

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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Tuesday, July 14, 2020 WELL WORK PERMIT Horizontal 6A / New Drill

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

Re: Permit approval for SIZEMORE 17H 47-103-03351-00-00

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

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

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

James A. Martin Chief

Operator's Well Number: Farm Name: U.S. WELL NUMBER: Horizontal 6A Date Issued: 7/14/2020

Promoting a healthy environment.

PERMIT CONDITIONS

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

CONDITIONS

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

API Number:

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.

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4710303351

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

OPERATOR WELL NO. <u>17H</u> Well Pad Name: <u>Sizemore</u>

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

1) Well Operato	or: EQT Produ	ction Company	306686	Wetzel	Center	Littleton	
-			Operator ID	County	District	Quadrangle	
2) Operator's W	/ell Number: 17	Η	Well Pad	Name: Sizem	ore		
3) Farm Name/) Farm Name/Surface Owner: Anthony W. Sizemore Public Road Access: CR 7/16						
4) Elevation, cu	rrent ground:	1148' (built) El	evation, proposed p	oost-constructio	on: <u>1148' (</u>	built)	
5) Well Type	(a) Gas X Other	Oil	Unde	rground Storag	je		
		llow X	Deep			· · · · · · · · · · · · · · · · · · ·	
		$\frac{X}{X}$	Deep				
6) Existing Pad	: Yes or No Yes				DMH :	5/28/20	
7) Proposed Tar), Depth(s), Antic	ipated Thickness a	nd Expected Pr	essure(s):		
8) Proposed To	tal Vertical Dept	h: 7,335' √				RECEIVED Office of Oil and Gas	
	Total Vertical D					11.1.	
10) Proposed Te	otal Measured D	epth: 13,086'	/		1	JUN 0 2 2020	
11) Proposed H	orizontal Leg Le	ngth: 4,234' /			Envi	W Department of ronmental Protection	
12) Approxima	te Fresh Water S	trata Depths:	176', 682', 717'	1			
13) Method to I	Determine Fresh	Water Depths:	Offset Wells 47-10	3-02120; 47-10)3-02121; 4	47-103-02580 🦯	
14) Approxima	te Saltwater Dep	ths: 1,859'	/				
15) Approxima	te Coal Seam De	pths: <u>527'-531';</u>	754.5'-761', 888'-8	91' 🖊			
16) Approxima	te Depth to Possi	ble Void (coal m	ine, karst, other):	N/A			
· ·	sed well location ng or adjacent to	n contain coal sear an active mine?	ms Yes	No	<u>X</u>		
(a) If Yes, pro	vide Mine Info:	Name:					
		Depth:					
		Seam:					
		Owner:					

4710303351 API NO. 47-

OPERATOR WELL NO. 17H

WW-6B (04/15)

18)

CASING AND TUBING PROGRAM

ТҮРЕ	<u>Size</u> (in)	<u>New</u> <u>or</u> <u>Used</u>	Grade	<u>Weight per ft.</u> (lb/ft)	<u>FOOTAGE: For</u> <u>Drilling (ft)</u>	INTERVALS: Left in Well (ft)	<u>CEMENT:</u> <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	26	New	A-500	85.6	40	40 🖌	60 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	1041	1041	911 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	2463	2463	958 ft^3 / CTS
Production	5 1/2	New	P-110	20	13086	13086	500' above intermediate casing
Tubing							
Liners							

DMH 5/28/20

ТҮРЕ	<u>Size (in)</u>	<u>Wellbore</u> Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Yield</u> (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	0.395	3950	3160	Class A / Type 1	1.13 - 1.19
Production	5 1/2	8 1/2	0.361	14360	11488	Class A/H	1.04 - 2.098
Tubing							
Liners							

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PACKERS

WV Department of Environmental Protection Kind: Sizes: Depths Set:

WW-6B (10/14)

API NO. 47	7-1	.0	3	0	3	3	5	1
OPERATOR								
Well Pad N	ame:	Sizer	nore					_

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.

DMH 5/28/20

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, e	etc., (acres): N/A - Site built
	N/A - Site built Office of Oil and Gas
23) Describe centralizer placement for each casing string:	JUN 022020

WV Department of
 Surface: Bow spring centralizers – One centralizer at the shoe and one spaces are spaces are spaces are spaces.

• 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, Retarder, Anti-Settling/Suspension Agent

25) Proposed borehole conditioning procedures:

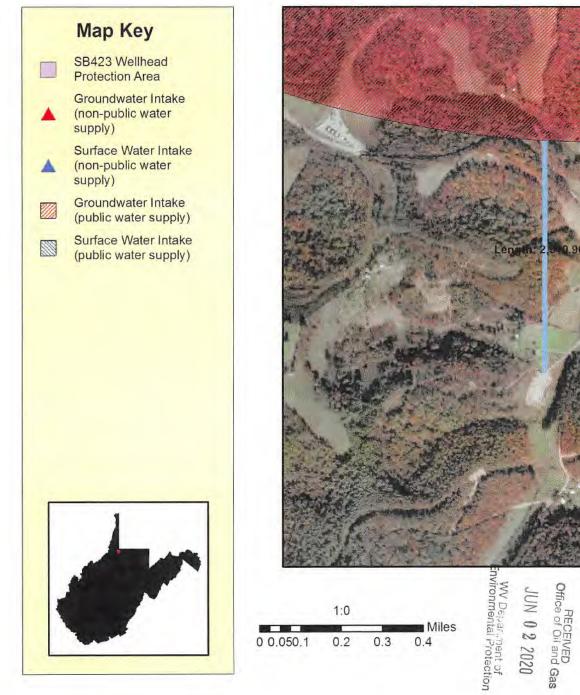
Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.

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

Production: 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.

Sizemore Measurement to Groundwater



ength: 2,540,96 ft Source: Esti, Delta(Clobe, CeoEys, Earlistar Ceographics, CNES:Mitus DS, USDA, USCS, Aers CRD, 16N, and the GS Veer Communit

Disclaimer:

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the appropriate usage of the information. WW-6RW (1-12) BOP ACQUISITION 2547 WASHINGTON RDAD BLDG. 700 - SUITE 720 UPPER SAINT CLAIR PA 15241-2557

API NO. 47-OPERATOR WELL NO. 17H Well Pad Name: Sizemore

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS WELL LOCATION RESTRICTION WAIVER

The well operator, <u>EQT Production Company</u> is applying for a permit from the State of West Virginia to conduct oil or gas well work. Please be advised that well work permits are valid for twenty-four (24) months.

Well Location Restrictions

Pursuant to West Virginia Code § 22-6A-12(a), 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.

Kinderly A. Sizemonie WAIVER

I. Andhory h	ted above, and that I have rece	that I have read the Instructions to Persons Native copies of a Notice of Application, an Appl	med on Page WW-6A and the associated ication for a Well Work Permison Bornd Gas
WW-6A and	attachments consisting of page	s one (1) through , including the e	erosion and sediment control plan, if
required, and	the well plat, all for proposed	well work on the tract of land as follows:	JUN 0 2 2020
State:	West Virginia	UTM NAD 83 Easting:	
County:	Wetzel	UTM NAD 83 Northing:	WV Department of
District:	Center	Public Road Access:	Anthem Rd. (County Route 7/16)
Quadrangle:	Littleton	Generally used farm name:	Sizemore
Watershed:	Sugar Run		

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials and I therefore waive all well site restrictions listed under West Virginia Code § 22-6A-12(a).

WELL SITE RESTRICTIONS BEING WAIVED *Please check all that apply	FOR EXECUTION BY A NATURAL PERSON Signature:
□ EXISTING WATER WELLS	Print Name: Anthony W. Sizemore and Kimberly A. Sizemore
□ DEVELOPED SPRINGS	FOR EXECUTION BY A CORPORATION, ETC.
DWELLINGS	By: Corde P Corde P
□ AGRICULTURAL BUILDINGS	Signature:
Well Operator: EQT Production Company	Signature S D
By: John Zavatchan	Telephone, 724-746-9073
Its: Project Specialist - Permitting	
Notary Public, State Of West Virginia Robin A. Bragg First Exchange Bank PO Box 780	cribed and swom before me this 11th day of January 2620 All Control C

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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 <u>depprivacyofficer@wv.gov</u>.

EQT Production Hydraulic Fracturing Monitoring Plan Pad ID: Sizemore County: Wetzel

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WV Department of Environmental Protection

June 1, 2020

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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 Sizemore pad: 3H, 5H, 7H, 9H, 11H, 13H, 15H and 17H.

