

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, S.E. Charleston, WV 25304 (304) 926-0450 fax: (304) 926-0452 Jim Justice , Governor Austin Caperton , Cabinet Secretary www.dep.wv.gov

Tuesday, December 12, 2017 WELL WORK PERMIT Horizontal 6A / New Drill

EQT PRODUCTION COMPANY 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for BIG464H27

47-103-03214-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

James A. Martin Chief

Operator's Well Number: BIG464H27

Farm Name: COASTAL FOREST RESOURCES COMPANY D/B/A COASTAL

U.S. WELL NUMBER: 47-103-03214-00-00

Horizontal 6A / New Drill

Date Issued: 12/12/2017

Promoting a healthy environment.

API Number: 103-03214

PERMIT CONDITIONS

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

CONDITIONS

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

API Number: 103-03214

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, 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.

4710303214 API NO. 47-103

API NO. 47-103 -03214

OPERATOR WELL NO. BIG464H27
Well Pad Name: BIG464

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

1) Well Operator: EQT Produ	iction Company	306686	Wetzel	Grant	Big Run
		Operator ID	County	District	Quadrangle
2) Operator's Well Number: Bl	G464H27	Well Pa	d Name: BIC	G464	
3) Farm Name/Surface Owner:	Coastal Forest Resources Company Coastal Timberlands Company	Public Ro	ad Access: R	t 250	
4) Elevation, current ground:	1305' Ele	evation, proposed	post-constru	ction: 1246'	
5) Well Type (a) Gas X Other	Oil	Unc	lerground Sto	rage	
	rizontal X	Deep			Dall
6) Existing Pad: Yes or No No					yn y
7) Proposed Target Formation(s Marcellus, 7419', 51', 2620 PS		ipated Thickness	and Expected	Pressure(s):	9-19-17
8) Proposed Total Vertical Dept	h: 7 4 19				
9) Formation at Total Vertical I	Depth: Marcellus				
10) Proposed Total Measured D	epth: 14314				
11) Proposed Horizontal Leg Le	ength: 6392				
12) Approximate Fresh Water S	trata Depths:	109,184,432			
13) Method to Determine Fresh14) Approximate Saltwater Dep		From offset wells			
15) Approximate Coal Seam De	pths: 556,795,89	97,912			
16) Approximate Depth to Poss	ible Void (coal mi	ne, karst, other):	None report	ed	
17) Does Proposed well location directly overlying or adjacent to		ns Yes	N	No X	Office of Oil and Gas SEP 19 2017
(a) If Yes, provide Mine Info:	Name:				WV Department of Environmental Protect
	Depth:				Environments
	Seam:				
	Owner:				

API NO. 47-103 - 03214

OPERATOR WELL NO. BIG464H27
Well Pad Name: BIG464

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	26	New	A-500	85.6	40	40	49 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	1019	1019	952 ft^3 / CTS
Coal							1
Intermediate	9 5/8	New	A-500	40	2841	2841	1108 ft^3 / CTS
Production	5 1/2	New	P-110	20	14314	14314	500' above top producing zone
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40' above top perf or 80° inclination.	(
Liners						above top peri or so inclination.	

DMH 9-14-17

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	26	30	.312	1378	17	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	See Variance	1.19
Production	5 1/2	8 1/2	.361	12640	10112	Class A/H	1.123/2.098
Tubing	2 3/8	NA	.19	7700			
Liners							

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4710303214 WW-6B

(10/14)

API NO. 47- 103

OPERATOR WELL NO. BIG464H27

Well Pad Name: BIG464

19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical to an approximate depth of 5850'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

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, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 400,000 pounds of sand per stage.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 125.43
- 22) Area to be disturbed for well pad only, less access road (acres): 7.42
- 23) Describe centralizer placement for each casing string:
- Surface: Bow spring centralizers One centralizer at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

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

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Conductor: Class A no additives Surface (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement sturries Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Used to speed the setting of cement slurries. Production:

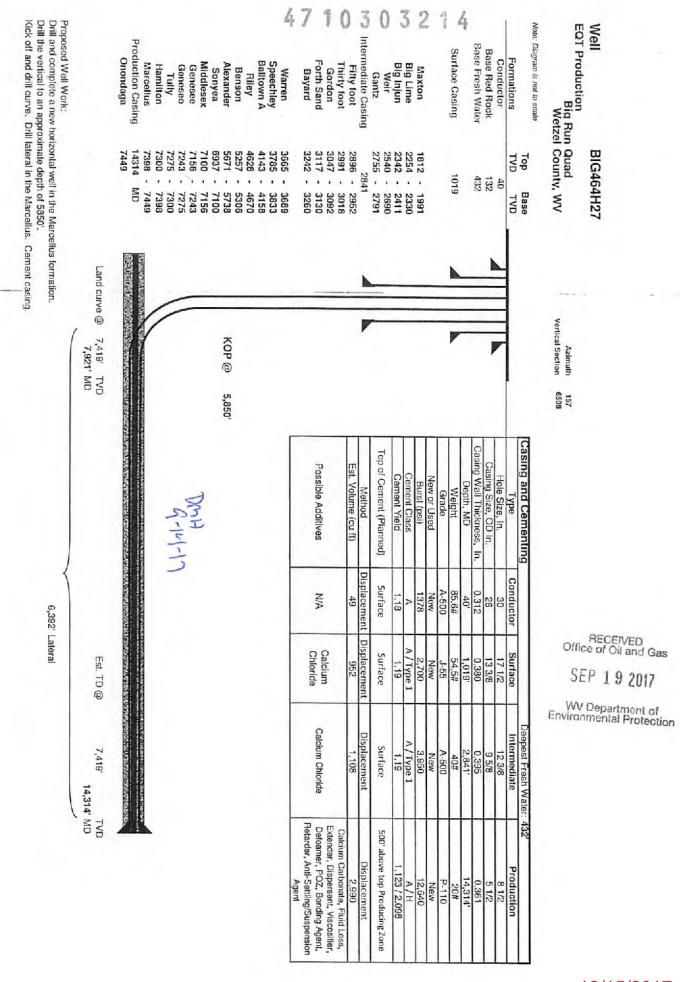
Lead (Class A Cement): 0.2% CD-20 (dispersant makes cement easier to mix). .15% SuperFL-300 (fluid loss/lengthens thickening time) .15% SEC-10 (fluid loss) 50:50 POZ (extender) Tail (Class H Cement): 0.2% Super CR-1 (Retarder). Lengthens thickening time. .3% Super FL-200 (fluid loss) .2% SEC-10 (Fluid loss). .2% SuperFL-350 (fluid loss) Reduces amount of water lost to formation. 60 % Calculm 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.





August 16, 2017

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 (BIG464)

Dear Mr. Smith,

EQT is requesting the 13-3/8" surface casing be set at 1019' KB, 100' below the workable Pittsburgh Coal seam. We will set the 9-5/8" intermediate string at 2841' KB, 50' below the base of the Gantz formation.

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

Sincerely,

Vicki Roark

Permitting Supervisor

Enc.

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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)

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

James Peterson

Environmental Resources Specialist / Permitting

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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

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

)	ORDER NO.	2014 - 17
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))))	ORDER NO.)))))

REPORT OF THE OFFICE

Nabors Completion & Production Services Co. requests approval of a different cement blend for use in cementing surface and coal protection casing of oil and gas wells.

FINDINGS OF FACT

- 1.) Nabors Completion & Production Services Co. proposes the following cement blend:
 - 2% Calcium Chloride (Accelerator)
 - 0.25 % Super Flake (Lost Circulation)
 - 94% Type "1" Cement
 - 5.20 % Water
- Laboratory testing results indicate that the blend listed in Fact No.1 will achieve a 500
 psi compressive strength within 6 hours and a 2,435 psi compressive strength within 24
 hours.

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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

EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: BIG464

Wetzel County, WV

8/21/17

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Page **1** of **2** 12/15/2017

Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Wetzel County, WV prior to hydraulic fracturing at the following EQT wells on BIG464 pad: BIG464H13, BIG464H14, BIG464H26, BIG464H27, BIG464H28

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation. A report is required to be submitted along with a well work permit application.

The plan is being implemented as an additional safety measure to be utilized in conjunction with existing best management practices and emergency action plans for the site. These additional measures include coordination with well operators of the timing and location of the hydraulic fracturing, establishment of measures well operators should implement, and assurance that the OOG is notified of the timeline, as well as any issues that may arise during fracturing.

1. Communications with Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known wells and well operators within 500 feet of this pad and the lateral sections that are known or could reasonably be expected to be within range of the fracture propagation. A map showing these wells along with a list of the wells and operators is included in **Attachment A**.

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

EQT will recommend to these operators at a minimum to:

