

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: 47-10303154, 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: 514365

Farm Name: BLUE GRASS ET LLC

API Well Number: 47-10303154

Permit Type: Horizontal 6A Well

Date Issued: 06/21/2016

API Number:	

PERMIT CONDITIONS₄₇₁₀₃₀₃₁₅₄

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

CONDITIONS

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

API NO. 47-103	
OPERATOR WEL	L NO. 514365
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 P	roduction Co	ompany	306686		Vetzel	Grant	Big Run
	***************************************			Operator l	D	County	District	Quadrangle
2) Operator's Wo	ell Number	r: <u>514365</u>	Washington	W	ell Pad 1	Name: BIG2	245	
3) Farm Name/S	urface Ow	ner: ET Blue	Grass I	LLC Publ	ic Road	Access: Rt	19/2	
4) Elevation, cur	rent groun	d: <u>1480</u>	E	levation, pro	posed po	ost-construct	ion: <u>1430</u>	
5) Well Type ((a) Gas	X	_ Oil		Under	ground Stora	1ge	
	Other							
((b)If Gas	Shallow	***************************************	De	ер	····		
		Horizontal	X					Day
6) Existing Pad:					***************************************			4-27-16
7) Proposed Targ Middlesex, 724	_				iness and	d Expected 1	Pressure(s):	l m . 15
8) Proposed Tota								
9) Formation at			Middlese	ix				
10) Proposed To		-	12228					The second secon
11) Proposed Ho		_	4425					n3156
12) Approximate	2 Fresh Wa	iter Strata De	pths:	229, 507,	662, 75	2, 1011	1103	03154
13) Method to D	etermine F	resh Water I	epths:	From offset	wells	-		
14) Approximate	e Saltwater	Depths: No	one					
15) Approximate	e Coal Sear	m Depths: 9	25, 1024	1, 1123				
16) Approximate	e Depth to	Possible Voi	d (coal m	nine, karst, ot	her): N	one		
17) Does Propos directly overlyin	sed well loo g or adjace	cation containent to an activ	1 coal sea 1e mine?	nms Yes		N	io X	
(a) If Yes, prov	/ide Mine l	Info: Name	•					
-		Depth	•					
		Seam						
		Owne	r:					-

WW-68 (04/15)

API NO. 47-103 -	
OPERATOR WELL	NO. 514365
Well Pad Name:	B1G245

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	12228	12228	SOT above top producing zone
Tubing	2 3/8		J-55	4.7		May not be nm. if nm set 40' above top perf or 80" inclination	
Liners							

Dr.H 4-27-16

TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	<u>Cement</u> <u>Yield</u> (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:	47 4	
	479030315	4

PI NO. 47-103 -	
OPERATOR WELL	NO. 514365
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 Middlesex Formation. Drill the vertical to an approximate depth of 5635'. Kick off and drill curve. Drill the lateral in the Middlesex. Cement casing.

Dr. 14 4-27-11

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:
- Surface: Bow spring centralizers One at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers

 One cent at the shoe and one sages every 500'.
- Production: One solid body cent spaced every joint from production casing shoe to KOP

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

Conductor: Class A no additives
Surface (Type 1 Cement): 0.3% Calcium Chlonde. Used to speed the setting of cement slumes, 2.5% Flake Loss Circulation Material (LCM)
Intermediate (Class H Cement): 0.3% Calcium Chlonde. Used to speed the setting of cement slumes, 0.25% flake. Loss Circulation Material (LCM): 6% Super FL-300 (fluid loss/sengthens thickening time)
Production:

1.5% SEC. 10 (fluid loss): 50.50 POZ (estimate): 50.50 POZ (estimate): 50.50 POZ (estimate): 50.50 PO

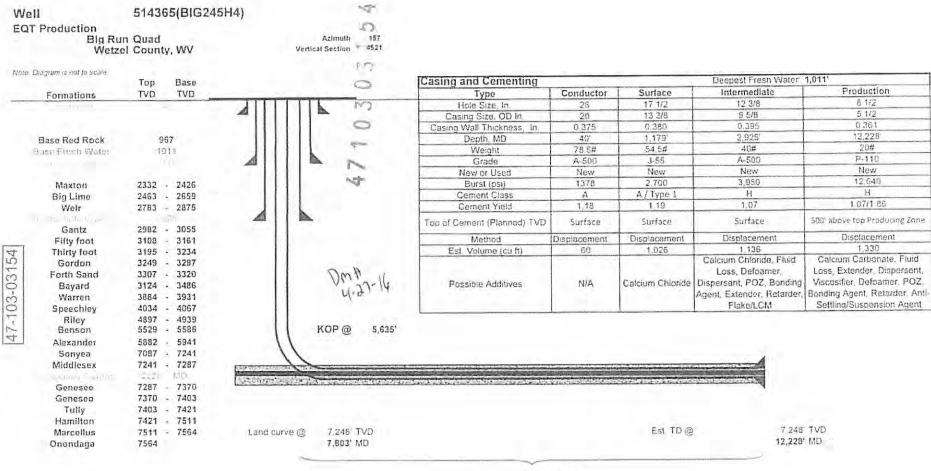
Lead (Type H Cement): 0.2% CD-20 (dispersant makes cement easer to mux): 15% SuperFL-300 (fluid loss) engineers thickening time): 15% SEC-10 (fluid loss): 50.50 POZ (extender): 124 (Type H Cement): 0.2% Super CR-1 (Retarder): Lengthers thickening time: .3% Super FL-200 (fluid loss): .2% SEC-10 (Fluid loss): .2% SuperFL-350 (fluid loss): Reduces amount of water lost to formation 60 % Calculum Carbonate: Acid solubility.

25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface. Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.

Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume. Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

^{*}Note: Attach additional sheets as needed.



4 425' Lateral

Proposed Well Work:
Drill and complete a new horizontal well in the Middlesex formation.
Drill the vertical to an approximate depth of 5635"
Kick off and drill curve. Drill lateral in the Middlesex. Cement casing.



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

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

March 18, 2014

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

Re: Cement Variance Request

Dear Sir or Madam,

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

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

4710303154 If you have any questions regarding this matter feel free to contact me at 304-926-0499, ext. 1653.

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

RECEIVED Office of Oil and Gas

APR 11 2016

WV Department of Environmental Protection



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 4 7 1 0 3 0 3 1 5 4 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.

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WV Department of Environmental Protection 06/24/2016

CONCLUSIONS OF LAW

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

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

ORDER

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

James Martin, Chief Office of Oil and Gas

4710303154



August 24, 2015

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

Re: Casing plan on Wells 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

4710303154

Enc.