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:

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WV Department of Environmental Protection

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

2. Reporting

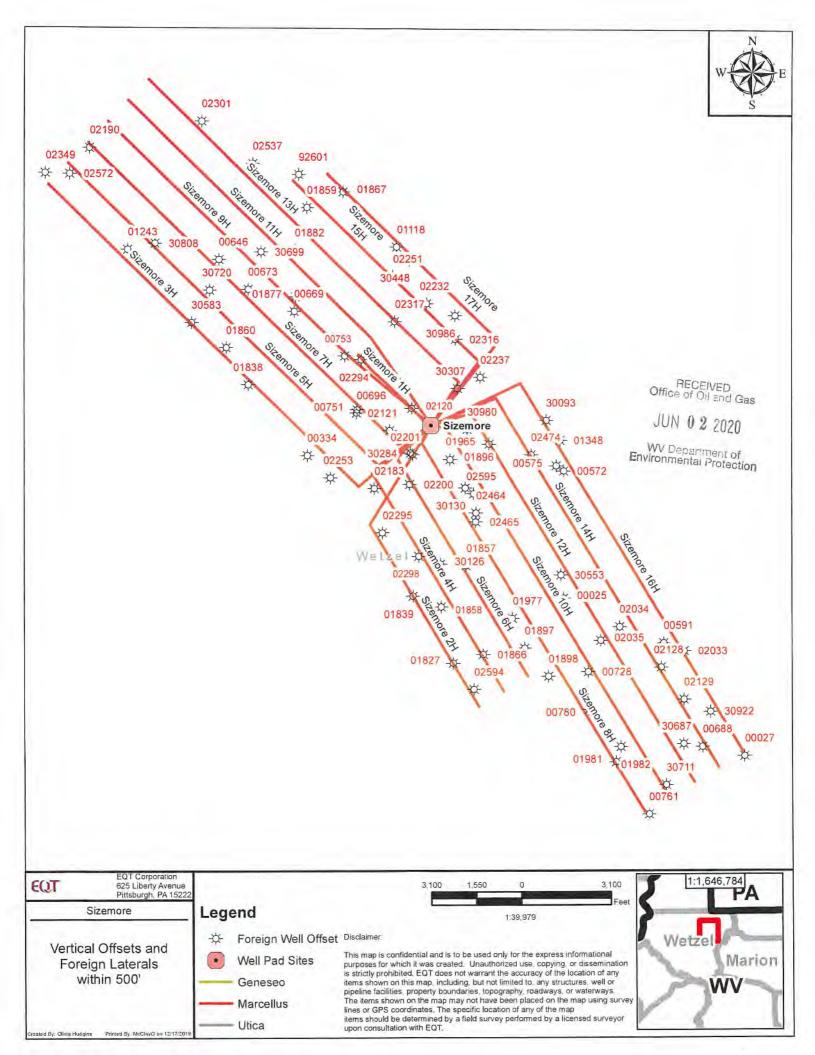
EQT will provide information relating to the hydraulic fracturing schedule, communication with other operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.

WellID	WellStatus	date F	matTD	Permit	RemarksPRO		Operator	Longitude	Latitude	DatumEleva	TotalDepth-SS	Total Depth
4710300025	GAS	6/12/1930		00025			MANUFACTURERS LIGHT & HEAT	-80.5133	39.6292	1240.0000	-1982.0000	3222.0000
4710300027	GAS	8/27/1930		00027			MANUFACTURERS LIGHT & HEAT	-80.4911	39.6141	1250.0000	-1104.0000	2354.0000
4710300334	DRY	11/5/1946		00334			A S ISINMINGER	-80.5447	39.6429	1170.0000	-600.0000	1770.0000
4710300572	UNK			00572			F M CHISLER	-80.5132	39.6413	1418.0000		1418.0000
4710300575	OIL	8/12/1967		00575			F M CHISLER	-80.5141	39.6418	1407.0000	-1985.0000	3392.0000
4710300591	UNK	0,, _0 0 0		00591			R M CHISLER	-80.5010	39.6249	1240.0000		1240.0000
4710300646	UNK	5/19/1900		00646	BNJ		EPC	-80.5555	39.6615	1466.0000	-552.0000	2018.0000
4710300669	GAS-P	4/21/1904		00669			CNG	-80.5462	39.6566	1196.0000		1196.0000
4710300673	GAS	9/27/1904		00673	BNJ		CNG	-80.5519	39.6587	1020.0000	-1245.0000	2265.0000
4710300688	GAS	8/20/1914		00688	BNJGDN		EPC	-80.4963	39.6150	0.0000	-2455.0000	2455.0000
4710300696	GAS	1/2/1917		00696	GDN4SD		EPC	-80.5386	39.6469	0.0000	-3339.0000	3339.0000
4710300728	GAS	12/28/1918		00728	4SD		MANUFACTURERS L& H	-80.5103	39.6222	1300.0000	-1842.0000	3142.0000
4710300728	GAS	11/24/1905		00751	NCR		EPC	-80.5385	39.6472		-2550.0000	2550.0000
	GAS	11/24/1905		00753	NCR		EPC	-80.5400	39.6523	0.0000		0.0000
4710300753		2/3/1914		00761	NCR		EPC	-80.5030	39.6086	1240.0000	-2011.0000	3251.0000
4710300761	GAS	2/5/1914		00781	NCR		EPC	-80.5103	39.6186		-3363.0000	3363.0000
4710300780	GAS	0/20/1004		01118	GDN		PENNZOIL	-80.5335	39.6626	1190.0000	-1942.0000	3132.0000
4710301118	OIL	8/30/1904			WERBER		PENNZOIL	-80.5667	39.6625	1250.0000	1942.0000	1250.0000
4710301243	PLUG	2/22/4020		01243	WERDER		MANUFACTURERS L& H	-80.5136	39.6442		-1838.0000	3338.0000
4710301348	UNK	2/22/1928		01348			MANUFACTORERS L& H	-80.5150	39.6231	1299.0000	-2358.0000	3657.0000
4710301827	UNK	7/20/2001		01827	460		DAG	-80.5209	39.6496	1342.0000	-4342.0000	5684.0000
4710301838	GAS	9/14/2001		01838	4SD		DAC DAC	-80.5320	39.6294	1566.0000	-2357.0000	3923.0000
4710301839	GAS	8/11/2001		01839	GDN			-80.5318	39.6323	1625.0000	-2060.0000	3685.0000
4710301857	GAS	11/3/2001		01857	BNJGDN		DAC		39.6323	1461.0000		3706.0000
4710301858	GAS	10/27/2001		01858	BNJGDN		DAC	-80.5283	39.6284 39.6664	1258.0000	-2245.0000 -2264.0000	3522.0000
4710301859	GAS	10/9/2001		01859	BNJGDN		DAC	-80.5446				
4710301860	GAS	9/24/2001		01860	4SDBNJ		DAC	-80.5546	39.6532		-2271.0000	3611.0000
4710301866	GAS	11/12/2001		01866	GDN		DAC	-80.5232	39.6239		-2256.0000	3852.0000
4710301867	GAS	12/10/2001		01867	BNJGDN		DAC	-80.5401	39.6679		-2292.0000	3588.0000
4710301877	GAS	6/17/2002		01877	4SDBNJ		DAC	-80.5461	39.6580		-2354.0000	3629.0000
4710301882	GAS	7/30/2002		01882	GDN		DAC	-80.5461	39.6624	1281.0000	-2070.0000	3351.0000
4710301896	GAS	10/6/2002		01896	GDNBNJ			-80.5271	39.6424	1159.0000	-2282.0000	3441.0000
4710301897	GAS	9/20/2002		01897	GDN			-80.5181	39.6245	1405.0000	-2223.0000	3628.0000
4710301898	GAS	9/27/2002		01898	GDNBNJ			-80.5152	39.6218		-2233.0000	3640.0000
4710301965	GAS	8/12/2003		01965	GDN		DAC	-80.5223	39.6439	1392.0000	-2116.0000	3508.0000
4710301977	GAS	10/6/2003		01977	BNJGDN		DAC	-80.5196	39.6273	1247.0000	-2194.0000	3441.0000
4710301981	GAS	11/10/2003		01981	BNJGDS		DAC	-80.5070	39.6136		-2261.0000	3456.0000
4710301982	GAS	11/18/2003		01982	GDN		DAC	-80.5064	39.6150		-2289.0000	3667.0000
4710302033	СВМ	5/5/2005		02033	PGH		DYNATEC ENERGY	-80.4985	39.6241	1221.0000	-33.0000	1254.0000
4710302034	CBM	4/27/2005		02034	PGH		DYNATEC ENERGY	-80.5064	39.6264	1187.0000	-23.0000	1210.0000
4710302035	GAS	11/11/2004		02035	GDNBNJ 📶		DAC	-80.5087	39.6252	1408.0000	-2276.0000	3684.0000
4710302120	UNK	11/7/2005		02120			DAC	-80.5318	39.6473	1199.0000	-2351.0000	3550.0000
4710302121	UNK	11/14/2005		02121	вил ₫≶	5	de≩kc	-80.5345	39.6452	1374.0000	-2236.0000	3610.0000
4710302128	UNK	10/15/2005		02128	BNJ BNJ/GDN BNJ/GDN BNJ/GDN BNJGDN	JUN		-80.5013	39.6226		-2280.0000	3600.0000
4710302129	GAS	10/23/2005		02129	BNJ/GDN	0	ent	-80.4986	39.6195	1339.0000	-2261.0000	3600.0000
4710302183	GAS	7/8/2006		02183		2	DAC	-80.5364	39.6397	1431.0000	-2269.0000	3700.0000
4710302190	GAS	9/8/2006		02190	BNJ/GDN ភ្លឺឆ្នី		<u>p</u> ac	-80.5713	39.6721	0.0000	-3500.0000	3500.0000
4710302200	GAS	10/14/2006		02200	BNJ/GDN	2020	西 ØC	-80.5321	39.6401	0.0000	-3340.0000	3340.0000
					BNJ/GDN BNJ/GDN BNJ/GDN `BNJ/GDN	0	Gas					