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

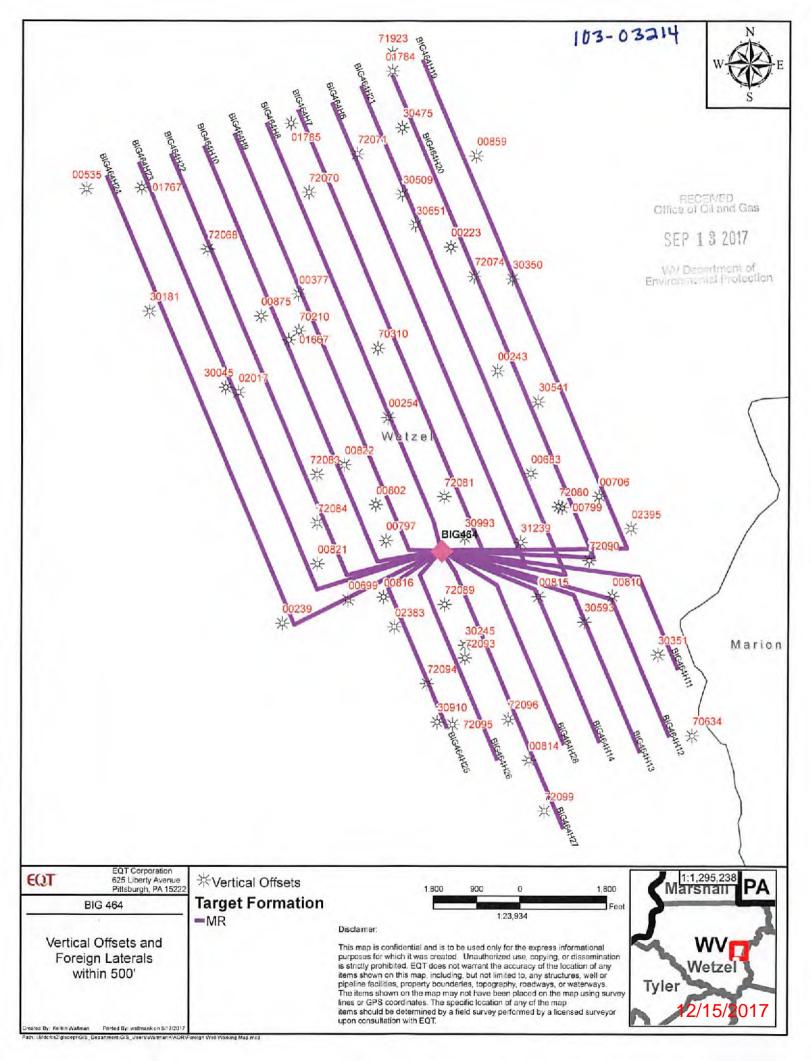
2. Reporting

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

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API Number A	banonded Da	Completion D Current Operator	Elevation Elevation	Ref Final Statu	lat	Long	Permit Date	SPUD Date TD Formation	Total Depth Permit
47103002230000	8/19/2015	4/8/1939 EQT PRODUCTION COMPANY	1148 GR	ABD-GW		-80.515215		3/9/1939 BAYARD	3230 00223
47103300450000	2/5/1931	HOPE NATURAL GAS	GR	ABD-GW		-80.531847	-,,	BIG INJUN /SD/	2146 30045
47103301810000	12/16/1935	9/29/1923 PITTSBURGH & W VA GAS	906 GR	ABD-GW			5/29/1923	6/13/1923 HAMPSHIRE	2936 30181
47103302450000	8/12/1937	3/24/1903 CARNEGIE NATURAL GAS CORPORATION	1040 GR	ABD-GW	39.561853			7/10/1902 HAMPSHIRE	2908 30245
47103303500000	1/17/1941	HOPE NATURAL GAS	1427 GR	ABD-GW	39.582608		0,23,2302	POCONO	2573 30350
47103303510000		12/16/1910 CARNEGIE NATURAL GAS CORPORATION	1620 GR	ABD-GW	39.561272		10/11/1910	10/26/1910 HURON LOWER	3355 30351
47103304750000	2/8/1944	9/22/1916 PITTSBURGH & W VA GAS	1120 GR	ABD-GW		-80.518768		5/18/1916 HURON LOWER	3072 30475
47103305090000	11/22/1945	6/20/1928 DUNN-MAR OIL & GAS COMPANY	1182 GR	ABD-GW		-80.518768		2/27/1928 HAMPSHIRE	3102 30509
47103305930001	10/14/1947	6/16/1922 UNKNOWN	1527 GR	ABD-GW	39.563159	-80.505433		5/16/1922 HAMPSHIRE	3438 30593
47103306510000	6/15/1948	8/14/1919 PITTSBURGH & W VA GAS	1401 GR	ABD-GW	39.585667			5/19/1919 HAMPSHIRE	3297 30651
47103309100000	4/9/1951	9/13/1916 CARNEGIE NATURAL GAS CORPORATION	1250 GR	ABD-GW		-80.516298		8/23/1916 SALT SD 3	1848 30910
47103309930000	9/21/1953	7/19/1911 CARNEGIE NATURAL GAS CORPORATION	1131 GR	ABD-GW		-80.514238		5/18/1911 FIFTH SAND	3004 30993
47103002430000	0, 11, 1100	11/1/1940 HOPE NATURAL GAS	1272 GR	D&A	39.577383			10/2/1940 CONEMAUGH /SERIES/	
47103003770000		7/1/1952 ANJA RESOURCES	GR	D&A	39.581796	-80.526452		6/15/1952 BAYARD	3197 00377
47103017840001		6/1/2000 DAC ENERGY LLC	937 GR	D&AW		-80.519486			
47103008220000		8/30/1929 EPC	337 GK	GAS	-80.5231	39.5721	3/12/2000	3/22/2000 DEVONIAN	3307 01784
47103002390001		9/19/1940 EQT PRODUCTION COMPANY	1410 GR	GAS		-80.527726	8/4/1940	9/10/1040 HANADCHIDE	-1954 00822
47103002540000		9/1/1941 EQT PRODUCTION COMPANY	1464 GR	GAS	39.57477			8/19/1940 HAMPSHIRE 8/2/1941 FIFTH SAND	3426 00239
47103006990001		8/9/1922 EQT PRODUCTION COMPANY	0 GR	GAS	39.564465	-80.522855			3449 00254
47103007060000		8/7/1917 ROSS & WHARTON	979 GR	GAS		-80.504309	,,	5/17/1917 HAMPSHIRE	3154 00699
47103007990000		1/1/1981 EQT PRODUCTION COMPANY	1090 GR	GAS	39.569634			11/24/1980 FOURTH SAND	3086 00706
47103017670000		11/12/1998 ALLIANCE PETROLEUM CORPORATION	868 GR	GAS				10/26/1998 DEVONIAN /SD/	3086 00799
47103017850000		8/13/1999 ALLIANCE PETROLEUM CORPORATION	1186 GR	GAS	39.591481		6/29/1999	8/3/1999 DEVONIAN /SD/	3264 01767
47103023830000		9/30/2008 ALLIANCE PETROLEUM CORPORATION	1453 GR	GAS		-80.519436		8/25/2008 FOURTH SAND	3554 01785
47103023950000		11/25/2008 ALLIANCE PETROLEUM CORPORATION	1064 GR	GAS	39.568424		8/27/2008	10/8/2008 BAYARD	3403 02383
47103020170000		4/29/2004 DYNATEC ENERGY INCORPORATED	948 GR	GAS-CB	39.576229			12/10/2003 PITTSBURGH COAL	3262 02395
47103706340000		7-10-10-10-10-10-10-10-10-10-10-10-10-10-	540 011	LOC	-80.4975	39.5567	11/30/2003	12/10/2003 PITTSBORGH COAL	711 02017
47103006830000	9/12/1986	CONSOLIDATED GAS SUPPLY CORPORATION	GR	PSEUDO		-80.509367			70634 00683
47103007970000	-,,	EQT PRODUCTION COMPANY	GR	PSEUDO		-80.520045			00797
47103008020000		EQUITABLE PRODUCTION COMPANY	GR	PSEUDO		-80.520794			00802
47103008100000		EQT PRODUCTION COMPANY	GR	PSEUDO		-80.503372			00810
47103008140000		EQUITABLE PRODUCTION COMPANY	GR	PSEUDO		-80.509554			00814
47103008150000		EQT PRODUCTION COMPANY	GR	PSEUDO		-80.508805			00814
47103008160000		EQT PRODUCTION COMPANY	GR	PSEUDO		-80.520232			00815
47103008210000	11/7/2007	CARNEGIE NATURAL GAS CORPORATION	GR	PSEUDO		-80.525103			00821
47103008590000	5/11/1997	PHILADELPHIA OIL	GR	PSEUDO		-80.513301			00859
47103008750000		EQT PRODUCTION COMPANY	GR	PSEUDO		-80.529225			00875
47103016670000		ANJA RESOURCES	1066 GR	PSEUDO		-80.527179			01667
47103702100000		HOPE NATURAL GAS	GR	PSEUDO		-80.526415			70210
47103005350000		1/2/1963 EPC	1008	STORAGE	-80.5421	39.5878			00535
47103305410000	1/1/1946	UNKNOWN	GR	UNKWN		-80.508805			30541
47103312390000	1/5/1973	3/23/1911 CONSOLIDATED GAS SUPPLY CORPORATION	GR	UNKWN	39.567658	-80.510116	2/6/1911	2/21/1911	31239
47103703100000		7/6/1900 HOPE NATURAL GAS	GR	UNKWN		-80.520607	5/22/1900	6/6/1900	70310
47103719230000		UNKNOWN	GR	UNKWN		-80.519483	-,,	0, 0, 2300	71923
47103720680000		UNKNOWN	GR	UNKWN		-80.533159			72068
47103720700000		HOPE NATURAL GAS	GR	UNKWN		-80.525665			72070
47103720710000		UNKNOWN	GR	UNKWN		-80.522106			72071
47103720740000		UNKNOWN	GR	UNKWN		-80.513488		RECEIVED	72074
47103720800000		CARNEGIE NATURAL GAS CORPORATION	GR	UNKWN		-80.507306		Office of Oil and Gas	72080
47103720810000		HOPE NATURAL GAS	GR	UNKWN		-80.515736		da	72081
47103720830000		UNKNOWN	GR	UNKWN		-80.525103		CED 1 9 2047	72083
47103720840000		HOPE NATURAL GAS	GR	UNKWN	39.568819	-80.525103		SEP 1 3 2017	72084

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47103720890000	UNKNOWN	GR	UNKWN	39.564175	-80.515736	72089
47103720900000	HOPE NATURAL GAS	GR	UNKWN	39.566642	-80.505058	72090
47103720930000	UNKNOWN	GR	UNKWN	39.561127	-80.514238	72093
47103720940000	HOPE NATURAL GAS	GR	UNKWN	39.559676	-80.517048	72094
47103720950000	UNKNOWN	GR	UNKWN	39.557353	-80.515174	72095
47103720960000	UNKNOWN	GR	UNKWN	39.557644	-80.511053	72096
47103720990000	UNKNOWN	GR	UNKWN	39.552419	-80.50843	72099

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WellID	WellStatus	date	Operator	Longitude	Latitude	TargetFm	DatumElev [*]	TotalDepth	Permit_1
4710300535	STORAGE	1/2/1963	EPC	-80.5421	39.5878		1008	-2049	535
4710300822	GAS	8/30/1929	EPC	-80.5231	39.5721		0	-1954	822
4710370634	LOC			-80.4975	39.5567		0	-99999	70634

WW-9 (4/16)

API Number 47 - 103	•
Operator's Well No.	BIG484H27

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

	TINGS DISPOSAL & RECLAMATION PLAN	
Operator Name EQT Production Company	OP Code 306686	
Watershed (HUC 10) Wiley Fork	Quadrangle Big Run	
Will a pit be used? Yes No No	ater to complete the proposed well work? Yes	No _
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 Pi	t Wastes:	
Land Application		
	(UIC Permit Number 0014, 8462, 4037)
Reuse (at API Number	Various New York (Various Various Var	
Other (Explain	ny form w w-9 for disposal location)	Dall
Will closed loop system be used? If so, describe:	Yes, The closed loop system will remove drill cuttings from the drilling fluid. The dri prepared for transportation to an off-site disposal facility.	ill cuttings are then 9-14-11
Drilling medium anticipated for this well (vertical a	and horizontal)? Air, freshwater, oil based, etc. See Attach	ned
-If oil based, what type? Synthetic, petrol-		
Additives to be used in drilling medium? See Attac		Office of Oil and Gas
Drill cuttings disposal method? Leave in pit, landfi		SEP 1 9 2017
	Transfer and trans	
	lium will be used? (cement, lime, sawdust) N/A	WV Department of Environmental Protection
-Landfill or offsite name/permit number?	See Attached List	
Permittee shall provide written notice to the Office West Virginia solid waste facility. The notice shall where it was properly disposed.	of Oil and Gas of any load of drill cuttings or associated w be provided within 24 hours of rejection and the permittee	aste rejected at any shall also disclose
on August 1, 2005, by the Office of Oil and Gas of provisions of the permit are enforceable by law. Value or regulation can lead to enforcement action. I certify under penalty of law that I have application form and all attachments thereto and	I I R	n. I understand that the and/or other applicable ation submitted on this
Company Official Title Permitting Supervisor	1/	
company smount the	V	
Subscribed and sworn before me this 8th Musty S. Christice My commission expires 2/20	Notes Public NOTA Notes Public NOTA Notes Public NOTA Notes Public NOTA Notes Public Notes Publi	CIAL SEAL WESTVIRGINIA ARYPUBLIC S Christie iercliff Rd L, WV 25330 Lines February 2012015

WW-9 Attachment

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

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

Additives to be used in drilling medium?