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Office of Oil and Gas

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WV Department of Environmental Protection WW-9 (4/16)

API Number	47 -	103	-	
Ope	rator's	s Well No). 514365	

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN	
Operator Name EQT Production Company OP Code 306686	
Watershed (HUC 10) Rockcamp Run Wiley Fork Quadrangle Big Run	
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No	
Will a pit be used? Yes No 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:	
Land Application	
Underground Injection (UIC Permit Number 0014, 8462, 4037) Reuse (at API Number Various)	
Off Site Disposal (Supply form WW-9 for disposal location)	
Other (Explain	Dm H
Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.	4-27-1L
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. See Attached	-
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud	
Additives to be used in drilling medium? See Attached	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill	
-If left in pit and plan to solidify what medium will be used? (cement, line Zaw usp N/A -Landfill or offsite name/permit number? See Attached List	
-Landfill or offsite name/permit number? See Attached List	
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at ar West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclos where it was properly disposed.	y :
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT is on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other application can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar with the information submitted of application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible obtaining the information. I believe that the information is true, accurate, and complete. I am aware that there are significantly penalties for submitting false information, including the possibility of fine or imprisonment. Company Official Signature Company Official Title Permitting Supervisor	at the icable n this le for
Subscribed and sworn before me this day of April Bentilities STATE OF WEST V HOTAL SE STATE OF WEST V HOTAL SE PARE SY PUI Pamela SY EOT Product OF Box 28 Bridgeport, WV My Commission expires	INHUMBURE AL IRGINIA E RIC E Son E Son E
My commission expires 2-34-32 Bridgeport, WV My Commission Expires Limitation Hills Hill	26330 Aug. 24, 2022

•	tment: Acres Disturbed 38.4	Prevegetation	1 pH 6.3		
Lime 3	Tons/acre or to correct to p	Н 6.5			
Fertilizer type Gra	anular 10-20-20				
Fertilizer amount_1	1/3	lbs/acre			
Mulch_2	Tons	s/acre			
	<u>Se</u>	ed Mixtures			
Te	emporary	Per	rmanent		
Seed Type KY-31	lbs/acre 40	Seed Type Orchard Grass	47	15/acre 115/3 5	
Alsike Clover	5	Alsike Clover		5 3 0	3 1
Annual Rye	15				
Maps(s) of road, location, pi provided). If water from the acreage, of the land applicat	pit will be land applied, include dion area	lication (unless engineered plans ir dimensions (L x W x D) of the pit,	icluding thi and dimen	is info have been nsions (L x W), a	nd area
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provided). If water from the acreage, of the land applicat Photocopied section of invo	it and proposed area for land applied pit will be land applied, include a ion area Ived 7.5' topographic sheet.	lication (unless engineered plans ir dimensions (L x W x D) of the pit,	and dimen	isions (L x W), a	nd area

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, water based mud, or oil based mud.

Additives to be used in drilling medium?

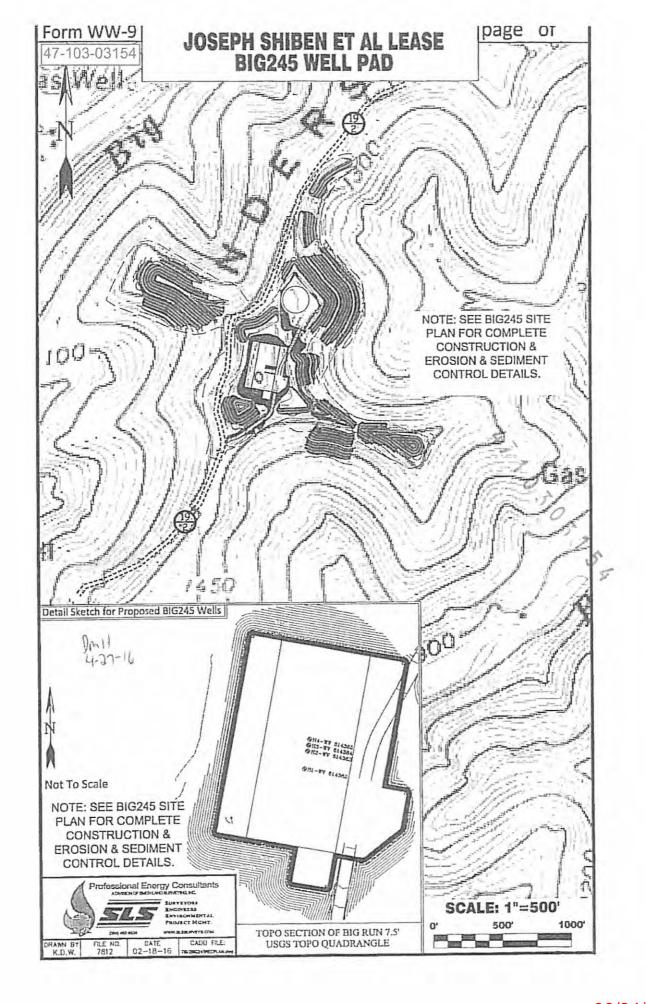
Air - biodegradable oil lubricant, detergent, defoaming, water. Water based mud – Barite, viscosifer, alkalinity control, lime, filtration control, deflocculates, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates. Oil based mud – synthetic base oil, emulsifier, salt, lime,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

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EQT Production Water plan Offsite disposals for Marcellus wells

CWS TRUCKING INC.

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

LAD LIQUID ASSETS DISPOSAL INC.

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

TRI COUNTY WASTE WATER MANAGEMENT, INC.

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

Waste Management - Meadowfill Landfill

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

Waste Management - Northwestern Landfill

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

BROAD STREET ENERGY LLC

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

TRIAD ENERGY

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

KING EXCAVATING CO.

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

FJ OJ OJ OJ SF

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APR 11 2016

WV Department of Environmental Protection



Site Specific Safety Plan

EQT BIG 245 Pad

Burton Wetzel County, WV

213.222	For Wells:	
_514365		4710
		303154
That IL	Date Prepared:	April 4, 2016
EQI Production		WV Oil and Gas Inspector
Title Spenusor		Title
#- 7-16 Date		1-27-/4 Date

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH) NAD'27 S.P.C.(FT) N. 400,723.66 E. 1,698,785.28 NAD'27 GEO. LAT-(N) 39.595300 LONG-(W) 80.568918 NAD'83 UTM (M) N. 4,382,939.01 E. 537,029.52

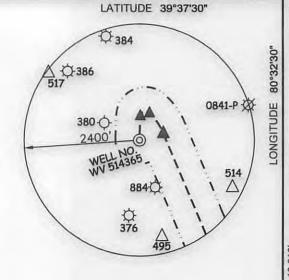
LANDING POINT

NAD'27 S.P.C.(FT) N. 400,862.97 E. 1,699,284.92 LAT-(N) 39.595698 LONG-(W) 80.567151 NAD'27 GEO. N. 4,382,984.00 NAD'83 UTM (M) E. 537,181.04

BOTTOM HOLE

NAD'27 S.P.C.(FT) N. 396,789.68 E. 1,701,013.63 NAD'27 GEO LAT-(N) 39.584572 LONG-(W) 80.560847 NAD'83 UTM (M) N. 4,381,751.83 E. 537,728,38