4710302201	GAS	10/8/2006	02201	BNJGDN	DAC	-80.5317	39.6429	0.0000	-3650.0000	3650.0000
4710302232	GAS	5/26/2007	02232	BNJGDSGDN5SDBYD	DAC	-80.5299	39.6573	1360.0000	-2210.0000	3570.0000
4710302237	GAS	6/23/2007	02237	BNJGDN5SDBYD	DAC	-80.5233	39.6502	1162.0000	-2232.0000	3394.0000
4710302251	GAS	6/16/2007	02251	BNJ/GDN	DAC	-80.5340	39.6598	1389.0000	-2196.0000	3585.0000
4710302253	GAS	8/11/2007	02253	BNJ/GDN	DAC	-80.5418	39.6408	1463.0000	-2217.0000	3680.0000
4710302294	GAS	10/16/2007	02294	BNJGDN5SD	DAC	-80.5380	39.6520	1285.0000	-2205.0000	3490.0000
4710302295	GAS	12/22/2007	02295	GDN	DAC	-80.5355	39.6355	1343.0000	-2281.0000	3624.0000
4710302298	GAS	10/23/2007	02298	5SDGDSSS	DAC	-80.5310	39.6332	1260.0000	-2320.0000	3580.0000
4710302301	GAS	11/16/2007	02301	SL/BNJ	DAC	-80.5575	39.6746	1382.0000	-2158.0000	3540.0000
4710302316	GAS	7/26/2008	02316	BNJ	DAC	-80.5264	39.6539	1321,0000	-2313.0000	3634.0000
4710302317	GAS	12/15/2007	02317	BLM/GDN	DAC	-80.5338	39.6556	1373.0000	-2230.0000	3603.0000
4710302349	GAS	8/23/2008	02349	GDN	DAC	-80.5768	39.6698	1362.0000	-2240.0000	3602.0000
4710302464	CBM	1/10/2010	02464		DOMINION COAL BED METHANE	-80.5240	39.6373	1218.0000	-53.0000	1271.0000
4710302465	CBM	12/2/2009	02465		DOMINION COAL BED METHANE	-80.5240	39.6365	1321.0000	-29.0000	1350.0000
4710302474	GAS	8/7/2009	02474	BYDBNJ5SD4SDGDS	DAC	-80.5171	39.6428	1289,0000	-2294.0000	3583.0000
4710302537	GAS	3/2/2010	02537	HTV	GRENADIER ENERGY	-80.5513	39.6706	1391.0000	-6332.0000	7723.0000
4710302572	GAS	7/29/2010	02572		GRENADIER ENERGY PARTNERS	-80.5738	39.6697	1332.0000	-5168.0000	6500.0000
4710302594	CBM	2/9/2011	02594		CONSOL GAS	-80.5244	39.6206	1216.0000	636.0000	580.0000
4710302595	CBM	2/9/2011	02595	PGH	CONSOL GAS	-80.5242	39.6392	1197.0000	-132.0000	1329.0000
471030292601	GAS	10/17/2014	92601		STATOIL USA ONSHORE PROP	-80.5456	39.6696	1471.0000	-12289.0000	13760.0000
4710330093	GAS	and damage	LOWER HUR(30093		MANUFACT LIGHT	-80.5153	39.6461	1397.0000	-2060.0000	3457.0000
4710330126	OILGS		30126		OPER IN MIN.OWN	-80.5283	39.6325	1421.0000	-1969.0000	3390.0000
4710330130	OIL		30130		OPER IN MIN.OWN	-80.5253	39.6397	1185.0000	-1880.0000	3065.0000
4710330284	0&G	12/2/1925	30284		H E MILLIKEN	-80,5319	39,6431	1232.0000	-1984.0000	3216.0000
4710330307	OIL	4/19/1939	LOWER HURC 30307		SOUTH PENN	-80.5261	39.6492	1116.0000	-1985.0000	3101.0000
4710330448	OILGS	3/30/1901	LOWER HUR(30448		SOUTH PENN	-80.5319	39.6614	1138.0000	-1848.0000	2986.0000
4710330553	GAS	2/6/1923	30553		MANUFACT LIGHT	-80.5136	39.6314	1394.0000	-2022.0000	3416.0000
4710330583	0&G	4/21/1904	30583		RANDALL-ZOGG	-80.5589	39.6556	1043.0000	-1874.0000	2917.0000
4710330687	GAS	11/28/1913	30687		HOPE NAT GAS	-80.4986	39.6153	1306.0000	-1910.0000	3216.0000
4710330699	GAS	100000	30699		OPER IN MIN.OWN	-80.5503	39.6622	1226.0000	-1174.0000	2400.0000
4710330711	OIL		LOWER HUR(30711		OPER IN MIN,OWN	-80.5008	39.6114	1331.0000	-1895.0000	3226.0000
4710330720	OILGS	3/27/1905	LOWER HURC 30720		SOUTH PENN	-80.5567	39.6586	1034,0000	-1869.0000	2903.0000
4710330808	GAS	4/22/1920	30808		HOPE NAT GAS	-80,5633	39.6631	1466.0000	-1052.0000	2518.0000
	GAS	9/20/1917	LOWER HURC 30922		MANUFACT LIGHT	-80.4953	39.6183	1,0000	-3265.0000	3266.0000
4/103309//		5/29/1907	LOWER HURC 30980		HOPE NAT GAS	-80.5250	39.6453	1341.0000	-2009.0000	3350.0000
4710330922 4710330980	GAS					-80.5264	39.6561	1.0000		2360.0000

Environmental Protection UN 0 2 2020

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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 coment 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:

RECEIVED Office of Oil and Gas

JUN 0 2 2020

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

If you have any questions regarding this matter feel free to contact me at 304-926-0499, WV Department of Environmental Protection

Sincerely eron anes

James Peterson Environmental Resources Specialist / Permitting

Promoting a healthy environment.

de	9 C		
west virginia department of	environmental p	protection	
Office of Oil and Gas 601 57 th Street, SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax		Earl Ray Tomblin, Gove Randy C. Huffman, Cabinet Seer dep.wv	etary
BEFORE THE OFF DEPARTMENT OF ENVI STATE OF WES	RONMENTA	L PROTECTION	
IN THE MATTER OF A VARIANCE FROM 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)))))	ORDER NO. 2014 - 17	
REGULATIONS OF CEMENTING OIL AND GAS WELLS)		RECEIVED Office of Oil and Gas
	,		JUN 0 2 2020

REPORT OF THE OFFICE

WV Department of Environmental Protection

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

FINDINGS OF FACT

1.) Nabors Completion & Production Services Co. proposes the following cement blend:

- 2% Calcium Chloride (Accelerator)
- 0.25 % Super Flake (Lost Circulation)
- 94% Type "1" Cement
- 5.20 % Water

2.) Laboratory testing results indicate that the blend listed in Fact No.1 will achieve a 500 psi compressive strength within 6 hours and a 2,435 psi compressive strength within 24 hours.

