

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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Tuesday, August 10, 2021 WELL WORK PERMIT Horizontal 6A / New Drill

EQT PRODUCTION COMPANY 625 LIBERTY AVE., SUITE 1700 PITTSBURGH, PA 15222

Permit approval for BG464 113H Re: 47-103-03437-00-00

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

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

Operator's Well Number: BG464 113H

by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Farm Name: EQT PRODUCTION COMPAN

U.S. WELL NUMBER: 47-103-03437-00-00

Horizontal 6A New Drill

Date Issued:

API Number:	

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

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

API Number:	

PERMIT CONDITIONS

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.

WW-6B (04/15) API NO. 47- 103 - 03437

OPERATOR WELL NO. 113H

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 P	roduction C	ompany/	306686	Wetzel	/	Grant /	Big Run	
				Operator ID	County	,	District	Quadrangle	е
2) Operator's Wel	l Number	r: 113H		Well Pad	l Name:	BIG46	64 /		
3) Farm Name/Su	rface Ow:	ner: EQT Pro	duction Con	npany Public Road	d Access	: <u>CR1</u>	l		
4) Elevation, curre	ent groun	d: 1246.8'	(built) Ele	evation, proposed j	post-con	structio	on: 1246.8	3' (built)	
, , ,) Gas ther	X	_ Oil	Unde	erground	Storag	ge		
(b)If Gas	Shallow Horizontal	X	Deep					
6) Existing Pad: Y	es or No	Yes							
7) Proposed Targe Marcellus, 7,399			(s), Antici	pated Thickness a	nd Expe	cted Pr	ressure(s):		
8) Proposed Total	Vertical	Depth: 739	9' /						
9) Formation at To		_	Marcellus					- 24	
10) Proposed Tota	ıl Measur	ed Depth:	10208' /						
11) Proposed Hori	izontal Le	eg Length:	1390' /					***	
12) Approximate	Fresh Wa	iter Strata De	pths:	109', 184', 432'	/				
13) Method to Det 14) Approximate S				Offset Wells - 47-1	03-3059	3, 47-	103-30910		
15) Approximate	Coal Sear	m Depths: 5	56'-559',	795'-797', 897'-89	99', 912'	-919'/			
16) Approximate	Depth to	Possible Voi	d (coal mi	ne, karst, other):	N/A				
17) Does Proposed directly overlying				ns Yes		No	X		
(a) If Yes, provide	de Mine I	nfo: Name	•					R Office	FCEIVED of Cill and Gas
(-) 1 oo, pro 10	A A	Depth	-					JUL	0 8 2021
		Seam:							epartment of tental Protect
		Owner	*•					Environn	ieniai Protect

API NO. 47- 103 - 03437

OPERATOR WELL NO. 113H
Well Pad Name: BIG464

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	26	New	A-500	85.6	40	40	50 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	1019	1019 /	1000 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	J-55	36	2441	2441 /	1000 ft^3 / CTS
Production	5 1/2	New	P-110	20	10208	10208	500' above intermediate casing
Tubing							
Liners	-						

Buyan Ham . 6-11-21

ТҮРЕ	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	0.312	1050	18	Class A	1.18
Fresh Water	13 3/8	17 1/2	0.380	2730	2184	Class A / Type 1	1.13 - 1.19
Coal							
Intermediate	9 5/8	12 3/8	0.352	3520	2816	Class A / Type 1	1.13 - 1.19
Production	5 1/2	8 1/2	0.361	14360	11488	Class A/H	1.04 - 2.10
Tubing							
Liners							

PACKERS

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Office of Cit and Gas

	 r	 ⊤ JUL 0 8	2021
Kind:			
		WV Depar Environmenta	ment of LProtection
Sizes:			, , , , , , , , , , , , , , , , , , , ,
Depths Set:			
•			

WW-6B (10/14) API NO. 47- 103 - 0 3437

OPERATOR WELL NO. 113H

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, 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 0.1%) 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 10,000 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 200,000-600,000 pounds of proppant per stage.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): N/A Site Built
- 22) Area to be disturbed for well pad only, less access road (acres): N/A Site Built
- 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.

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

Conductor: Class A no additives

Surface: Calcium Chloride. Used to speed the setting of cement slurries

Intermediate: Calcium Chloride. Used to speed the setting of cement slurries.

Production: Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarement Gas

Anti-Settling/Suspension Agent

- 11.11 **- 0**-8-2021

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25) Proposed borehole conditioning procedures:

WV Department of Environmental Projection

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: Perform a cleanup cycle by pumping 3-8 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.



west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary dep.wv.gov

March 18, 2014

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

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 I (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.

Sincerely

lames Peterson

Environmental Resources Specialist / Permitting

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WV Department of Environmental Protection

Promoting a healthy environment.



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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

IN THE MATTER OF A VARIANCE FROM)	ORDER NO.	2014 - 17
REGULATION 35 CSR § 4-11.4/11.5/14.1)		
AND 35 CSR § 8-9.2,h. 4/5/6/8 OF THE)		
THE OPERATIONAL)		
REGULATIONS OF CEMENTING OIL)		
AND GAS WELLS)		

REPORT OF THE OFFICE

Nabors Completion & Production Services Co requests approval of a different cement blend for use in cementing surface and coal protection easing 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 "I" 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

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> > JUL 08 2021

WV Department of Environmental Protection

Wellbore Diagram EQT Production Well: County: Wetzel BIG 464 113H State: West Virginia Pad: **BIG 464** Elevation: 1246' GL 1259' KB Conductor @ 40' 26", 85.6#, A-500, cement to surface w/ Class A 1,019' Surface @ 13-3/8", 54.5#, J-55, cement to surface w/ Class A/Type I Intermediate 2,441' 9-5/8", 36#, J-55, cement to surface w/ Class A/Type I RECEIVED
Office of Oil and Gas JUL 08 2021 WV Department of Environmental Protection **Production** @ 10,208' MD / 7,399' TVD 5-1/2", 20#, P-110, cement to 500' inside 9-5/8" w/ Class A/H Formation: Marcellus

08/63/2025CALE

WEST VIRGINIA GEOLOGICAL PROGNOSIS

Horizontal Well BIG464 S-000124

Drilling Objectives: County: Quad:

Elevation:

Marcellus Wetzel Big Run

1259 KB

1246 GL

Recommended Azimuth

#N/A Degrees

TVD: 7399

Recommended LP to TD: #N/A

Proposed Lugging Suite:

Pilot Logging Not needed

ESTIMATED FORMATION TOPS		rom pilots on BIG57			Trans n	- 000
formation	Top (TVD)	Base (TVD)	Lithology	Comments	Top RR Ba	
Fresh Water Zone	1	432		FW @ 109,184,432	69	73
Waynesburg Coal	556	559 Co			76	80
Coal	795	797 Co.		No known past/present/and or future mining within the area	96	114
Sewickley Coal	897	899 Ca			125	132 Base of Rec
Pittsburgh Coal	912	919 Co			V	
Maxton	1792	1971 San		SW @ 1724.1848		
Big Lime	2234	2310 Lin				
Big Injun	2322	2391 San	idstone			
Int. esg pt	2441					
Weir	2520	2670 San	idstone			
Top Devonian	2735					
Gantz	2735	2771 Silt	y Sand			
Fifty foot	2876	2932 Silt	y Sand	Storage is NOT of concern		
Thirty foot	2971	2998 Silt	y Sand	- 200 0		
Gordon	3027	3072 Silt	y Sand			
Forth Sand	3097	3110 Silt	y Sand	Base of Offset Well Perforations at 3129' TVD		
Fifth Sand	3169	3188 Sile				
Bayard	3222	3240 Silt				
Warren	3645	3669 Silt				
Speechley	3765	3813 Silt				
Balltown A	4123	4138 Silt				
Riley	4608	4650 Sili				
Benson	5237	5286 Silt				
Alexander	5651	5718 Silt				
Elks	5718		ay Shales and Silts			
Sonyea	6917	7080 Gra				
Middlesex	7080	7136 Sha				
Genesee	7136		ay shale interbedded			
Geneseo	7223	7255 Bla				
Tully	7255	7280 Lin				
Hamilton	7280		ry shale with some			
Marcellus	7378	7429 Blo				
Purcell	7393	7396 Lin				
-Lateral Zone	7399	7370 Lin	ILES DIC			
Cherry Valley	7409	7413 Lin	nactora			
Onondaga						
Onomaga	7429	LIII	nestone			

Target Thickness 51 feet Max Anticipated Rock Pressure 2620 PSI

Comments:

Intermediate casing point is recommended beneath the Big Injunito shul off any water production from the Upper Devonian sands. Intermediate casing should be cemented into the surface string, per WV regulations.

LATERAL DRILLING TOLERANCES

Mapview - Lateral: Deviate as little as possible to the left or right of the planned wellbore. Mapview - TD: DO NOT EXTEND beyond recommended wellbore to avoid leaseline.

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Office of Oil and Gas

RECOMMENDED CASING POINTS
Fresh Water/Coal CSG OD 13 3/8 Fresh Water/Coal CSG OD 9 5/8 Intermediate 1: 5 1/2 Production: CSG OD

CSG DEPTH: 1019 CSG DEPTH: 2441 CSG DEPTH: m TD

Bencall Pittsburgh Coal Protection Beneath the Big Injun formation



June 14, 2021

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

Re: Casing on BIG464 113H

Dear Mr. Brewer,

The 13-3/8" surface casing will be set at 1,019' KB, 100' below the deepest workable coal seam and 587' below the deepest fresh water. The 9-5/8" intermediate string will be set at 2,441' KB, 50' below the base of the Big Injun formation.

If you have any questions, please do not hesitate to contact me at 724-746-9073.

Sincerely,

John Zavatchan

Project Specialist - Permitting

Enc.