- A	DITTE OF LOCKWILLO	100 00 1 00 00	0 00 00 00
A	BLUE GRASS ET LLC	138.93 ACRES±	G-TM-8-22
В	JOHN M. BYARD	71.60 ACRES±	G-TM-8-15
С	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
H	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	GARNET GAS CORPORATION	0.47 ACRES±	G-TM-8-8.1
L	JAMES & MARTIN STONEKING	19.12 ACRES±	G-TM-8-7
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
T	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
X	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-9-52.1
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	STEPHEN GRANTZ ET AL	119 ACRES±	G-TM-9-23
GG	LOSSIE WATSON ET AL	20.08 ACRES±	G-TM-9-17
HH	WILLEY CEMETERY	0.80 ACRES±	G-TM-9-14
П	TERRY LIVELY ET AL	8.82 ACRES±	G-TM-9-15
JJ	HURSEL WILLEY ET AL	11.3 ACRES±	G-TM-9-09
KK	JOHN SEIWELL	36.5 ACRES±	G-TM-9-05
LL	MARY WRIGHT ET AL	4.25 ACRES±	G-TM-8-63

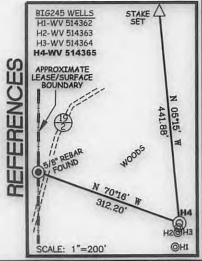


NOTES ON SURVEY

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

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

ROYALTY	OWNERS	
RAYMOND & PAMELA GASTON	61 AC.±	LEASE NO. 125372
JAMES YOHO ET AL	22 AC.±	LEASE NO. 125373
JORDAN Z. PIGG	100 AC.±	LEASE NO. 125374
DORN H. HIGGINBOTHAM ET AL	73 AC.±	LEASE NO. 125421





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

P.S

2288

MINIMUM DEGREE

1/2500 OF ACCURACY

FILE NO.

No. 2288

STATE OF

NO. 208

STATE OF

NO. 208

THOMAS

NO. 2088

THOMAS

THOMAS

NO. 2088

THOMAS

THOMAS

THOMAS

NO. 2088

THOMAS

THOMAS 7812P514365R2.dwg SEE NOTE 2 SCALE

HORIZONTAL & VERTICAL

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

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS. DECEMBER 10 DATE__ 12/11/15, 04/01/16 REVISED_

OPERATORS WELL NO.

WV 514365

API WELL

STATE

103 COUNTY 03154 A PERMIT

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



					The second secon		
WELL TYPE: OIL	GAS_X	LIQUID INJECTION	WASTE DISPOSAL	IF "GAS" PRODUC	TION_X STORAGE	DEEP	_ SHALLOWX
LOCATION: ELEVATION	(GROUND 1,480'	(PROPOSED) 1,430'	_ WATERSHEE	TRIBUTARY OF	ROCKCAMP RUN		
DISTRICT	GRANT		COUNT	Y WETZEL	QUADRANGLE	BIG RU	N 7.5'
SURFACE OWNER	BLUE GF	RASS ET LLC			ACREAGE	138.93±	
ROYALTY OWNER	SHIBEN	ESTATES INC.			ACREAGE	140±	06/24/2016
PROPOSED WORK	:				LEASE NO	125397	
DRILL X C	ONVERT _	DRILL DE	EPER	REDRILL	FRACTURE OR STIMULAT	E_X_	PLUG OFF OLD
FORMATION	PERFORA	ATE NEW FORMAT	rion	PLUG AND ABANDON	CLEAN OUT AND	REPLUG_	OTHER
PHYSICAL CHANG	E IN WELL (SPECIFY)		1	TARGET FORMATION	MIDDLE	SEX
					ESTIMATED DEPTH	7,24	1'