Promoting a healthy environment.

4710303351

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. WV Department of Environmental Protection

RECEIVED Office of Oil and Gas

JUN 02 2020

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

4710303351

Drilling Objectives: County: Quad: Elevation: Surface location Landing Point Toe location Recommended Azimuth	Marcellus Wetzel Littleton Northing: Northing: Northing:	61 KB 0.00 0.00 0.00 0 Degrees	WEST VIRGINIA Easting: Easting: Easting:	Horizon		TVD: Recommended LP to TD:	
ESTIMATED FORMATION			om Pilot Hole 4710302580		-		
Formation	Top (TV	D) Base	(TVD) Lithology			mments]
Fresh Water Zone Waynesburg	5	27	717 531 Coal		FW (a) 17	6,682,717	
Sewickley Pittsburgh	754		761 Coal 891 Coal		SW (2	ā 1850,	
Big Injun Int. csg pt	24	63	2363 Sandstone				
Berea		07	2761 Sandstone		Not	in storage	
Top Devonian		47	2701 Saldstone		19011	in storage	
Gantz		47	3033 Silty Sand				
Fifty foot	30		3101 Silty Sand				
Thirty foot	31	01	3133 Silty Sand				
Bayard	31	85	3631 Silty Sand		Base of Offset Well P	erforations at 3026' TVD	
Speechley	36	94	3772 Silty Sand				
Balltown A	37	72	4089 Silty Sand				
Alexander	56	57	6100 Silty Sand				
Elk		00	6880 Silty Sand			RECEIVED	Top RR Base RR
Elks		80	6880 Gray Shales and Silts		Of	fice of Oil and Gas	No red rock listed in offset complet
Sonyea		80	7031 Gray shale			and dub	
Middlesex	70		7075 Shale	C 1	1	UIN 0.9 2020	
Genesee		75	7154 Gray shale interbedde	ed	J	IUN 0 2 2020	
Geneseo		54	7184 Black Shale				
Tully	71		7206 Limestone		W	V Department of promental Protection	
Hamilton		06	7312 Gray shale with some	2	Enviro	onmental Protection	
Marcellus		12	7362 Black Shale				
Purcell	73		7333 Limestone		Court I a	(
-Lateral Zone Cherry Valley		335 45	7347 Limestone		Start La	teral at 7335'	
Onondaga		45 62	Limestone				
Pilot Hole TD		62 62	Linestone				
Target Thickness		50 feet					
Max Anticipated Rock Pressure	26	20 PSI					

Comments:

Note that this is a TVD prog for a horizontal well (azimuth of 0 degrees; target formation = Marcellus). All measurements taken from estimated KB elevation. Water and coal information estimated from surrounding well data.

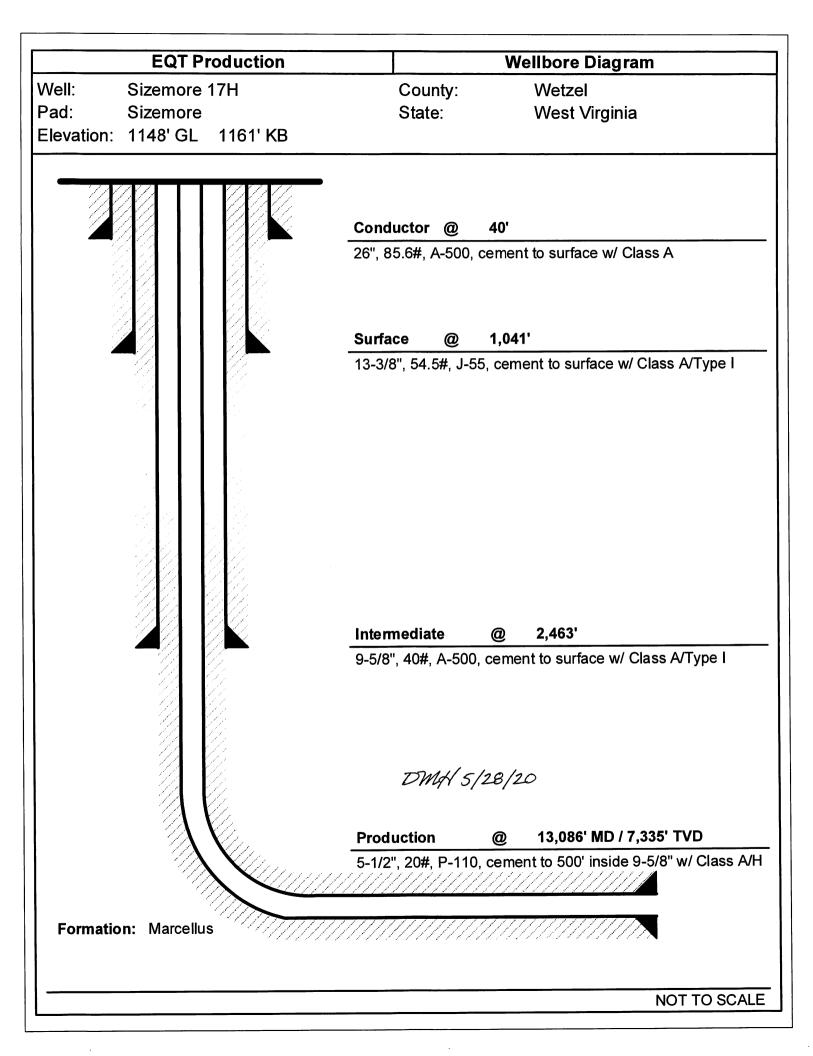
Intermediate casing point is recommended beneath the Big Injun to shut off any water production from the Upper Devonian sands. Intermediate casing should be cemented into the surface string, per WV regulations.

The estimated landing point TVD is 7335', rig geologist may adjust landing point. After the well is landed, drill to reported bed dips/ geologists' recommendation. The geologic structure is unknown at this time.

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.

RECOMMENDED CASI	NG POINTS				
Fresh Water/Coal	CSG OD	13 3/8	CSG DEPTH:	1041	Below Pittsburgh
Intermediate 1:	CSG OD	9 5/8	CSG DEPTH:	2463	Beneath Big Injun Base
Production:	CSG OD	5 1/2	CSG DEPTH: @ TD		





June 1, 2020

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

Re: Casing on Sizemore 17H

Dear Mr. Brewer,

The 13-3/8" surface casing will be set at 1,041' KB, 150' below the deepest workable coal seam and 324' below the deepest fresh water. The 9-5/8" intermediate string will be set at 2,463' KB, 100' 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 Landman - Permitting

Enc.

Office of Oil and Gas

JUN 0 2 2020

WV Department of Environmental Protection

API Number 47 -

Operator's Well No. Sizemore 17H

0303351

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) Tributary of Sugar Run	Quadrangle Littleton	
Do you anticipate using more than 5,000 bbls of water to complet Will a pit be used? Yes No	te the proposed well work? Yes No	
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:	Γ	DB H
Land Application Underground Injection (UIC Permit N Reuse (at API Number Various	Number_0014, 8462, 4037)	2-4-20
Off Site Disposal (Supply form WW-9 Other (Explain	9 for disposal location)	V
Will closed loop system be used? If so, describe: Yes, The closed loop	oop system will remove drill cuttings from the drilling fluid. The drill cuttings are transportation to an off-site disposal facility.	
Drilling medium anticipated for this well (vertical and horizontal) -If oil based, what type? Synthetic, petroleum, etc. Synthetic, petroleum, etc.	Office of Oil	VED and Gas
Additives to be used in drilling medium? See Attached	JUN 02	2020
Drill cuttings disposal method? Leave in pit, landfill, removed of	ffsite, etc. Landfill WV Doles of Environmental F	Protection
-If left in pit and plan to solidify what medium will be us	sed? (cement, lime, sawdust) N/A	2
	int.	

-Landfill or offsite name/permit number? See Attached List

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto 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 or imprisonment.

Company Official Signature	
Company Official (Typed Name) John Zavatchan	
Company Official Title Project Specialist - Permitting	

Subscribed and sworn before me this 3rd day of february	, 20 20
agent	Notary Public
My commission expires OCHOLIC 25, 2003	Commonwealth of Pennsylvania - Notary Seal Olivia Plshioneri, Notary Public Allegheny County
	My commission expires October 25, 2023

WW-9 Attachment

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

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

Additives to be used in drilling medium?

