

# west virginia department of environmental protection

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

August 25, 2015

# WELL WORK PERMIT

# Horizontal 6A Well

This permit, API Well Number: 47-4902388, issued to EQT PRODUCTION COMPANY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

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

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

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.

James Martin

Operator's Well No: 515715

Farm Name: SHAVER, KARL S. JR.

API Well Number: 47-4902388

Permit Type: Horizontal 6A Well

Date Issued: 08/25/2015

API Number: 49-02388

# **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. <u>Failure to adhere to the specified permit conditions may result in enforcement action.</u>

#### **CONDITIONS**

- This proposed activity may require permit coverage from the United States Army Corps of Engineers
  (USACE) and WV DEP Department of Water and Waste Management (DWWM). No activity authorized
  under this permit shall be commenced until all necessary permits from USACE and DWWM are obtained.
- 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 fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
- 9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.



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

# ORDER ISSUED UNDER WEST VIRGINIA CODE, CHAPTER 22, ARTICLE 6A

TO: EQT Production Company 625 Liberty Ave. Pittsburgh, PA 15222 DATE: August 25, 2015 ORDER NO.: 2015-W-8

# INTRODUCTION

This Order (hereinafter "Order") is issued by the Office of Oil and Gas (hereinafter "OOG"), by and through its Chief, pursuant to the authority of W. Va. Code §§ 22-1-1, 22-6-1 and 22-6A-1 et seq. to EQT Production Company (hereinafter "EQT" or "Operator"), collectively the "Parties."

# FINDINGS OF THE CHIEF

In support of this Order, the Chief hereby finds the following:

- OOG, an office within the West Virginia Department of Environmental Protection, is the agency
  with the duty and authority to execute and enforce W. Va. Code §22-6-1 and §22-6A-1 et seq., and
  the rules and regulations promulgated thereunder.
- 2. EQT is a "person" as defined by W. Va. Code §22-6-1(n), with a corporate address as 625 Liberty Avenue Pittsburgh, Pennsylvania.
- 3. On March 11, 2015, EQT submitted well work permit applications identified as API#s 47-049-02385, 47-049-02386, and 47-049-02387; on March 12, 2015, EQT submitted a well work permit application identified as 47-049-02388 and on April 24, 2015 EQT submitted a well work permit application identified as 47-049-02394. The five proposed wells are to be located on the FAW 55 Pad in Grant District of Marion County, West Virginia.
- 4. On March 27, 2015, EQT requested a waiver for Wetlands B, C, D and F as outlined in Attachment F, from well location restriction requirements in W. Va. Code §22-6A-12(b) for gas well permit applications identified as 47-049-02385, 47-049-02386, 47-049-02387, 47-049-02389 and 47-049-02394.

# **CONCLUSIONS OF LAW**

- 1. West Virginia Code §22-1-6(d) requires, in part, that "[i]n addition to other powers, duties and responsibilities granted and assigned to the secretary by this chapter, the secretary is authorized and empowered to...(3) Enter private lands to make surveys and inspections for environmental protection purposes; to investigate for violations of statutes or rules which the Office of Oil and Gas is charged with enforcing; to serve and execute warrants and processes; to make arrests; issue orders, which for the purposes of this chapter include consent agreements; and to otherwise enforce the statutes or rules which the Office of Oil and Gas is charged with enforcing."
- 2. West Virginia Code §22-6A-2(a)(6) requires, in part, that "Concomitant with the broad powers to condition the issuance of well work permits, the secretary should also have broad authority to waive certain minimum requirements of this article when, in his or her discretion, such waiver is appropriate: *Provided*, That the secretary shall submit a written report of the number of waivers granted to the Legislature commencing January 1, 2013, and each year thereafter."
- 3. West Virginia Code §22-6A-12(b) requires, in part, that "[n]o 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 Office of Oil and Gas 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 Office of Oil and Gas 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."

# ORDER :

West Virginia Code §22-6A-12(b) requires, in part, that "[n]o 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. The Office of Oil and Gas grants the request for a waiver for Wetlands C, D, and F from well location restriction requirements in W. Va. Code §22-6A-12(b) for gas well permit applications identified as API#s 47-049-02385, 47-049-02386, 47-049-02387, 47-049-02388, and 47-049-02394. Further, a waiver from Wetland B is not needed for construction as proposed. The Office of Oil and Gas hereby **ORDERS** that EQT shall meet the following site construction and operational requirements for the FAW 55 well pad:

- a. A berm shall be constructed around the perimeter of the pad to contain any potential spills and storm water runoff. Berm is to be at least two feet (2') in height;
- b. Filter/silt socks and erosion control blankets shall be installed on all slopes and down gradient locations of the pad and topsoil pile areas as erosion and sediment controlling BMPs;
- c. Wetland C shall have a double 32" compost filter sock stack installed adjacent to the wetland and ditch checks shall be installed to minimize sediment flow through pipe inlet;
- d. Wetland D shall have ditch checks installed to minimize sediment from the diversion ditch and compost sock sediment traps installed adjacent to the wetland;
- e. Wetland F shall have a double 32" compost filter stock installed adjacent to the wetland;
- f. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- g. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- h. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- i. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- j. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- k. Inspections of the storm water and spill prevention measures shall be conducted after any major storm event defined as a half inch (½") rain within any twenty-four (24) hour period;
- l. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- m. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 25th day of August, 2015.

# IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

y:///a

JAMES A. MARTIN, CHIEF

# WETLAND WAIVER REQUEST

# FAW 55 WELL PAD PROJECT MARION COUNTY, WEST VIRGINIA

# Submitted to:

# WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS 601 57<sup>TH</sup> STREET CHARLESTON, WEST VIRGINIA 25305

# Prepared for:

EQT PRODUCTION COMPANY 120 PROFESSIONAL PLACE BRIDGEPORT, WEST VIRGINIA 26330

# Prepared by:

CIVIL & ENVIRONMENTAL CONSULTANTS, INC. 99 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330

CEC Project 142-405

March 24, 2015





March 24, 2015

Mr. James Martin, Chief West Virginia Department of Environmental Protection Office of Oil and Gas 601 57<sup>th</sup> Street Charleston, West Virginia 25304

Dear Mr. Martin:

Subject: Wetland Waiver Request

EQT Production Company FAW 55 Well Pad Project Marion County, West Virginia

CEC Project 142-405

#### 1.0 INTRODUCTON

On behalf of EQT Production Company (EQT), Civil & Environmental Consultants, Inc., (CEC) is submitting a Wetland Waiver Request pursuant to Chapter 22 Article 6A Section 12 of West Virginia Code. EQT is requesting a waiver for four wetlands which lie within 100-feet from the limits of disturbance (LOD) of the proposed FAW55 Well Pad Project located in Marion County, West Virginia.

EQT is proposing to construct a natural gas well pad with attendant facilities and associated access roads. The total LOD for the FAW 55 Well Pad Project is 22.38 acres and will support up to 10 horizontal wells. The waiver request form is included as Attachment A and the below sections provide a detailed description as required by the waiver.

#### 2.0 WETLAND WAIVER REQUEST

Question 1: Describe the proposed project location, including unique identifying names of all wetlands, and the names of perennial streams for which the waiver is sought.

The proposed FAW 55 Well Pad Project is located in southern Marion County, West Virginia near the town of Monongah, as shown on the Site Location Map included as Attachment B. The proposed project's LOD is within 100-feet of four palustrine emergent wetlands. Wetland C is partially located within the LOD, along the access road, but is not proposed for temporary or permanent impacts. Wetland D is located approximately 9 feet to the east and Wetland F is located approximately 57 feet to the east of the proposed access road. Wetland B is located approximately 99 feet south of the proposed pits. No perennial streams are located within 100-feet of the proposed LOD and no surface or ground water intakes of a public water supply are located within 1,000-feet. The Water Topo Map is provided as Attachment C.

Question 2: Justify the proposed activity by describing alternatives to this project that were considered

a. Include a No-Action Alternative as to show "the future without the project".

The No-Action alternative does not represent "no alteration" of the existing environment, as future development could likely occur. However, under this alternative, the FAW55 Well Pad Project would not be constructed and would produce no immediate environmental impacts and, consequently would not require a waiver; however, this option would not fulfill the project's purpose and need.

b. Location alternatives must be shown.

The proposed FAW 55 Well Pad went through various conceptual designs prior to the proposed design. The PP03 Conceptual Design, Attachment D, represented EQT's initial design and most efficient facility

Mr. James Martin Project 142-405 Page 2 March 24, 2015

layout prior to obtaining detailed information regarding the location and types of on-site aquatic resources. CEC biologists subsequently performed detailed wetland and stream delineations, and characterized all potentially jurisdictional areas on the site. The resulting aquatic resource data was then incorporated into the design of the facility to arrive at the proposed design. The stream and wetland delineation map is included as Attachment E.

As shown on the conceptual drawings, Wetlands C and D were initially proposed for temporary impacts, which would obviate the need for the wetland waiver; however, in an effort to further minimize impacts to on-site aquatic features the LOD was adjusted to avoid these impacts. The proposed design represents EQT's commitment to reducing aquatic impacts to the furthest extent practicable while still meeting the projects purpose and need. The proposed Site Plans are included as Attachment F.

c. Must demonstrate why a one hundred foot buffer cannot be maintained.

Maintaining a 100-foot buffer from all on-site wetlands was not feasible due to topographic restraints and location of the existing features. To maintain a 100-foot buffer for Wetlands B and C the project would needed to be shifted north. Shifting the site north would result in excess cut material which would need to be spoiled, potentially in wetland areas. The only other alternative to meet the setback requirements would be a reduction in the project's footprint.

The proposed design represents the minimum footprint required to meet the projects purpose and need. The flowback and completion pits have minimum set volumes, 1.25 million gallons and 5 million gallons respectively, which are based on the minimum requirements needed for fracing. A reduction in the flowback or completion pit size would not allow for project completion. The footprint of the pad is based on the minimum square foot required for equipment needed vital to the operation of the facility.

d. Describe how the proposed project is the least environmentally damaging practicable alternative.

The proposed FAW 55 design represents the alternative which reduces both temporary and permanent impacts to the greatest degree. The conceptual design would have reduced the need to obtain wetland waivers but instead would have resulted in direct temporary impacts to on-site features whereas the proposed design will avoid these impacts.

Question 3: Identify sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect waters of the state. This description should include all additional erosion and sediment control measures and devices that will be used.

As part of their permitting process, EQT has prepared an Erosion and Sedimentation Control Plan (E&SCP) specific for this project which stipulates specific seed mix for post-construction soil stabilization. The E&SCP will be implemented to reduce soil erosion, compaction, and sedimentation of receiving streams and wetlands. Proper construction sequencing and implementation of the E&SCP will ensure water quality impacts are minimized throughout the project area. Furthermore, the pits will be lined with an impermeable barrier to prevent possible contamination of soil and groundwater. EQT will also ensure that any contaminants will be strictly controlled. Furthermore, appropriate stormwater management features and culverts will be installed along the access roads to prevent the damming and funneling of water that might otherwise reach wetland areas.

Mr. James Martin Project 142-405 Page 3 March 24, 2015

Question 4: Proved mapping, plans, specifications and design analysis for the preferred alternative to the project.

Specify in writing what additional controls, measures, devices, monitoring, etc. will be used to protect
wetlands and/or perennial streams for which the waiver is sought.

West Virginia Department of Environmental Protection approved erosion and sediment controls will be maintained continuously throughout the project. Orange construction fencing will be installed around Wetland C and 32-inch silt sock will be installed upslope of the wetland to prevent secondary impacts from sedimentation. A filter sock sediment trap will be installed upslope of Wetland D, while 32-inch filter sock will be installed upslope of Wetlands B and F to also avoid sedimentation.