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



4710303214

Operator's Well No. BIG464H27

Lime 3		25.43 Prevegetation pF	I
	Tons/acre or to corre	ct to pH 6.5	
Fertilizer type Gr	anular 10-20-20		
Fertilizer amount_	1/3	lbs/acre	
Mulch 2		_Tons/acre	
		Seed Mixtures	
Т	emporary	Perma	nent
Seed Type KY-31	lbs/acre 40	Seed Type Orchard Grass	lbs/acre 15
Alsike Clover	5	Alsike Clover	5
Maps(s) of road, location, p provided). If water from the acreage, of the land applica-	pit will be land applied, inc tion area.	d application (unless engineered plans include lude dimensions (L x W x D) of the pit, and	ling this info have beer
Attach: Maps(s) of road, location, p provided). If water from the acreage, of the land applicate Photocopied section of invo	it and proposed area for land pit will be land applied, indition area. Ived 7.5' topographic sheet.	d application (unless engineered plans included limensions (L \times W \times D) of the pit, and	ling this info have beer
Attach: Maps(s) of road, location, p provided). If water from the acreage, of the land applicate Photocopied section of invol	it and proposed area for land pit will be land applied, indition area. Ived 7.5' topographic sheet.	d application (unless engineered plans include dimensions (L x W x D) of the pit, and	ling this info have beer dimensions (L x W), a
Attach: Maps(s) of road, location, p provided). If water from the acreage, of the land applicate Photocopied section of invol	it and proposed area for land pit will be land applied, indition area. Ived 7.5' topographic sheet.	d application (unless engineered plans include dimensions (L x W x D) of the pit, and	ling this info have been dimensions (L x W), a
Attach: Maps(s) of road, location, p provided). If water from the acreage, of the land applicate Photocopied section of invol	it and proposed area for land pit will be land applied, indition area. Ived 7.5' topographic sheet.	d application (unless engineered plans include dimensions (L x W x D) of the pit, and	ling this info have beer dimensions (L x W), a

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

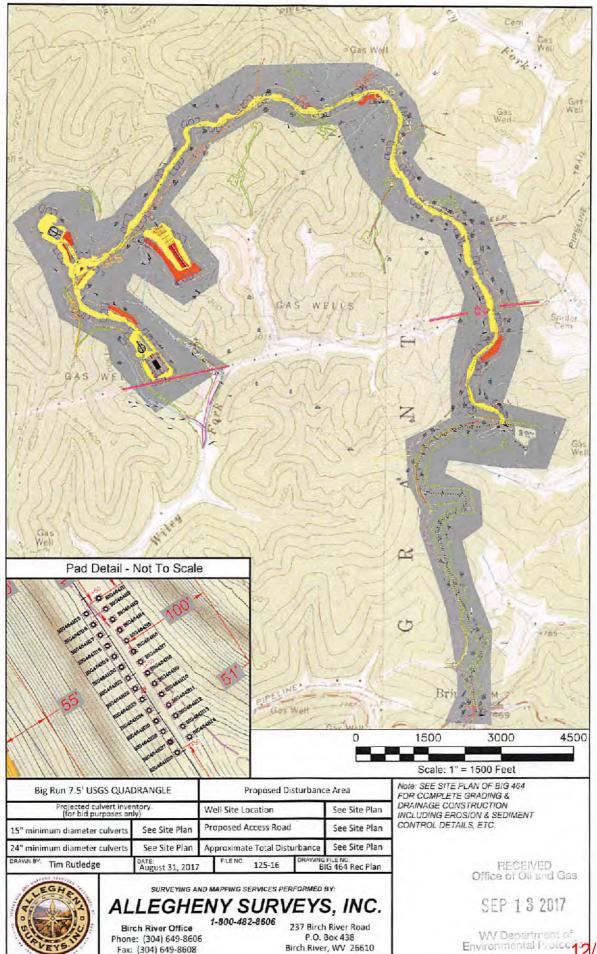
KING EXCAVATING CO.

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

> RECEIVED Office of Oil and Gas

SEP 1 3 2017

WV Department of Environmental Protection



WV Department of Environmental Protect 12/15/2017



Site Specific Safety Plan

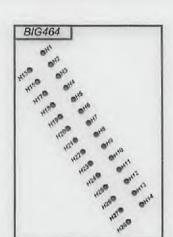
EQT BIG 464 Pad Mannington Wetzel County, WV

	For Wells:		Office of Oil and Gas SEP 1 9 2017
			WV Department of Environmental Protection
Tust Leave to the second of	Date Prepared:	December 21, 2016	
Title 9-8-17		WV Oil and Gas Inspector Oil 16cc Inspector Title G14-17	
Date		Date	

BIG464H27 **BIG464 EQT Production Company**

Tract I.D.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	20	1	Wetzel	Grant	Coastal Forest Resources Co.	542.50
2	15	27	Wetzel	Grant	William J. Barr	10.00
3	14	6	Wetzel	Grant	Coastal Lumber Co.	332.90
4	14	27	Wetzel	Grant	The E. Lorna Howard Trust, LLC, et al.	22.00
5	14	34	Wetzel	Grant	The E. Lorna Howard Trust, LLC, et al.	25.25
6	15	15	Wetzel	Grant	Donald J. D'Lusky	25.00
7	15	18	Wetzel	Grant	Donald J. D'Lusky	39.50
8	15	29	Wetzel	Grant	Terry W. & Carolyn P. Phillips	40.00
9	15	34	Wetzel	Grant	John C. & Donald J. D'Lusky	42.00
10	15	35	Wetzel	Grant	John C. & Donald J. D'Lusky	17.60
11	43	11	Marion	Mannington	Robert & Maxine Tonkery	85.00
12	43	11.1	Marion	Mannington	David A. & Diane E. Floyd	30.00
13	20	3	Wetzel	Grant	Linda Corwin, et al.	99.82
14	20	2	Wetzel	Grant	Scott A. Shannon, et al.	41.40
15	20	2.1	Wetzel	Grant	Larry & Mary Shimp	63.00
16	19	19.3	Wetzel	Grant	Richard M. & Mary G. Underwood	99.82
17	19	14	Wetzel	Grant	Mabel F. Barr	1.00
18	19	12	Wetzel	Grant	Mabel F. Barr	1.10
19	19	13	Wetzel	Grant	Mabel F. Barr	2.00
20	14	45	Wetzel	Grant	Coastal Forest Resources Co.	11.06
21	14	44	Wetzel	Grant	Mabel F. Barr	11.00
22	14	43	Wetzel	Grant	Mabel F. Barr	11.01
23	14	42	Wetzel	Grant	Donald J. D'Lusky	111.00
24	14	33	Wetzel	Grant	Atlee & Hilda Conaway	108.00
25	14	20	Wetzel	Grant	The E. Lorna Howard Trust, LLC, et al.	126.50
26	none	none	Wetzel	Grant	Unknown	unknow
27	20	7.1	Wetzel	Grant	John H. Frye Jr. & Denise Frye	3,91
28	20	7	Wetzel	Grant	Bernard D. Holbert, et al.	8.00

Notes:
BIG464H27 coordinates are
NAD 27 N: 390,404.77 E: 1,713,384.86
NAD 27 Lat: 39.567436 Long: -80.516699
NAD 83 UTM N: 4,379,889,60 E: 541,529,87
BIG464H27 Landing Point coordinates are
NAD 27 N: 390,444.86 E: 1,713,750.84
NAD 27 Lat: 39.567558 Long: -80.515403
NAD 83 UTM N: 4,379,883,68 E: 541,641.17
BIG464H27 Rottom Hole coordinates are NAD 83 UTM N: 4,379,883,88 E: 541,641.17
BIG464H27 Bottom Hole coordinates are
NAD 27 N: 384,560.80 E: 1,716,248,30
NAD 27 Lat: 39,551481 Long: -80,506310
NAD 83 UTM N: 4,378,103,74 E: 542,431.91
West Virginia Coordinate system of 1927 (North Zone)
based upon Differential GPS Measurements.
Plat orientation, corner and well ties are based upon
the grid north meridian.
Well location references are based upon the grid north
meridian.
UTM coordinates are NAD83, Zone 17, Meters.