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

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JUN 02 2020

WVDapacement of Environmental Protection

EQT Production Company

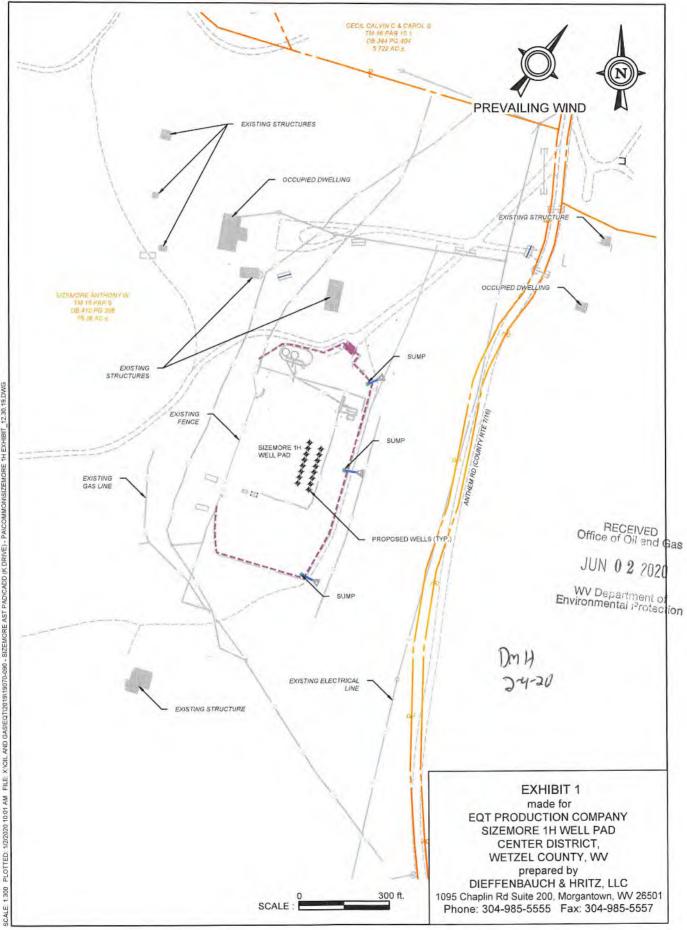
Proposed Revegetation Trea	tment: Acres Disturbed	No additional disturbance Prevegetation pl	ł
Lime 3	Tons/acre or to corr	rect to pH	
Fertilizer type Gra	nular 10-20-20		
Fertilizer amount_1	/3	lbs/acre	
Mulch 2		Tons/acre	
		Seed Mixtures	
Те	emporary	Perma	nent
Seed Type	lbs/acre	Seed Type	lbs/acre
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

Attach:

Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:	RECEIVED Office of Oil and Gas
Comments:	JUN 02 2020
	WV Lopa, anent of Environmental Protection
Title: Dil + Ger Trepeuter Date:_	2-4-22
Field Reviewed?	



SCALE 1300 PLOTTED 112/2020 1001 AM FILE X/OLL AND GASECIT/2019/19/20-98/2/EMORE AST PAD/CADD (K DRIVE) - PA/COMMON/SIZEMORE 1H EXHIBIT_12.30.19/DWG

EQT Production Water Plan									
			sals for Unconvention		1-1			1	
acility Name	Address	Address 2	City	State	Zip	Phone	County	State	Permit Number
CWS Trucking Inc.	P.O. Box 391		Williamstown	wv	26187	740-516-3586	Noble	ОН	3390
				_					
Broad Street Energy LLC	37 West Broad Street	Suite 1100	Columbus	ОН	43215	740-516-5381	Washingotn	он	8462
AD Liquid Assets Disposal Inc.	226 Rankin Road		Washington	PA	15301	724-350-2760	Ohio	wv	USEPA WV 0014
				-				1	
Triad Energy	PO Box 430		Reno	он	45773		Noble	он	4037
						740-374-2940	<u> </u>		
				PA	15341	724-627-7178	Greene	PA	TC-1009
Fri County Waste Water Management, Inc.	1487 Toms Run Road		Holbrook		15541	724-627-7178	Greene	PA	10-1009
						724-499-3047		+	
	101 Diver Dark Drive		New Castle	PA	16101		Lawrence	PA	PAR000029132
King Excavating Co. Advance Waste Services	101 River Park Drive		New Castle	FA	10101		Lawrence	<u></u>	FAN000023132
Marta Maraana Maadau fill Landfill	Rt. 2, Box 68 Dawson Drive		Bridgeport	wv	16330	304-326-6027	Harrison	wv	SWF-1032-98
Waste Management - Meadowfill Landfill	RL 2, BOX 68 Dawson Drive		bildgepoit		10550	504-520-0027	Tiarrison		Approval #100785WV
				-					Approval #100783444
Marta Marta and Marthurstors Londfill	512 E. Dry Road		Parkersburg	wv	26104	304-428-0602	Wood	wv	SWF-1025 WV-0109400
Waste Management - Northwestern Landfill			Farkersburg		20104	304-428-0002	wood		5001-1025 000-0105400
APEX Landfill	11 County Road 78	PO Box 57	Amsterdam	он	43903	740-543-4389	Jefferson	он	06-08438
		10 804 37	Anisterdani		43505	740 545 4505			
Advensed Dispesal Chestnut Valley Landfill	1184 McClellandtown Road		McClellandtown	PA	15458	724-437-7336	Favette	PA	100419
Advanced Disposal - Chestnut Valley Landfill	1164 Micclehandtown Road		Witchenariutown	<u> </u>	13450	724 437 7330	Tuyette	<u> </u>	100415
Westmoreland Sanitary Landfill	901 Tyrol Boulevard		Belle Vernon	РА	15012	724-929-7694	Westmoreland	PA	100277
					15012	121 323 7031	The second second	1	1002//
Austin Master Services	801 North 1st Street		Martins Ferry	он	43935	740-609-3800	Belmont	он	2014-541
						1.10 000 0000			
Belmont Solids Control	77505 Cadiz-New Athers Road		Cadiz	ОН	43907	740-942-1739	Harrison	он	2015-511
Bernont Solids Control	77505 Cadiz New Adders Houd					1			
Diversified Resources	3111 Braun Rd.	+	Belpre	он	45714	740-401-0413	Washington	ОН	
Diversitieu Resources									
			-						34-031-27177
			Coshocton	он	43812	740-610-1512		он	34-031-27178
Buckeye Brine	23986 Airport Road					724-591-4393	Coshocton		34-031-27241
buckeye brine	25500740000								
Central Environmental Services	28333 West Belpre Pike	-	Coolville	ОН	45723	304-488-0701	Athens	ОН	
Central Environmental Services									
Nuverra - Nichols	10555 Veto Road		Belpre	он	45714	330-232-5041	Washington	ОН	34-119-2-8776
				_					
Nuverra - Goff	9350 East Pike Road		Norwich	ОН	43767	330-232-5041	Muskingum	ОН	34-167-2-3862
i i									
Nuverra - Wolf	5480 State Route 5		Newton Falls	ОН	44444	330-232-5041	Trumbull	он	34-155-2-1893
1	2							1	
Nuverra - Pander	5310 State Route 5	<u>د ع</u>	Newton Falls	ОН	44444	330-232-5041	Trumbull	ОН	34-155-2-3795
	<u></u>	⊂ fi				1			
Nuverra - AnnaRock D-1	3549 Warner Road O		Fowler	ОН	44418	330-232-5041	Trumbull	ОН	34-155-2-2403
						1			
	ntai Protec	No SM	J		•	• · · ·	_	•	
	Pre	NED I and 202							
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				740-374-2940			
	Reno	ОН	45773	412-443-4397		он	
199 Bowersock Road				740-236-2135	Washington		34-167-2-9577
				740-374-2940			
	Dexter City	ОН	45727	412-443-4397		он	34-121-24037
38505 Marietta Rd.				740-236-2135	Noble		34-121-24086
			-				
	Ellenboro	lwv	26346		[WV	
122 Lonesome Pine Rd				740-236-2135	Ritchie		47-085-09721
		_					34-105-2-3619
				740-374-2940			34-105-2-3652
	Portland	он	45770	412-443-4397		ОН	34-105-2-3637
53610 TS Pd 706				740-236-2135	Meigs		34-105-2-3651
53610 13 Kd 706					IVIEIB3		54-105-2-5051
	Combridge		42725	614 477 1269			
745 North 3rd Street	Cambridge		43723	014-4/7-1308	Guernsey		Ohio Chiefs Order 25-019
38 Technology Dr.	Tridelphia	wv	26059	740-255-5727	Ohio	WV	
2341 OH-821	Marietta	он	45750	204 620 0176).	ОН	34-167-2-9766
	38505 Marietta Rd. 122 Lonesome Pine Rd 53610 TS Rd 706 745 North 3rd Street 38 Technology Dr.	199 Bowersock Road Image: Construction of the sector o	199 Bowersock Road Image: Source City and the city of th	199 Bowersock RoadImage: Amage: A	199 Bowersock Road Reno OH 45773 412-443-4397 199 Bowersock Road Image: Construction of the second s	199 Bowersock RoadRenoOH 45773 $412-443-4397$ $740-236-2135Washington199 Bowersock RoadImage: Strain Strain StreetImage: Strain StreetIma$	Image: space s