The following attachments are included with this waiver request:

Attachment A: Waiver Request Form Attachment B: Site Location Map Attachment C: Water Topo Map Attachment D: Conceptual Site Plans

Attachment E: Wetland and Stream Delineation Map

Attachment F: Proposed Final Site Plans

#### 3.0 CLOSING

A Nationwide Permit-14 and Stream Activity Application have been submitted to the U.S. Army Corps of Engineers and the West Virginia Division of Natural Resources' (WVDNR) Office of Land and Streams, respectively.

We appreciate your review of this Wetland Waiver Request. Please contact Lacoa Corder at (304) 848-0066, or at lcorder@eqt.com, if you have any questions or require additional information.

Respectfully submitted,

CIVIL AND ENVIRONMENTAL CONSULTANTS, INC

Jacquiyn Kester

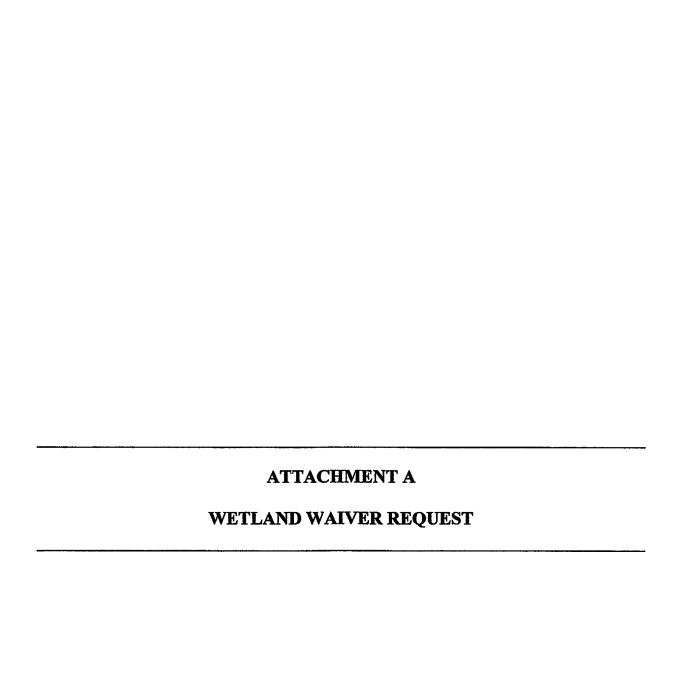
Project Manager

Joseph D. Robinson, P.E.

Project Manager

Enclosures

cc: Ms. Lacoa Corder, EQT Production Company



API Number:	Not yet assigned
<b>Operator's Well Number:</b>	306686

Well Number:		Well Pad Name: FAW 55 Well Pad County, Grant District, Fairmont West Quad
Well Operator:	EQT Production Company	

Answer the questions below to request a waiver from West Virginia Department of Environmental Protection for any wetlands or perennial streams which lie within one hundred feet of proposed project Limit of Disturbance (LOD), which includes any erosion and sediment control devices to be used.

This waiver shall be requested pursuant to Chapter 22 Article 6A Section 12 of West Virginia Code, which states:

§22-6A-12(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.

§22-6A-12(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.

**Wetland and Perennial Stream Waiver Request** 

API Number: Not yet assigned Operator's Well Number: 306686

Answer in the space provided, or use additional pages as necessary to fully answer the questions below:

1. Describe the proposed project location, including unique identifying names of all wetlands, and the names of perennial streams for which the waiver is sought.

Please refer to Section 2.0, Question 1 of the letter.

- 2. Justify the proposed activity by describing alternatives to this project that were considered.
  - a. Include a No-Action Alternative as to show "the future without the project"
  - b. Location Alternatives must be shown
  - c. Must demonstrate why a one hundred foot buffer cannot be maintained
  - d. Describe how the proposed project is the least environmentally damaging practicable alternative

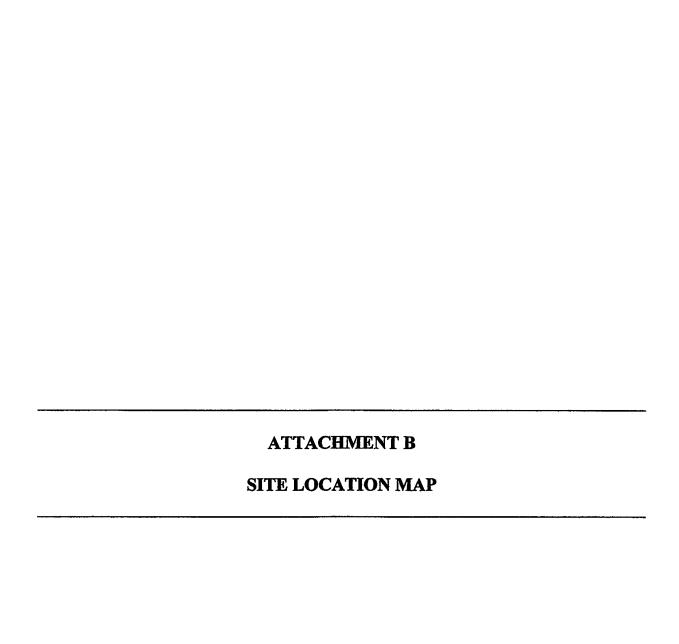
Please refer to Section 2.0, Question 2 of the letter.

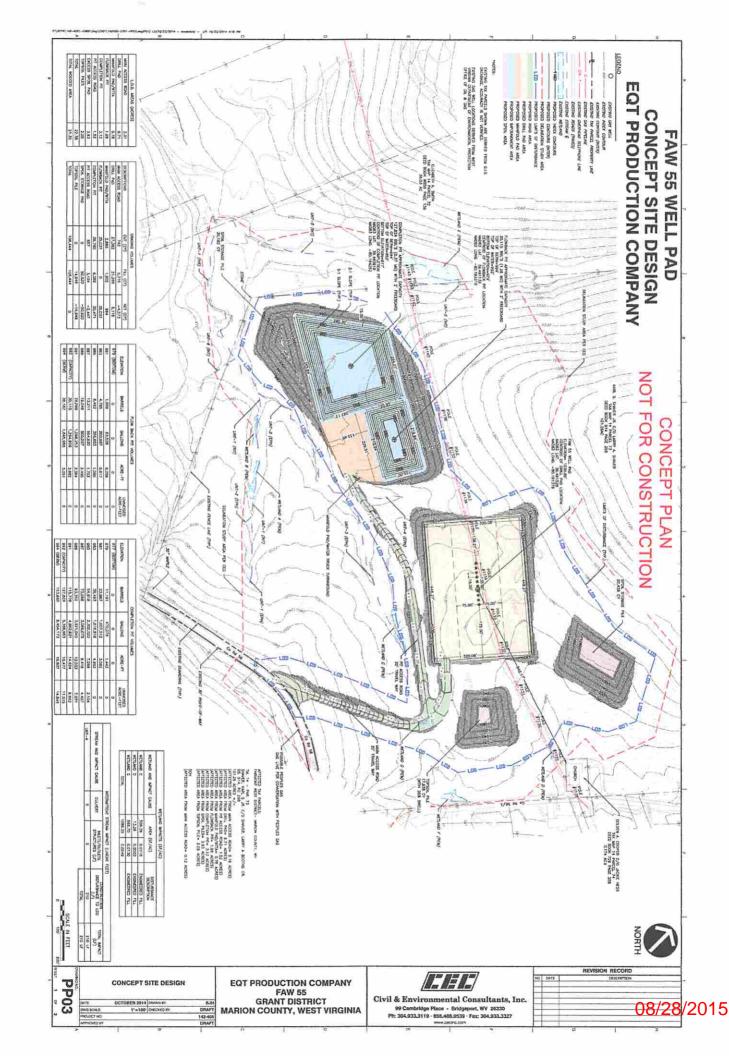
3. Identify sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. This description should include all additional erosion and sediment control measures and devices that will be used.

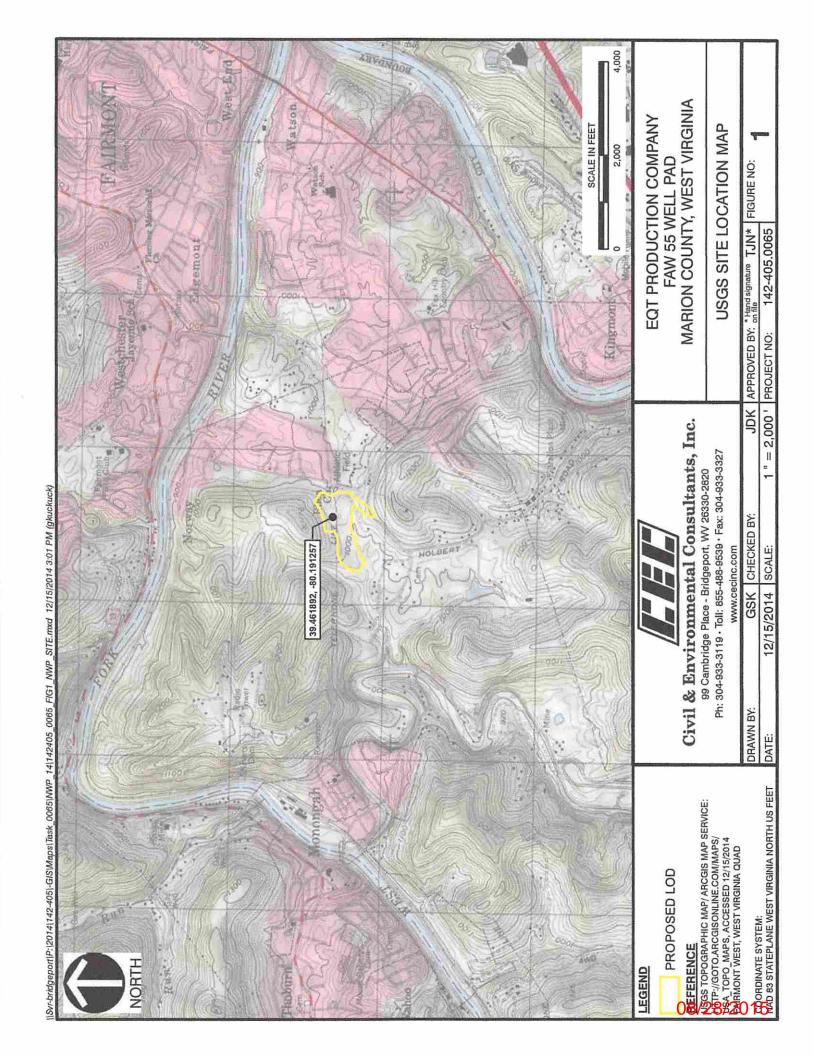
Please refer to Section 2.0, Question 3 of the letter.