Office of Oil and Gas

JUL 08 2021

WV Department of Environmental Protection

API Number 47 -	103	63437
		BIG464 113H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company	OP Code 306686	
Watershed (HUC 10) Wiley Fork	Quadrangle Big Run	
Do you anticipate using more than 5,000 bbls of water to comple	lete the proposed well work? Yes V No	
Will a pit be used? Yes No V		
If so, please describe anticipated pit waste: N/A		
Will a synthetic liner be used in the pit? Yes	No ✓ If so, what ml.? N/A	
Proposed Disposal Method For Treated Pit Wastes:		
Land Application		
Underground Injection (UIC Permit	t Number 0014, 8462, 4037)
Reuse (at API Number Vanous Off Site Disposal (Supply form WW Other (Explain	7-9 for disposal location)	
Will closed loop system be used? If so, describe: Yes, The closed then prepared to	d loop system will remove drill cuttings from the drilling fluid. The drill or transportation to an off-site disposal facility.	cuttings are
Drilling medium anticipated for this well (vertical and horizontal	al)? Air, freshwater, oil based, etc. See Attached	
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	ynthetic Mud	
Additives to be used in drilling medium? See Attached		
Drill cuttings disposal method? Leave in pit, landfill, removed	offsite, etc. Landfill	Office of Oil and G
-If left in pit and plan to solidify what medium will be	used? (cement, lime, sawdust) N/A	JUL 0 8 202
-Landfill or offsite name/permit number? See Attached	List	
Permittee shall provide written notice to the Office of Oil and G West Virginia solid waste facility. The notice shall be provided where it was properly disposed.	ias of any load of drill cuttings or associated waste re within 24 hours of rejection and the permittee shall a	WV Department jected aranynmental Prote lso disclose
I certify that I understand and agree to the terms and con August 1, 2005, by the Office of Oil and Gas of the West Vir provisions of the permit are enforceable by law. Violations of law or regulation can lead to enforcement action. I certify under penalty of law that I have personally application form and all attachments thereto and that, based obtaining the information, I believe that the information is to penalties for submitting false information, including the possibility Company Official Signature Company Official Title Project Specialist - Permitting	friginia Department of Environmental Protection. I under any term or condition of the general permit and/or examined and am familiar with the information suddon my inquiry of those individuals immediately true, accurate, and complete. I am aware that there	derstand that the other applicable abmitted on this responsible for
Subscribed and sworn before methis the day of the bleet Sh. My commission expires March 4, 2024	Notary Public B My commissi Commiss	of Pennsylvania - Notary Seal Shrum, Notary Public eaver County on expires March 9, 2024 ion number 1267706

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 synthetic 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.
- Synthetic mud synthetic base oil, emulsifier, salt, lime, viscosifer, alkalinity control, filtration control, deflocculates, biodegradable oil lubricant, defoaming, carbonates.

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		Operator's Wel	1 No. BIG464 113H
Lime 3			1110
Lime 3	A area Disturbed		
	Acres Disturbed _	Prevegetation pH	
Fertilizer type Granular	Fons/acre or to corre	ect to pH 6.5	
1 change type Chandle	10-20-20		
Fertilizer amount 500		lbs/acre	
Mulch_ 2		Tons/acre	
		Cood Mintures	
Tompon		Seed Mixtures Permane	ant.
Tempora	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		
acreage, of the land application are	10		
		ì.	
Photocopied section of involved 7	5' topographic sheet	t.	
Photocopied section of involved 7	5' topographic sheet		oly possible,
Photocopied section of involved 7 Plan Approved by: Duga- Comments: Pre-seed/mulc	.5' topographic sheet Haun ch all disturbe	ed areas as soon as reasonat necessary per WV DEP E&S N	
Photocopied section of involved 7 Plan Approved by: Duga- Comments: Pre-seed/mulc	.5' topographic sheet Haun ch all disturbe	ed areas as soon as reasonat	
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Photocopied section of involved 7 Plan Approved by: Duga- Comments: Pre-seed/mulc	.5' topographic sheet Haun ch all disturbe	ed areas as soon as reasonat	Manual. RECEIVI

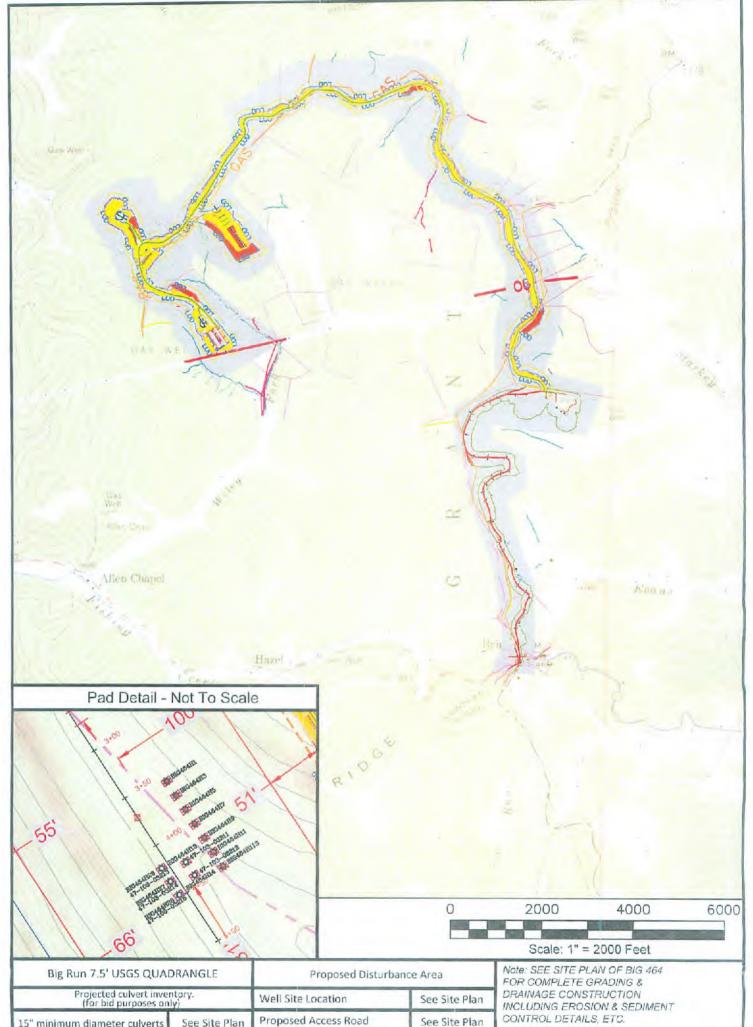
Facility Name	Address	Address 2	sals for Unconvention	State	Zip	Phone	County	State	Permit Number
CWS Trucking Inc.	P.O. Box 391	, Add, C33 E	Williamstown	wv	26187	740-516-3586		ОН	3390
WYS Trucking Inc.	F.O. BOX 331		VVIIII III III III III III III III III	+***	2010,	740 310 3300	1100.0	1011	3330
Proad Street Energy LLC	37 West Broad Street	Suite 1100	Columbus	ОН	43215	740-516-5381	Washingoth	ОН	8462
				 	1			1	
AD Liquid Assets Disposal Inc.	226 Rankin Road		Washington	PA	15301	724-350-2760	Ohio	wv	USEPA WV 0014
			1 2					İ	
Triad Energy	PO Box 430		Reno	ОН	45773	740-516-6021	Noble	ОН	4037
				1		740-374-2940	_		
							_		
ri County Waste Water Management, Inc.	1487 Toms Run Road		Holbrook	PA	15341	724-627-7178	Greene	PA	TC-1009
						724-499-5647			
ing Excavating Co. Advance Waste Services	101 River Park Drive		New Castle	PA	16101		Lawrence	PA	PAR000029132
						L			
Waste Management - Meadowfill Landfill	Rt. 2, Box 68 Dawson Drive	1	Bridgeport	wv	16330	304-326-6027	Harrison	wv	SWF-1032-98
		1						ļ	Approval #100785WV
	ļ			4	<u> </u>	ļ		<u> </u>	
Vaste Management - Northwestern Landfill	512 E. Dry Road		Parkersburg	wv	26104	304-428-0602	Wood	wv	SWF-1025 WV-0109400
APEX Landfill	11 County Road 78	PO Box 57	Amsterdam	ОН	43903	740-543-4389	Jefferson	ОН	06-08438
								ļ	1
Advanced Disposal - Chestnut Valley Landfill	1184 McClellandtown Road		McClellandtown	PA	15458	724-437-7336	Fayette	PA	100419
					45045	774 070 7604	111	D4	100277
Westmoreland Sanitary Landfill	901 Tyrol Boulevard		Belle Vernon	PA	15012	724-929-7694	Westmoreland	PA	100277
	004 N		Manata Fara		42025	740 500 3000	Deles and	ОН	2014 541
Austin Master Services	801 North 1st Street		Martins Ferry	ОН	43935	740-609-3800	Beimont	Un	2014-541
	77505 Cadia Nama Adhara Baad		C-4:-	ОН	42007	740 043 1730	llassiass.	ОН	2015-511
Belmont Solids Control	77505 Cadiz-New Athers Road		Cadiz	- OH	43907	740-942-1739	нагизоп	Un	2015-311
N	3111 Braun Rd.		Dolmen	ОН	45714	740-401-0413	Machington	ОН	
Diversified Resources	SIII Biauli ku.	+	Belpre	1011	43714	740-101-0413	washington		
		+		+	_	_	-	1	34-031-27177
			Coshocton	ОН	43812	740-610-1512		он	34-031-27178
Buckeye Brine	23986 Airport Road		Coshocton	0	73612	724-591-4393	Coshocton		34-031-27241
вискеуе втие	23986 All port Road		 	+	+		COSHOCION	<u> </u>	34 051 27242
Central Environmental Services	28333 West Belpre Pike	+	Coolville	ОН	45723	304-488-0701	Athens	ОН	
Lential Environmental Services	20000 West beipte tike		COOTVING	 	13725	304 400 0702	Herens		
luverra - Nichols	10555 Veto Road		Belpre	он	45714	330-232-5041	Washington	ОН	34-119-2-8776
TOTAL THE TOTAL	20000 VCCO MODE				10101				
Nuverra - Goff	9350 East Pike Road	<u> </u>	Norwich	Он	43767	330-232-5041	Muskingum	ОН	34-167-2-3862
		-				1			
Nuverra - Wolf	5480 State Route 5		Newton Falls	ОН	44444	330-232-5041	Trumbuli	ОН	34-155-2-1893
									<u>tr</u>
Nuverra - Pander	5310 State Route 5		Newton Falls	ОН	44444	330-232-5041	Trumbull	ОН	34-155-2-3-95.
				1					35 6
Nuverra - AnnaRock D-1	3549 Warner Road		Fowler	ОН	44418	330-232-5041	Trumbull	ОН	34-155-2-2408
	- - 			1	1	T		т——	98 2021