WELL OPERATOR EQT PRODUCTION COMPANY

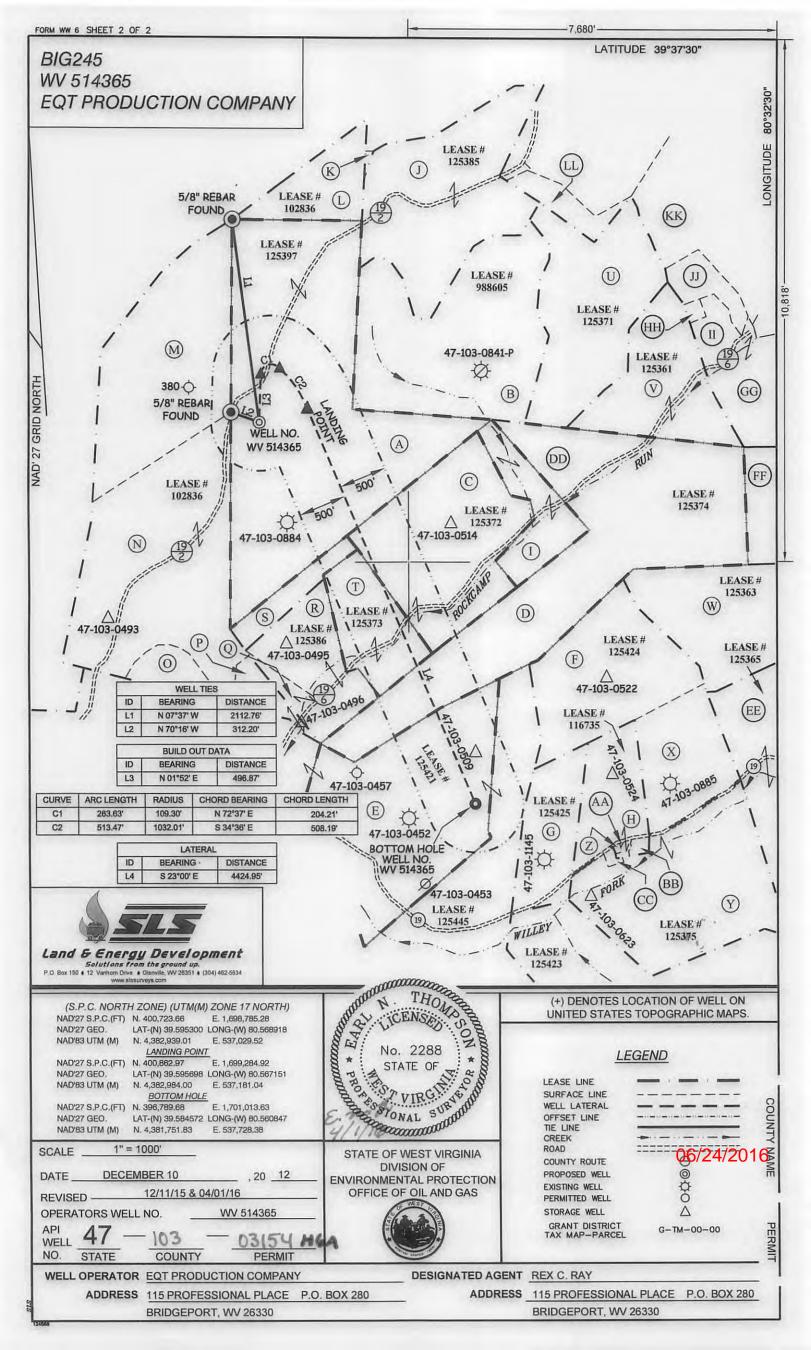
115 PROFESSIONAL PLACE P.O. BOX 280

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

4710303154

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

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

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

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

Well Operator: EQT Production Company

By: Victoria Roark

Its: Permitting Supervisor Office of Oil and Gas

APR 11 2016

Page 1 of 2 WV Department of Environmental Protection 06/24/2016

WW-6A1 attachment		Operator's Well No.	5	514365		
Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page		
125397	ET Blue Grass LLC, et al. (current royalty owner)		1/8 Min Pd			
	Joseph Shiben, et al.	Equitable Gas Company		DB 44-A/224		
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453		
	Equitrans, Inc.	Equitrans, LP		DB 105/908		
	Equitrans, LP	EQT Production Company		O&G 131A/81		
	Raymond P. Gaston, et al. (Current Royalty Owner)		1/8 Min Pd			
125372	C. Amos Long, et ux.	Equitable Gas Company		DB 44A/36		
	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		
	James Yoho, et al. (Current Royalty Owner)		1/8 Min Pd			
125373	Edna M. Rice, et al.	Equitable Gas Company		DB 52A/245		
	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		
	Jordan Zachary Pigg, et al. (Current Royalty Owner)		1/8 Min Pd			
125374	Josephine J. Pigg, et vir.	Equitable Gas Company		DB 52A/165		
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453		
	Equitrans, Inc.	Equitrans, LP		DB 105/908		
	Equitrans, LP	EQT Production Company		O&G 131A/81		
	H. Dorn Higginbotham, et al. (Current Royalty Owner)		1/8 Min Pd			
<u>125421</u>	Elva R. King, et al.	Equitable Gas Company		DB 42A/411		
	Equitable Gas Company	Equitrans, Inc.		O&G 71A/453		
	Equitrans, Inc.	Equitrans, LP	•	DB 105/908		
	Equitrans, LP	EQT Production Company		O&G 131A/81		

4710303154



April 11, 2016

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

Re: BIG245 well pad, well numbers 514363, 514364, 514365 1 0 3 0 5 1 5 4 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

PECEIVED
Office of Oil and Gas

APR 1 1 2016

WV Department of
Environmental Protection

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

	e Certification: 4-11-16		API No. 47		
	Operator's Well No. 514			55	
			Well Pad N	ame: BIG245	
otice has b	oeen given:	S 22 CA the Overster has a sec	uidad tha wax	aired portice	ith the Notice Forms list
	e provisions in West Virginia Code tract of land as follows:	g 22-6A, the Operator has pro-	vided the req	unea parties w	and the monce points list
state:	WV	Country of the consense	Easting:	4,382,939.01	
County:	Wetzel	UTM NAD 83	Northing:	537,029.52	
istrict:	Grant	Public Road Acc		Rt 19/2	
uadrangle:	Big Run	Generally used fa	arm name:	ET Bluegrass LLC	
atershed:	Tributary of Rockcamp Run				
quirements irginia Code this article	surface owner notice of entry to s of subsection (b), section sixteen \$ 22-6A-11(b), the applicant shall have been completed by the applicant	of this article were waived in tender proof of and certify to t ant.	writing by the secretary	the surface ow that the notice	vner; and Pursuant to W
Pursuant to	West Virginia Code § 22-6A, the O	perator has attached proof to t	this Notice C	ertification	
	rator has properly served the requireCK ALL THAT APPLY	red parties with the following:			OOG OFFICE USE ONLY
PLEASE CHE			RED BECAU	JSE NO	
*PLEASE CHE	CK ALL THAT APPLY	r NOTICE NOT REQUIRED SEISMIC ACTIVITY WAS	RED BECAUS CONDUC	JSE NO FED	ONLY RECEIVED/
*PLEASE CHE	ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY OF	r NOTICE NOT REQUIRES SEISMIC ACTIVITY WAS	RED BECAU S CONDUC EY WAS CO RED BECAU	USE NO FED ONDUCTED USE	ONLY RECEIVED/ NOT REQUIRED
*PLEASE CHE	ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY OF	r NOTICE NOT REQUIRED NOTICE NOT REQUIRED NO PLAT SURVEY OF NOTICE NOT REQUIRED NOTICE OF ENTRY FOR	RED BECAUS CONDUCTEY WAS CORED BECAUS PLAT SURVEY	USE NO ITED ONDUCTED USE VEY	ONLY RECEIVED/ NOT REQUIRED RECEIVED/ RECEIVED/
*PLEASE CHE 1. NO? 2. NO? 3. NO?	ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY OF	r NOTICE NOT REQUIRESEISMIC ACTIVITY WAS EVEY or NO PLAT SURVEY OF NOTICE NOT REQUIRED FOR WAS CONDUCTED OF WAS CONDUCTED OF CONTROL WAS CONDUCTED OR CONTROL WAS CONTROL WAS CONDUCTED OR CONTROL WAS CON	RED BECAUS CONDUCTEY WAS CONDUCTEY WAS CONDUCTEY WAS CONDUCTED BECAUSED BY SURFACED BY SUR	USE NO ITED ONDUCTED USE VEY CE OWNER	ONLY RECEIVED/ NOT REQUIRED RECEIVED/ RECEIVED/
*PLEASE CHE 1. NOT 2. NOT 3. NOT	ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY OF FICE OF ENTRY FOR PLAT SUR FICE OF INTENT TO DRILL OF	r NOTICE NOT REQUIRESEISMIC ACTIVITY WAS EVEY or NO PLAT SURVEY OF NOTICE NOT REQUIRED FOR WAS CONDUCTED OF WAS CONDUCTED OF CONTROL WAS CONDUCTED OR CONTROL WAS CONTROL WAS CONDUCTED OR CONTROL WAS CON	RED BECAUS CONDUCTEY WAS CORED BECAUS PLAT SURVEY	USE NO ITED ONDUCTED USE VEY CE OWNER	ONLY RECEIVED/ NOT REQUIRED RECEIVED/ NOT REQUIRED

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-11(b), the Certification of Notice to the person may be made by affidavit of personal service.

WW-6AC (1/12)

Its:

Certification of Notice is hereby given:/

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

Address:

Email:

Well Operator: EQT Production Company By: Victoria Roark

OFFICIAL SEAL
NSTARROFORMST VIRGINIA
NOTARY PUBLIC
Pamela Sykes
EQT Production
PO Box 280
Bridgeport, WV 26330
My Commission Expires Aug. 24, 2022

Bridgeport WV 26330 Facsimile: 304-848-0041 Permitting Supervisor

Telephone: 304-848-0076 OFFICIAL SEAL
NSTANROIS WEST VIRGINIA
NOTARY PUBLIC
Pamela Sykes
EQT Production
PO Box 280
Bridgeport, WV 26330
My Commission Expires Ava. 24

Subscribed and sworn before me this 2016

115 Professional Place PO Box 280

My Commission Expires

vroark@egt.com

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.