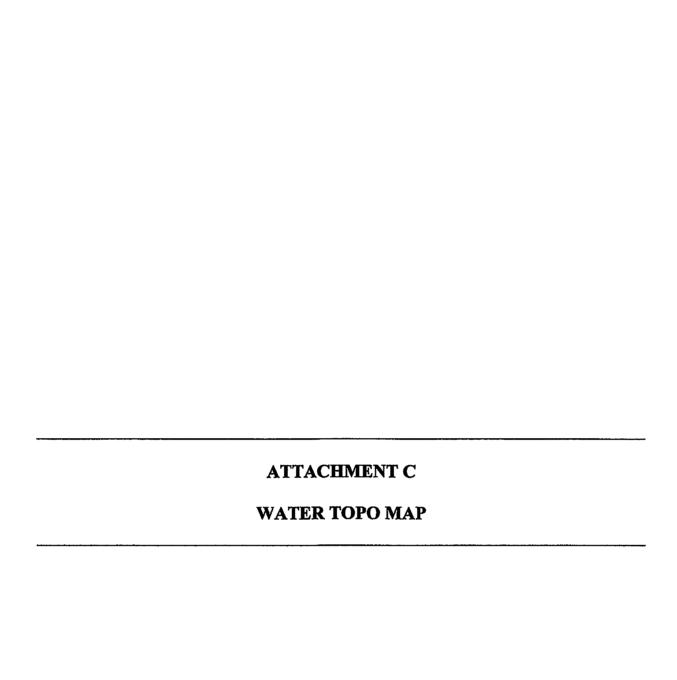
- 4. Provide mapping, plans, specifications and design analysis for the preferred alternative to the project.
  - a. Specify in writing what additional controls, measures, devices, monitoring, etc. will be used to protect these wetlands and/or perennial streams for which the waiver is sought.

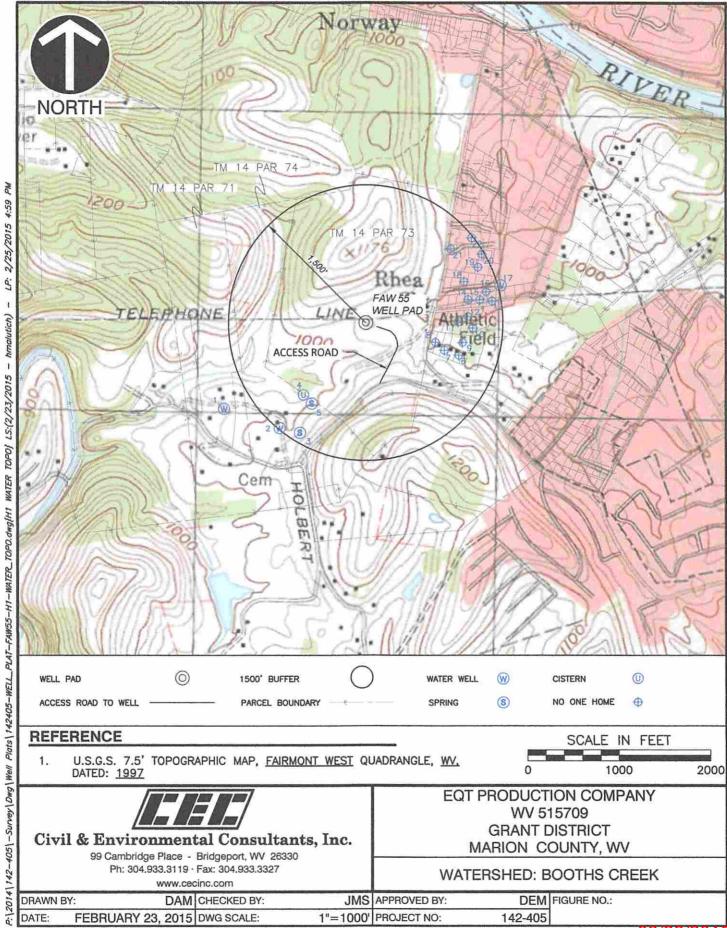
Please refer to Section 2.0, Question 4 of the letter.