FQ Helen	199 Bowersock Road	Reno	ОН	H 45	5773	740-374-2940 412-443-4397 740-236-2135	Washington	ОН	34-167-2-9577
FQ Dexter	38505 Marietta Rd.	Dexter	City OH	H 4:	5727	740-374-2940 412-443-4397 740-236-2135	Noble	ОН	34-121-24037 34-121-24086
FQ Ritchie	122 Lonesome Pine Rd	Ellenbo	ro W\	V 20	6346	740-374-2940 412-443-4397 740-236-2135	Ritchie	wv	47-085-09721
FQ Mills	53610 TS Rd 706	Portlar	d OH	H 4!	5770	740-374-2940 412-443-4397 740-236-2135	Meigs	он	34-105-2-3619 34-105-2-3652 34-105-2-3637 34-105-2-3651
Petta Enterprises - OH	745 North 3rd Street	Cambr	dge OH	H 43	3725	614-477-1368	Guernsey	ОН	Ohio Chiefs Order 25-019
Petta Enterprises - WV	38 Technology Dr.	Tridelp	hia W	V 2	6059	740-255-5727	Ohio	wv	
Deep Rock Disposal	2341 OH-821	Mariet	та ОН	1 4	5750	304-629-0176	Washington	он	34-167-2-9766

Office of Oil and Gas

JUL 08 2021

WM/ Department of Environmental Protection



Proposed Access Road See Site Plan 15" minimum diameter culverts See Site Plan 24" minimum diameter culverts Approximate Total Disturbance See Site Plan ng File No. BIG 464 Rec Plan Tim Rutledge 125-16 June 03, 2021



SURVEYING AND MAPPING SERVICES PERFORMED BY:

EGHENY SURVEYS, INC. 1-800-482-8606

Birch River Office Phone: (304) 649-8606 Fax: (304) 649-8608

237 Birch River Road P.O. Box 438 Birch River, WV 26610 08/13/2021

EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: BIG464

County: Wetzel

June 14, 2021

RECEIVED
Office of Oil and Gas

JUL 08 2021

WV Department of Environmental Projection

Page 1 of 2

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 the BIG464 well pad: 1H, 3H, 5H, 7H, 9H, 11H, 113H

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation.

A report is required to be submitted along with a well work permit application.

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

1. **Communications with Well Operators**

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

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

EQT will recommend to these operators at a minimum to:

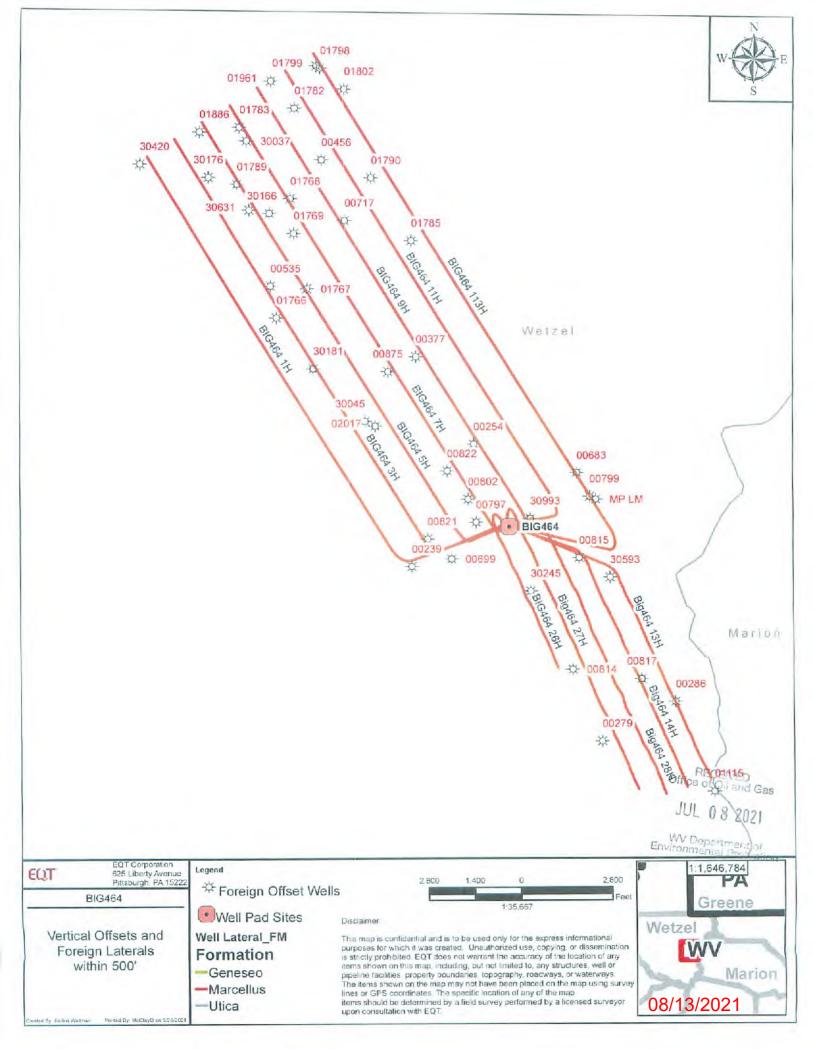
- Inspect their surface equipment prior to fracturing to establish integrity and establish pre-1. frac well conditions
- Observe wells closely during and after fracturing and monitor for abnormal increases in 2. water, gas or pressure
- Inspect or install master valves or other necessary equipment for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

2. Reporting

EQT will provide information relating to the hydraulic fracturing schedule, communication with other $0.8\,$ 2021 EQT will provide information relating to the hydraunc mactaining content.

operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of Environmental Protection

Page 2 of 2



WellD	WeRStatus	date	FmatTD	Permit	Operator	Longitude	Latitude	Targetim	DatumEleva	TotalDepth-SS	Total Depth
	GAS	9/19/1940		00239	EPC		0.5270	39.5641	1410.0000		3426,0000
4710300239	GAS	9/27/1941		00254	EPC	-8	0.5202	39.5744	1464,0000	-1985.0000	3449.0000
4710300Z54		7/21/1942		00279	EPC	-8	0 5066	39.5492	1100.0000	-964.0000	2064.0000
4710300279	GAS-P	3/25/1943		00286	CARNEGIE NAT GAS	-8	0.4986	39.5525	1170.0000	-1896.0000	3066.0000
4710300286	GAS-P	5/25/1545		00377	EAGON & ROBINSON	-8	0.5264	39.5818	1035.0000	-2162,0000	
4710300377	D&A			00456	W D BROOKOVER	-8	0.5366	39.5984	1295.0000	-1211.0000	
4710300456	GAS	3/30/195B		00535	EPC	-8	0.5421	39.5878	1008.0000		
4710300535	STORAGE	1/2/1963		00683	CNG	.2	0.5091	39.5719	1015.0000		
4710300683	GAS-P	9/2/1979		00699	EPC		0.5227	39.5647	0.0000		
4710300699	GAS	8/9/1922			EPC		0.5341	39.5933	9 0000		
4710300717	GA5	10/2/1919		00717	EPC		0.5200	39.5678	0 0000		
4710300797	GAS-P			00797	EPC EPC		0.5077	39.5699	0,0000		
4710300799	GAS	12/19/1910		00799				39.5697			
4710300802	GAS			00862	EPC		0.5208		0.0000	-2343.0000	
4710300314	GAS			00814	EPC		0.5097	39.5553	1340.0000		
4710300815	GAS			00315	EPC		0.5089	39.5647	0.0000		
4710300817	GAS-P			00817	EPC		0.5022	39.5544	1520,0000		
4710300821	GAS-P			00821	EPC		0.5253	39.5664	0.0000		
4710300322	GAS	8/30/1929		00822	EPC		0.5231	39.5721	0 0000	-1954.0000	
4710300371	GAS	12/15/1922		00375	EPC		0.5294	39.5806	0.0000	-93999.0000	99999.0000
4710301115	OIL	4/29/1899		01115	PENNZOIL	-8	0.4945	39.5449	1500.0000	-1132.0000	2632,0000
	GAS	11/6/1998		01766	DAC	-8	0.5415	39,5851	871.0000	-1431.0000	2302.0000
4710301766	GAS	10/30/1998		01767	DAC	-8	0.5382	39.587G	868.0000	-2396.0000	3264.0000
4710301767		10/25/1998		01768	DAC	-8	0.5400	39.5951	1285.0000	-2394.0000	3679.0000
4710301768	GAS	10/19/1998		01769	DAC	+8	0.5396	39.5922	1526.0000	-2366.0000	3692.0000
4710301769	GAS	2/19/1999		01782	DAC	•8	0.5395	39.6027	1424.0000	-2399,0000	3823.0000
4710301782	GAS			01783	DAC	٠.	0.5455	39.6011	1376,0000	-2179.0000	
4710301783	GAS	8/26/1999		01785	DAC		0.5269	39.5916	1186,0000	-2368,0000	
4710301785	GAS	8/13/1999		01789	DAC		0.5457	39.5964	1420,0000	-2164,0000	
4710301789	GAS	9/2/1999		01790	DAC		0.5312	39.5969	904.0000	-2222,0000	
4710301790	GAS	9/17/1999			DAC		0.5368	39.6061	1525.0000	-798.0000	
4710301798	P&A	12/12/1999		01798	DAC		0.5372	39,6063	1525.0000	-2092.0000	
4710301799	GAS	12/23/1999		01799	DAC		0.5342	39.6043	1401,0000	-2193.0000	
4710301802	GAS	6/12/2000		01805			0.5342 0.5498	39.6007			
4710301886	GAS	10/3/2002		01885	EXCEL ENERGY		10.5498 10.5421	39,6050	981.0000	-2329.0000	
4710301961	O\$G	9/21/2003		01961	EXCEL ENERGY				1380.0000	-2316.0000	
4710302017	CBM	4/28/2004		02017	DYNATEC ENERGY		0.5309	39.5760	948.0000	237.0000	
4710330037	GAS	5/22/1920		30037	PGH & WV GAS		10.5447	39.6000	869 0000	-1097,0000	
4710330045	GAS			30045	HOPE NAT GAS		IO.5329	39.5764	1725 0000	-421.0000	2146.0000
4710330166	GAS			30166	HOPE NAT GAS		0.5422	39.5939	1012.0000	-1203.0000	
4710330176	GAS	8/18/1922		30176	PGH & WV GAS		0.5489	39.5969	1078.0000	-2057.0000	3135.0000
	GAS	9/29/1923		30181	PGH & WV GAS	-6	0.5375	39.5203	906.0000	-2030.0000	2936.0000
4710330181	GAS	3/24/1903		30245	CARNEGIE NAT GAS	-4	0.5142	39.5619	1040.0000	-1858.0000	2908.0000
4710330245		m1 = -1 =	LOWER HURON SHALE	30420	OPER IN MIN.OWN	-8	30.5564	39.5981	1310.0000	-1916.0000	3226.0000
4710330470	OIL	2/16/1921		30593	CARNEGIE NAT GAS	-8	80.5055	39.5631	1527.0000	-360 0000	1887.0000
4710330593	GAS	4/27/1916		30631	HOPE NAT GAS	-8	0.5444	39.5942	1356 0000	-1938.0000	3294.0000
4710330631	GAS			30993	CARNEGIE NAT GAS	-8	0.5142	39.5680	1131.0000	-1873.0000	3004.0000
4710330993	GAS	7/19/1911		MPLM			80.5071	39,5696	0.0000	-99999.0000	99922.0000
650531 TEMP LM	TEMP			**** ****							