4710303154

RECEIVED Office of Oil and Gas

Notary Public

APR 1 1 2016

WV Department of Environmental Protection WW-6A (9-13)

API NO. 47- 103 OPERATOR WELL NO. 514365
Well Pad Name: BIG245

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

Not	ice Time Requirem	ent: notice shall be provi	ided no later tha	n the filing date of permit applic	ation.
Dat	e of Notice: 4-11-10	Date Permit Applica	tion Filed: 4-	11-16	
	ice of:				
V	PERMIT FOR AN	y D CERTIFI	CATE OF APP	ROVAL FOR THE	
ب	WELL WORK			AN IMPOUNDMENT OR PIT	
			1 0 22 (1 10	4.5	
Deli	very method pursu	ant to West Virginia C	ode § 22-6A-10	(b)	
	PERSONAL	REGISTERED	✓ METH	OD OF DELIVERY THAT REQU	JIRES A
	SERVICE	MAIL	RECEI	PT OR SIGNATURE CONFIRM	ATION
sedin the soil a desc oper more well impo have prov prop subs reco prov Cod	ment control plan required aurface of the tract on and gas leasehold being ribed in the erosion a attor or lessee, in the election control of the work, if the surface to bundment or pit as detained a water well, spring and water for consumptions of the sheriff requires on the sheriff requires of the sheriff requires on the sheriff requires of the sheriff requires of the sheriff requires	which the well is or is programmed by section seven of a which the well is or is programmed by the proposed sediment control plans when the tract of land on wowners of record of the stract is to be used for the programmed by seribed in section nine of or water supply source looption by humans or domesty is to take place. (c)(1) I don't hold interests in the laired to be maintained pure the contrary, notice to a laires, in part, that the open	this article, and to oposed to be local sed well work, if submitted pursual which the well pro- urface tract or tra- lacement, constrained this article; (5) A cated within one stic animals; and if more than thre- nds, the applicar suant to section of ien holder is not rator shall also pirator	ted; (2) The owners of record of the surface tract is to be used for ront to subsection (c), section seven of oposed to be drilled is located [sic] ets overlying the oil and gas leasehoution, enlargement, alteration, repair, surface owner or water purveyor thousand five hundred feet of the ec (6) The operator of any natural gas te tenants in common or other co-own may serve the documents required eight, article one, chapter eleven-a on otice to a landowner, unless the lie	spersons: (1) The owners of record of surface tract or tracts overlying the bads or other land disturbance as of this article; (3) The coal owner, is known to be underlain by one or old being developed by the proposed air, removal or abandonment of any who is known to the applicant to enter of the well pad which is used to storage field within which the eners of interests described in a upon the person described in the f this code. (2) Notwithstanding any en holder is the landowner. W. Va.
Ø A	application Notice	☑ WSSP Notice ☑ E&	S Plan Notice	☑ Well Plat Notice is hereby	provided to:
	URFACE OWNER(s	:)		COAL OWNER OR LESSEE Name: See Attached	
	ne: See Attached		-	Address:	
				47 1	
Nan			-	COAL OPERATOR Name: Address:	30312
Add	ress:			Address:	54
☑ SI	URFACE OWNER((Road and/or Other Di	sturbance)		COD WELL
. ,				SURFACE OWNER OF WAT	
Add				AND/OR WATER PURVEYOR Name: N/A	
Mon				Name: N/A Address:	REGEIVED
Add	ress:		-	71441 055.	Office of Oil and Gas
				☐ OPERATOR OF ANY NATU	RAL GAS STORAGE FIELD
M SI	URFACE OWNER(s	(Impoundments or Pits	(3)	Name:Address:	APR 1.1 2016
Nan	ne: See Attached TAN	KSITE	-	Address:	200 00 00 00 00 00
Add				*Please attach additional forms i	f necessary V Department of

WW-6A WELL: 514365

Surface Owner:

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

4710303154

REGEIVED Office of Oil and Gas

APR 1 1 2016

WV Department of Environmental Protection

API NO. 47- 103 -	
OPERATOR WELL NO.	514365
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

I, John Williams, 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: State: w Easting: 4.382,939.01 UTM NAD 83 Wetzel Northing: 537,029.52 County: District: Grant Public Road Access: Rt 19/2 Big Run Generally used farm name: ET Bluegrass LLC Quadrangle: Watershed: Tributary of Rockcamp 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 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: Date: □ OPERATOR OF ANY NATURAL GAS STORAGE 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 I Qui? Office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WV Department of Environmental Protect

RECEIVED

WW-6A WELL: 514365

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 4710303154

RECEIVED
Office of Oil and Gas

APR 1 1 2016

WV Department of Environmental Protest 272016

API NO. 47- 103 -	
OPERATOR WELL NO.	514365
Well Pad Name: BIG245	

STATE OF WEST VIRGINIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

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VOLUNTARY STATEMENT OF NO OBJECTION

provisions lis WW-6A and	hereby state that I have real ted above, and that I have received copies of attachments consisting of pages one (1) through the well plat, all for proposed well work on the	a Notice of A	pplication, an App , including	plication for a Well Work Permit on Form	
State:			Easting:	4,382,939.01	
County:	Wetzel	UTM NAD 83 Porthi		537,029.52	
District:	Grant	Public Roa		Rt 19/2	
Quadrangle: Watershed:	Big Run Tributary of Rockcamp Run	Generally (ised farm name:	ET Bluegrass LLC	
issued on thos		escribed in the			
,	the box that applies		FOR EXECUT	ION BY A NATURAL PERSON	
☑ SURFA	CE OWNER		Signature:		
☑ SURFAC	CE OWNER (Road and/or Other Disturban	nce)	Print Name: Date:		
□ SURFAC	CE OWNER (Impoundments/Pits)			ION BY A CORPORATION, ETC.	
COAL C	WNER OR LESSEE		Company: ET	Bluegrass LLC	
□ COAL O	PERATOR		Its: Region	u Damato	
■ WATER	PURVEYOR		Signature:	Milm	
□ OPERAT	TOR OF ANY NATURAL GAS STORAG	SE FIELD	Date:	4.7-16	

Oil and Gas Privacy Notice:

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

WW-6A WELL: 514365

Surface Owner: Other

ET Blue Grass LLC With 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

4710303151

Office of Oil and Gas

APR 11 2016

WV Department of Environmental Protection

API NO. 47- <u>103</u>	
OPERATOR WELL NO.	514365
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 1) hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through , including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows: State: 4,382,939.01 Easting: **UTM NAD 83** County: Wetzel Northing: 537,029.52 District: Grant **Public Road Access:** Rt 19/2 Quadrangle: Big Run ET Bluegrass LLC Generally used farm name: Watershed: Tributary of Rockcamp 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 issued on those materials. *Please check the box that applies FOR EXECUTION BY A NATURAL PERSON 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 ☐ COAL OPERATOR **WATER PURVEYOR** Signature: Date: □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD Office of Oil and Gas