₩802 1239A 816 ***** 815% 2383*

Owner Ridgetop Royalties LLC, et al Ridgetop Royalties LLC, et al Nancy Hobbs, et al 1010666 703715

> Well References AZ61°54'35" 250.95 @ 5/8" Rebar 95/8" Rebar 1" = 500"



Proposed Gas Well Located Corner, as no

Surface Tract Lines Reference Line Lease Boundary

Creek or Drain

I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

P.S. 2092

Z



FILE NO: 125-16 SCALE:

DRAWING NO: 125-16 BIG464H27 1" = 2000'

MINIMUM DEGREE OF ACCURACY: 1:2500

PROVEN SOURCE OF ELEVATION:

Bridgeport, WV 26330

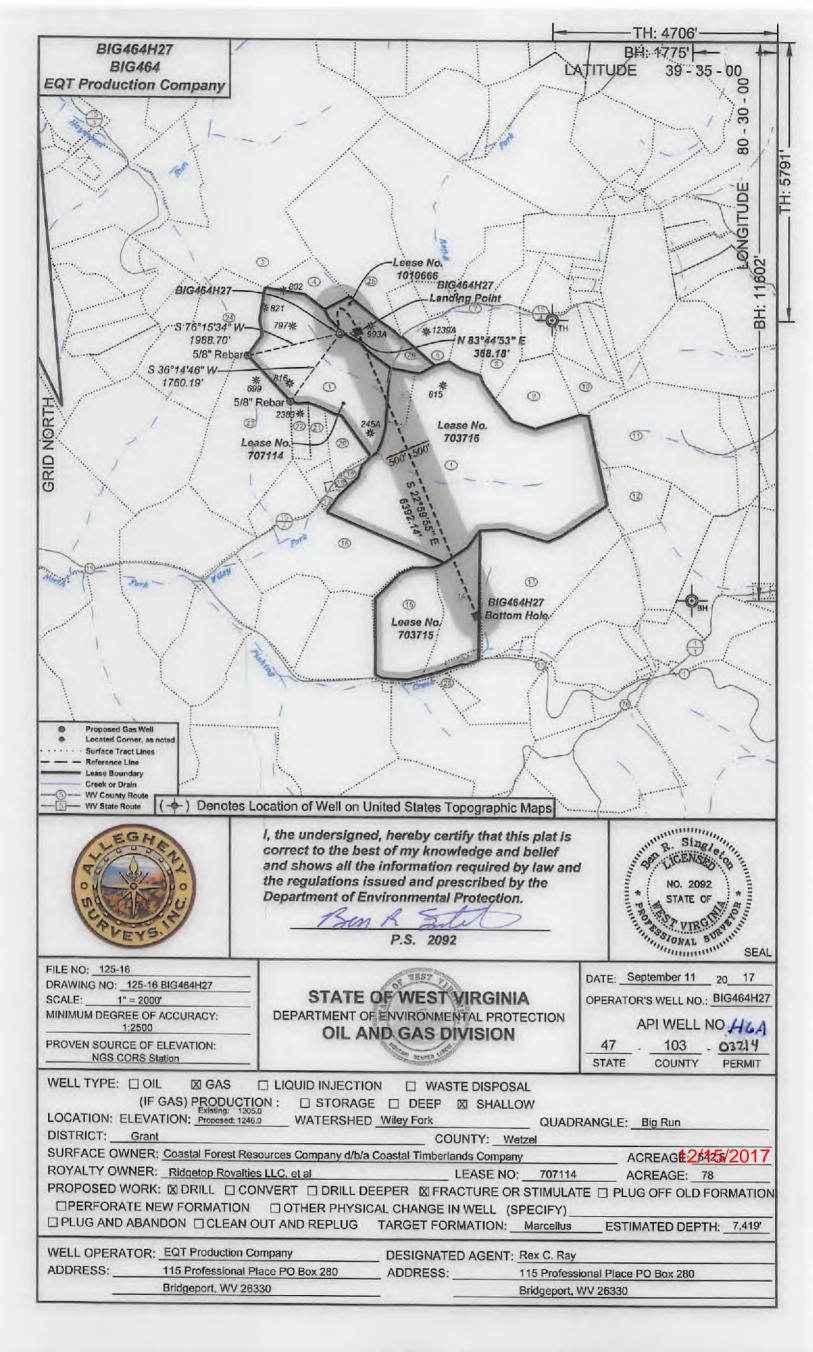
OF WEST STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OIL AND GAS DIVISION

DATE:	September	11	20_	17
OPERA	TOR'S WELL	NO.:	BIG	164H27

API WELL NO HEA 47 103 - 03214

Bridgeport, WV 26330

NGS CORS Station	The state of the s	STATE COUNTY PERMIT
(IF GAS) PRODUCTION	□ LIQUID INJECTION □ WASTE DISPOSAL ON: □ STORAGE □ DEEP ☒ SHALLOW	
DISTRICT	WATERSHED Wiley Fork	
DISTRICT: Grant	COUNTY: Wetzel	
SURFACE OWNER: Coastal Forest Res	sources Company d/b/a Coastal Timberlands Company	ACREAGE: 24425/2017
ROYALTY OWNER: Ridgetop Royaltie	s LLC, et al LEASE NO:	707114 ACREAGE: 78
PROPOSED WORK: ☑ DRILL ☐ CO	INVERT DRILL DEEPER FRACTURE OR ST	TIMULATE PLUG OFF OLD FORMATION
LIPERFORATE NEW FORMATION	OTHER PHYSICAL CHANGE IN WELL (SPE	CIFY)
☐ PLUG AND ABANDON ☐ CLEAN C	OUT AND REPLUG TARGET FORMATION: ME	arcellus ESTIMATED DEPTH: 7,419'
WELL OPERATOR: EQT Production Co	ompany DESIGNATED AGENT: Rex	x C. Ray
ADDRESS: 115 Professional P		Professional Place PO Box 280



WW-6A1 (5/13)

Operator's V	Vell No.	BIG464H27
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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

Office of Oil and Gas

SEP 1 3 2017

WV Department of Environmental Protection

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 J Roark

Its:

Regional Land Supervisor

Page 1 of

WW-6A1 attachment

Operator's Well No.

BIG464H27

Lease No.	Grantor, Lessor, etc.	Grantee, Lessèe, etc.	Royalty	Book/Page
707114	Ridgetop Royalties LLC, et al. (current royalty owner)		**	
	W.S. Furbee, et ux	Carnegie Natural Gas Company		DB 2A/182
	Carnegie Natural Gas Company	Carnegie Production Company		DB 78A/513
	Carnegie Production Company	Equitable Production - Eastern States, Inc).	see attached merger
	Equitable Production - Eastern States, Inc.	Equitable Production Company		see attached merger
	Equitable Production Company	EQT Production Company		CB 281/347
	Ridgetop Royalties LLC, et al. (current royalty owner)		**	
<u>703716</u>	Sara J. Furbee	C.D. Greenlee		DB 63/89
	C.D. Greenlee	Carnegie Natural Gas Company		See attached assignment
	Carnegie Natural Gas Company	Carnegie Production Company		DB 78A/513
	Carnegie Production Company	Equitable Production - Eastern States, Inc		see attached merger
	Equitable Production - Eastern States, Inc.	Equitable Production Company		see attached merger
	Equitable Production Company	EQT Production Company		CB 281/347
<u>1010666</u>	Ridgetop Royalties LLC, et al.	EQT Production Company	**	DB 166A/638
<u>703715</u>	Nancy Hobbs, et al.	EQT Production Company		DB 176A/176

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

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Office of Oil and Gas

SEP 13 2017

VAY Department of Environmental Frotection

P. 18

DEC 2 2 2000 Micrafilm Number Filed with the Department of State on 271973 Enity Number ARTICLES OF MERGER-DOMESTIC BUSINESS CORPORATION DICE:151928 (Rey 90) In compliance with the requirements of 15 Pa.C.S. § 1926 yearing to articles of merger or consolidation), the undersigned business corporations; depling to effect a merger, hereby state that: 1. The name of the corporation surviving the merger is: EQUITABLE PRODUCTION - EASTERN STATES, INC. 2. (Check and complete one of the following): The surviving corporation is a damestic business corporation and the (a) address of its current registered affice in this Commonwealth or (b) name of its commercial registered office provider and the county of venue is the Department is hereby authorized to correct the following information to conform to the records of the Department): Number and Street State City Jin. County (b) c/o: Name of Commercial Registered Office Provider County for a corporation represented by a commercial registered office provider, the county in (b) shot be deemed the downly in which the corporation is located for versue and official publication purposes: Fine surviving corporation is a qualified foreign business corporation incorporated under the laws of and the (a) address of its current registered office in this Commonwealth or (b) name of its commercial registered office provider and the county of yeaue is (the Department is hereby authorized to correct the following information to conform to the records of the Department): County Number and Street State Zio City ALLEGHEN (b) c/o; CT Corporation System Name of Commercial Registered Office Provider For a comprofion represented by a commercial registered office provider, the county in (b) shall be deemed the county in which the corporation is located for varies and afficial publication purposes. The surviving corporation is a nonqualified foreign business corporation incorporated under the laws of and the address of its principal office under the laws of such domiciliary brisciation is: Number and Street City State Zio 3. The name and the address of the registered office in this Commonwealth or name of its commercial registered office. provider and the county of venue of each other domestic business corporation and qualified foreign business corporation

Address of Registered Office of Hame of Commercial Registered Office Provides

One Oxford Centre, Suite 3300, Pirtsburgh, PA 15219-6401

PA. DEPT OF STATE

V/V Dames I Environmental ('romenta)

SEP 1 3 2017

which is a party to the plan of marger are as follows:

County

Allegheny

PACES . ICHIANG C T System Dahne

Name of Corporation

Carnegie Production Company

DEC 29 2888 2:21 PM FR EQT 412 553 7781 TO 92915212 P. 03 USC8:15-1926 (Rev 90)-2 4. (Check, and it appropriate complete, one of the following): __The plan of merger shall be effective upon filing these Articles of Merger in the Department of State, * The plan of merger shot be effective on: December 31, 2000 of 12:15 a.m Hour 5. The monner in which the plan of merger was adopted by each domestic corporation is as follows: Name of Corporation Monnes of Adeption Carnegie Production Company Adopted by action of the board of directors of the corporation pursuant to 15 PA. C. S. Section 1924(b)(2) (Strike out this paragraph is no foreign corporation is a party to the merger). The pion was authorized, adopted or approved, as the case muly be, by the foreign business corporation (or each of the foreign business corporations) party to the plan in accordance with the laws of the jurisdiction in which it is incorporated. (Chock, and it appropriate complete, one of the following): The plan of merger is set forth in full in Editor. A attached hereta and made a part hereof. Pursuant to 15 Pa.C.S. § 1901 (relating to omission of certain provisions from filed plans) the provisions, if any, at the plan of merger that amend or constitute the operative Afficies of incorporation of the surviving corporation as in effect subsequent to the effective date of the plan are set forth in full in Exhibit A affeched hereto and made a part hereaf. The full text of the plan of merger is an file at the principal place of business of the surviving corporation, the address of which is: Number and Street City . State Zip County IN TESTIMONY WHEREOF, the undersigned corporation or each undersigned corporation has coursed these Articles of Merger to be signed by a duly outhorized officer thereof this 29th day of December . 2000 . Equitable Production - Rastem States, Inc. (Hame of Corporation) VP and Corporate Secretary Carnegie Production Company (Name of Corporation) VP TITLE .