WV Department of Environmental Protection

JUN 0 2 2020

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Site Specific Safety and Environmental Plan

			T51	Pad		
			Cent	er		
	We	etze		unty	, WV	

JUN 0-2 2020

WV Department of Environmental Protection

Date-Firepared: February 20, 2019 EQT Production Project Specialist - Permitting Title

2 121 Date

17H

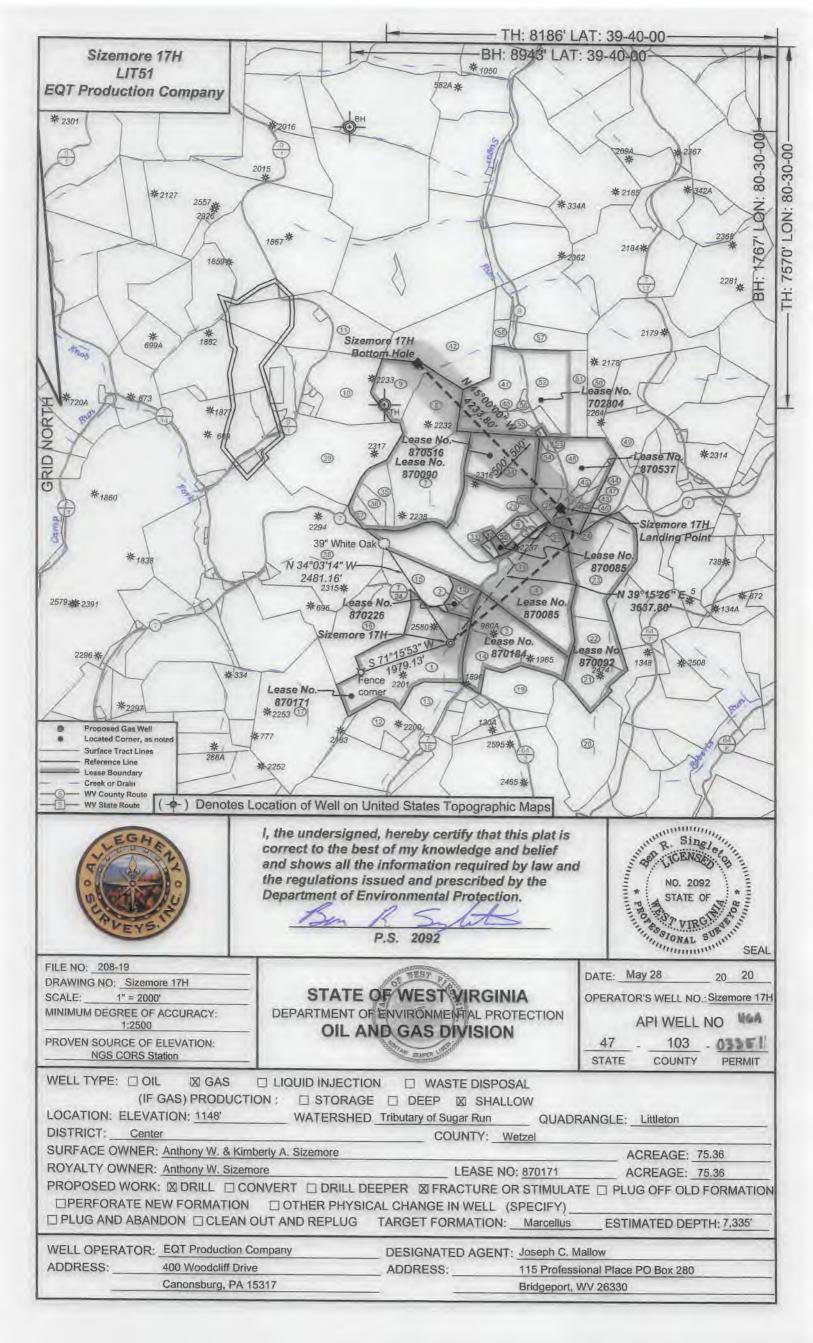
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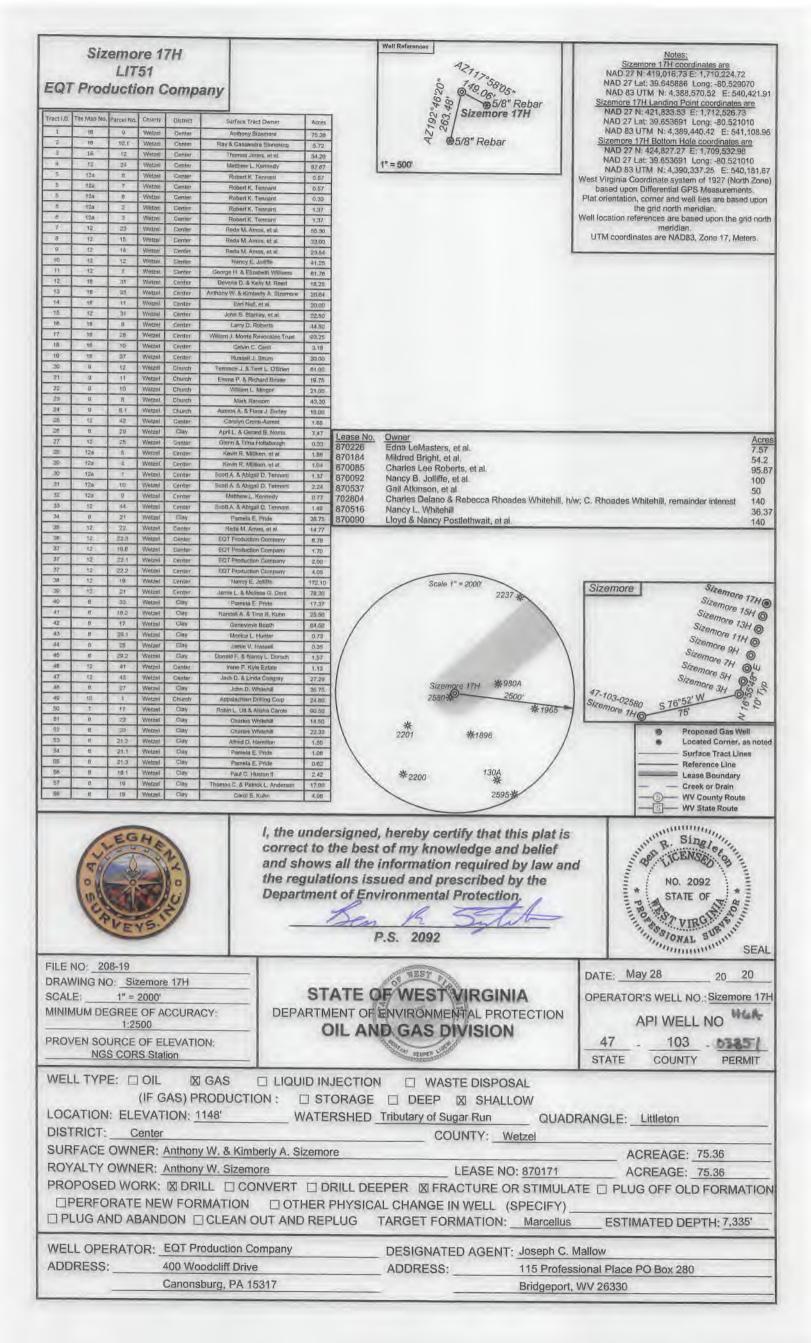
WV Oil and Gas Inspector

Oil and Gas Inspector Title

2-4-20 Date

1





WW-6A1 (5/13) Operator's Well No. Sizemore 17H

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

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

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Attached				
		Office of Oil an) d Gas	
		JUN 022	020	

WV Department of Environmental Protection

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

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

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

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

Well Operator:	EQT Production Company
By:	John Zavatchan
Its:	Project Specialist - Permitting

