCATION COORDINATES

EQT BIG 245 CONSTRUCTION ENTRANCE LATITUDE: 39,59388 LONGITUDE: 80,569747 (NAD 83)

EOT BIG 245 WELL PAD CENTER LATITUDE; 39.595312 LONGITUDE; 80.568705 (NAD 83)

FOT 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 AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS

SITE DISTURBANCE COMPUTATIONS

WELL PAD/ MAIN ACCESS ROAD= 4,5 + A CRES AST PAD/AST ACCESS ROAD = 3,1 + A ACRES STOCKPILES = 30,5 + A ACRES TOTAL SITE DISTURBANCE AREA = 38.4 + ACRES

ENTRANCE PERMIT

EGT PRODUCTION COMPANY WILL OBTAIN AN ENCROACHMENT PERMIT (FORM MM-109) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MISS UTILITY STATEMENT

MISS UTILITY OF WEST VIRGINIA WAS NOTED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN: TICKET #132598935 IN ADDITION, MISS UTILITY WILL BE CONTACTED PRIOR TO START OF THE

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 FOR UNFORSEEN SUBSURFACE INFECULARITIES CAUSING ADDITIONAL WORK OR ADDITIONAL CONSTRUCTION MEASURES REQUIRED BEYOND THOSE STANDARD PRACTICES SHOWN ON THIS PLANAS A RESULT OF ANY OTHER GEOTECHNICAL COMPLICATIONS ENCOUNTERED DURING CONSTRUCTION

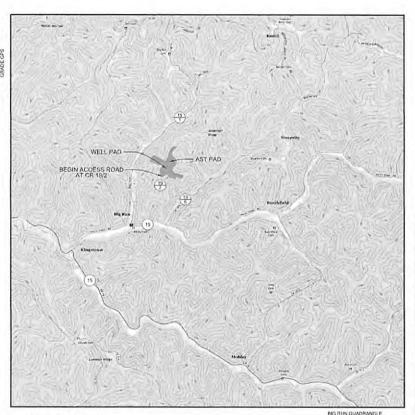
ENVIRONMENTAL NOTES

A WETLAND DELINEATION WAS PERFORMED ON JULY 7, 2011, MAY 30, 2012, AUGUST 14 A WETLAND DELIREATION WAS PERFORMED ON JULY 7, 2011, MAY 30, 2012, AUGUST 14, 2012, AMACH 1-142, 2015, APPL 3, 2015, AMO WETLANDS THAT ARE MOST LIBELY WITHIN THE REVIEW THE SITE OF WATERS AND WETLANDS THAT ARE MOST LIBELY WITHIN THE WEST WAS A SASCICLARY OF WATER AND WETLANDS THAT ARE MOST LIBELY WITHIN THE WEST WAS THAT ARE MOST LIBELY WITHIN THE WEST WAS THAT ARE MOST LIBELY WAS THAT AND A WAY THAT A WAS A WATER AND WEST WAS PREPARED BY POTESTA A ASSOCIATE, INC., 2016 MARKARIZES THE RESULTS OF THE FIELD DELINEARY. THE FLANDWARD LIMITS OF WATER AND WAS THAT A WAY THE FALL AND WAY THE SAME WAS THE WAS THE WAS THE WAS THAT A WATER AND WAY THE REMAINS THE WAY BE RECULATED BY THE LANDWARD LIMITS OF WATERS AND WATER AND WATER AND WAY BE RECULATED BY THE USAGE OF THE WOODER. IT IS STRONGLY RECOMMENDED THAT THE AFOREMENTIONED AGENCIES BE CONSULTED IN AN EFFORT TO GAIN WRITTEN CONFIRMATION OF THE DELINEATION DESCRIBED BY THIS EFFORT TO GAIN WILLEN COMPRIMATION OF THE DELINEATION DESCRIBED BY THE REPORT PRIOR TO ENGACING CONSTRUCTION ON THE PROPERTY DESCRIBED HEREIN, THE DEVELOPER SHALL OBTAIN THE APPROPRIATE PERMITS FROM THE FEDERAL AND/OF STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S., INCLUDING WEILAND FILLS AND STREAM CROSSINGS.

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

T. THEE ARE INTERNETTENT STREAMS, LAKES, POINDS, OR RESERVOIRS WITHIN NO FEET OF THE PROJECT LOD, THERE ARE WITHING WITHIN 100 FEET OF THE LOD, AND ANWERS FROM THE WORDS WITHIN 100 FEET OF THE LOD, AND ANWERS FROM THE WORDS WITHIN 100 FEET OF THE PARTY CORPS OF ENGINEERS BY EQT PRODUCTION COMPANY.

THERE ARE NO ADJUDIED AND THE PARTY OF THE

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

5. THERE ARE NO OCCUPIED DWELLING STRUCTURES WITHIN 650 FEET OF THE CENTER OF THE PAID

WEST VIRGINIA 7.5 MINUTE SERIES

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

APPROVED WVDEP OOG

W/21 1 4/28/2016

	LIST OF DRAWINGS
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	OVERALL PLAN SHEET INDEX
4-7	WELL PAD LAYOUT
8	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
46	CONSTRUCTION QUANTITIES

LEGEND				
EX, INDEX CONTOUR EX, INTERNEDIATE CONTOUR EX, BOUNDARY LINE EX, EDGE OF ROAD PAVEMENT EX, GUARDRAIL EX, FENCELINE EX, GATE EX, OVERHEAD UTILITY RW EX, UTILITY PRW EX, UTILITY PRW		PROP. INDEX CONTOUR PROP. INTERMEDIATE CONTOUR PROP. FILL LINE PROP. WELL HEAD PROP. CONTAINMENT BERM		
EX. GUY WIRE EX. TELEPHONE LINE EX. CASUNE EX. CASUNE EX. WATER LINE EX. WATER WELL EX. CAS WELL EX. TREELINE EX. REFERENCE TREE		PROP. ROAD CENTERLINE PROP. VENTCH WITH CHECK DAMS PROP. CLUVERT PROP. RIP-RAP OUTLET PROTECTION PROP. COMPOST FILLERSOOK PROP. TREELINE PROP. STONE CONSTRUCTION ESTIMATOR		
EX. DELINEATED STREAM EX. DELINEATED WETLAND EX. BUILDING	F., in . d d d d d d d	X-SECTION GRID INDEX X-SECTION GRID INTERMEDIATE X-SECTION PROPOSED GRADE X-SECTION EXISTING GRADE		

OPERATOR EQT PRODUCTION COMPANY

OPERATOR ID: 306686 P.O. BOX 280 BRIDGEPORT WV 26630 PHONE: (304) 348-3870

ENGINEER

STANTEC CONSULTING INC. 111 ELKINS STREET FAIRMONT WY 26554 PHONE: (304) 367-940

SURVEYOR

SMITH LAND SURVEYING, INC. PO BOX 150 226 WEST MAIN STREET

U Stante







GRANT DISTRICT 24 BIG EQT

CALE: AS SHOWN

FEE NO. 510-7517 SHEET 1 OF 49