SEP 1 3 2017

Office or Oil and Gua

PASS-10(49) CT Syeen Oalbo

p. 17

AGREEMENT AND PLAN OF MERGER BETWEEN EQUITABLE PRODUCTION – EASTERN STATES, INC. AND CARNEGIE PRODUCTION COMPANY

AGREEMENT AND PLAN OF MERGER, dated this 29th day of December, 2000, pursuant to Section 252 of the General Corporation Law of the State of Delaware and Section 1926 of the Pennsylvania Business Corporation Law of 1988 between Equitable Production – Eastern States, Inc., a Delaware corporation and Carnegie Production Company, a Pennsylvania corporation.

WHEREAS, the constituent corporations desire to merge into a single corporation.

NOW, THEREFORE, the corporations, parties to this Agreement, in consideration of the mutual covenants, agreements and provisions hereinafter contained and intending to be legally bound, do hereby prescribe the terms and conditions of said merger and mode of carrying the same into effect as follows:

FIRST: Effective December 31, 2000, Carnegie Production Company hereby merges into Equitable Production - Eastern States, Inc. and Equitable Production - Eastern States, Inc. shall be the surviving corporation.

SECOND: The Certificate of Incorporation of Equitable Production – Eastern States, Inc. as heretofore amended and is in effect on the date of the merger provided in this Agreement, shall continue in full force and effect as the Certificate of Incorporation of the corporation surviving this merger.

THIRD: The manner of converting the outstanding shares of the common stock of each of the constituent corporations into shares or other securities of the surviving corporation shall be as follows: Each share of common stock of the surviving corporation, Equitable Production - Eastern States, Inc., which is issued and outstanding on the effective date of this Agreement, shall remain issued and outstanding. Each share of common stock of the marged corporation, Carnegie Production Company, shall be cancelled.

FOURTH: The terms and conditions of the merger are as follows:

(a) The by-laws of the surviving corporation as they shall exist on the effective date of this Agreement shall be and remain the by-laws of the surviving corporation until the same shall be altered, amended and repealed as therein provided.

SEP 1 3 2017

Environmental reference

200098 - 311

- (b) The directors and officers of the surviving corporation shall continue in office until the next annual meeting of stockholders and until their successors shall have been elected and qualified.
- Upon the merger becoming effective, all the property, rights, privileges, (c) franchises, patents, trademarks, licenses, registrations and other assets of every kind and description of the merged corporation shall be transferred to, vested in and devolved upon the surviving corporation without further act or deed and all property, rights, and every other interest of the surviving corporation and the merged corporation shall be effectively the property of the surviving corporations as they were of the surviving corporation and the merged corporation respectively. The merged corporation hereby agrees from time to time, as and when requested by the surviving corporation or by its successors or assigns, to execute and deliver or cause to be executed and delivered all such deeds and instruments and to take or cause to be taken such further or other action as the surviving corporation and may deem to be necessary or desirable in order to vest in and confirm to the surviving corporation title to and possession of any property of the merged corporation acquired or to be acquired by reason of or as a result of the merger herein provided for and otherwise to carry out the intent and purposes hereof and the proper officers and directors of the merged corporation and the proper officers and directors of the surviving corporation are fully authorized in the name of the merged corporation or otherwise to take any and all such action.

IN WITNESS WHEREOF, the parties to this agreement, pursuant to the approval and authority duly given by resolutions adopted by their respective Board of Directors and stockholders have caused these presents to be executed by the officers of each party hereto as the respective act, deed and agreement of said corporations on this 29th day of December 2000.

EQUITABLE PRODUCTION -EASTERN STATES, INC.

EASTERN STATES, INC.

VP and Corporate Secretary

CARNEGIE PRODUCTION COMPANY

1 0

By: They Went of

Office union of Cas

SEP 1 3 2017

Ensurem The man

DEC-58-5000 I2:01

PENNSYLVANIA DEPARTMENT OF STATE
CORPORATION BUREAU
ROOM 308 NORTH OFFICE BUILDING
P.O. BOX 8722
HARRISBURG, PA 17105-8722

PR

315

EQUITABLE PRODUCTION COMPANY

THE CORPORATION BUREAU IS HAPPY TO SEND YOU YOUR FILED DOCUMENT. PLEASE NOTE THE FILE DATE AND THE SIGNATURE OF THE SECRETARY OF THE COMMONWEALTH. THE CORPORATION BUREAU IS HERE TO SERVE YOU AND WANTS TO THANK YOU FOR DOING BUSINESS IN PENNSYLVANIA. IF YOU HAVE ANY QUESTIONS PERTAINING TO THE CORPORATION BUREAU, CALL (717) 787-1057.

ENTITY NUMBER: 2980374

MICROFILM NUMBER: 2001032

1297-1300

RECEIMED Office of Oil and Gas

SEP 1 3 2017

VM Department of Environmental Protection

C T CORP SYSTEM COUNTER

200132 - 1297

Microfilm Number	Office of Oil and Gas		•	APR 3 0 200
PHCIOTIRITI NOTITION		led with the Depo	irfment of Stati	e on
20.50.201	SEP 1 3 2017	- 13/ · · ·	Carlotte .	· 11
Entity Number 29 80304	V.V Department of	Mary	Herryon	meld
	Environmental Protection		<u> </u>	
	•	19010	ry of the Com	Woumagini
ARTICLES OF	MERGER-DOMESTIC I DSCB: 15-1926 (Rev		PORATION	W.
In compliance with the requirements of 1 pusiness corporations, desiring to effect a me	5 Pa.C.S. § 1926 (relating to	articles of merge	er or consolida	ifon), the undersigne
. The name of the corporation surviving the	merger is: Equitable Product	tion Company		
. (Check and complete one of the following	c business corporation and nmercial registered office p	provider and the c	ounty of venu	e is (the
(a) Number and Street	City	State	Zip	County
			•	•
(b) c/o: CT Corporation System Name of Commercial Regis	A		A	llegheny County
and the (a) address of its current regis office provider and the county of vent to conform to the records of the Depart	ue is (the Department is her	nwedith or (b) nar reby authorized to	ne of its common or	nercial registered billowing information
(a) Number and Street				
MANIDEL OUR PRESI	<u>~</u> &/	State	7in	County
	City	State	Zip	County
(b) c/o:		State	Zip	
Name of Commercial Regis For a corporation represented by a commercial corporation is located for venue and official put	itered Office Provider registered office provider, the oblication purposes.	county in (b) shall be	e deemed the co	County ounty in which the
Name of Commercial Regis For a corporation represented by a commercial	stered Office Provider registered office provider, the oblication purposes. Iffied foreign business corpo	county in (b) shall be	e deemed the co	County ounty in which the
Name of Commercial Regis For a corporation represented by a commercial carporation is located for venue and official put. The surviving corporation is a nonqual.	stered Office Provider registered office provider, the oblication purposes. Iffied foreign business corpo	county in (b) shall be	e deemed the co	County ounty in which the
For a corporation represented by a commercial register carporation is located for venue and official put and the address of its principal office. Number and Street The name and the address of the registere provider and the county of venue of each which is a party to the plan of merger are	thered Office Provider I registered office provider, the oblication purposes. Iffied foreign business corpo under the laws of such domain of the laws of such domain of the laws of such domain office in this Commonwer of the domestic business of as follows:	county in (b) shall be ration incorporate ilciliary jurisdiction State eaith or name of its orporation and quantical and quantic	e deemed the condition of the latest the latest tendence to be a commercial and the latest tendence tendence to be a commercial and the latest tendence tendenc	County county in which the cows of registered office n business corporation
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2001 APR 30 PATÉ: 26 2212

200132 - 1298

DSCB:15-1926 (Rev 90)-2

	tive upon filing these Articles			
X The plan of merger shall be effect	tive on: April 30, 2001	at	Н	our
				•
The manner in which the plan of merg	ger was adopted by each d	omestic corporation is	as follows:	
		er of Adoption		
Name of Carporation		y Board of Directors pu	resent to Sec. 1	924 of the PA BCL
Equitable Production Company	Adopted t	y Board of Differents be	dente to been	
(Strike out this paragraph it no foreign approved, as the case may be, by it the plan in accordance with the law	n corporation is a party to the ne foreign business corporati s of the jurisdiction in which	e merger). The plan with the fore it is incorporated.	as authorized. Ign business c	adopted or orporations) party to
(Check, and if appropriate complete				
(Check, and a appropriate destriction		eto and made a part l	pereof.	·
X The plan of merger is set forth in Pursuant to 15 Pa.C.S. § 1901 (re	full in Exhibit A and ched her	\$10 G 10 1110GG - 1		ions is any of the
Pursuant to 15 Pa.C.S. § 1901 (rel plan of merger that amend or c effect subsequent to the effecti hereof. The full text of the plan address of which is:	of merger is on file at the pri	ncipal place of busine	ss of the surviv	ing corporations in
	•		71	County
Number and Street	City	State	Zip	County
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PA025 - 10/14/99 CT Systems Online

VM Department of Environmental Protection

AGREEMENT AND PLAN OF MERGER

BETWEEN

EQUITABLE PRODUCTION – EASTERN STATES, INC.

AND

EQUITABLE PRODUCTION COMPANY

AGREEMENT AND PLAN OF MERGER, dated this 30th day of April 2001, pursuant to Section 251 of the General Corporation Law of the State of Delaware between Equitable Production – Eastern States, Inc., a Delaware corporation, and Equitable Production Company, a Pennsylvania corporation.

WHEREAS, the constituent corporations desire to merge into a single corporation.

NOW, THEREFORE, the corporations, parties to this Agreement, in consideration of the mutual covenants, agreements and provisions hereinafter contained, do hereby prescribe the terms and conditions of said merger and mode of carrying the same into effect as follows:

FIRST: Effective on April 30, 2001, Equitable Production Company. hereby merges into itself Equitable Production – Eastern States, Inc., and Equitable Production Company shall be the surviving corporation.

SECOND: The Articles of Incorporation of Equitable Production Company as heretofore amended and as in effect on the date of the merger provided in this Agreement, shall continue in full force and effect as the Articles of Incorporation of the corporation surviving this merger.

THIRD: The outstanding shares of the capital stock of Equitable Production – Eastern States, Inc. shall be cancelled as of the effective date of the merger pursuant to this Agreement and no new shares issued therefor.