4710303351

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			Operator's Well No.		
se No.	1	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
870171	\checkmark	Anthony W. Sizemore		**	
<u>010111</u>	-	James Sizemore and Donna Sizemore	Drilling Appalachian Corporation		OG 84A-516
		Drilling Appalachian Corporation	Grenadier Energy Partners, LLC		OG 124A/9 & 136A/5
		Drilling Appalachian Corporation	Statoil USA Onshore Properties Inc.		OG 138A/54
		Grenadier Energy Partners, LLC	Statoil USA Onshore Properties Inc.		OG 138A/1
		Statoil USA Onshore Properties Inc.	EQT Production Company		OG 175A/707
870184	\mathbf{J}	Mildred Bright et al		**	
0/0104	v	<u>Mildred Bright, et al.</u> Mildred Bright	Drilling Appalachian Corporation		OG 111A/407
		•	• • • •		OG 124A/9 & 136A/5
		Drilling Appalachian Corporation Drilling Appalachian Corporation	Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc.		OG 138A/54
		Grenadier Energy Partners, LLC	Statoil USA Onshore Properties Inc.		OG 138A/1
		Statoil USA Onshore Properties Inc.	•		OG 175A/707
	1	Statoli OSA Olisilole Properties lite.	EQT Production Company		OG ITSMTOT
		Oberlander Distante et al.			
<u>870085</u>	v	Charles Lee Roberts, et al.		**	
		Charles Lee Roberts and Shirley E. Roberts, h/w	Drilling Appalachian Corporation		OG 84A/452
		Drilling Appalachian Corporation	Grenadier Energy Partners, LLC		OG 124A/9 & 136A/5
		Drilling Appalachian Corporation	Statoil USA Onshore Properties Inc.		OG 138A/54
		Grenadier Energy Partners, LLC	Statoil USA Onshore Properties Inc.		OG 138A/1
	,	Statoil USA Onshore Properties Inc.	EQT Production Company		OG 175A/707
<u>870092</u>	V	Nancy E. Jolliffe, et al.		**	
		Joe B. Jolliffe	Drilling Appalachian Corporation		OG 86A/152
		Drilling Appalachian Corporation RECEIVED	Grenadier Energy Partners, LLC		OG 124A/9 & 136A/
		Drilling Appalachian Corporation Office of Oil and Gas	Statoil USA Onshore Properties Inc.		OG 138A/54
		Grenadier Energy Partners 110	Statoil USA Onshore Properties Inc.		OG 138A/1
		Statoil USA Onshore Properties Inc. JUN 0 2 2020	EQT Production Company		OG 175A/707
870527	./	Gail Atkinson, et al. WV is such that the of			
<u>870537</u>	v	Gail Atkinson, et al. Gail Phillips Atkinson	Drilling Appalachies Corporation		OG 132A/624
			Drilling Appalachian Corporation		
		Drilling Appalachian Corporation	Grenadier Energy Partners, LLC		OG 135A/49
		Drilling Appalachian Corporation	Statoil USA Onshore Properties Inc.		OG 138A/54
		Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc.	Statoil USA Onshore Properties Inc. EQT Production Company		OG 138A/1 OG 175A/707
	,		Let rodución company		00 110/0101
<u>870516</u>	\checkmark	Nancy L. Whitehill		**	
		Nancy L. Whitehill, a widow	Drilling Appalachian Corporation		OG 129A/412
		Drilling Appalachian Corporation	Grenadier Energy Partners, LLC		OG 132A/594
		Drilling Appalachian Corporation	Statoil USA Onshore Properties Inc.		OG 138A/54
		Grenadier Energy Partners, LLC	Statoil USA Onshore Properties Inc.		OG 138A/1
		Statoil USA Onshore Properties Inc.	EQT Production Company		OG 175A/707
702804	\checkmark	Charles Delano & Rebecca Rhoades Whitehill, h/w;			
102004	•	C. Rhoades Whitehill, remainder interest Elizabeth Anderson, widow of John Anderson, decd.;		**	
		Elizabeth Roberts; John Roberts and Catherine Roberts, h/w	The Fisher Oil Company		DB 44/565
		The Fisher Oil Company	Carnegie Natural Gas Company		Unrecorded
		Carnegie Natural Gas Company	Carnegie Production Company		OG 78A/513
		Carnegie Production Company	EQT Production Company		WV SOS
	./				
<u>870090</u>	V	Lloyd & Nancy Postlethwait, et al.		**	
		Lloyd Postlethwait and Nancy Postlethwait	Drilling Appalachian Corporation		OG 85A/667
		Drilling Appalachian Corporation	Grenadier Energy Partners, LLC		OG 124A/9 & 136A/
		Drilling Appalachian Corporation	Statoil USA Onshore Properties Inc.		OG 138A/54
		Grenadier Energy Partners, LLC	Statoil USA Onshore Properties Inc.		OG 138A/1
		Statoil USA Onshore Properties Inc.	EQT Production Company		OG 175A/707
<u>870226</u>	\checkmark	Edna Lemasters, et al.		**	
-		Edna L. Lemasters	Drilling Appalachian Corporation		OG 103A/241
		Drilling Appalachian Corporation	Grenadier Energy Partners, LLC		OG 106A/11 & 135A
		Drilling Appalachian Corporation	Statoil USA Onshore Properties Inc.		OG 138A/54
			and the second		
		Grenadier Energy Partners, LLC	Statoil USA Onshore Properties Inc.		OG 138A/1
		Grenadier Energy Partners, LLC Statoil USA Onshore Properties Inc.	Statoil USA Onshore Properties Inc. EQT Production Company		OG 138A/1 OG 175A/707

4710303351



EQT Production Company 400 Woodcliff Drive Canonsburg, PA 15317 www.eqt.com

John Zavatchan Landman - Permitting O:724-746-9073 jzavatchan@eqt.com

June 1, 2020

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

Re: Sizemore 17H Gas Well Center District, Wetzel County

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 Landman - Permitting

Office of Oil and Gas JUN 02 2020 WV Department of Environmental Protection

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE CERTIFICATION</u>

Date of Notice Certification: 06/01/2020	API No. 47
	Operator's Well No. 17H
	Well Pad Name: Sizemore
Notice has been given:	
Pursuant to the provisions in West Virginia Code § 22-6A, th	e Operator has provided the required parties with the Notice Forms listed
below for the tract of land as follows:	

State:	West Virginia	UTM NAD 83	Easting:	540421.91
County:	Wetzel	UTMINAD 83	Northing:	4388570.52
District:	Center	Public Road Access:		CR 7/16
Quadrangle:	Littleton	Generally used f	arm name:	Anthony W. and Kimberly A. Sizemore
Watershed:	Tributary of Sugar Run	-		

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

	Office of Oil and Fast
Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY	JUN 0 2 2020
□ 1. NOTICE OF SEISMIC ACTIVITY or ■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	WV LONLY Environmental Protection RECEIVED/ NOT REQUIRED
□ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ■ NO PLAT SURVEY WAS CONDUCTED	
 3. NOTICE OF INTENT TO DRILL or DIVICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) 	RECEIVED/ NOT REQUIRED
4. NOTICE OF PLANNED OPERATION	
5. PUBLIC NOTICE	
■ 6. NOTICE OF APPLICATION	

Required Attachments:

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

WW-6AC (1/12)

Certification of Notice is hereby given:

THEREFORE, J John Zavatchan

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

Well Operator:	EQT Production Company	Address:	400 Woodcliff Drive
By:	John Zavatchan	1	Canonsburg, PA 15317
ts:	Project Specialist - Permitting	Facsimile:	412-395-2974
Telephone:	724-746-9073	Email:	jzavatchan@eqt.com
Oliv My comr	NOTARY SEAL wealth of Pennsylvania - Notary Seal via Pishioneri, Notary Public Allegheny County nission expires October 25, 2023 mmission number 1359968	Subscribed and swo	Provide Notary Public
Member,	Pennsylvania Association of Notaries		

Oil and Gas Privacy Notice:

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

Office of Oil and Gas JUN 0 2 2020 WV Deparchent of Environmental Proteotion

WW-6A (9-13)

API NO. 47-**OPERATOR WELL NO. 17H** Well Pad Name: Sizemore

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application.