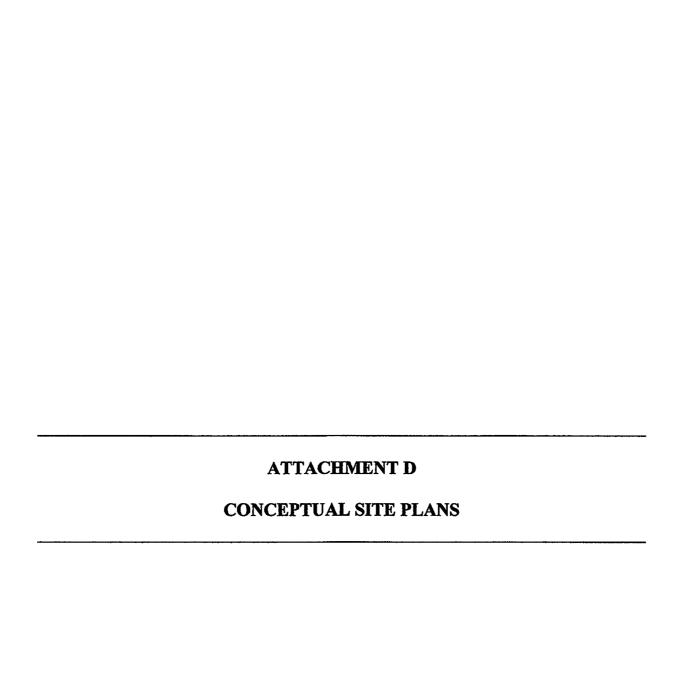


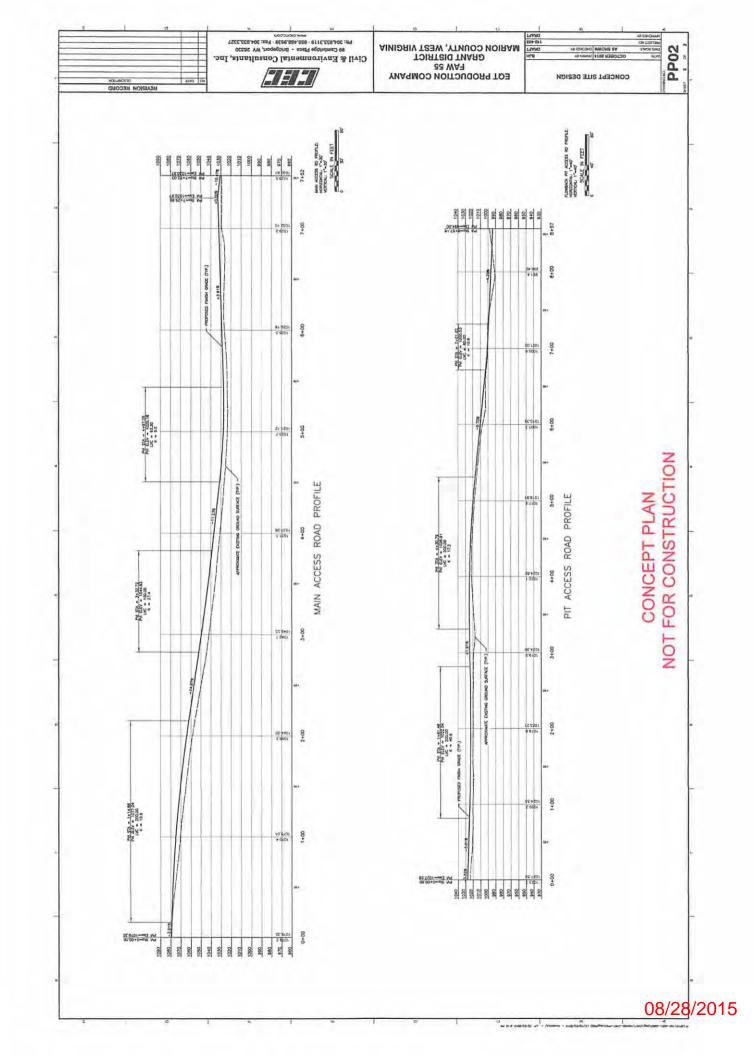


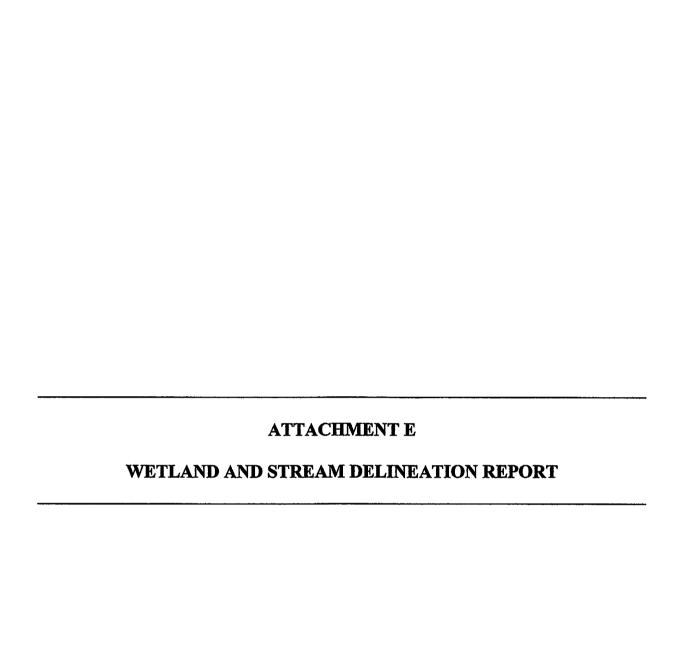


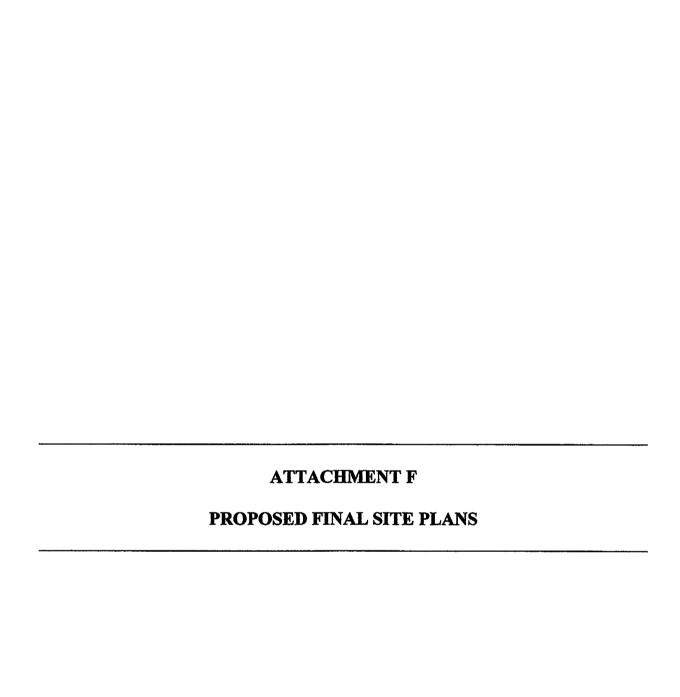


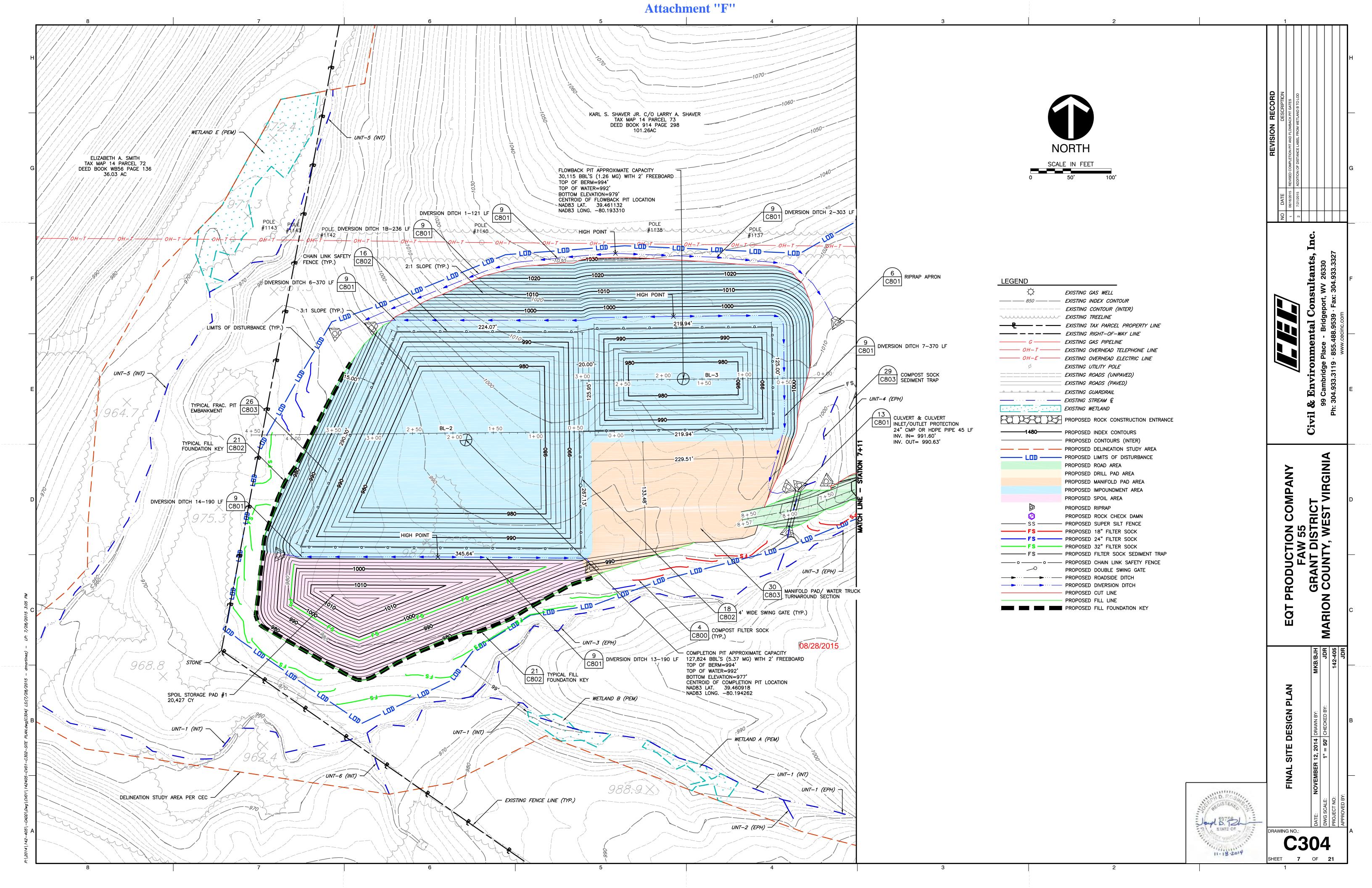
08/28/2015











# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS W.VA. CODE §22-6A - WELL WORK PERMIT APPLICATION

1) Well Operator: <u>EQT Producti</u>	on Company		306686	049	2	343
<del></del>			Operator ID	County	District	Quadrangle
2) Operator's Well Number:	·	515715		Well Pad Name	: <u>_</u>	FAW55
3) Farm Name/Surface Owner : _	<del></del>	Shaver		_ Public Road Acc	ess:	CR 56
4) Elevation, current ground:	1,039.0	Elevat	ion, proposed p	oost-construction:	1,031.0	<u> </u>
5) Well Type: (a) Gas	Oil	Und	derground Stora	age		
Other						
(b) If Gas:	Shallow	•	Deep			
ŀ	Horizontal	•				
6) Existing Pad? Yes or No:	No					
7) Proposed Target Formation(s), I				ociated Pressure(s) e 31 feet and anticip		re of 2593 PSI
8) Proposed Total Vertical Depth:	<del></del>			6971	<del></del>	
9) Formation at Total Vertical Dept	h:			Geneseo		<del></del>
10) Proposed Total Measured Dep				11718		
11) Proposed Horizontal Leg Lengt	th			3,689		
12) Approximate Fresh Water Strat	a Depths:			122, 164, & 19	97	
13) Method to Determine Fresh Wa	ater Depth:			By offset well		
14) Approximate Saltwater Depths:			1	1014 & 1088		
15) Approximate Coal Seam Depth				See #16), 524, 889	. & 1029	
<ol> <li>Approximate Depth to Possible</li> <li>Does proposed well location</li> </ol>			r):			2' - Pittsburg Seam
adjacent to an active mine?						
(a) If Yes, provide Mine Info:	Name:					
	Depth:					
	Seam:					
	Owner:					
				PH		
			3	33-15		Page 1 of 3

0:1100 0 0 0 15 MAR 27 2015 WW - 6B (3/13)

# **CASING AND TUBING PROGRAM**

18)

TYPE	Size	<u>New</u>	Grade	Weight per	FOOTAGE:	INTERVALS:	CEMENT:
		<u>or</u> Used		<u>ft.</u>	for Drilling	Left in Well	Fill- up (Cu.Ft.)
Conductor	26	New	MC-50	81	40	40	49 C.T.S.
Fresh Water	13 3/8	New	MC-50	54	248	248	241 C.T.S.
Coal	-	-	_	_	-	_	_
Intermediate	9 5/8	New	MC-50	40	2,741	2,741	1,094 C.T.S.
Production	5 1/2	New	P-110	20	11,718	11,718	See Note 1
Tubing	2 3/8		J-55	4.6			May not be run, if run will be set 100' less than TD
Liners							

WFH-23-15

						-3 4 3 -13
TYPE	<u>Size</u>	<u>Wellbore</u>	<u>Wall</u>	<u>Burst</u>	Cement	Cement Yield
		<u>Diameter</u>	<u>Thickness</u>	Pressure	<u>Type</u>	(cu. ft./k)
Conductor	26	30	0.375	-	Construction	1.18
Fresh Water	13 3/8	17 1/2	0.38	2,730	* See Note 2	1.21
Coal					_	_
Intermediate	9 5/8	12 3/8	0.395	3,950	* See Note 2	1.21
Production	5 1/2	8 1/2	0.361	12,640	-	1.27/1.86
Tubing						
Liners					1	

## **Packers**

Kind:	N/A		
Sizes:	N/A		
Depths Set:	N/A		

**Note 1**: EQT plans to bring the TOC on the production casing cement job 1,000' above kick off point, which is at least 500' above the shallowest production zone, to avoid communication.

Note 2: Reference Variance 2014-17. (Attached)

Page 2 of 3

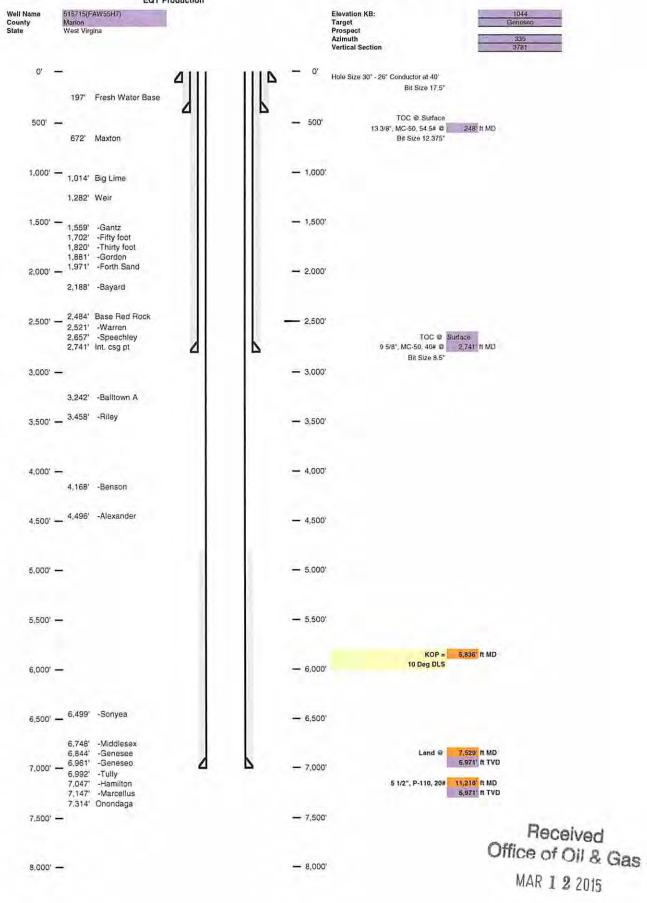
Cilico Circilio A Gas

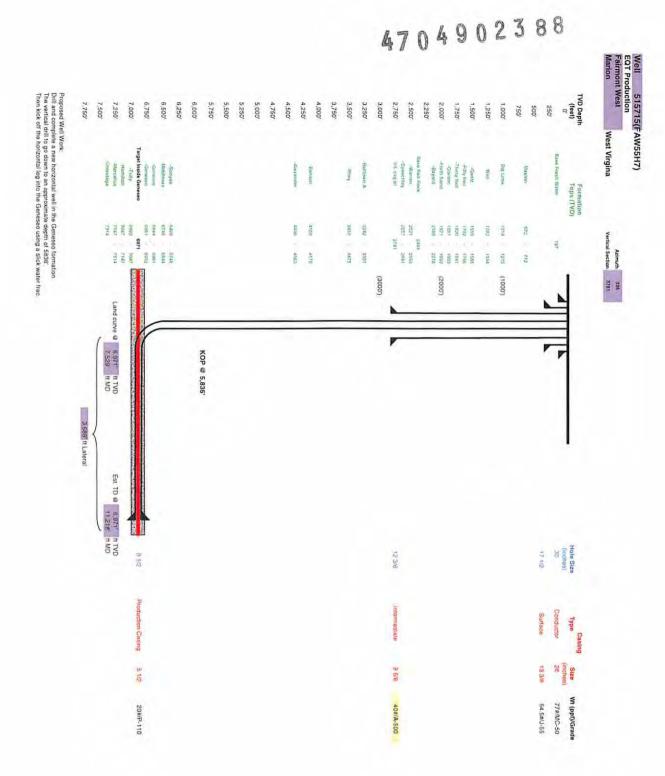
WW - 6B	API NO. 47 - 49 - 023
(10/14)	OPERATOR WELL NO. 5157
19) Describe proposed well work, including the drilling and plugging back of any pil	Well Pad Name: FAW lot hole:
Drill and complete a new horizontal well in the Geneseo Formation. The vertical drill to go down to	an approximate depth of 5836'. Then kick
off the horizontal leg into the Geneseo using a slick water frac. The hole will be drilled no more than	100' below the mine void. Cement basket(s)
and centralizers will be run to facilitate cementing the coal protection casing string to surface.  20) Describe fracturing/stimulating methods in detail, including anticipated max pre	essure and max rate:
Hydraulic fracturing is completed in accordance with state regulations using water recycled from previous	
freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "santicipated internal casing pressure is expected to average approximately 8500 psi, maximum anticipate	lickwater" completion. Maximum
approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barr	els of water per stage. Sand sizes
vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage.	
21) Total area to be disturbed, including roads, stockpile area, pits, etc, (acres):	± 22.28
22) Area to be disturbed for well pad only, less access road (acres):	± 6.71
<ul> <li>23) Describe centralizer placement for each casing string.</li> <li>Surface: Bow spring centralizers - One at the shoe and one spaced every 500'.</li> </ul>	
<ul> <li>Surface: Bow spring centralizers - One at the shoe and one spaced every 500.</li> <li>Intermediate: Bow spring centralizers - One cent at the shoe and one spaced every 500.</li> </ul>	rv 500'.
Production: One spaced every 1000' from KOP to Int csg shoe	
24) Describe all cement additives associated with each cement type. Surface	2 (Type 1 Cement): 0-3% Calcium Chloride
Used to speed the setting of cement slurries.	
0.4% flake, Loss Circulation Material (LCM) is used to combat the loss of the cement slurry Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temperature	
slurries. 0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of whole dri	
to a thief zone.	
Production:	
Lead (Type 1 Cement): 0.2-0.7% Lignosulfonate (Retarder). Lengthens thickening time.	
0.3% CFR (dispersant). Makes cement easier to mix.	
Tail (Type H Cement): 0.25-0.40% Lignosulfonate (Retarder). Lengthens thickening time.	
0.2-0.3% CFR (dispersant). This is to make the cement easier to mix.	
60 % Calcuim Carbonate. Acid solubility.	
0.4-0.6% Halad (fluid loss). Reduces amount of water lost to formation.	
25) Proposed borehole conditioning procedures. <u>Surface: Circulate hole clean (Appro-</u>	simately 30-45 minutes) rotating & reciprocating
one full joint until cuttings diminish at surface. When cuttings returning to surface diminish,	continue to circulate an additional 5
minutes. To ensure that there is no fill, short trip two stands with no circulation. If there is fi	ll, bring compressors back on
and circulate hole clean. A constant rate of higher than expected cuttings volume likely ind	lcates washouts that will not clean up.
Intermediate: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating one fu	Il joint until cuttings diminish at
surface. When cuttings returning to surface diminish, continue to circulate an additional 5 r	ninutes. If foam drilling, to enhance
hole cleaning use a soap sweep or increase injection rate & foam concentration.	
Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gau	uge holes bottoms up volume.
Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check	volume of cuttings coming across

the shakers every 15 minutes.