FOURTH: The terms and conditions of the merger are as follows:

(a) The by-laws of the surviving corporation as they shall exist on the effective date of this Agreement shall be and remain the by-laws of the surviving corporation until the same shall be altered, amended and repealed as therein provided.

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The directors and officers of the surviving corporation shall continue in office until the next annual meeting of the shareholders

and until their successors shall have been elected and qualified.

Upon the merger becoming effective, all the property, rights, (c) privileges, franchises, patents, trademarks, licenses, registrations and other assets of every kind and description of the merged corporation shall be transferred to, vested in and devolved upon the surviving corporation without further act or deed and all property, rights, and every other interest of the surviving corporation and the merged corporation shall be effectively the property of the surviving corporation as they were of the surviving and the merged corporations, respectively. The merged corporation hereby agrees from time to time, as and when requested by the surviving corporation or by its successors or assigns, to execute and deliver or cause to be executed and delivered all such deeds and instruments and to take or cause to be taken such further or other action as the surviving corporation may deem to be necessary or desirable in order to vest in and confirm to the surviving corporation title to and possession of any property of the merged corporation acquired or to be acquired by reason of or as a result of the merger herein provided for and otherwise to carry out the intent and purposes hereof and the proper officers and directors of the merged corporation and the proper officers and directors of the surviving corporation are fully authorized in the name of the merged corporation or otherwise to take any and all such action.

IN WITNESS WHEREOF, the parties to this agreement, pursuant to the approval and authority duly given by resolutions adopted by their Board of Directors have caused these presents to be executed by the President of each party hereto as the respective act, deed and agreement of said corporations on this 30th day of April 2001.

ATTEST:

Corporate Secretary

EQUITABLE PRODUCTION – EASTERN STATES, INC.

By:

President

ATTEST

Corporate/Secretary

EQUITABLE PRODUCTION COMPANY

By

President

SEP 1 \$ 2017

VM Department of Environmental Protection

12/15/2017

COMMONWEALTH OF PENNSYLVANIA

DEPARTMENT OF STATE

APRIL 30, 2001

TO ALL WHOM THESE PRESENTS SHALL COME, GREETING:

EQUITABLE PRODUCTION COMPANY

I. Kim Pizzingrilli, Secretary of the Commonwealth of

Pennsylvania do hereby certify that the foregoing and annexed is a true

and correct photocopy of Articles of Merger

Office of Oil and Gas

SEP 1 3 2017

which appear of record in this department

WV Department of Environmental Protection



IN TESTIMONY WHEREOF. I have hereunto set my hand and caused the Seal of the Secretary's Office to be affixed, the day and year above written

Secretary of the Commonwealth

DPOS

In consideration of One-thousand (\$1,000.00) Dollars to me in hand paid by the Carnegie Natural Cas Company, receipt of which is hereby acknowledged, I, C. D. Greenlee of Pittsburg, Pennsylvania, die hereby sell, transfer and set over to the Carnegie Natural Gas Company, its successors and assigns, the gas and gas rights in two certain oil and gas leases on land situated in Grant District, Wetzel County, West Virginia, bounded and described as follows: - Lease made by Wilson Ney, et. ux., Pebruary 16th, 1898, to C. D. Greenlee, bounded on the North by lands of James Furbee;, East by lands of John H. Snodgrass, et.al; South by lands of S. P. Snodgrass; West by lands of James Allen, containing 600 acres, more or less, recorded in deed book #55 page #146; also lease made by Sarah J. Furbee, dated March 20th, 1900, to C. D. Greenlee, bounded on the North by lands of Hiley and Snodgrass; East by lands of Ney, Kendall and Allen; South by lands of Allen and Ott; West by lands \$716 of Allen and Glover, containing 400 acres, more or less, recorded in deed book #63 page #89.

Together with all my estate, right, title, interest and privilege in and to the gas and gas rights in the herein described tracts of land. SIGNED, SEALED and DELIVERED by the parties hereto this 25 day of June, A.D., 1900.

Witness:

(SEAL)

STATE OF WEST VIRGINIA

COUNTY OF Products

I. O B. Johnson a Molary Public of said County, do certify that O.D. Greekler and his wife, whose name is signed to the writing within, bearing date the 25" day of June 1900 has this day acknowledged the same before be in my said County.

Given under my hand this 25" day of June 1900.

RECEIVED Office of Oil and Gas



August 21, 2017

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

Re: BIG464

Grant District, Wetzel County

Dear Mr. Martin,

EQT Production Company is submitting an application for a new well work permit for the above well number. Upon information and belief, Operator's lease and/ or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

Sincerely,

Vicki Roark

Permitting Supervisor-WV

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SEP 1 3 2017

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

		NOTICE CERTIFICATIO	N			
Date of Notic	ce Certification: 9-8-17	A	PI No. 47	- 103 - (3214	
	+		Operator's Well No. BIGH			
			Well Pad Name: BIG464			
Notice has I	been given:					
	ne provisions in West Virginia Code	§ 22-6A, the Operator has provid	led the rea	uired parties w	ith the Notice Forms listed	
below for the	tract of land as follows:	•		- Parties		
State:	w	UTM NAD 83 E	asting:	541,529.87		
County: Wetzel District: Grant		UIM NAD 83 N	Northing: cess:	4,379,869.60 Rt 250		
		Public Road Access				
Quadrangle:	Big Run	Generally used farm	n name:	Coastal Forest Resources Co dba Coastal Timberlands Co		
Watershed:	Wiley Fork					
Virginia Code of this article Pursuant to	of subsection (b), section sixteen of § 22-6A-11(b), the applicant shall thave been completed by the applicant West Virginia Code § 22-6A, the Operator has properly served the require	ender proof of and certify to the nt. perator has attached proof to this	secretary	that the notice		
	ECK ALL THAT APPLY	a parties with the tono wing.			OOG OFFICE USE ONLY	
☐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRE SEISMIC ACTIVITY WAS C			☐ RECEIVED/ NOT REQUIRED	
☐ 2. NO	TICE OF ENTRY FOR PLAT SURV	/EY or 🔳 NO PLAT SURVEY	WAS CO	NDUCTED	☐ RECEIVED	
■ 3. NO	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRE NOTICE OF ENTRY FOR PL WAS CONDUCTED or			☐ RECEIVED/ NOT REQUIRED	
		☐ WRITTEN WAIVER BY (PLEASE ATTACH)	SURFAC	E OWNER		
■ 4. NO	TICE OF PLANNED OPERATION	Office o	CEIVED FOII and C	53	☐ RECEIVED	
■ 5. PUE	BLIC NOTICE	CED	1.9.2017		RECEIVED	

Required Attachments:

■ 6. NOTICE OF APPLICATION

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

VAV Department of Environmental Frotection ☐ RECEIVED

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.

Well Operator: EQT Production Company By: Victoria J Roark

Permitting Supervisor

NOTARY SEALICIAL SEAL

STATE OF WEST VIRGINIA NOTARY PUBLIC Misty S Christie 1207 Briercliff Rd Bridgeport, WV 26330 Commission Expires February 20, 2018

Telephone: 304-848-0076 Address: 115 Professional Place PO Box 280

Bridgeport WV 26330 Facsimile: 304-848-0041

Email: vroark@eqt.com

Subscribed and sworn before me this & day of

Notary Public

My Commission Expires

Oil and Gas Privacy Notice:

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

SEP 1 3 2017

WV Department of Environment of the ion

API NO. 47- 103 - 03214

OPERATOR WELL NO. BIG464H27

Well Pad Name: BIG464

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

Notice Time Requirer	ment: notice shall be provided n	o later than the filing date of permit application.
Date of Notice:	Date Permit Application I	Filed: 9-8-17
PERMIT FOR AN		E OF APPROVAL FOR THE TION OF AN IMPOUNDMENT OR PIT
Delivery method purs	uant to West Virginia Code §	22-6A-10(b)
PERSONAL SERVICE	☐ REGISTERED ☑ MAIL	METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION
sediment control plan re the surface of the tract of oil and gas leasehold be described in the erosion operator or lessee, in the more coal seams; (4) The well work, if the surface impoundment or pit as di provide water for consur- proposed well work acti- subsection (b) of this sec- records of the sheriff rec- provision of this article of Code R. § 35-8-5.7.a re	quired by section seven of this art n which the well is or is proposed ing developed by the proposed we and sediment control plan submit event the tract of land on which e owners of record of the surface tract is to be used for the placem escribed in section nine of this ar g or water supply source located v input on by humans or domestic an vity is to take place. (c)(1) If more ction hold interests in the lands, the puired to be maintained pursuant to the contrary, notice to a lien ho quires, in part, that the operator shades	a receipt or signature confirmation, copies of the application, the erosion and ticle, and the well plat to each of the following persons: (1) The owners of record of to be located; (2) The owners of record of the surface tract or tracts overlying the ell work, if the surface tract is to be used for roads or other land disturbance as sted pursuant to subsection (c), section seven of this article; (3) The coal owner, the well proposed to be drilled is located [sic] is known to be underlain by one or tract or tracts overlying the oil and gas leasehold being developed by the proposed ent, construction, enlargement, alteration, repair, removal or abandonment of any ticle; (5) Any surface owner or water purveyor who is known to the applicant to within one thousand five hundred feet of the center of the well pad which is used to imals; and (6) The operator of any natural gas storage field within which the enthan three tenants in common or other co-owners of interests described in the applicant may serve the documents required upon the person described in the o section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any lader is not notice to a landowner, unless the lien holder is the landowner. W. Va. hall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any ter testing as provided in section 15 of this rule.
		an Notice ☑ Well Plat Notice is hereby provided to:
SURFACE OWNER Name: See Attached	(s)	
Address:		Address:
Name: Address:		COAL OPERATOR Name:
Name: See Attached	(s) (Road and/or Other Disturba	Address: nce) SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)
		Name: See Attached
Name:		Address:
Address:		□ OPERATOR OF ANY NATURAL GAS STORAGE FIELD
Vannas San Attached	(s) (Impoundments or Pits)	Name: Address:
		*Please attach additional forms if necessary

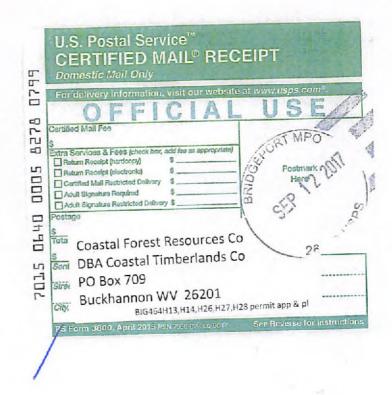
Office of Ollend Gas



Surface Owners:

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222



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SEP 1 3 2017

WV Department of Environmental Protection

12/15/2017

Surface Owners: Access Road

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

Rich Rager 4620 Simpson Road Grafton WV 26354

Timothy E Titus 7335 Willey Fork Rd Burton WV 26562

Higgins Family Trust 531 Franklin Trace Washington PA 15301

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222

Robert E Tonkery 33 Tonkery Dr Fairmont WV 26554

Paul Able Trustee et al PO Box 54 New Martinsville WV 26155

William J & Beverly L Barr 1044 Barr Road Smithfield WV 26437

Donald & Diana White 5017 Husky Hwy Mannington WV 26582

Beverly Hickman 132 Joes Run Rd Morgantown WV 26508 Paul Glover 15861 Rt 301 LaGrange OH 44050

Raymond Teagarden 718 Evans Run Rd Mannington WV 26582

David A Floyd & Diane E Floyd 12 Emily Ct Fairmont WV 26554

Keith & Rita Powell 3898 Buffalo Brink Rd Mannington WV 26582



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Surface Owners: AST

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222



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Coal Owners:

CNX Land LLC
Engineering Operations Support Dept Coal
Attn: Casey Saunders
1000 Consol Energy Dr
Canonsburg PA 15317

Consol Mining Company
Engineering Operations Support Dept Coal
Attn: Casey Saunders
1000 Consol Energy Dr
Canonsburg PA 15317

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

Jackson T. Beatty 14048 Roblar Street Sherman Oaks, CA 91423

Joe P. Beatty Jr. 818 Cabin John Parkway Rockville, MD 20852

William F. Beatty 83 Cozy mountain Lane Weaverville, NC 28787

James F. Beatty Trust 31 Washington Street East Charleston, WV 25301

SKB Mineral Interest LLC 3606 Pruetts Chapel Road Paraground, AK 72450

Scott T. Beatty 1003 Saint Johns Drive Charlevoix, MI 497230-1342

Ann Beatty Reynolds P.O. Box 5 Elkview, WV 25071



Office of Oil and Gas

Coal Owners Continued:

Patrick G. Beatty 7755 Grant Creek Road Missoula, MT 59808

CBM Only

CNX Gas Company LLC 1000 Consol Energy Drive Canonsburg, PA 15317

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SEP 13 2017 12/15/2017 WV Department of Environmental Protection

Owners of Water Sources:

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222

> RECEIVED Office of Oil and Gas

WW-6A (8-13)

RECEIVED Office of Oil and Gas

SEP 1 3 2017

API NO. 47- 103 OPERATOR WELL NO. Well Pad Name: BIG464

Notice is hereby given:

VA Department of
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 alteration to address the items

WW-6A (8-13) API NO. 47-103 - 032 14

OPERATOR WELL NO. BIG464H27

Well Pad Name: BIG464

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

Office of Oil and Gas SEP 1 3 2017

V/V Department of Environmental Frotection

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

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.

RECEIVED
Office of Oil and Gas

API NO. 47- 103 - 0	3214
OPERATOR WELL NO	
Well Pad Name: BIG464	

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 304-848-0076

Email: vroark@eqt.com

Address: 115 Professional Place PO Box 280

Bridgeport WV 26330

Facsimile: 304-848-0041

Oil and Gas Privacy Notice:

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

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Misty S Christie
1207 Brierchiff Rd
Bridgeport, WV 26330
My Commission Expires February 20, 2018

Subscribed and sworn before me this 8th day of Section

emper

My Commission Expires

Notary Public

RECEIVED Office of Oil and Gas

Topo Quad: Big Run 7.5' Scale: 1" = 1000" RECEIVED Office of Oil and Gas County: Wetzel Date: December 19, 2016 SEP 1 3 2017 Grant District: Project No: 125-34-G-16 Environmental Protection Water **BIG 464** 3 Potential Water Sources within 2500 Site 2 Site 3 1500 NAD 27, North Zone LEGEND N: 390,461.51 Red Symbol - Declined Sampling E: 1,713,355.50 Blue Symbol - Requested Sampling / Unable to Contact WGS 84 Well Spring LAT: 39.567675 Pond LONG: -80.516616 Building ELEV: 1264.00 llen Cem SURVEYING AND MAPPING SERVICES PERFORMED BY: PREPARED FOR: ALLEGHENY SURVEYS, INC. **EQT Production Company** 1-800-482-8606 P.O. Box 280 237 Birch River Road Bridgeport, WV 26330 Birch River, WV 26610 PH: (304) 649-8606 FAX: (304) 649-8608

WW-6A4 (1/12) Operator Well No. BIG464H27

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

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

Notice Time	Requirement: Notice shall be provided at least		permit application.
Date of Notic	e: \$ 23 17 Date Permit	Application Filed: 9-8	Office of Oil and Gas
Delivery met	hod pursuant to West Virginia Code § 22-6	A-16(b)	
☐ HAND	CERTIFIED MAIL		SEP 1 3 2017
		erren.	WV Denartment of
DELIVE	RY RETURN RECEIPT REQUE	SIED	Environmental Protection
receipt reques drilling a hori of this subsect subsection ma and if availabl	V. Va. Code § 22-6A-16(b), at least ten days proted or hand delivery, give the surface owner notice owner in the surface owner in the surface owner in the surface owner. It is a soft the date the notice was provided to the surface owner. It is facsimile number and electronic mail addrested provided to the SURFACE OWNER.	otice of its intent to enter upon the suant to subsection (a), section to the surface owner: <i>Provided, how</i> . The notice, if required, shall includes of the operator and the operator.	the surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this ude the name, address, telephone number,
Name: See Attac		Name: See Attached	
Address:		Address:	
State: County: District:	Wetzel Grant	UTM NAD 83 Easting: Northing: Public Road Access:	541,529,87 4,379,869.60 Rt 250
District: Quadrangle:	Grant Big Run	Public Road Access: Generally used farm name:	Rt 250 Coastal Forest Resources Co dba Coastal Timberlands Co.
Watershed:	Wiley Fork	Generally used farm fiame.	Coastal Polest Resources Co dua Coastal Timberianos Co.
Pursuant to W facsimile num related to hori	Shall Include: Vest Virginia Code § 22-6A-16(b), this notice the properties of the operation of the operation of the operation of the section of the Section of the Section of Street, SE, Charleston, WV 25304 (304-9).	tor and the operator's authorize retary, at the WV Department o	ed representative. Additional information f Environmental Protection headquarters,
	reby given by:		
Of the state of th	EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place PO Box 280	Address:	
Bridgeport WV 26			115 Professional Place PO Box 280
2 2 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Bridgeport WV 26330	
Telephone:	304-848-0076	Bridgeport WV 26330 Telephone:	304-848-0076
2 2 4 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Bridgeport WV 26330	

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.

Surface Owners:

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222

> RECEIVED Office of Oil and Gas

> > SEP 1 3 2017

Surface Owners: Access Road

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

Rich Rager 4620 Simpson Road Grafton WV 26354

Timothy E Titus 7335 Willey Fork Rd Burton WV 26562

Higgins Family Trust 531 Franklin Trace Washington PA 15301

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222

Robert E Tonkery 33 Tonkery Dr Fairmont WV 26554

Paul Able Trustee et al PO Box 54 New Martinsville WV 26155

William J & Beverly L Barr 1044 Barr Road Smithfield WV 26437

Donald & Diana White 5017 Husky Hwy Mannington WV 26582

Beverly Hickman 132 Joes Run Rd Morgantown WV 26508 Paul Glover 15861 Rt 301 LaGrange OH 44050

Raymond Teagarden 718 Evans Run Rd Mannington WV 26582

David A Floyd & Diane E Floyd 12 Emily Ct Fairmont WV 26554

Keith & Rita Powell 3898 Buffalo Brink Rd Mannington WV 26582

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Office of Oil and Gas

SEP 1 3 2017

Surface Owners: AST

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222

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SEP 1 3 2017

Operator Well No. BIG464H27

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

WAIVER

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

State:	W	LITM NATE 02	Easting:	541,529.87
County:	Wetzel	UTM NAD 83	Northing:	4,379,869.60
District:	Grant	Public Road Acc	cess:	Rt 250
Quadrangle:	Big Run	Generally used f	arm name:	Coastal Forest Resources Co dba Coastal Timberlands Co.
Watershed:	Wiley Fork			,

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.

Office of Oil and Gas

SEP 1 3 2017

WW-6A5 (1/12) Operator Well No. BIG464H27

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

Date of Noti		ed no later than the filing date of permit it Application Filed:	t application.
Delivery me	thod pursuant to West Virginia Cod	le § 22-6A-16(c)	
■ CERTI	FIED MAIL RN RECEIPT REQUESTED	☐ HAND DELIVERY	
Pursuant to Vereturn receipt the planned of required to be drilling of a damages to the damages to the folion of notice.	W. Va. Code § 22-6A-16(c), no later requested or hand delivery, give the superation. The notice required by the provided by subsection (b), section to horizontal well; and (3) A proposed the surface affected by oil and gas open	than the date for filing the permit appl surface owner whose land will be used f is subsection shall include: (1) A copy en of this article to a surface owner who surface use and compensation agreementations to the extent the damages are compensation to the surface owner at the address like	ication, an operator shall, by certified mail for the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the nt containing an offer of compensation for spensable under article six-b of this chapter, sted in the records of the sheriff at the time
	s listed in the records of the sheriff at		
		Managar	
Name:		Name:	
Name: Address:		Address:	
Name: Address: Notice is her Pursuant to Voperation on State: County:	eby given: Vest Virginia Code § 22-6A-16(c), not		well operator has developed a planned act of land as follows: 541,529.87 4,379,869.60 Rt 250
Name:	eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the purpo W Wetzel Grant Big Run	Address: dice is hereby given that the undersigned ose of drilling a horizontal well on the trace. UTM NAD 83 Easting: Northing:	act of land as follows: 541,529.87 4,379,869.60
Name:	eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the purpoww Wetzel Grant Big Run Wiley Fork Shall Include: Vest Virginia Code § 22-6A-16(c), this ed by W. Va. Code § 22-6A-10(b) to ell; and (3) A proposed surface use and ted by oil and gas operations to the elated to horizontal drilling may be clocated at 601 57th Street, SE, Co	Address: Address: Address: It ice is hereby given that the undersigned on the transport of drilling a horizontal well on the transport of the property of t	act of land as follows: 541,529.87 4,379,869.60 Rt 250
Name:	eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the purpow Wetzel Grant Big Run Wiley Fork Shall Include: Vest Virginia Code § 22-6A-16(c), this ed by W. Va. Code § 22-6A-10(b) to the lit; and (3) A proposed surface use and the lit. Just Code § 25-6A-10(c) to the lit.	Address: Address: Address: It ice is hereby given that the undersigned on the transport of drilling a horizontal well on the transport of the property of t	act of land as follows: 541,529.87 4,379,869.60 Rt 250 Coastal Forest Resources Co dba Coastal Timberlands Co. code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting <a 280"="" href="https://www.dep.wv.gov/oil-and-damages-no-based-no-base</td></tr><tr><td>Name:</td><td>eby given: Vest Virginia Code § 22-6A-16(c), not the surface owner's land for the purpoww Wetzel Grant Big Run Wiley Fork Shall Include: Vest Virginia Code § 22-6A-16(c), this ed by W. Va. Code § 22-6A-10(b) to ell; and (3) A proposed surface use and the description of the eletted to horizontal drilling may be colorated at 601 57th Street, SE, Coault.aspx.</td><td>Address: Address: Address: It ice is hereby given that the undersigned on the transport of drilling a horizontal well on the transport of the property of the property of the property of the property of this of a surface owner whose land will be a compensation agreement containing an extent the damages are compensable uncobtained from the Secretary, at the WV harleston, WV 25304 (304-926-0450)</td><td>act of land as follows: 541,529.87 4,379,869.60 Rt 250 Coastal Forest Resources Co dba Coastal Timberlands Co. code section; (2) The information required used in conjunction with the drilling of a noffer of compensation for damages to the ler article six-b of this chapter. Additional Department of Environmental Protection or by visiting www.dep.wv.gov/oil-and-ace-PO-Box 280