Date of Notice: 5/29/2020	Date Permit Application Filed: 6/1/2020
Notice of:	

PERMIT FOR ANY	CERTIFICATE OF APPROVAL FOR THE
WELL WORK	CONSTRUCTION OF AN IMPOUNDMENT OR PIT

Delivery method pursuant to West Virginia Code § 22-6A-10(b)

□ REGISTERED PERSONAL ✓ METHOD OF DELIVERY THAT REQUIRES A SERVICE RECEIPT OR SIGNATURE CONFIRMATION MAIL

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. O

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☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice ☑ Well Plat Notice is hereby provided to: JUN 0 2 2020

SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: See AttachedList Address:	Name: See AttachedList WV Department of Environmental Protection
Name:	COAL OPERATOR
Address:	Name:
	Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)	
Name: See AttachedList	SURFACE OWNER OF WATER WELL
Address:	AND/OR WATER PURVEYOR(s)
	Name: See AttachedList
Name:	Address:
Address:	
	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
☑ SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name: See AttachedList	Address:
Address:	
	*Please attach additional forms if necessary

API NO. 47-____ OPERATOR WELL NO. 17H Well Pad Name: Sizemore

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 Gas 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.covieman.cov/odm of 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-**OPERATOR WELL NO. 17H** Well Pad Name: Sizemore

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 number of the real property owner's water supply. Office of Oil and Gas authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

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 arment of application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written EXMINERMENTAL MARKET COMPANY AND A COMPANY location or construction of the applicant's proposed well work to the Secretary at:

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

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.

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WW-6A (8-13)

Time Limits and Methods for Filing Comments.

API NO. 47-_____ OPERATOR WELL NO. 17H Well Pad Name: Sizemore

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/florizontal-

<u>Permits/Pages/default.aspx</u> 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.

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WV Department of Environmental Protection

W	W-6A	
(8-	13)	

Notice is h	ereby given	by:	71/	21	7)
	tor: EQT Production		15/	97)	1
Telephone:	724-746-9073	14	-1	9	
Email: jzavat	chan@eqt.com	11	0	0	

API NO. 47	1
OPERATOR WE	ELL NO. 17H
Well Pad Name:	Sizemore

Addre	SS: 400 Woodcliff Drive	
	Canonsburg, PA 15317	
Facsin	nile: 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 depprivacyofficer@wv.gov.

Olivia Pishioneri, Notary Public Allegheny County My commission expires October 25, 2023 Commission number 1359968 Member, Pennsylvania Association of Notarie

Subscribed and sworn before me this 4 day of 4	UNE, 2820.
- O'Prin-	Notary Public
My Commission Expires October 25, 2	123

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WV Department of Environmental Protection

Surface Owners:

Anthony W. and Kimberly A. Sizemore 63 Styles Run Road Metz, WV 26585

Surface Owners (road, AST) or other disturbance):

Anthony W. and Kimberly A. Sizemore 63 Styles Run Road Metz, WV 26585

Water Supply Owners within 1,500'

Anthony W. and Kimberly A. Sizemore 63 Styles Run Road Metz, WV 26585

Calvin & Carol Cecil & Edna Lemasters 6111 Hornet Highway Hundred, WV 26575

Gregory and Adair Wood 621 Mt. Herman Road Wileyville, WV 26581

John Starkey 759 Veterans Highway New Martinsville, WV 26155

Larry Roberts 543 Delta Road Wileyville, WV 26581

Nathan Sizemore 330 Mt. Herman Road Wileyville, WV 26581

Ray and Cassandra Stoneking 130 Delta Road Wileyville, WV 26581

Thomas and Theresa Jones 291 Mount Herman Road-Littleton, WV 26581

Coal Owner

Anthony W. Sizemore 63 Styles Run Road Metz, WV 26585

New Gauley Coal Corp. 5260 Irwin Road Huntington, WV 25705-3247 RECEIVED Office of Oil and Gas

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WV Department of Environmental Protection

Topo Quad: _	Littleton	Scale:	1" = 1000'	
County:	Wetzel	Date:	December 13, 20	019
District:	Center	Project No:	208-34-C-19	
Water	LIT	51 SIZEMORE	PAD	
J.	18 Poten	tial Water Sources w	ithin 2500'	
1300	(1400)	2 Nor		
1300		1200	Site 2 Site 1	
	Site 7	DELTA RD 3	Site 3	1200
2/	Site 8	(D) Cito 17	Site 4	\square
55	1 A		\times (1)	\mathbb{N}/\mathbb{N}
	Site 18 G			
On a		emeteri	Site 10	$(X \rightarrow Y)$
-			Site 9	RECEIVED
		Site 19	The second	Office of Oil and
	1300	Site 1	4	WV Department Environmental Post
		VIAV		
		Site 20 Site 12		JUN 0 2 20 WV Department Environmental Prove
LEGE	VD VD	2002		NAD 27, North Zon
Red Symbol - Decline Blue Symbol - Reque		E I		N:418978.46 E:1710213.07
	le to Contact		2011 ((()	WGS 84
S Spring	Sect		ZSAN	LAT:39.645864
Building	- Der	1400	511	LONG:-80.524746 ELEV:1710213.07
LEGHE			PARED FOR:	tion Composition
0	ALLEGHENY S	-8606		tion Company
CALE IN	237 Birch Riv Birch River, V PH: (304) 64	VV 26610		s Drive, Suite 200 burg, PA 15317

Operator Well No. Sizemore 17H

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

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

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to filing a permit application. Date of Notice: 12/27/2019 Date Permit Application Filed: 06/01/2020

Delivery method pursuant to West Virginia Code § 22-6A-16(b)

HAND	CERTIFIED MAIL
DELIVERY	RETURN RECEIPT REQUESTED

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

Notice is hereby provided to the SURFACE OWNER(s):

Name:
Address:

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(b), notice is hereby given that the undersigned well operator has an intent to enter upon the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virginia	LITANIAD 22 Eas	sting:	540421.91	
County:	Wetzel	UTM NAD 83 Not	rthing:	4388570.52	
District:	Center	Public Road Access:		CR 7/16	RECEIVED Office of Oil and Gas
Quadrangle:	Littleton	Generally used farm	name:	Anthony W. and Kimberly A. Sizemore	Olines or with study of the
Watershed:	Tributary of Sugar Run				UIN 0 2 2020

This Notice Shall Include:

WV Department of Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if Eavairable, rotection facsimile number and electronic mail address of the operator and the operator's authorized representative. 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.

Notice is hereby given by:

Well Operator:	EQT Production Company	Authorized Representative:	John Zavatchan	
Address:	400 Woodcliff Drive	Address:	400 Woodcliff Drive	
	Canonsburg, PA 15317		Canonsburg, PA 15317	
Telephone:	724-746-9073	Telephone:	724-746-9073	
Email:	jzavatchan@eqt.com	Email:	jzavatchan@eqt.com	
Facsimile:	412-395-2974	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 depprivacyofficer@wv.gov.

WW-6A5 (1/12) Operator Well No. Sizemore 17H

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE OF PLANNED OPERATION</u>

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 05/29/2020 Date Permit Application Filed: 06/01/2020

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL	HAND
RETURN RECEIPT REQUESTED	DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: Anthony W. and Kimberly A. Sizemore	Name:
Address: 63 Styles Run Road	Address:
Metz, WV 26585	

Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virginia	UTM NAD 83	Easting:	540421.91	Office of Oil and Gas
County:	Wetzel	UTMINAD 83	Northing:	4388570.52	
District:	Center	Public Road Acces	is:	CR 7/16	JUN 02 2020
Quadrangle:	Littleton	Generally used far	m name:	Anthony W. and Kimberly A. Sizemore	WW Doon
Watershed:	Tributary of Sugar Rn				WV Department of Environmental Protection

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. 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 <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Well Operator:	EQT Production Company	Address:	400 Woodcliff Drive	
Telephone:	724-746-9073		Canonsburg, PA 15317	
Email:	jzavatchan@eqt.com	Facsimile:	412-395-2974	

Oil and Gas Privacy Notice:

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

December 10, 2019

Byrd E. White, 111 Secretary of Transportation/ Commissioner of Highways

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

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 James Sizemore Pad, Wetzel County

Sizemore 3H Sizemore 11H Sizemore 5H Sizemore 13H Sizemore 7H Sizemore 15H

Sizemore 9H Sizemore 17H

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Dear Mr. Martin,

WV Department of

This well site will be accessed from a DOH permit #06-2010-0264 which has been Protection transferred to EQT Production Company for access to the State Road for a well site located off Wetzel County Route 6 SLS.

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.

Very Truly Yours,

Dary K. Clayton

Gary K. Clayton, P.E. Regional Maintenance Engineer Central Office O&G Coordinator

Cc: John Zavatchan EQT Production Company CH, OM, D-6 File

Anticipated Frac Additives Chemical Names and CAS numbers

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

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WV Department of Environmental Protection