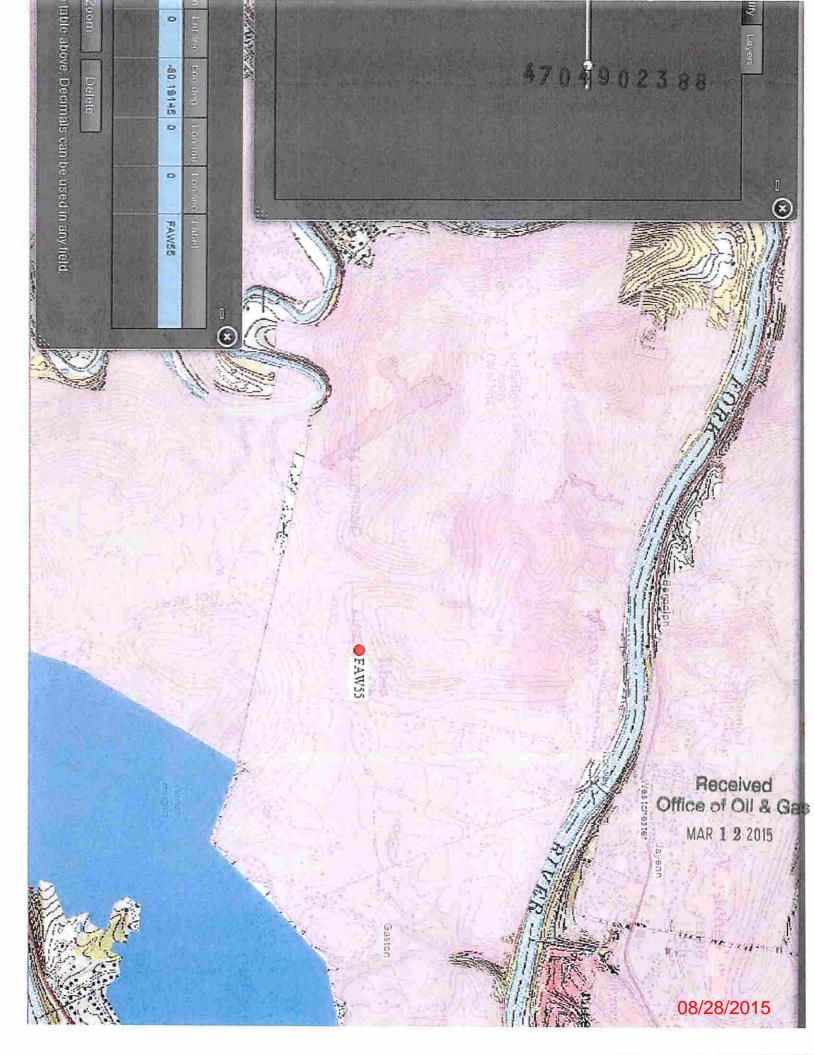
<sup>\*</sup>Note: Attach additional sheets as needed.

Well Schematic EQT Production





Received Office of Oil & Gas MAR 1 2 2015





west virginia department of environmental protection

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

March 18, 2014

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

Re: Cement Variance Request

Dear Sir or Madam,

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

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

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

P

ames Peterson

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

Received
Office of Oil & Gas

MAR 1 2 2015



west virginia department of environmental protection

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

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

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

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

# REPORT OF THE OFFICE

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

#### FINDINGS OF FACT

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

Promoting a healthy environment.

Received
Office of Oil & Gas

MAR 1 2 2015

#### **CONCLUSIONS OF LAW**

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

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

#### ORDER

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

James Martin, Chief Office of Oil and Gas

Office of Oil & Gas

WW-9 (5/13) 4704902388

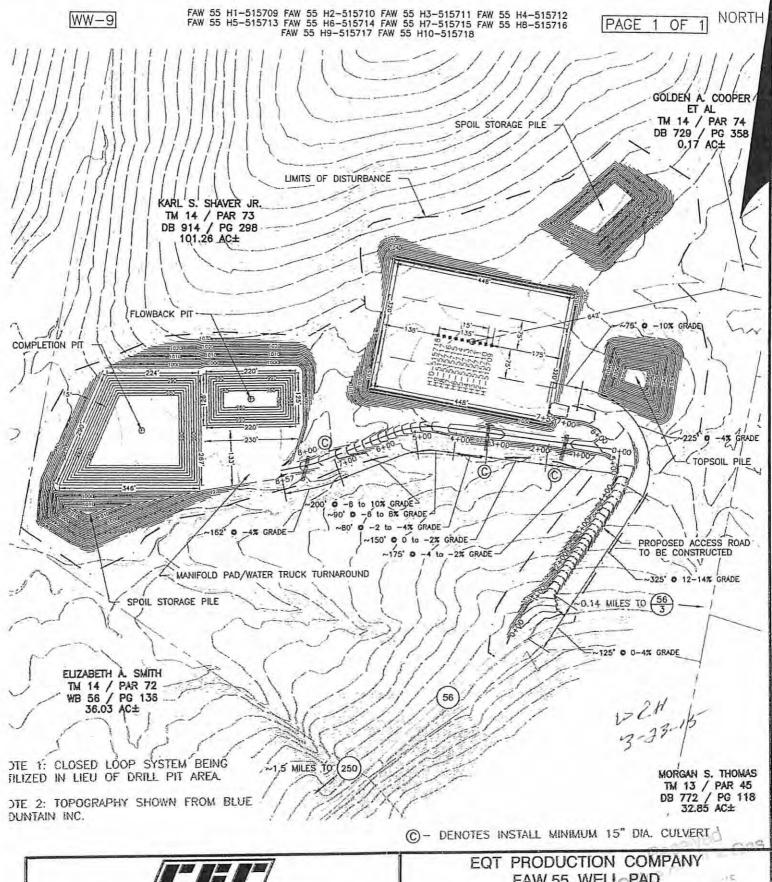
F	age	1	of	2
API No. 47	049	-	-	0
Operator's W	ell No.			515715

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

Fluids/Cuttings Disposal & Reclamation Plan

Operator Name	EQT Production	on Company	OP Code	306686	6
Watershed (HUC10) _	Booths Cre	ek	Quadrangle	Fairmont West	7.5'
Elevation	1031.0 Co	ountyMario	n Dist	rict Gran	t
Do you anticipate usin	g more than 5,000 bbls	of water to comple	te the proposed w	vell work? Yes_	x_No
Will a pit be used ? Ye	es: X No:				
If so please de	scribe anticipated pit was	te:	flowback wate	r & residual solids	
Will a synthetic	c liner be used in the pit?	YesX	No	_If so, what ml.? _	60
Proposed Dis	Land Application Underground Ir Reuse (at API Off Site Dispos	on njection ( UIC P Number_ al (Supply form	ermit Number Vari WW-9 for dispose	ous	7 )
	Other (Explain	1			)
	m be used ? Yes, Th			tings from the drilling	
fluid. The drill cuttings a	are then prepared for trans	sportation to an off-sit	e disposal facility.		
Drilling medium antic	cipated for this well? Ai	r, freshwater, oil bas	sed, etc. Air is used	to drill the top-hole sections of the	he wellbore,
			Surface, In	termediate, and Pilot hole section	ns, water based
W = 11 L = 2 - 2	what he so o with all	satuala usa sta	mud is use	d to drill the curve and lateral.	
	I, what type? Synthetic,		kaliaih. Casteel Hees	Oblasida Calla Bata Ella	the Cartest
Additives to be used in		The second secon		Chloride Salts,Rate Filtra	
	etergent, Defoaming, Walnut				
	on air: lubricant, detergent lime, chloride salts, rate filtr				
x-cide, SOLTEX terra	inne, chionde saits, rate intr	ation control, delloccular	nt, lubilicant, deterger	it, deloanling, wallut sil	ell,
	 I method? Leave in pit,	landfill, removed of	fsite, etc.	Landfill	
	and plan to solidify what med			n/a	
	ffsite name/permit numbe		See Attac	hed List	
on August 1, 2005, by the C provisions of the permit are or regulation can lead to en I certify under penalt application form and all atta the information, I believe th submitting false information Company Official Sign Company Official (Typ	y of law that I have personal achments thereto and that, but at the information is true, accurate including the possibility of	Vest Virginia Department ns of any term or condition by examined and am fam ased on my inquiry of the curate, and complete. I a fine or imprisonment.	t of Environmental Pro on of the general perm illiar with the informati ose individuals immed am aware that there ar Victoria J. Roark	otection. I understand that nit and/or other applicable on submitted on this liately responsible for ob	at the le law taining
Company Official Title		Permit	tting Supervisor/		
					_Re
Subscribed and sworr	before me this	10 day of _	MARCH	, 20 _	Office o
	k e		- 0.0	Notary Publ	ic MAR
My commission expire	99	7/27/2018		STATE O NOT Nichola	FICIAL SEAL FWEST VIRGII FARY PUBLIC ss.L. Bumgardn Rt. 1, Box 4 rty, WV 25124 ion Expires July 2

		Opera	tor's Well No.	515715
Proposed Revegetat	ion Treatment: Acres Disturbed	22.28	Prevegetation pH	4.5
Lime	3 Tons/acre o	r to correct to pH	6.5	
Fertilize type	e			
Fertilizer An	nount <u>1/3</u> lb	os/acre (500 lbs minimum)		
Mulch	2	Tons/acre		
		Seed Mixtures		
	Temporary		Permanent	
Seed Type KY-31	lbs/acre 40	Seed Type Orchard Grass		/acre
Alsike Clover	5	Alsike Clover		
Annual Rye	15			<del></del>
				T
Plan Approved by:	of involved 7.5' topographic she	shi		
Comments:				
			- "	
<del></del>				-
<del></del>			<del></del>	<del></del>
Title: EDUITOR	nessas 1 ospecto	ッ <u>ノ</u> Date: ラージ	3-15	
Field Reviewed?		Yes (		



Civil & Environmental Consultants, Inc.