Office of Oil and Gas

JUL 08 2021

WV Department of Environmental Protection



Buyer Han'

SITE SAFETY AND ENVIRONMENTAL PLAN

BIG464 Pad

Mannington
Wetzel County, WV

Wells: 1H, 3H, 5H, 7H, 9H, 11H, 13H (103-03211), 14H (103-03212), 26H (103-03213), 27H (103-03214), 28H (103-03215), 113H

Prepared By: Donny Prater, CSP, Health and Safety Sciences, LLC

Approved By: Scott M. Held, Senior Safety Coordinator

Created Date: 29-Jan-20

John Zavatehan Project Specialist

EQT Production Company

Bryan Harris Oil and Gas Inspector West Virginia DEP

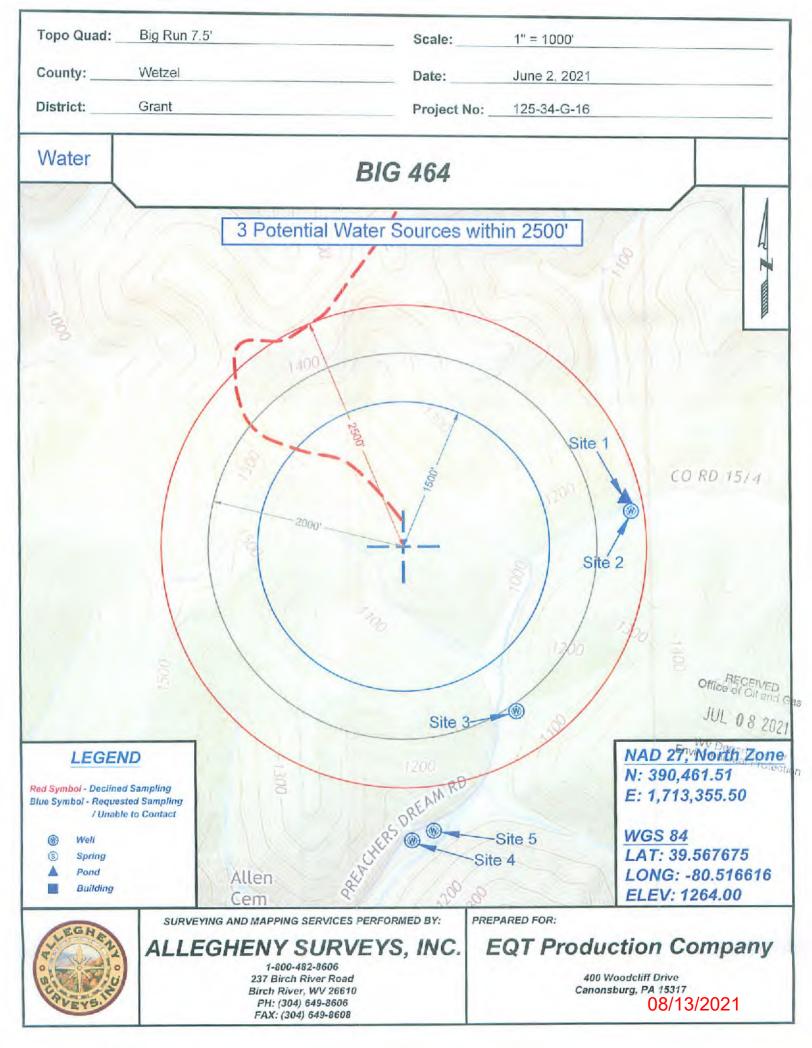




Table 1 - Water Source Identification

	ubmittal Date: May 2, 2021
EQT Well Number:	
Survey / Engineering Company: Allegheny Surve	ys, Inc.
Site Number: 1 Distance from Gas Well (feet): 2,3	35 ±
Surface Owner / Occupant: Donald D'Lusky Address: PO Box 495 Farmington, WV 26571 Ph Field Located Date: 12/16/2016 Owner home duri Coordinates: 39.569123, -80.508546 (decimal deg Contact Attempts (Date): 1st: 5/27/2021 2nd: Comments: Certified letter sent May 27, 2021. In	ng survey (yes/no): rees – NAD 83) Door Hanger Left: Sampling Unable to Contact (Further contact attempts to made by EQT's third party pre-drill sampling lab)
Site Number: 2 Distance from Gas Well (feet): 2,3	67 ±
Surface Owner / Occupant: Donald D'Lusky Address: PO Box 495 Farmington, WV 26571 Ph Field Located Date: 12/16/2016 Owner home duri Coordinates: 39.568746, -80.508332 (decimal deg Contact Attempts (Date): 1st: 5/27/2021 2nd:	ing survey (yes/no): Sampling Unable to Contact (Further contact attempts to made by EQT's third party pre-drill sampling (ab)
Comments: Certified letter sent May 27, 2021. In	fo from previous report in 2016. Water well.
Site Number: 3 Distance from Gas Well (feet): 2,0	60 ±
Surface Owner / Occupant: Marlene Barr – Bever Address: 2124 Barr Rd Smithfield, WV 26437 P Field Located Date: 12/16/2016 Owner home dur Coordinates: 39.563023, -80.512462 (decimal deg Contact Attempts (Date): 1st; 5/27/2021 2nd	Sampling Landowner Decline Sampling Unable to Contact (Further contact attempts to made by EQT's third part) pre-drill sampling lab)
	revious Certified signed for by Marlene Barr on JUL 0 8 2 Environmental Pro

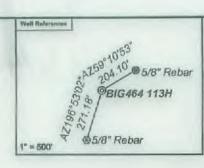
Site Number: 4 Distance from Gas Well (feet): 3044 ±	
Surface Owner / Occupant: Mabel Barr Address: 722 Barr Rd. Smithfield WV 26437 Phone #: 304-386-9650 Field Located Date: 10/15/2018 Owner home during survey (yes/no): Yes Coordinates: 39.559321, -80.516238 (decimal degrees – NAD 83) Contact Attempts (Date): 1st: 5/27/2021 2nd: Door Hanger Left: Comments: Certified letter sent May 27, 2021. Water well by Ms. Barr's	(Further contact attempts to be made by EQT's third party pre-drill sampling lab)
Site Number: 5 Distance from Gas Well (feet): 2958 ±	
Surface Owner / Occupant: Mabel Barr	☐ Landowner Requested
Address: 722 Barr Rd. Smithfield WV 26437 Phone #: 304-386-9650	Sampling ☐ Landowner Decline
Field Located Date: 10/15/2018 Owner home during survey (yes/no):	Sampling ☐ Unable to Contact
Coordinates: 39.559605 , -80.515444 (decimal degrees – NAD 83)	(Further contact attempts to be made by EQT's third party
Contact Attempts (Date): 1st: 5/27/2021 2nd: Door Hanger Left:	pre-drill sampling lab)

Comments: Certified letter sent May 27, 2021. Water well by Ms. Barr's son's mobile home located in 2018.