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Environmental

WW-6A WELL: 514365

Surface Owner: TANK SITE

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

4710303154

RECEIVED
Office of Oil and Gas

APR 1 1 2016

WV Department of Environmental Protection 06/24/2016

API NO. 47-103 -	
OPERATOR WELL NO.	514365
Well Pad Name: BIG245	

STATE OF WEST VIRGINIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

VOLUNTARY STATEMENT OF NO OBJEC'

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Oil and Gas Privacy Notice:

RECEIVED

Oil and Gas Privacy Notice:

Office of Oil and Gas Privacy Notice:

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API NO. 47- <u>103</u>	
OPERATOR WELL NO.	514365
Well Pad Name: BIG245	

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

VOLUNTARY STATEMENT OF NO OBJECT

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Oil and Gas Privacy Notice:

RECEIVED

Oil and Gas Privacy Notice:

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Environmental Protection

WW-6A (8-13)

API NO. 47- 103

OPERATOR WELL NO. 514365

Well Pad Name: BIG245

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water 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 Afteration to address the items WW-6A (8-13) API NO. 47-103

OPERATOR WELL NO. 514365

Well Pad Name: BIG245

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

RECEIVED
Office of Oil and Gas

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

WV Department of Environmental Protection 06/24/2016

WW-6A (8-13) API NO. 47- 103

OPERATOR WELL NO. 514365

Well Pad Name: BIG245

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

REGEIVED
Office of Oil and Gas

APR 1 1 2016

WV Department of Environmenta 6724920016

WW-6A (8-13)

API NO. 47- 103 OPERATOR WELL NO. 514365
Well Pad Name: BIG245

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 304-848-0076

Email: vroark@eqt.com

Address: 115 Professional Place PO Box 280

Bridgeport WV 26330

Facsimile: 304-848-0041

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

Subscribed and sworn before me this 3 day of 2016

Notary Public

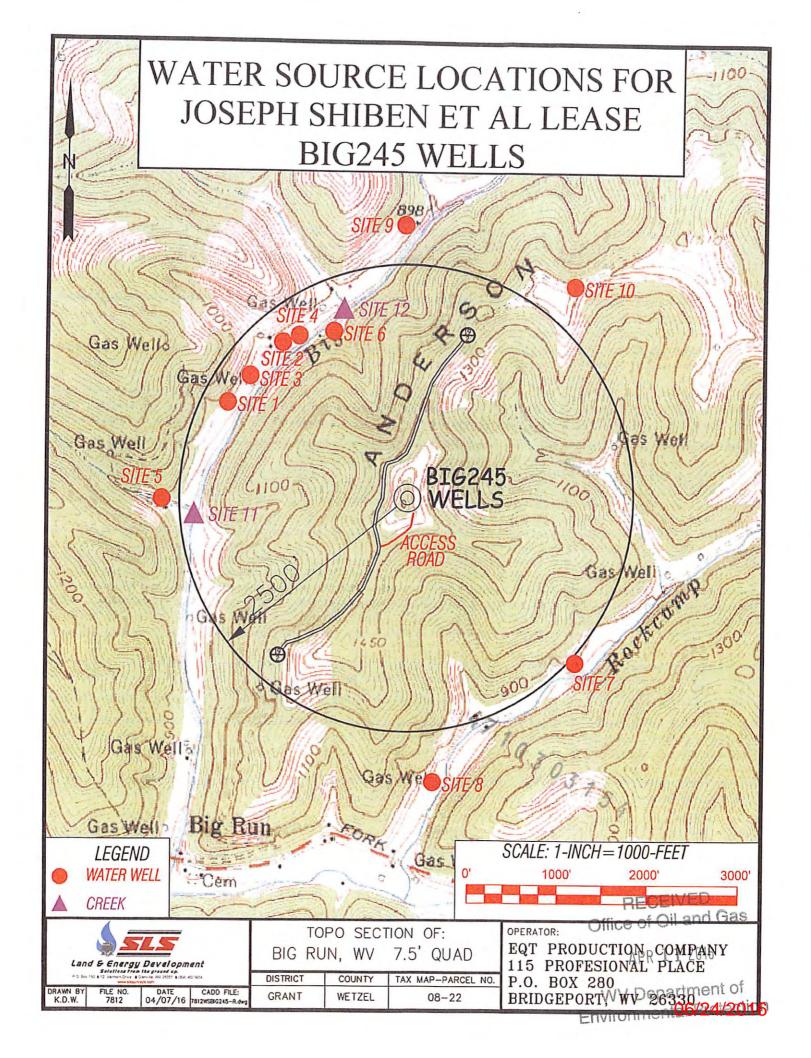
My Commission Expires

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Office of Oil and Gas

APR 1 1 2016

WV Department of Environment Protection



Oil and Gas Privacy Notice:

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

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

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

Notice Time Date of Notic	Requirement: Notice shall be provided at ee: 04/01/2016 Date Peru	least TEN (10) days prior to filing a mit Application Filed: 04/11/2016	permit application.
Delivery met	hod pursuant to West Virginia Code § 2	2-6A-16(b)	
☐ HAND DELIVE	CERTIFIED MAIL RETURN RECEIPT REQ	UESTED	
receipt request drilling a hore of this subsect subsection mand if availab	V. Va. Code § 22-6A-16(b), at least ten day sted or hand delivery, give the surface own izontal well: <i>Provided</i> , That notice given tion as of the date the notice was provided by be waived in writing by the surface own le, facsimile number and electronic mail acreby provided to the SURFACE OW	er notice of its intent to enter upon the pursuant to subsection (a), section to the surface owner: <i>Provided, hower</i> . The notice, if required, shall includers of the operator and the operator	ne surface owner's land for the purpose of n of this article satisfies the requirements rever, That the notice requirements of this ude the name, address, telephone number,
Name: See Atta Address:	ched	Name: See Attached Address:	507
State: County: District: Quadrangle:	wner's land for the purpose of drilling a hor WV Wetzel Grant Big Run	UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:	4,382,939.01 537,029.52 Rt 19/2 ET Bluegrass LLC
Pursuant to V facsimile nun related to hor	Shall Include: West Virginia Code § 22-6A-16(b), this in the shall drilling may be obtained from the street, SE, Charleston, WV 25304 (3)	perator and the operator's authorized Secretary, at the WV Department of	d representative. Additional information f Environmental Protection headquarters,
	reby given by: r: EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place PO Box 280	Address:	115 Professional Place PO Box 280
Bridgeport WV 2	6330	Bridgeport WV 26330	
Telephone:	304-848-0076	Telephone:	304-848-0076
Email:	vroark@eqt.com	Email:	vroark@eqt.com
Facsimile:	304-848-0041	Facsimile:	304-848-0041

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APR 1 1 2016



WW-6A4

Surface Owners

ET Blue Grass LLC J 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 4710-6-154

PEGEIVED
Office of Oil and Gas

APR 1 1 2016

WV Department of Environmer 06/24/2016n

WW-6A-4 WELL: 514365

Surface Owner: TANK SITE

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

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Office of Oil and Gas

APR 1 1 2016

WV Department of Environm 96/24/2016 Con

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

WAIVER

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

State:	WV	UTM NAD 83	Easting:	4,382,939.01
County:	Wetzel	O INI NAD 83	Northing:	537,029.52
District:	Grant	Public Road Acc	cess:	Rt 19/2
Quadrangle:	Big Run	Generally used	arm name: >	ET Bluegrass LLC
Watershed:	Tributary of Rockcamp Run		0	0315
Name: Joh	n W Damato	Signature:	At	gree 4

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 depprivacyofficer@wv.gov.