99 Cambridge Place - Bridgeport, WV 26330 Ph: 304.933.3119 · Fax: 304.933.3327

www.cecinc.com

JMS APPROVED BY:

DEM FIGURE NO .:

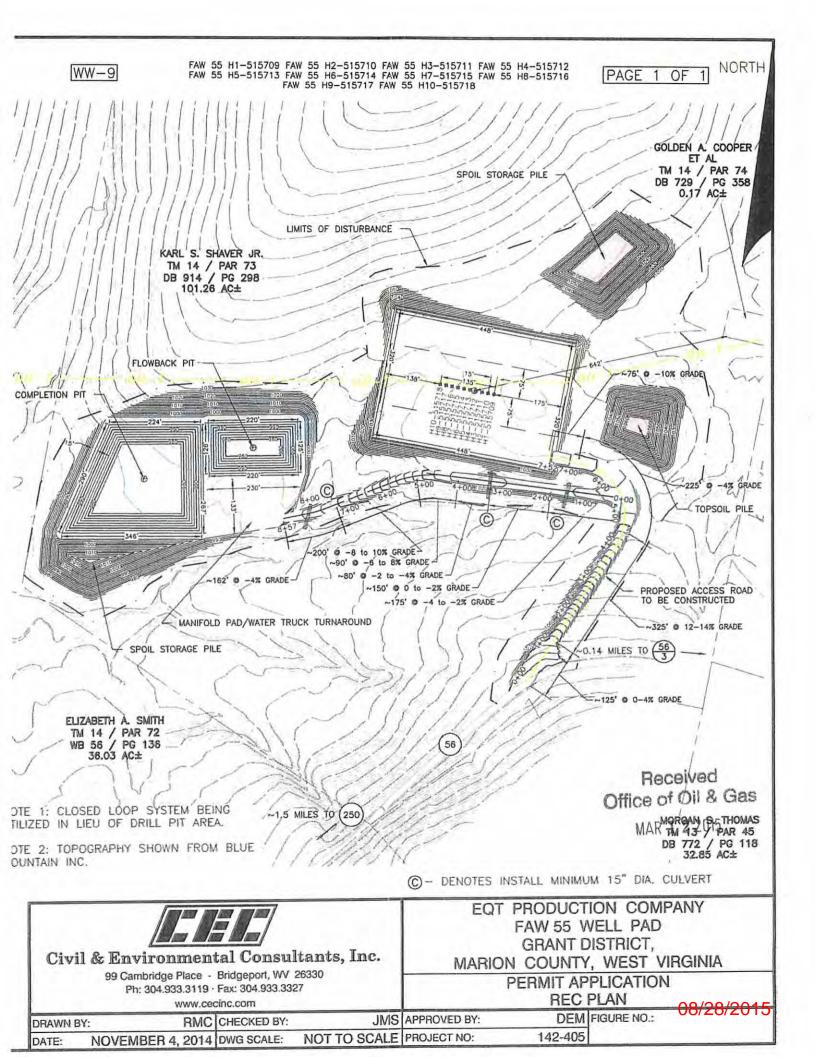
FAW 55 WELL PAD GRANT DISTRICT,

MARION COUNTY, WEST VIRGINIA

PERMIT APPLICATION REC PLAN 08/28/2015

DRAWN BY:

RMC CHECKED BY:



# **EQT Production Water plan Offsite disposals for Marcellus wells**

#### CWS TRUCKING INC.

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

#### LAD LIQUID ASSETS DISPOSAL INC.

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

#### TRI COUNTY WASTE WATER MANAGEMENT, INC.

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

#### **Waste Management - Meadowfill Landfill**

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

#### **Waste Management - Northwestern Landfill**

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

#### **BROAD STREET ENERGY LLC**

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

#### **TRIAD ENERGY**

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

#### KING EXCAVATING CO.

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

Received
Office of Oil & Gas



# Site Specific Safety Plan

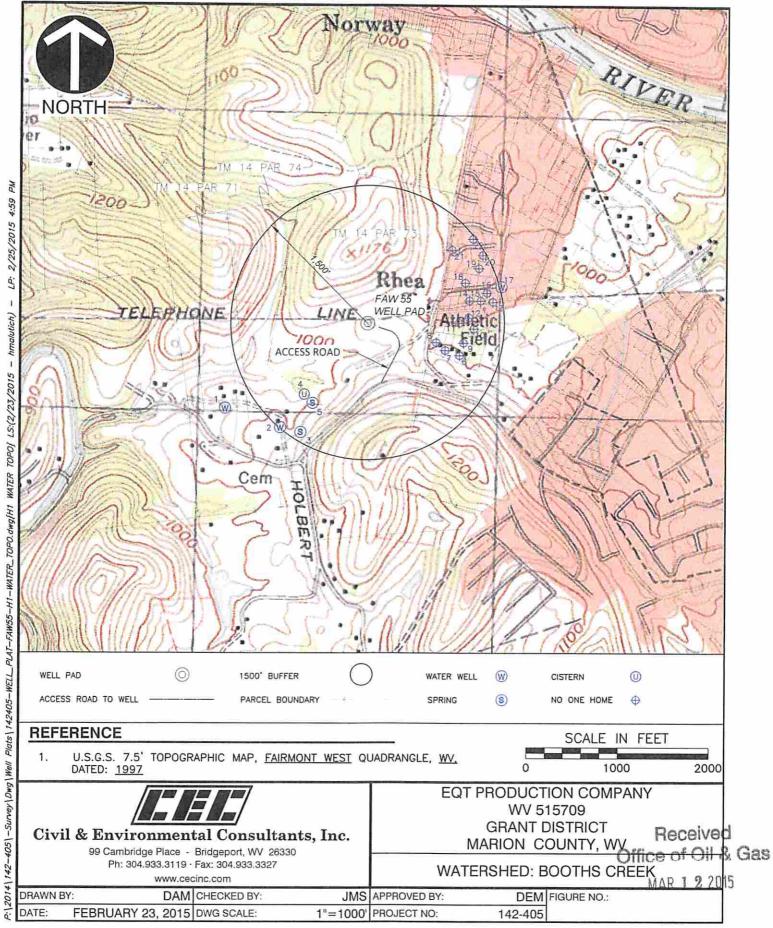
## **EQT FAW 55 Pad**

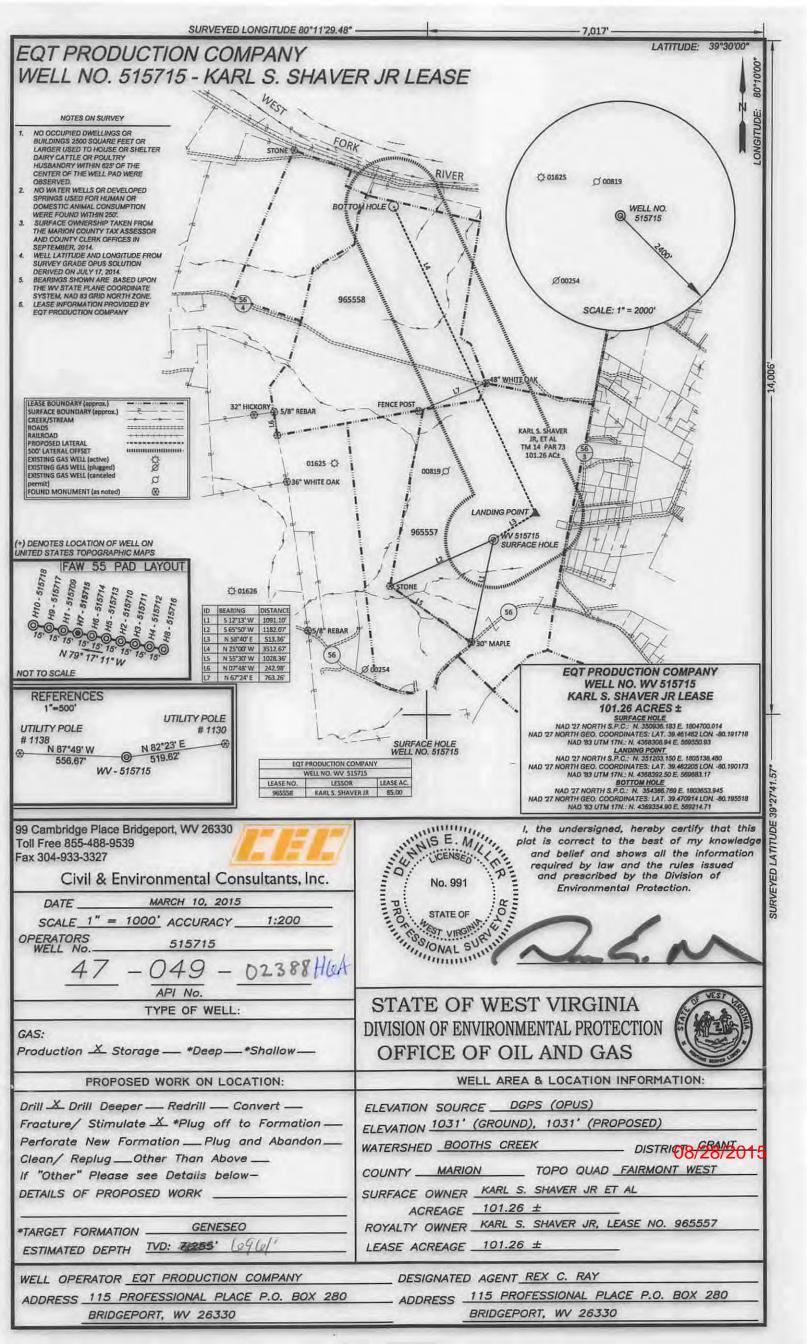
# **Fairmont**

# Marion County, WV

_515709	515711	515712	For Wells: <u>515715</u>	
EQT Production  Fittle  3-4-  Date	g Siper	Date Pro	epared:	October 24, 2014  William Hendersical WV Oil and Gas Inspector  Linumental Taspector  Title  3-73-15  Date  Final Gas  MAR 27 2015

KARL S. SHAVER JR. LEASE





WW-6A	l
(5/13)	

O	peral	or'	S	W	ell	No.