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.

Office of On and Gas

Surface Owners:

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222



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SEP 1 3 2017

Surface Owners: Access Road

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

Rich Rager 4620 Simpson Road Grafton WV 26354

Timothy E Titus 7335 Willey Fork Rd Burton WV 26562

Higgins Family Trust 531 Franklin Trace Washington PA 15301

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222

Robert E Tonkery 33 Tonkery Dr Fairmont WV 26554

Paul Able Trustee et al PO Box 54 New Martinsville WV 26155

William J & Beverly L Barr 1044 Barr Road Smithfield WV 26437

Donald & Diana White 5017 Husky Hwy Mannington WV 26582

Beverly Hickman 132 Joes Run Rd Morgantown WV 26508 Paul Glover 15861 Rt 301 LaGrange OH 44050

Raymond Teagarden 718 Evans Run Rd Mannington WV 26582

David A Floyd & Diane E Floyd 12 Emily Ct Fairmont WV 26554

Keith & Rita Powell 3898 Buffalo Brink Rd Mannington WV 26582



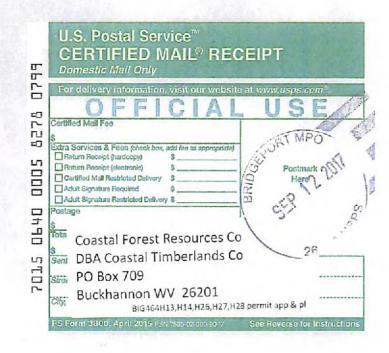
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SEP 1 3 2017

Surface Owners: AST

Coastal Forest Resources Co DBA Coastal Timberlands Co PO Box 709 Buckhannon WV 26201

ET Bluegrass 625 Liberty Avenue, Suite 1700 Pittsburgh, PA 15222



Office of Oil and Gas

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

Instructions to Persons Named on Page WW-6A

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

Comment and Waiver Provisions

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

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

VOLUNTARY STATEMENT OF NO OBJECTION

provisions lis WW-6A and	Grant Grant	Notice of Application gh, ract of land as follow UTM NAD 83 Public Road According	tion, an Applincluding tows: Easting: Northing:	plication for a Well Work Permit on Form the erosion and sediment control plan, if 541,529.87
issued on tho				
SURFACE SURFACE SURFACE COAL COAL COAL COAL COAL COAL COAL COAL	the box that applies CE OWNER CE OWNER (Road and/or Other Disturbance CE OWNER (Impoundments/Pits) OWNER OR LESSEE OPERATOR R PURVEYOR TOR OF ANY NATURAL GAS STORAGE	Signa Print Date FOR Com By: Its: Signa	Attornature:	ION BY A NATURAL PERSON ION BY A CORPORATION, ETC. T Bluegrass See Banson Age Fact

Oil and Gas Privacy Notice:

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Office of Oil and Gas



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

Revised September 6, 2017

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

RECEIVED Office of Oil and Gas

SEP 1 3 2017

Subject: DOH Permit for the BIG 464 Pad Site, Marion County

WV Department of Environmental Protection

BIG464H1	BIG464H2	BIG464H3	BIG464H4	BIG464H5	BIG464H6
BIG464H7	BIG464H8	BIG464H9	BIG464H10	BIG464H11	BIG464H12
BIG464H13	BIG464H14	BIG464H15	BIG464H16	BIG464H17	BIG464H18
BIG464H19	BIG464H20	BIG464H21	BIG464H22	BIG464H23	BIG464H24
BIG464H26	BIG464H27	BIG464H28			
	HJ102-02714				

Dear Mr. Martin,

Jim Justice

Governor

This well site will be accessed from Permit # 04-2014-0722 transferred to EQT Production Company and the haul route revised for access to the State Road. The well site is located off of Marion County Route 1 SLS.

The operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated January 3, 2012.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

EQT Production Company CH, OM, D-4, File

RECEIVED Office of Oil and Gas

BIG 464 WELL PAD FINAL SITE DESIGN

FINAL SITE DESIGN, CONSTRUCTION PLANS, & EROSION & SEDIMENT CONTROL PLANS







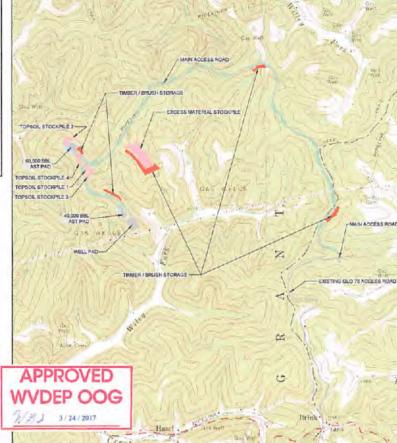
CONDITIONS	5
TAKE PLACE IN FLOODPLAIN:	NO
OCCPLAIN COORDINATOR:	NO.
	NO
6	NO
54049C0965D + 54183C025DC + 5	41030022
	S TAKE PLACE IN FLOODPLAIN: OCOPPLAIN COORDINATOR:

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

ACREAGES OF CONSTRUCTION IN FLOODPLAIN



NA.



WELLEGEATION RESTRICTIONS

250' from an existing well or disveloped spring used for huma



Design Certification The dewlings, construction notes, and reference diagrams attached hereto have been prepared in accordance with the West Virginia Code of State Rules, Division of Environmental Protection, Office of Olivard Gas \$35-421.

The information reflects a 40,000 BBL. Above Ground Storage Tank (AST) Pad with secondary containment and a 50,000 BBL. Above Ground Storage Tank Pag

Homor Brothers Engineers make no pertifications relating to the design, construction or materials associated with the Acove Ground Storage Tank of St.

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SHEET INDEX

COVER SHEET / LOCATION MAN EXISTING CONDITIONS PLAN.
SCHEDULE OF DUANTITIES & UTILITY INFORMATION.
CONSTRUCTION, GENERAL AND EAS NOTES. CONSTRUCTION, GENERAL AND BAS NOTES.
OVERVIEW RLAN
EXISTING GLO TA ACCESS ROAD.
FIRAL SITE DESIGN PLANS.
WELL PAD PROFILES & SECTIONS.
60,000 BBL. AST PAD PROFILES & SECTIONS.
4,0000 BBL. AST PAD PROFILES & SECTIONS. 33.34 35-36 37.38 40,000 BBL AST PAD PROPILES & SECTIONS.
EXISTING BLO TO ACCESS PROFILE & SECTIONS.
MAIN ACCESS ROAD PROFILE & SECTIONS.
60,000 BBL AST ACCESS ROAD PROFILE & SECTIONS.
67,000 BBL ASTACCESS ROAD PROFILE & SECTIONS.
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RECLAMATION PLANS 99-10

WELL LEGEND

BIG 464 H16- LAT: 39 567938 / LONG -80 516819 BIG 464 H15- LAT: 39.567915 / LONG: -80 516799 BIG 464 H14- LAT: 39.567893 / LONG: -80.516780 BIG 464 H13- LAT: 39.567870 / LONG: -80.516760 BIG 464 H12- LAT: 39.567847 / LONG: -80.516740 BIG 464 H11- LAT: 39 567824 / LONG: -80 516720 BIG 464 H10- LAT: 39.567802 / LONG: -80.516700 BIG 464 H9- 1 AT: 39 567779 / LONG: -80 516680 BIG 464 H8- LAT: 39.567756 / LONG: -80 516660 BIG 464 H7- LAT: 39.567733 / LONG: -80 516641 BIG 464 H6- LAT: 39.567710 / LONG: -80.516621 BIG 464 H5- LAT: 39.567688 / LONG: -80.516601 RIG 464 H4. 1 AT: 30 567665 / LONG: -80 516581 BIG 464 H3: 1 AT: 39 567642 / LONG: -80 516561 BIG 464 H2- LAT: 39.567619 / LONG: -80 516541 BIG 464 H24 LAT: 39 567507 / LONG: -80 516522

Project Contacts

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Tom Corethers - PE, PS riemor Brothers Engineers 30+52+6445 Office

DATE	REVISIONS
13 16.2016	WILL AS HE FER HOT
12 19 29 16	UPDATE PROPERTY OWNER
32 86 2017	WIDDNED FAD ENTRANCE: ADDED NEW WELL LATTER FORMATION FROM TO LINES REVISED EXCESS FOR THE A TORSOIL STOCKHELL I CYS A PRATED WILL COORDS
92.12.2011	ADJUST NOTE AIR SIT SECONDARY CONTAINMENT ON 46,000 BISE AIR / ADDED AIRSINGGE DETAIL
02 (42017)	REVEICH WELL-LEGING TO PREVIOUS SOURS WELL-LAYOUT

Date: 12/07/2016 Scale N.A. Designed By: TBC Plette married Peer 1 of 227