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Office of Oil and Gas

APR 1 1 2016

WV Department of Environmental Protection/2016

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

Notice Time Date of Noti	Requirement: notice shall be provided no l ce: Date Permit App	ater than the filing dication Filed:	date of permit 4-/1-/6	application.
Delivery me	thod pursuant to West Virginia Code § 22	-6A-16(c)		
■ CERTI	FIED MAIL	HAND		
return receipt the planned of required to be drilling of a damages to the	t requested or hand delivery, give the surface operation. The notice required by this sub e provided by subsection (b), section ten of the horizontal well; and (3) A proposed surface surface affected by oil and gas operations	e owner whose land section shall include his article to a surfa- e use and compens to the extent the da	will be used for de: (1) A copy ace owner whos ation agreemen mages are com	or the drilling of a horizontal well notice of of this code section; (2) The information e land will be used in conjunction with the t containing an offer of compensation for pensable under article six-b of this chapter.
Notice is her	eby provided to the SURFACE OWNER(s)		
(at the address Name: See Atta		ne of notice): Name: 5	See Attached	
Address:				
Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed:	Vest Virginia Code § 22-6A-16(c), notice is	drilling a horizonta UTM NAD 8 Public Road A	I well on the tra Easting: Northing: Access:	well operator has developed a planned ct of land as follows: 4,382,939.01 537,029.52 Rt 19/2 ET Bluegrass LLC
This Notice: Pursuant to V to be provide horizontal we surface affect information the headquarters. gas/pages/de Well Operator Telephone:	ed by W. Va. Code § 22-6A-10(b) to a surell; and (3) A proposed surface use and cometed by oil and gas operations to the extent related to horizontal drilling may be obtain, located at 601 57th Street, SE, Charles	Delivery West Virginia Code § 22-6A-16(c) HAND QUESTED DELIVERY 2-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail did delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of notice required by this subsection shall include: (1) A copy of this code section; (2) The information section (b), section ten of this article to a surface owner whose land will be used in conjunction with the and (3) A proposed surface use and compensation agreement containing an offer of compensation for dby oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Is section shall be given to the surface owner at the address listed in the records of the sheriff at the time the SURFACE OWNER(s) ords of the sheriff at the time of notice): Name: See Altached Address: Name: See Altached Address: UTM NAD 83 LUTM NAD 83 LUTM NAD 83 Ordshing: 4.382.393.01 Northing: 537.029.52 Public Road Access: Rt 19/2 Generally used farm name: ET Bluegrass LLC De Run Met § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required one § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a posed surface use and compensation agreement containing an offer of compensation for damages to the stopparts to the extent the damages are compensable under article six-b of this chapter. Additional thal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-		
Email:	vroark@eqt.com	Facsimile:	304-848-0041	
V-37307				

Oil and Gas Privacy Notice:

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

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 4710303154

API NO. 47-103 -	
OPERATOR WELL NO.	514365
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 hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through , including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows: State: Easting: 4,382,939.01 UTM NAD 83 Wetzel County: Northing: 537,029.52 District: Grant Public Road Access: Rt 19/2 Quadrangle: Blg Run ET Bluegrass LLC Generally used farm name: Watershed: Tributary of Rockcamp 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 issued on those materials. *Please check the box that applies FOR EXECUTION BY A NATURAL PERSON SURFACE OWNER Signature: Print Name: SURFACE OWNER (Road and/or Other Disturbance) ☐ SURFACE OWNER (Impoundments/Pits) FOR EXECUTION BY A CORPORATION, ETC. **I** COAL OWNER OR LESSEE Company: ET Bluegrass LLC □ COAL OPERATOR Its: <u>Regional</u> ■ WATER PURVEYOR Signature: Date: □ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Oil and Gas Privacy Notice:

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WV Department of Environment of Envi

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WW-6A-5 WELL: 514365

Surface Owner: TANK SITE

ET Blue Grass LLC 625 Liberty Ave Waster

Suite 1700

Pittsburgh PA 15222

4710303154

API NO. 47- 103 -	
OPERATOR WELL	NO. 514365
Well Pad Name: BIG24	15

STATE OF WEST VIRGINIA

DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

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Oil and Gas Privacy Notice:

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

RECEIVED

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WV Department of Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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 4710305154

Subject: DOH Permit for the BIG245 Pad Site, Wetzel County

514362 BIG245H1 514364 BIG245H3 514363 BIG245H2 514365 BIG245H4

Dear Mr. Martin,

Earl Ray Tomblin

Governor

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,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

EOT Production Company

CH, OM, D-6, File

Anticipated Frac Additives Chemical Names and CAS numbers

<u>Material</u>	Ingredient	CAS Number
Material Water Sand Friction Reducer Biocide Scale Inhibitor 15% Hydrochloric Acid Corrosion Inhibitor Corrosion Inhibitor Gelling Agent Oxidizing Breaker Buffering Agent	Hydrotreated light petroleum distillate Tributyl tetradecyl phosphonium chloride Ammonium chloride Hydrochloric Acid Propargyl Alcohol Methanol Guar Gum Sodium Persulfate Potassium Carbonate	14808-60-7 64742-47-8 81741-28-8 12125-02-9 7647-01-0 107-19-7 67-56-1 9000-30-0 7775-27-1 584-08-7
	b _i	110:

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Office of Oil and Gas

APR 1 1 2016

WV Department2016 Environmental Protection NEAL UTT MAP 03, PARCEL 14 GRANT DISTRICT, WETZEL COUNTY, WY TOTAL PROPERTY AREA: 51.0 +/- ACRES TOTAL DISTURBANCE AREA: 6.1 */- ACRES

IKEY JOE WILLEY
MAP 09, PARCEL 21
GRANT DISTRICT, WETZEL COUNTY, WY
TOTAL PROPERTY AREA; 76,27 +6 ACRES TOTAL DISTURBANCE AREA: 0.2 +/- ACRES

ET BLUE GRASS LLC.
MAP 08, PARCEL 22
GRANT DISTRICT. WETZEL COUNTY, WY
TOTAL PROPERTY AREA: 135.93 +/- ACRES
TOTAL DISTURBANCE AREA; 30.5 +/- ACRES

OIL AND GAS ROYALTY OWNER

SHIBEN ESTATER, INC.
GRANT DISTRICT, WETZEL COUNTY, WV TOTAL PROPERTY AREA: 140.0 +/- ACRES

SITE LOCATION:

THE FOT BIG 245 ACCESS ROAD ENTRANCE IS LOCATED 4,427-1-NORTHEAST OF THE JUNCTION OF CO.RT. 194 AND CO.RT. 1992. THE WELL PAD IS LOCATED 1.9 MILES +1-NORTHEAST OF THE JUNCTION OF CO.RT. 15 AND CO.RT. 19.