#### 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
			Min 1/8 pd	
Lease 965557				
	Karl S. Shaver, Jr.	Hunt Marcellus, LLC		DB 1071/97
	Hunt Marcellus, LLC	EQT Production Company		AB 46/916
Lease 965558				
	Karl S. Shaver, Jr.	Hunt Marcellus, LLC		DB 1071/101
	Hunt Marcellus, LLC	<b>EQT Production Company</b>		AB 46/916

Upon information and belief, Operator's lease and/or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

#### 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:

Its: Permitting Supervisor

Page 1 of 1

Received Office of Oil & Gas

Date of Notice Certification:

FAW55

API No. 47 0 Operator's Well No. Well Pad Name:

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

	WV	UTM NAD 83 Easting:	569,550.93
County:	Marion	UTM NAD 83 Northing:	4,368,308.94
District:	Grant	Public Road Access:	CR 56
uadrangle:	Fairmont West 7.5	Generally used farm name:	Shaver
atershed:	Booths Creek		
ursuant to	West Virginia Code & 22-6A-7(h	o), every permit application filed under this section shall be on a	form as may be
	그 경에 나는 그림에 가꾸게 하는 것이 이렇게 하는 것 같아. 그는 살이에게 모나스다	I and shall contain the following information: (14) A certification f	
		scribed in subdivisions (1), (2) and (4), subsection (b), section to	
		(c), section sixteen of this article; (ii) that the requirement was d	
giving the	surface owner notice of entry to	survey pursuant to subsection (a), section ten of this article six-	-a; or (iii) the notice
		en of this article were waived in writing by the surface owner; ar	
		hall tender proof of and certify to the secretary that the notice re	
	have been completed by the a	지근 이렇게 보고 아이들에게 가장 아이들에게 그렇게 하면 되었다. 그리고 있어요? 그렇게 하면 하는 사람이 그렇게 하는 것이 되었다. 그렇게 하는 사람이 하는 사람이 아니라 때문에	quiremente di decilon ten
ino artiore	mare been sempleded by and a		
ursuant to	West Virginia Code § 22-6A, the	e Operator has attached proof to this Notice Certification	
at the Ope	rator has properly served the re	quired parties with the following:	OOG OFFICE USE
			ONLY
LEASE (	CHECK ALL THAT APPLY		
			_ RECEIVED/NOT
NOTICE	OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	REQUIRED
		SEISMIC ACTIVITY WAS CONDUCTED	
NOTICE	OF ENTRY FOR PLAT SU	IRVEY or NO PLAT SURVEY WAS CONDUCTED	☐ RECEIVED
		NOTICE NOT REQUIRED BECAUSE	
- NOTICE	E OF INTENT TO DRILL or	NOTICE NOT REQUIRED BECAUSE  NOTICE OF ENTRY FOR PLAT SURVEY	RECEIVED/NOT
NOTICE	OF INTERN TO BRIDE OF	WAS CONDUCTED OR	REQUIRED
			1 = T
		WRITTEN WAIVER BY SURFACE OWNER	
		(PLEASE ATTACH)	" W
7 NOTICE	OF DIANNER ORERATIO	(PLEASE ATTACH)	C BECEIVED
	E OF PLANNED OPERATIO	(PLEASE ATTACH)	☐ RECEIVED
	E OF PLANNED OPERATION	(PLEASE ATTACH)	☐ RECEIVED

#### **Required Attachments:**

**▼** NOTICE OF APPLICATION

MAR 1 2 2015

F RECEIVE Peceived

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 2015 the return receipt card or other postal receipt for certified mailing.

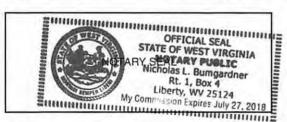
WW-6AC (1/12)

#### Certification of Notice is hereby given:

4704902388

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

Well Operator:	EQT Production Company	Address:	P.O. Box 280	
By:	Victoria J. Roark	Bridgeport,	WV 26330	
Its:	Permitting Supervisor	Facsimile:	304-848-0040	
Telephone:	304-848-0076	Email:	vroark@eqt.com	

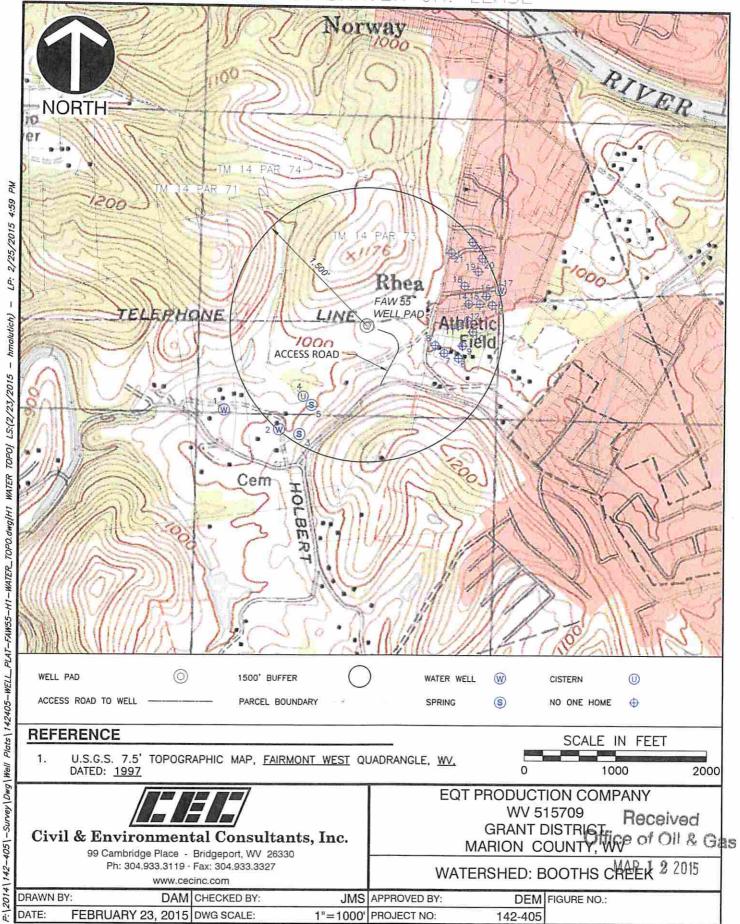


Subscribed and sworn before me this	10	day of	MARCH	,201
- Ho	,			Notary Public
My Commission Expires 7/27	2018			

#### 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.

Received Office of Oil & Gas MAR 1 2 2015 KARL S. SHAVER JR I FASE



WW-6A (9-13)

		and the	1	0	4	9	0	2	3	8	8
API NO.	47		_	049		-			0	otto	9
OPERATOR	E WEI	LNO	).					515	715		
Well Pad	Man	14.		-			1	3 A 11	155		

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

Notice Time Requirement: no	Date Permit App	the filing date of permit application.		
Date of House.	Date I Claim App	incarion Frica.	1	
Notice of:				
PERMIT FOR ANY WELL WORK		OF APPROVAL FOR THE ON OF AN IMPOUNDMENT OR PIT		
Delivery method pursuant	to West Virginia Code § 22-6A-10	O(b)		
☐ PERSONAL	REGISTERED	☑ METHOD OF DELIVERY T	THAT DECIDES A	
SERVICE	MAIL	RECEIPT OR SIGNATURE		
requires a receipt or signification and continuous requires a receipt or tagging plat to each of the following the surface tract of the surface as described lessee, in the event the trecord of the surface traconstruction, enlargeme water purveyor who is known activity is to take pin the lands, the applica article one, chapter elevunless the lien holder is	nature confirmation, copies of wing persons: (1) The owners is overlying the oil and gas lead in the erosion and sediment tract of land on which the well at the tracts overlying the oil at each, alteration, repair, removal known to the applicant to have water for consumption by high place. (c)(1) If more than three int may serve the documents in the en-a of this code. (2) Notwith the landowner. W. Va. Code	f the application, the erosion are sof record of the surface of the asehold being developed by the control plan submitted pursual II proposed to be drilled is local and gas leasehold being developed or abandonment of any impoute a water well, spring or water umans or domestic animals; and the tenants in common or other of the equired upon the person descriptions and the experimental provision of this ex. § 35-8-5.7.a requires, in page 1997.	er, by personal service or by registered mail or and sediment control plan required by section a tract on which the well is or is proposed to be proposed well work, if the surface tract is to not to subsection (c), section seven of this artic ted [sic] is known to be underlain by one or a ped by the proposed well work, if the surface andment or pit as described in section nine of supply source located within one thousand fit and (6) The operator of any natural gas storage co-owners of interests described in subsection libed in the records of the sheriff required to be article to the contrary, notice to a lien holder art, that the operator shall also provide the We after testing as provided in section 15 of this re-	seven of the located; be used the; (3) The more coal tract is to this we field in (b) of the is not the located the located tract is to this
Application Notice	✓ WSSP Notice ✓ E&S P	lan Notice 📝 Well Plat Notice	is hereby provided to:	
☑ SURFACE OWNER			ER OR LESSEE	
Name:	Karl S. Shay		Bell Shareholders, LLC 5700 Buck Hollow Drive	/
Address:	POA for Larry A. S 129 Old Monongah		Alpharetta, GA 30005	"
	Fairmont, WV		7 Inplicated, 57 7 5 6 6 5	
		a = COAL OPEN	See attached for additional coal owners.	
Name: Address:		0 COAL OPER Name:	0	
Address:		0 Address:	0	
		0	0	
SUBEACE OWNE	RS(s) (Road and/or Other Dis		0	
Name:	Karl S. Shav		<u> </u>	
Address:	POA for Larry A. S	Shaver SURFACE C	WNER OF WATER WELL	
	129 Old Monongah	Road AND/OR WATER	PURVEYOR(s)	
	Fairmont, WV		Elizabeth A, Smith	
Name:		0 Address:	259 OLD MONONGAH RD	/
Address:		0	FAIRMONT WV 26554-5374	
		0	0	
		0	and the state of t	
(1987) - C. William & C. Willia	R(s) (Impoundments/Pits)		OF ANY NATURAL GAS STORAGE FIELD	
Name:	Karl S. Shav		Received	1
Address:	POA for Larry A. S		Office of Oil 2	Da.
	129 Old Monongah			CHS
	Fairmont, WV		MAR 1 2 201	i
		*Please attach addit	tional forms if necessary	

WW-6A (8-13)

API NO.	<u>47</u>	-	049	 	C
<b>OPERAT</b>	TOR V	VELI	NO.		515715
Well Pad	Nam	e:		FAW55	

#### Notice is hereby given:

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

#### This Notice Shall Include:

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

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

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

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

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

#### Well Location Restrictions

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and Received organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding organic 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 MAR 1 2 2015

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OPERATOR WELL NO. 515715

Well Pad Name: FAW55

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

#### Water Well Testing:

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

#### Water Testing Laboratories:

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

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

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

#### **Written Comment:**

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

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

Received
Office of Oil & Gas

MAR 1 2 2015

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

WW-6A (8-13) 4704902388

API NO. 47 - 049 - 00

OPERATOR WELL NO. 515715

Well Pad Name: FAW55

#### Time Limits and Methods for Filing Comments.

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

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

#### **Comment Requirements**

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

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

#### **Permit Denial or Condition**

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

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

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

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

Received
Office of Oil & Gas
MAR 1 2 2015

#### Notice is hereby given by:

4704902388

Well Operator: EQT Production Company
Telephone: 304-848-0082

115 Professional Place P.O. Box 280 Bridgeport, WV 26330

Email: Vroark@eqt.com

Facsimile: 304-848-0041

#### Oil and Gas Privacy Notice:

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

Address:

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, 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.

My Come 124 127, 2018

OFFICIAL SEAL STATE OF WEST VIRGINIA MOTARY PUBLIC Nicholas L. Bumgardner

Rt. 1, Box 4

By: Victoria Roark

Its: Permitting Supervisor

Sabscribed and sworn before n\_10\_ d

Notary Public

My Commission Expir

16.