BIG464 113H **BIG464 EQT Production Company**

Trect I.D.	Tax Mas No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	14	34	Wetzel	Grant	EQT Preduction Company	25.25
2	20	1	Wetzel	Grant	Coastal Fernit Resources Company	520.00
- 0	15	27	Wetzel	Grant	Beverly Lynn Barr Life Extrie	10.00
- 4	14	27	Wetnel	Grant:	EQT Production Complety	22 00
- 6	14	20	Wetze4	Grant	ECT Production Company	126.80
- 6	15	10	Wetzel	Grant	Ocnast J. D'Lunky	25.00
18	15	18.	Weizel	Grunt	Donald J. Dr. unky	20.50
39	15	12	Wetzel	Grant	William Bowers & Donald J. D'Lusky	147.60
20	15:	34	Wetzel	Grant	Donald J. D'Lusky, Jr., et al.	42.00
25	15	29	Weten	Unint.	Terry Phillips, et al.	40.00
22	15	18.1	Wetzel	Grant	Donald J. & Jane A. D'Erriky	29.50
23	15	20	Wetzel	Grant	Terry Philips, et al.	16.00
24	15	20	Wetzel	Grant	Donald J. DiLusky	18.08
28	15	25	Wetzel	Grant	William Jack & Beverly L. Berr	4.70
26	15	15	Wetzel	Grant	Donald W. & Diame White	46.00
.27			Wetzel	Geant	160 Tax Map & Parcel Information	1

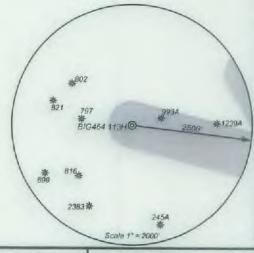


Notes: BIG464 113H coordinates are NAD 27 N: 390,418.37 E: 1,713,430.97 NAD 27 Lat: 39.567475 Long: -80.516536 NAD 83 UTM N: 4,379,873.98 E: 545,43.85 NAD 83 UTM N: 4,379,873,98 E: 541,543,85
BIG464 113H Landing Point coordinates are
NAD 27 N: 390,265,96 E: 1,716,539,39
NAD 27 Let: 39,557153 Long: -80,505505
NAD 83 UTM N: 4,379,843,37 E: 542,491,66
BIG464 113H Bottom Hole coordinates are
NAD 27 N: 391,458,08 E: 1,715,823,09
NAD 27 Let: 39,570403 Long: -80,508093
NAD 83 UTM N: 4,380,202,92 E: 542,287,38
West Virginia Coordinate system of 1927 (North Zone)
based upon Differential GPS Measurements.
Plat orientation, comer and well ties are based upon
the grid north meridian.
Well location references are based upon the grid north
meridian.



meridian.
UTM coordinates are NAD83, Zone 17, Meters

Lease No.	Owner	Acres
707114	Ridgetop Royalties, LLC, et al.	78
1010668	Ridgetop Royalties, LLC, et al.	25
704100	Piney Holdings, Inc., et al.	70
300681	Wayne Thorne, Jr., et al.	40
703716	Ridgetop Royalties, LLC, et al.	400





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

Single CENTER OF	in the second
NO. 2092 STATE OF	* # #
VIRGINAL SUR	SEAL

FILE NO: 125-16 DRAWING NO: BIG464 113H SCALE: 1" = 2000' MINIMUM DEGREE OF ACCURACY: 1:2500 PROVEN SOURCE OF ELEVATION:

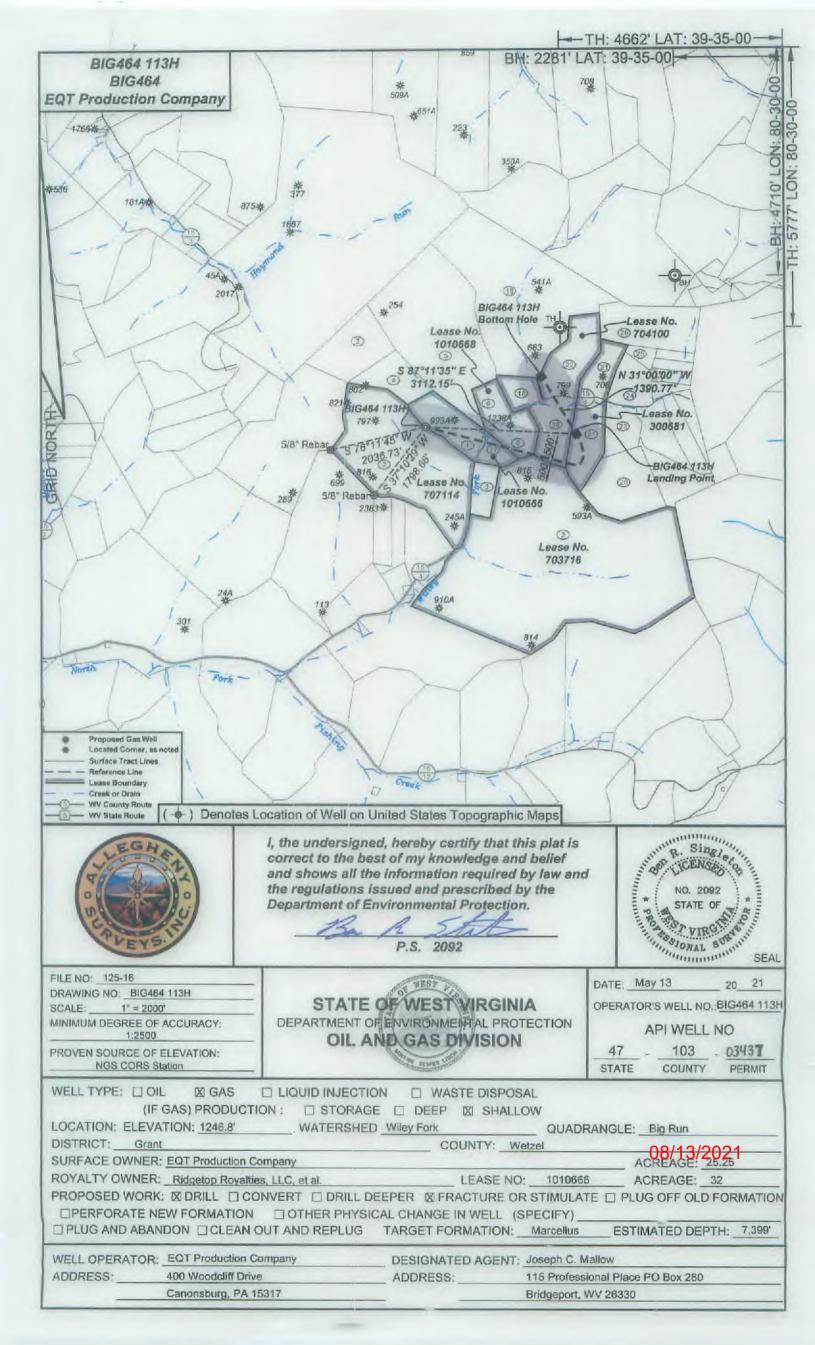
STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OIL AND GAS DIVISION

DATE: May 13 OPERATOR'S WELL NO .: BIG464 113H

API WELL NO

47 103 . 03437

NGS CORS Station		CAN SERVED		STATE	COUNTY	PERMIT
(IF GAS) PRODUCTION	LIQUID INJECTION: STORAG					
LOCATION: ELEVATION: 1246.8'	WATERSHEE	Wiley Fork	QUADRA	ANGLE:_	Big Run	
DISTRICT: Grant		COUNTY: W	etzel		08/13/20	121
SURFACE OWNER: EQT Production Co	mpany			AC	CREAGE: 25	
ROYALTY OWNER: Ridgetop Royalties	s, LLC, et al.	LEASE NO): 1010666		CREAGE: 3	
PROPOSED WORK: DRILL CO		EEPER MFRACTURE O	RSTIMULATE	PLU	G OFF OLD F	ORMATION
□PERFORATE NEW FORMATION						
□ PLUG AND ABANDON □ CLEAN O	UT AND REPLUG	TARGET FORMATION:	Marcellus	ESTIM	ATED DEPT	H: _7,399'
WELL OPERATOR: EQT Production Co	mpany	DESIGNATED AGENT:	Joseph C. Ma	llow		
ADDRESS: 400 Woodcliff Drive		ADDRESS:	115 Professio	nal Place F	PO Box 280	
Canonsburg, PA 15	317		Bridgeport, W	V 26330		



INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(a)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

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

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

See Attachment

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 mental protection permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: EQT Production Company

By: John Zavatchan

Its: Project Specialist - Permitting

Page 1 of 3

Lease No.	Grantor, Lessor, etc.		Grantee, Lessee, etc.	Royalty	Book/Page
<u>707114</u>	Ridgetop Royalties, LLC, et al. W. S. Furbee and Mary Furbee, his wife Carnegie Natural Gas Company Carnegie Production Company	78 ac	Carnegie Natural Gas Company Carnegie Production Company EQT Production Company	"at least 1/8th per WV Code 22-6-8"	OG 2A/182 OG 78A/513 WV SOS
<u>1010666</u>	Ridgetop Royalties, LLC, et al. Ridgetop Royalties, LLC	32 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	OG 166A/638
<u>1010668</u>	Ridgetop Royalties, LLC et al. Ridgetop Royalties, LLC	25 ac	EQT Production Company	"at least 1/8th per WV Code 22-6-8"	OG 248A/272
<u>704100</u>	Piney Holdings, Inc., et al. B. C. Merrifield and J. M. V. Merrifield, her husband J. E. Carnahan and H. L. Smith Carnegie Natural Gas Company Carnegie Production Company	70 ac	J. E. Carnahan and H. L. Smith Carnegie Natural Gas Company Carnegie Production Company EQT Production Company	"at least 1/8th per WV Code 22-6-8"	DB 96/349 Unrecorded OG 78A/513 WV SOS
JUL 08 300681 WV Departmental F	Wayne Thorne, Jr., et al. E. C. Snodgrass and Mary E. Snodgrass, his wife Hepe Natural Gas Company Consolidated Gas Supply Corporation	40 ac	Hope Natural Gas Company Consolidated Gas Supply Corporation Consolidated Gas Transmission Corporation	"at least 1/8th per WV Code 22-6-8"	DB 101/566 DB 233/387 OG 66A/69

Consolidated Gas Transmission Corporation
CNG Transmission Corporation
Eastern States Oil & Gas, Inc.
Blazer Energy Corp.
Eastern States Oil & Gas, Inc., Blazer Energy Corp., et al.

CNG Transmission Corporation

Eastern States Oil & Gas, Inc.

Blazer Energy Corp.

Corp. Book 12/253

Eastern States Oil & Gas, Inc.

Corp. Book 12/259

EQT Production Company

Corp. Book 13/14

"at least 1/8th per WV Code 22-6-8"

Ridgetop Royalties, LLC, et al.

Sara J. Furbee, sole Devisee under the Will of J. H.