LOCATION COORDINATES

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

EQT BIG 245 WELL PAD CENTER LATITUDE: 39,595312 LONGITI IDE: 80,568705 (NAD 83)

EOT BIG 245 AST PAD CENTER LATITUDE: 39,545495 LONGITUDE: 80,865501 (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 +/- ACRES AST PAD/AST ACCESS ROAD = 3.1 +/- ACRES STOCKPHES = 10 6 + LACRES TOTAL SITE DISTURBANCE AREA = 38.4 +/- ACRES

ENTRANCE PERMIT

EOT 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

MISS UTILITY STATEMENT

MISS UTILITY OF WEST VIRGINIA WAS NOTED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN; TICKET #132590935 IN ADDITION, MISS UTILITY WILL BE CONTACTED PRIOR TO START OF THE

GEOTECHNICAL NOTES

A SUBSURFACE INVESTIGATION HAS BEEN PERFORMED FOR THIS SITE AND A SUBSUM ACL INVESTIGATION HAS BILED IN FIDE ORMED FOR THIS SITE AND COCKED-WAY, HE'D IN HAS SITE AND COCKED-WAY, HE'D IN HAS SITE AND SITE OF HAS SITE AND SITE OF HAS SITE O

ENVIRONMENTAL NOTES

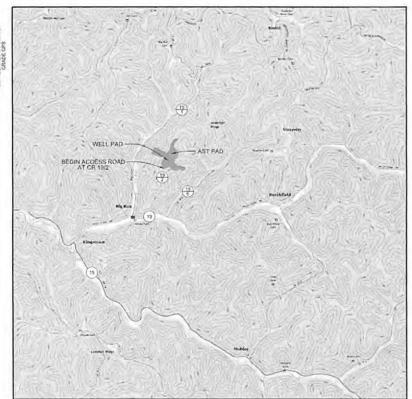
ENVIRONMENT NA INCLES

A WETHAND DE ENEATION WAS PERFORMED ON JULY 7, 2011, MAY 30, 2012, AUGUST 14,
2012, MARCH 11-13, 2015, APRIL 3, 2015, AND MAY 8, 2015, BY POTESTA & ASSOCIATES TO
2012, MARCH 11-13, 2015, APRIL 3, 2015, AND MAY 8, 2015, BY POTESTA & ASSOCIATES TO
2012, MARCH 11-13, 2015, APRIL 3, 2015, AND MAY 12, APRIL 2015, BELL YMITHS IT HE
WEST VIRIGINAL DEPARTMENT OF ENVIRONMENTAL PROTECTION (WODEN). THE MAY, 27
2013 REPORT FOR THE BIO 20 SET WAS PERPARED BY POTESTA A ASSOCIATES, NO.
SUMMARIZES THE RESULTS OF THE FILLD DELINEATION. THE REPORT DOES NO. 1, M AWAY, REPRESENTAL AMERICANDO, DETERMINATION OF THE LANDWARD LIMITS OF WAY, REPRESENT A JURIS STITCHAN DESTRIBUTION OF THE LANDWARD LIMIT OF THE WAY THE AND WATERS AND WATERS AND WATERS AND WATER AND WATER SHOWN THE REGULATION BY THE UNIT OF THE WAY THE PROPERT OF THE WAY THE PROPERTY OF THE WAY THE STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S., INCLUDING WETLAND 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

1. THEER ARE INTERNAT THE TOT STREAMS, LAKES, POINGS, OR RESERVOIRS WITHIN 100 FEET OF THE PROJECT LOD. THERE INVESTED ON WITHIN 150 FEET OF THE LOD. AND A WANGET FROM THE WORLD WITHIN 150 FEET OF THE LOD. AND A WANGET FROM THE WORLD WITHIN 150 FEET OF THE PROJECT OF THE PROJ

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

DISCOVERED DIRING CONSTRUCTION.

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

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

BIG RUN QUADRANGLE WEST VIRGINIA 7.5 MINUTE BERIES

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

APPROVED WVDEP OOG

2/2/1 4/28/2016

LIST OF DRAWINGS

	LIST OF DRAWINGS
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	OVERALL PLAN SHEET INDEX
4-7	WELL PAD LAYOUT
В	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
45.45	CONSTRUCTION OF THE

CONSTRUCTION QUANTITIES

	LEG	END	
EX. INDEX CONTOUR		PROP, INDEX CONTOUR	1550
EX. INTERMEDIATE CONTOUR	1950	PROP, INTERMEDIATE CONTOUR	
EX, BOUNDARY LINE		PROP. CUT LINE	C
EX. EDGE OF ROAD PAVEMENT		PROP, FILL LINE	-
EX. GUARDRAIL	->	PROP. LIMITS OF DISTURBANCE	
EX. FENCELINE	-x	ENVIRONMENTAL ASSESSMENT	
EX. GATE	••	AREA OF DELINEATION	
EX. DVERHEAD UTILITY	- E -	PROP, WELL HEAD	4
EX. OVERHEAD UTILITY RAW			
EX. UTILITY POLE	-0-	PROP, CONTAINMENT BERM	
EX. GUY WIRE		PROP, ROAD CENTERLINE	
EX, TELEPHONE LINE	- T -	PROP, V-DITCH	
EX. GASLINE		WITH CHECK DAMS	
EX. GASLINE R/W		PROP, CULVERT	
EX. WATERLINE	_ w _	PROP, RIP-RAP OUTLET PROTECT	ION ASS
EX. WATER WELL	C	PROP. RIP-RAP INLET PROTECTIO	N ES
EX. GAS WELL	iO.	PROP. COMPOST FILTERSOCK	CF
EX. TREELINE	-	PROP, TREELINE	me
EX. REFERENCE TREE	0	PROP, STONE CONSTRUCTION ENTRANCE	100
EX, DELINEATED STREAM		U MURANAN AND WARE	
EX. DELINEATED WETLAND	K M M M M	X-SECTION GRID INDEX	
		X-SECTION GRID INTERMEDIATE	-
EX. BUILDING		X-SECTION PROPOSED GRADE	
		V SECTION EXISTING COADE	DEALES.

48

OPERATOR

EDT PRODUCTION COMPANY OPERATOR ID: 306686 P.O. BOX 260 P.O. BOX 260 P.O. BOX 260 PHONE: (304) 348-3870

ENGINEER

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

SURVEYOR

SMITH LAND SURVEYING INC. PO BOX 150 226 WEST MAIN STREET GLENVILLE, WV 26351 PHONE: (304) 462-5634

Stante







245 BIG EQT

CALE: AS SHOWN HECKED. CSH EVIEWED RLG

FRE NO.: SL3-7912 SHEET 1 OF 45