Furbee, deceased

400 ac

C. D. Greenlee

703716

Carnegie Natural Gas Company

Carnegie Production Company

C. D. Greenlee

Carnegie Natural Gas Company Carnegie Production Company EQT Production Company DB 63/89

Unrecorded OG 78A/513 WV SOS

Office of Citard Gas

JUL 0 8 2021

Environmental Protection



June 14, 2021

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

Re:

BIG464 113H

Grant District, Wetzel County, WV

Dear Mr. Brewer,

EQT Production Company is applying for a new well work permit for the well referenced above. Upon information and belief, the 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,

John Zavatchan

Project Specialist - Permitting

Office of Oil and Gas

JUL 0 8 2021

WW Department of Environmental Protection

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

	e Certification: 6/15/2021	API No. 47- 103 - (77771
		Operator's Well No. 1131	1
		Well Pad Name: BIG464	
	een given:		CA STATELLAND
		§ 22-6A, the Operator has provided the required parties v	with the Notice Forms listed
	tract of land as follows:	The side of the same of the sa	
tate:	West Virginia	UTM NAD 83 Easting: 541543.853	
ounty:	Wetzel 4	Public Road Access: CR1	
istrict:	Grant Big Run	Public Road Access: CR1 Generally used farm name: EQT Production	Company
uadrangle: /atershed:	Wiley Fork	Generally used farm name.	Company
has provide formation re giving the quirements irginia Code	ed the owners of the surface descri- equired by subsections (b) and (c), s surface owner notice of entry to s of subsection (b), section sixteen	shall contain the following information: (14) A certification in subdivisions (1), (2) and (4), subsection (b), selection sixteen of this article; (ii) that the requirement was urvey pursuant to subsection (a), section ten of this article this article were waived in writing by the surface of tender proof of and certify to the secretary that the notice int.	ection ten of this article, the s deemed satisfied as a result icle six-a; or (iii) the notice wher; and Pursuant to We
humanant to	West Virginia Code \$ 33.64 the O	nameter has attacked speed to this Notice Configuration	
hat the Ope	rator has properly served the require	perator has attached proof to this Notice Certification ed parties with the following:	OOG OFFICE USE
that the Ope			OOG OFFICE USE ONLY
hat the Ope	rator has properly served the require		
that the Ope *PLEASE CHI	rator has properly served the require ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY or	ed parties with the following: NOTICE NOT REQUIRED BECAUSE NO	ONLY □ RECEIVED/
that the Ope *PLEASE CHI 1. NO	rator has properly served the require ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY or	ed parties with the following: NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED VEY or NO PLAT SURVEY WAS CONDUCTED	ONLY RECEIVED/ NOT REQUIRED
that the Ope *PLEASE CHI 1. NO 2. NO	rator has properly served the require ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY or FICE OF ENTRY FOR PLAT SUR	ed parties with the following: NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED VEY or NO PLAT SURVEY WAS CONDUCTED NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY	ONLY RECEIVED/ NOT REQUIRED RECEIVED RECEIVED/
that the Ope *PLEASE CHI 1. NO 2. NO 3. NO	rator has properly served the require ECK ALL THAT APPLY FICE OF SEISMIC ACTIVITY or FICE OF ENTRY FOR PLAT SUR	ed parties with the following: ■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED VEY or ■ NO PLAT SURVEY WAS CONDUCTED □ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED of □ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	ONLY RECEIVED/ NOT REQUIRED RECEIVED RECEIVED/
that the Ope *PLEASE CHI 1. NO 2. NO 3. NO 4. NO	TATES TO PRIVATE THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY FOR PLAT SURTICE OF INTENT TO DRILL OF	ed parties with the following: ■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED VEY or ■ NO PLAT SURVEY WAS CONDUCTED □ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED of □ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	ONLY RECEIVED/ NOT REQUIRED RECEIVED/ NOT REQUIRED

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. 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.

By:

Certification of Notice is hereby given:

THEREFORE, I John Zavalchan , 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

John Zavatchan

John Zavatchan

Its: Project Specialist - Permitting

Telephone: 724-746-9073

Address: 400 Woodcliff Drive

Canonsburg, PA 15317

Facsimile: 412-395-2974

Email: jzavatchan@eqt.com

Commonwealth சிசென்லில்கள்க் - Notary Seal Rebecca Shrum, Notary Public Beaver County

My commission expires March 9, 2024 Commission number 1267706

Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this 15th day of June 202

Notary Public

My Commission Expires

March 9, 2024

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 Oil and Cas

JUL 0 8 2021

WW Department of Environmental Protection

WW-6A (9-13) API NO. 47- 103 - 03437 OPERATOR WELL NO. 113H Well Pad Name: BIG464

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

Noti	ice Time Requirement: notice shall be provided no later the	oan the filing date of permit application.	
	e of Notice: 1/15/12AlDate Permit Application Filed:	10001	
	PERMIT FOR ANY CERTIFICATE OF AI	PPROVAL FOR THE	
		AN IMPOUNDMENT OR PIT	
Deli	very method pursuant to West Virginia Code § 22-6A-	10(b)	
	PERSONAL REGISTERED MET	HOD OF DELIVERY THAT REQUIRES A	
		EIPT OR SIGNATURE CONFIRMATION	
sedii the s oil a desc oper mor- well impo have prov prop subs reco prov Cod	stered mail or by any method of delivery that requires a receip ment control plan required by section seven of this article, and surface of the tract on which the well is or is proposed to be lo and gas leasehold being developed by the proposed well work, tribed in the crosson and sediment control plan submitted purs rator or lessee, in the event the tract of land on which the well e coal seams; (4) The owners of record of the surface tract or l work, if the surface tract is to be used for the placement, con oundment or pit as described in section nine of this article; (5) e a water well, spring or water supply source located within or ride water for consumption by humans or domestic animals; a posed well work activity is to take place. (c)(1) If more than the section (b) of this section hold interests in the lands, the applicants of the sheriff required to be maintained pursuant to section vision of this article to the contrary, notice to a lien holder is n e R, § 35-8-5.7.a requires, in part, that the operator shall also be purveyor or surface owner subject to notice and water testing	If the well plat to each of the following persons: (1) The objected; (2) The owners of record of the surface tract or traif the surface tract is to be used for roads or other land of uant to subsection (c), section seven of this article; (3) The proposed to be drilled is located [sic] is known to be untracts overlying the oil and gas leasehold being develope struction, enlargement, alteration, repair, removal or abate (a) Any surface owner or water purveyor who is known to be thousand five hundred feet of the center of the well pand (6) The operator of any natural gas storage field withing the tenants in common or other co-owners of interests durant may serve the documents required upon the person on eight, article one, chapter eleven-a of this code. (2) No ot notice to a landowner, unless the lien holder is the land provide the Well Site Safety Plan ("WSSP") to the surface.	owners of record of acts overlying the listurbance as he coal owner, derlain by one or d by the proposed indonment of any the applicant to d which is used to in which the escribed in lescribed in the twithstanding any downer. W. Va.
Ø A	Application Notice	ce Well Plat Notice is hereby provided to:	
	URFACE OWNER(s)	☐ COAL OWNER OR LESSEE	
	ne; See Attached List Iress:	Name: See AttachedList Address:	
Nan	he:	☐ COAL OPERATOR Name:	
		Address:	
_	URFACE OWNER(s) (Road and/or Other Disturbance)		
	ne: See Attached List Iress:	SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)	
, , ,		Name:	
Nan	ne;	Address:	
Add	lress:		Office of Oil and
□ Si Nan	URFACE OWNER(s) (Impoundments or Pits)	OPERATOR OF ANY NATURAL GAS STOR Name:	JUL 08 2021
	ne:	Address;	E WV Department
		*Please attach additional forms if necessary	Environmental Protection

WW-6A (8-13) API NO. 47-103 - 03437 OPERATOR WELL NO. 113H Well Pad Name: BIG464

Notice is hereby given:

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

This Notice Shall Include

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

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

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

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

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

Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending 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. 47-163 - 03437

OPERATOR WELL NO. 113H

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:

Office of Oil and Gas

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

JUL 0 8 2021
W Department of processing of the second seco

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

WW-6A (8-13) API NO. 47- 103 - 03437 OPERATOR WELL NO. 113H Well Pad Name: BIG464

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.

Office of Oll and Gas

JUL 0 8 2021

WV Department of Environmental Protection

WW-6A (8-13)

API NO. 47- 103 - 03437 OPERATOR WELL NO. 113H Well Pad Name: BIG464

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 724-746-9073 Email: jzavatchan@eqt.com Address: 400 Woodcliff Drive

Canonsburg, PA 15317 Facsimile: 412-395-2974

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 depprivacy officer (a) wv.gov.

Commonwealth of Pennsylvania - Notary Seal Rebecca Shrum, Notary Public Beaver County My commission expires March 9, 2024 Commission number 1267706

Member, Pennsylvania Association of Notaries

Subscribed and syron before me this 14th day of June, 2021

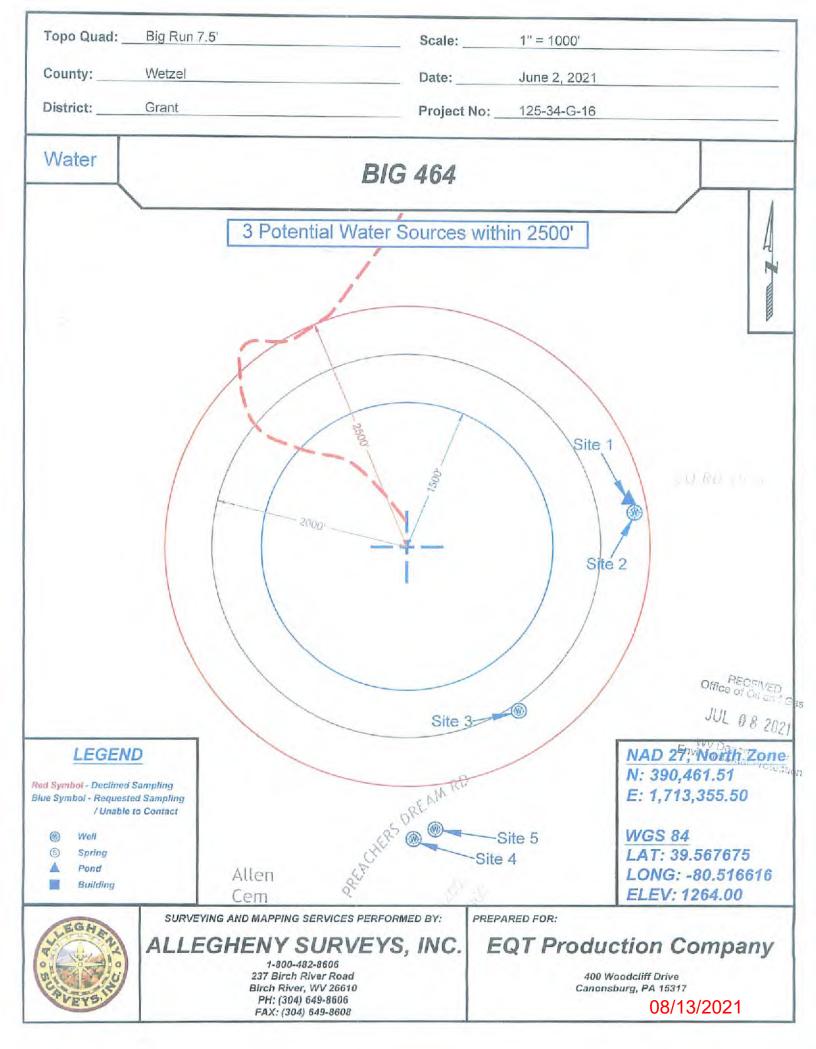
Relects 21 - Notary Public

My Commission Expires March 9, 2029

Office of Oil and Gas

JUL 08 2021

Environmental Protection



Well Pad / AST Pad / Access Road / Stockpile

- EQT Production Company
 400 Woodcliff Drive, CANONSBURG, PA 15317
- Coastal Forest Resources Co.
 PO BOX 709, BUCKHANNON, WV 26201

Access Road

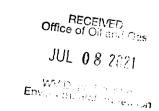
- Robert and Maxine Tonkery
 33 TONKERY DR., FAIRMONT, WV 26554
- Paul Able Trustee ETAL
 400 DELTA RD. APT 1, AMHERST, NY 14226
- William Jack & Beverly Barr (Marlene Barr LE)
 2124 BARR RD., SMITHFIELD, WV 26437
- Donald W. & Diana L. White
 5017 HUSKY HWY., MANNINGTON, WV 26582
- Coastal Forest Resources Co.
 PO BOX 709, BUCKHANNON, WV 26201
- Rich Rager
 4620 SIMPSON RD., GRAFTON, WV 26354
- Timothy E. Titus
 7335 WILLEY FORK RD., BURTON, WV 26562
- Timothy E. Titus ETAL
 7335 WILLEY FORK RD., BURTON, WV 26562
- Billy J. & Frances J. Higgins Irrevocable Intervivos Trust 531 FRANKLIN TERRANCE, WASHINGTON, PA 15301

Coal Owners

- Consol RCPC LLC 1000 Consol Energy Drive, Canonsburg, PA 15370
- SKB Mineral Interests, LLC
 3606 Pruetts Chapel Road, Paragould, AK 72450
- Newton S Beaty Families Trust
 107 High Street, PO Box 108, Mannington, WV 26582

Coal Lessee

ACNR Resources
 46226 National Road, St. Clairsville, OH 43950



WW-6A4 (1/12) Operator Well No. BIG464 113H

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 I Date of Notic	Requirement: Notice shall be provided at e: 05/25/2021 Date Peri	least TEN (10) days prior to filing a mit Application Filed:		
Delivery metl	hod pursuant to West Virginia Code § 2	2-6A-16(b)		
☐ HAND DELIVE	CERTIFIED MAIL RY RETURN RECEIPT REQ	UESTED		
receipt reques drilling a hori of this subsect subsection ma	Va. Code § 22-6A-16(b), at least ten day ted or hand delivery, give the surface own zontal well: <i>Provided</i> , That notice given tion as of the date the notice was provided by be waived in writing by the surface own te, facsimile number and electronic mail ac	er notice of its intent to enter upon to pursuant to subsection (a), section to to the surface owner: <i>Provided</i> , how er. The notice, if required, shall include	he surface owner's land en of this article satisfies rever. That the notice red lude the name, address, t	for the purpose of the requirements quirements of this elephone number,
	reby provided to the SURFACE OW			
Name: See Attac Address:	ched	Name: See Attached Address:		-
Pursuant to W the surface ov State: County: District: Quadrangle: Watershed:	/est Virginia Code § 22-6A-16(b), notice is vner's land for the purpose of drilling a hor West Virginia Wetzel Grant Big Run Wiley Fork	is hereby given that the undersigned rizontal well on the tract of land as for the UTM NAD 83 Easting: Northing: Public Road Access: Generally used farm name:	well operator has an in ollows: 541543.853 4379873.978 CR1 EQT Production Company	tent to enter upon
Pursuant to V facsimile nun related to hor	Shall Include: West Virginia Code § 22-6A-16(b), this other and electronic mail address of the of izontal drilling may be obtained from the 57th Street, SE, Charleston, WV 25304 (3)	operator and the operator's authorize Secretary, at the WV Department of	ed representative, Addit of Environmental Protec	cional information tion headquarters,
	reby given by:	Authorizad Danracantativa	Libe Zecutation	
Well Operato Address:		Authorized Representative Address:	John Zavatchan 400 Woodcliff Drive	
Address:	400 Woodcliff Drive	Tauress.	Canonsburg, PA 15317	RECEIVED
Telephone:	Canensburg, PA 15317	Telephone:	724-746-9073	Office of Citizald G
Email:	724-746-9073	Email:	jzavatchan@eqt.com	11.11 0
Facsimile:	jzavatchan@eqt.com 412-395-2974	Facsimile:	412-395-2974	JUL 08 2021
I meditifier	416-949-6914			

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.

BIG464 WW-6A4 Attachment

Well Pad / AST Pad / Access Road / Stockpile

- EQT Production Company
 400 Woodcliff Drive, CANONSBURG, PA 15317
- Coastal Forest Resources Co.
 PO BOX 709, BUCKHANNON, WV 26201

Access Road

- Robert and Maxine Tonkery
 33 TONKERY DR., FAIRMONT, WV 26554
- Paul Able Trustee ETAL
 400 DELTA RD. APT 1, AMHERST, NY 14226
- William Jack & Beverly Barr (Marlene Barr LE)
 2124 BARR RD., SMITHFIELD, WV 26437
- Donald W. & Diana L. White
 5017 HUSKY HWY., MANNINGTON, WV 26582
- Coastal Forest Resources Co.
 PO BOX 709, BUCKHANNON, WV 26201
- Rich Rager
 4620 SIMPSON RD., GRAFTON, WV 26354
- Timothy E. Titus
 7335 WILLEY FORK RD., BURTON, WV 26562
- Timothy E. Titus ETAL
 7335 WILLEY FORK RD., BURTON, WV 26562
- Billy J. & Frances J. Higgins Irrevocable Intervivos Trust
 531 FRANKLIN TERRANCE, WASHINGTON, PA 15301



WW-6A5 (1/12)

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

Date of Notic	Requirement: notice shall be prov e: <u>Olis 2021</u> Date Per	rmit Application Filed:		application.	
Delivery metl	hod pursuant to West Virginia C	Code § 22-6A-16(c)	, ,		
CERTIF	FIED MAIL	☐ HAND			
	N RECEIPT REQUESTED	DELIVERY			
return receipt the planned of required to be drilling of a h damages to the (d) The notice of notice. Notice is here	V. Va. Code § 22-6A-16(c), no late requested or hand delivery, give the peration. The notice required by provided by subsection (b), section for izontal well; and (3) A propose e surface affected by oil and gas of its required by this section shall be be the provided to the SURFACE Control of the surface	the surface owner whose land this subsection shall include on ten of this article to a surface ed surface use and compens perations to the extent the da given to the surface owner a	will be used for le: (1) A copy ace owner whose ation agreement mages are com	or the drilling of a hor of this code section se land will be used in at containing an offer pensable under article	rizontal well notice of ; (2) The information in conjunction with the r of compensation for e six-b of this chapter
at the address	s listed in the records of the sheriff	f at the time of notice): Name:			
Address: 400 W Canonsburg PA 1 Notice is here Pursuant to W	by given: /est Virginia Code § 22-6A-16(c),	Address notice is hereby given that the	e undersigned	well operator has dev	reloped a planned
Address: 400 W Garonsburg PA 1 Notice is here Pursuant to W operation on to State: County: District:	voodeliff Drive 5317 eby given:	Address notice is hereby given that the arpose of drilling a horizonta UTM NAD 8 Public Road A	te undersigned of the trace of trace of the	641543.853 4379873.976 CR1	
Address: 400 W Ganonsburg PA 1 Notice is here Pursuant to W operation on t State: County: District: Quadrangle:	eby given: est Virginia Code § 22-6A-16(c), the surface owner's land for the pu	Address notice is hereby given that the arpose of drilling a horizonta UTM NAD 8 Public Road A	te undersigned I well on the tra Basting: Northing:	641543.853 6379873.976	
Address: 400 W Carlonsburg, PA 1 Notice is here Pursuant to W operation on the State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information re headquarters.	eby given: lest Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virginia work with the surface owner's land for the put west Virginia work with the surface owner's land for the put west Virginia work with the surface owner's land for the put west Virginia work with the surface owner's land to the surface use ed by oil and gas operations to the lated to horizontal drilling may located at 601 57th Street, SE,	notice is hereby given that the arpose of drilling a horizonta UTM NAD 8 Public Road of Generally use this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are combe obtained from the Secret	te undersigned of well on the tra Easting: Northing: Access: d farm name: A copy of this of the containing and compensable understanding at the WV	code section; (2) The used in conjunction offer of compensatiler article six-b of the Department of Env	e information required with the drilling of a ion for damages to the is chapter. Additional ironmental Protection
Address: 400 W Ganonsburg PA 1 Notice is here Pursuant to W operation on the State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide horizontal we surface affect information re headquarters, gas/pages/defi	eby given: lest Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virginia Wetzel Grant Big Run Wiley Fork Shall Include: lest Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virginia Wetzel Grant Big Run Wiley Fork Shall Include: lest Virginia Code § 22-6A-16(c), the surface use west with the surface with the surface with the surface owner's land for the put west with the surface owner's land	Address notice is hereby given that the prose of drilling a horizonta. UTM NAD 8 Public Road a Generally use this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are cobe obtained from the Secret Charleston, WV 25304 (1)	te undersigned of well on the traces and farm name; Access: IA copy of this aland will be on the containing and the WV (304-926-0450)	code section; (2) The used in conjunction offer of compensatiler article six-b of the Department of Env	e information required with the drilling of a ion for damages to the is chapter. Additional ironmental Protection w.dep.wv.gov/oil-and-
Address: 400 W Canonsburg PA 1 Notice is here Pursuant to W operation on the State: County: District: Quadrangle: Watershed: This Notice S Pursuant to W to be provide norizontal we surface affect information re headquarters,	eby given: lest Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virginia Wetzel Grant Big Run Wiley Fork Shall Include: lest Virginia Code § 22-6A-16(c), the surface owner's land for the put west Virginia Wetzel Grant Big Run Wiley Fork Shall Include: lest Virginia Code § 22-6A-16(c), the surface use west with the surface with the surface with the surface owner's land for the put west with the surface owner's land	notice is hereby given that the arpose of drilling a horizonta UTM NAD 8 Public Road of Generally use this notice shall include: (1) to a surface owner whose and compensation agreement extent the damages are combe obtained from the Secret	te undersigned of well on the tra Easting: Northing: Access: d farm name: A copy of this of the containing and compensable understanding at the WV	code section; (2) The used in conjunction offer of compensation article six-b of the Department of Environment of Environment of Services of the Department of Environment of Services of the Department of Environment of Services of the Department of Environment of Environment of Services of the Department of Environment of Services of the Department of Environment of Services	e information required with the drilling of a ion for damages to the is chapter. Additional ironmental Protection

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.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

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

Jimmy Wriston, P. E. Deputy Secretary/ Deputy Commissioner

June 2, 2021

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

Subject: DOH Permit for the BIG 464 Pad, Wetzel County BIG 464 113H Well Site

Dear Mr. Martin,

Byrd E. White, III

Secretary of Transportation/

Commissioner of Highways

This well site will be accessed from a DOH permit #06-2018-0403 which has been issued to EQT Production Company for access to the State Road for a well site located off Wetzel County Route 15/4 SLS at MP 1.13.

This operator is in compliance with §22-6A-20 of the WV Code. 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 October 1, 2018. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer

Central Office O&G Coordinator

Office of On and Gas

JUL 08 2021

WV Department of Environmental Protection

Cc: Becky Shrum

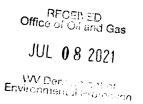
EQT Production Company

CH, OM, D-6

File

Anticipated Frac Additives Chemical Names and CAS Numbers

Material	Ingredient	CAS Number
Sand (Proppant)	Silica Substrate	14808-60-7
Water	Water	7732-18-5
Hydrochloric Acid (HCI)	Hydrogen Chloride	7647-01-0
Friction Reducer	Copolymer of 2-propenamide	Proprietary
	Petroleum Distillate	64742-47-8
	Oleic Acid Diethanolamide	93-83-4
	Alcohols, C12-16, ethoxylated	68551-12-2
	Ammonium chloride ((NH4)Cl)	12125-02-9
Biocide	Glutaraldehyde	111-30-8
	Alkyl dimethyl benzyl ammonium chloride	68391-01-5
	Didecyl dimethyl ammonium chloride	7173-51-5
	Non-hazardous substances	Proprietary
Scale Control	Bis(HexaMethylene Triamine Penta(Methylene Phosphonic Acid)(BHMT)	34690-00-1
	Non-hazardous substances	Proprietary
Acid Chelating Agent	Citric Acid	77-92-9
Corrosion Inhibitor	Methanol	67-56-1
	pyridinium, 1-(phenylmethyl)-, ethyl methyl derivs., chlorides	68909-18-2
	Nonoxynol-9	127087-87-0
	2-ethyl-1-hexanol	104-76-7
	4-nonylphenyl, ethoxylated	26027-38-3



BIG 464 WELL PAD FINAL SITE DESIGN

AS-BUILT COVER SHEET/LOCATION MAPS





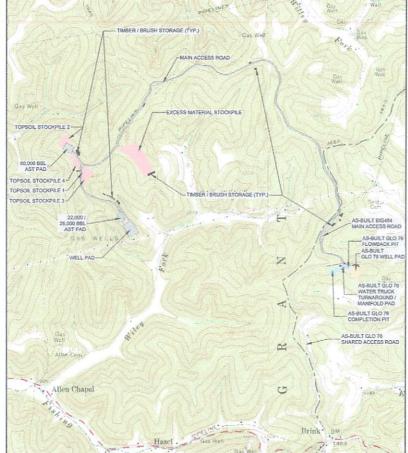


 -	_		 _	

FLOODPLAII	N COND	ITIONS	3
DO SITE CONSTRUCTON ACTIVITIES TAKE PLACE IN FLOODPLAIN.			NO
PERMIT NEEDED FROM COUNTY FI	LOODPLAIN COOR!	DINATOR:	NO
HEC-RAS STUDY COMPLETED:			NO
FLOODPLAIN SHOWN ON DRAWING	SS:		NO
FIRM MAP NUMBER(S) FOR SITE:	54049000650 -	54103C0250C - 5	4103C0225C
ACREAGES OF CONSTRUCTION IN	FLOODPLAIN:	N.A.	

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!!







West Virginia Coordinate System of 1983 State Plane Grid North Elevations NAVD88 Established By Survey Grade GPS

WVDEP OOG **ACCEPTED AS-BUILT** XXX 8/11/2021

AS-BUILT WELL LEGEND

BIG464 1H-	LAT: 39.567764 / LONG: -80.516525
BIG464 3H-	LAT: 39.567730 / LONG: -80.516495
BIG464 5H-	LAT: 39.567695 / LONG: -80.516466
BIG484 7H-	LAT: 39.567661 / LONG: -80.516436
BIG464 9H-	LAT: 39.567627 / LONG: +80.516406
BIG464 11H-	LAT: 39.587593 / LONG: -80.518376
BIG464 113H-	LAT: 39.567559 / LONG: -80.516347
47-103-03211-	LAT: 39.567568 / LONG: -80.516462
47-103-03212-	LAT: 39.567536 / LONG: -80.516434
47-103-03213-	LAT: 39.567552/LONG: -80.516537
47-103-03214-	LAT: 39.567520 / LONG: -80.516510
47-103-03215-	LAT: 39.567488 / LONG: -80.516482

SHEET INDEX

COVER SHEET	LOCATION MAP 1	-
AS-BUILT SITE		
ACCESS ROAD	PROFILES24-2	2

ASBUILT MA	TERIAL QUANTITIES		
ITEM DESCRIPTION	DESIGN QTY	UNIT	ASBUILT QTY
Clearing and Grubbing	125.43	AC.	125.79
12" Silt Sox	0	LF	2,584
Z4" Sfit Sox	19,821	LF	25,470
12" Dia. HDPE Culvert/ Pipe	0	U	73
15" Dta. HDPE Culvert/ Pipe	643	1.5	1,075
16" Dia. HDPE Culvert/ Pipe	342	LF	560
24" Dia. HDPE Culvert/ Pipe	912	U	1,216
30° Dia. HDPE Culvert/ Pipe	315	LF	334
35" Dia. HDPE Culvert/ Pipe	0	LF	175
Erosion Control Matting	139,442	.SY	0
Straw Wettle	21,816	UF	19,177
Sift Fence	0	LF	790
Super Silt Fence	358	LF	522
Toe Key Drain Pipe	24,479	LF	25,782
Toe Key Outlet Pipe	7,320	LF	13,275



NAD	83	
	LATITUDE	LONGITUDE
Center of Weil Ped	39.567675	-60.516016
Center of 60,000 BBL AST Paul	39,575120	-80.524345
Center of 22,000/26,000 BBL AST Pag	39.566599	-80.517732
Sta. 0+00 Main Access	39.564622	-80.491230
Sta. 0+00 60,000 AST Access	39.573440	-60.622526
Sts 0+00 22,000/26,000 AST Access	39.509724	-80.518191

UIND	HAR ACTORIES	COMPAGISO	TIMOUL				
	DESIGN	GRADING VO	LUMES	AS-BUH	LT GRADING V	OLUMES	These di
DESCRIPTION	CUT (CY)	FILL (CY)	NET (CY)	CUT (CY)	FILL (CY)	NET (CY)	3D scan
MAIN ACCESS ROAD	56,384	213,381	-156,997	140,359	249,482	-109,123	on 6.6.1
WELL PAD	258,756	12,463	246,293	236,590	10,906	225,684	this site.
50,000 BBL ABOVEGROUND STORAGE TANK (AST) PAD	14,230	21,301	-7,071	13,460	21,332	-7,872	
22,000/26,000 BBL ABOVEGROUND STORAGE TANK (AST) PAD	54,516	7,133	52,383	54,755	2,602	52,153	DATE
22,000/26,000 BBL. AST ACCESS ROAD	11,788	133	11,655	9,490	19	9,471	10/2/20
60,000 BBL. AST ACCESS ROAD	0	2,594	-2,594	0	2,976	-2,976	-
EXCESS MATERIAL STOCKPILE	0	143,669	-143,669	0	201,335	-201,335	5/11/2
TOPSOIL STOCKPILES	62,915	0	62,915	62,939	0	62,939	5/20/20
TOTAL	458,589	395,674	62,915	517,593	488,652	28,941	
		Of the last of the					-

As-Built Certification

These drawings have been prepared high density 3D scan data provided by Allegheny Surveys, Inc. on 6.8.18 and reflect the locations and as-built conditions from to exist following constitución of this site, to the best of my knowledge.

E	REVISIONS	Date: 06/14/2018
2018	ADDED AS-BUILT WELL API NUMBERS	Scale: N.A.
2021	CHANGED AS-BUILT AST SIZE	Doolgrad By: TRC
2021	UPDATED TOP HOLES	File No. 1964 substity (IPDL/sq
		Page 1 of 27



THIS DOCUMENT PREPARED FOR EQT PRODUCTION COMPANY

Engineers
rironmental and
Engineering

ULT COVER SHEET/LOCATION MAP BIG 464 WELL PAD SITE