#### WW6-A

#### Additional Coal Owners:

Karl S. Shaver Jr. POA for Larry A. Shaver 129 Old Monongah Road Fairmont, WV 26554

Shirley A. Martin, Trustee of the Carl J.Martin Testamentary Trust "A" P.O. Box 788 Buckhannon, WV 26201

#### Additional water purveyors:

Glen G & Ruth A Shaver RR1 Box 385B Fairmont, WV 26554

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#### Table 1 - Water Source Identification

EQT Well Pad Name: FAW 55	Submittal Date:	3/9/2015	
EQT Well Number: 515709, 515711, 515712, 5 Survey/Engineering Company: 0		nts Inc.	_
Site Number:1 Surface Owner/Occupant: _ Glen G & Ruth A Sha		1823	
Address: RR 1 Box 385B, Fairmont, WV 26554		Phone #:	
Field Located Date: 10/20/14  Coordinates: 39.4589374 , -80.1969046	Owner home during survey (y		
Contact Attempts (Date): 1st: 10/20/14 2nd:	tested	Date Door Hange	
Site Number:2 Surface Owner/Occupant:Elizabeth A Smith	Distance from Gas Well (ft):	1494	
Address: 259 Old Monongah Rd., Fairmont, WV	26554	Phone #:	
Field Located Date:	(decimal degrees - NAD 83)  3rd:	Date Door Hange	er Left:
Site Number: 3 Surface Owner/Occupant: Elizabeth A Smith	Distance from Gas Well (ft):	1406	
Address: 259 Old Monongah Rd., Fairmont, WV	26554	Phone #:	
Field Located Date:10/20/14 Coordinates:39.4582313 , -80.1939701	Owner home during survey (y (decimal degrees - NAD 83)	ves/no): yes	_
Contact Attempts (Date): 1st: 10/20/14 2nd: Comments: par. 72, property has spring, wants		Date Door Hange	Received Office of Off & Ga

Site Number: 4 Distance from Gas Well (ft): 1034	
Surface Owner/Occupant: Elizabeth A Smith	
Address: 259 Old Monongah Rd., Fairmont, WV 26554 Phone #:	
Field Located Date: 10/20/14 Owner home during survey (yes/no): yes	
Coordinates: 39.4593135 , -80.1936686 (decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/20/14 2nd: 3rd: Date Door Hanger L	.eft:
Comments: par. 72, property has cistern, wants cistern tested	
	<del></del>
Site Number:5 Distance from Gas Well (ft):1038	
Surface Owner/Occupant: Elizabeth A Smith	_
Address: 259 Old Monongah Rd., Fairmont, WV 26554 Phone #:	
Field Located Date: 10/20/14 Owner home during survey (yes/no): yes	<del>-</del>
Coordinates: 39.459246 , -80.1935836 (decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/20/14 2nd: 3rd: Date Door Hanger L	eft:
Comments:par. 72, property has spring, wants spring tested	
	<del></del>
Site Musels and Co.	
Site Number: 6 Distance from Gas Well (ft): 1057	
Surface Owner/Occupant: Emanuel G Billiris	_
	304-290-9099
Field Located Date: 10/21/14 Owner home during survey (yes/no): no	_
Coordinates: 39.4605887 , -80.1878377 (decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/21/14 2nd: 10/30/14 3rd: Date Door Hanger Lo	eft: 10/21/14
Comments: par. 59, owner called and said there is no well on property, uses city water	
Site Number:7 Distance from Gas Well (ft): 889	
Surface Owner/Occupant: Jeremy J & Jamie J Edgell (20%) & Pamela Marocco (40%) & C/O Marshal & Stephanie Hu	ahes
	<del></del>
Field Located Date: 10/22/14 Owner home during survey (yes/no): no	
Coordinates: 39.4607414 , -80.1883966 (decimal degrees - NAD 83)	-
	eft: <u>19722/cei</u> ved
Jacobs Hangel La	- HELDINGO
Comments: par. 57, uses city water	Office of Oil &

Site Number: 8	Distance from Gas Well (ff): 0770 9 0 2 3 8 8
Surface Owner/Occupant: Gregory R or Linda	
Address: RR 9 Box 120, Fairmont, WV 26554	Phone #:
Field Located Date: 10/22/14	
Coordinates: 39.4609747 , -80.1887461	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger Left: 10/22/14
Comments: par. 55, uses city water	
Site Number: 8	Distance from Gas Well (ft): 770
Surface Owner/Occupant: Gregory R or Linda C	Dunn
Address: RR 9 Box 120, Fairmont, WV 26554	Phone #:
Field Located Date: 10/22/14	Owner home during survey (yes/no):no
Coordinates: 39.4609747 , -80.1887461	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger Left: 10/22/14
Comments: par. 56, uses city water	
Site Number: 9	Distance from Gas Well (ft): 1061
Site Number: 9 Surface Owner/Occupant: L Zane Shuck	Distance from Gas Well (ft): 1061
Surface Owner/Occupant: L Zane Shuck	
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26	6505 Phone #: 304-288-0919
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14	0505 Phone #: 304-288-0919  Owner home during survey (yes/no):
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26	Owner home during survey (yes/no): no (decimal degrees - NAD 83)
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:	Owner home during survey (yes/no): no (decimal degrees - NAD 83)
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:	Owner home during survey (yes/no):  (decimal degrees - NAD 83)  10/28/14 3rd: Date Door Hanger Left:10/22/14_
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview PI., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 58, owner called on 10-28-14 and 10-28-	Owner home during survey (yes/no): no (decimal degrees - NAD 83)  10/28/14 3rd: Date Door Hanger Left: 10/22/14 and said there is no well on property, uses city water
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 58, owner called on 10-28-14 a	Owner home during survey (yes/no):  (decimal degrees - NAD 83)  10/28/14 3rd: Date Door Hanger Left:10/22/14_
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 58, owner called on 10-28-14 a  Site Number: 9  Surface Owner/Occupant: L Zane Shuck	Owner home during survey (yes/no): no
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 58, owner called on 10-28-14 and some par. 58, owner called on 10-28-1	Owner home during survey (yes/no): no
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 58, owner called on 10-28-14 and solve Site Number: 9  Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14	Owner home during survey (yes/no): no
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview PI., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 58, owner called on 10-28-14 and solve Site Number: 9  Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview PI., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892	Owner home during survey (yes/no): no (decimal degrees - NAD 83)  10/28/14 3rd: Date Door Hanger Left: 10/22/14 and said there is no well on property, uses city water  Distance from Gas Well (ft): 1061   Owner home during survey (yes/no): no (decimal degrees - NAD 83)
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd: Comments: par. 58, owner called on 10-28-14 and Site Number: 9  Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:	Owner home during survey (yes/no): no
Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd: Comments: par. 58, owner called on 10-28-14 and Site Number: 9  Surface Owner/Occupant: L Zane Shuck  Address: 401 Highview Pl., Morgantown, WV 26  Field Located Date: 10/22/14  Coordinates: 39.4609698 , -80.1876892  Contact Attempts (Date): 1st: 10/22/14 2nd:	Owner home during survey (yes/no): no (decimal degrees - NAD 83)  10/28/14 3rd: Date Door Hanger Left: 10/22/14 and said there is no well on property, uses city water  Distance from Gas Well (ft): 1061   Owner home during survey (yes/no): no (decimal degrees - NAD 83)

Site Number:10	Distance from Gas Well (ft):	1152	
Surface Owner/Occupant: Kenneth Decker			
Address: RR 9 Box 148, Fairmont, WV 26554		Phone #:	
Field Located Date: 10/22/14	Owner home during survey (ye		
Coordinates: 39.4614078 , -80.1873013	(decimal degrees - NAD 83)	<del></del>	
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd:	Date Door Hanger Left:	10/22/14
Comments: par. 50, uses city water			
Site Number: 11	Distance from Gas Well (ft):	990	
Surface Owner/Occupant: Michael R & Stacia N			
Address: 123 Norway Loop Rd., Fairmont, WV			
Field Located Date: 10/22/14		s/no): <u>no</u>	
Coordinates: 39.4615781 , -80.1878729	(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd:	Date Door Hanger Left:	10/22/14
Comments: par. 52, uses city water		<u>-</u>	
			<del></del> ,
Site Number: 12	Distance from Gas Well (ft):	1100	
Surface Owner/Occupant:David E Campbell			
Address: 28 Norway Loop Rd., Fairmont, WV 2		Phone #:	
Field Located Date: 10/22/14		s/no): <u>no</u>	
Coordinates: 39.4617438 , -80.1874946	(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st: 10/22/14 2nd: _	<u>10/30/14</u> 3rd:	ate Door Hanger Left:	10/22/14
Comments: par. 51, uses city water			
		,	
Site Number: 13	Distance from Con Maril (6)	1205	
	Distance from Gas Well (ft):	1300	
Surface Owner/Occupant: Dolores Calkusic	DEE 4	Db. "	
Address: 45 Norway Loop Rd., Fairmont, WV 26		Phone #:	
Field Located Date: 10/22/14		s/no):no	
Coordinates: 39.4622202 , -80.1865572			
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: D	ate Door Hanger Left:	<del>- Mecelve</del>
Comments: par. 49, uses city water		Offi	ce of Oil 8
			MAR 1 2 20

Site Number:14	Distance from Gas Well (ft): 1132	
Surface Owner/Occupant: Elizabeth J Brady		
Address: RR 9 Box 161, Fairmont, WV 26554	Phone #:	
Field Located Date: 10/22/14		
Coordinates: 39.4622497 , -80.187481	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger Left:10	/22/14
Comments: par. 45, uses city water		
024- 11		
Site Number: 15	Distance from Gas Well (ft): 1253	
Surface Owner/Occupant: Anna B Blaker		
Address: 113 Nottingham Lane, Fairmont, WV		
Field Located Date: 10/22/14		
Coordinates: 39.4622482 , -80.1870403		
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger Left:	/22/14
Comments: par. 46, uses city water		
Cita Number 45		
Site Number: 15	Distance from Gas Well (ft): 1253	
Surface Owner/Occupant: Anna B Blaker		
Address: 113 Nottingham Lane, Fairmont, WV 2		
Field Located Date: 10/22/14		
Coordinates: 39.4622482 , -80.1870403	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/22/14 2nd: _	10/30/14 3rd: Date Door Hanger Left:10/	22/14
Comments: par. 47, uses city water		
Site Number: 16	Distance from Gas Well (ft): 1343	
Surface Owner/Occupant: Dolores Calkusic	2.512.133 .1311 Gdd 11311 (1ty	
Address: 45 Norway Loop Rd., Fairmont, WV 20	6554 Phone #:	
Field Located Date: 10/22/14	Owner home during survey (yes/no): no	
Coordinates: 39.4624888 , -80.1867868	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/22/14 2nd:	•	20144 +
Comments: par. 48, uses city water		emed
par. 40, uses city water	Office of	<u>UII &amp;</u>
	MAR	1 2 201

Site Number:17	Distance from Gas Well (ft): 1528	
Surface Owner/Occupant: Dolores Calkusic		
Address: 45 Norway Loop Rd., Fairmont, WV 2	26554 Phone #:	
Field Located Date: 10/22/14		
Coordinates: 39.4626014 , -80.18636764	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger Left:10/2	22/14
	recently moved, possible well across from TM 13A P 34 is on the	
Site Number: 18	Distance from Gas Well (ft): 1149	
Surface Owner/Occupant: Gerald B III & Jan L	<del></del>	
Address: 19 Quint Dr., Fairmont, WV 26554		
	Owner home during survey (yes/no):no	
Coordinates: 39.4627865 , -80.1876489	\ \frac{1}{2}	
	10/27/14 3rd: Date Door Hanger Left: 10/2	00 /4 A
	and said there is no well on property, uses city water	-2114
par. 67, ewiter dance in 16-27-14 a	and said there is no well on property, uses city water	
Site Number: 18	Distance from Gas Well (ft): 1149	
Surface Owner/Occupant: Gerald B III & Jan L F	<del></del>	
Address: 19 Quint Dr., Fairmont, WV 26554		
Field Located Date: 10/22/14		
Coordinates: 39.4627865 , -80.1876489		
<del></del>	10/27/14 3rd: Date Door Hanger Left: 10/2	2/14
Comments: par. 38, owner called in 10-27-14 and s	<del></del>	
	The second secon	
Site Number:19	Distance from Gas Well (ft): 1352	
Surface Owner/Occupant: William L & Norma L	Jones	
Address: _54 Granite Dr., Fairmont, WV 26554	Phone #:	
Field Located Date: 10/22/14	Owner home during survey (yes/no): no	
Coordinates: 39.4632189 , -80.1871172	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/22/14 2nd:		BV1A
Comments: par. 26, uses city water	10/30/14 3rd: Date Door Hanger Left:	<del>ይ '</del>
Pair 20, 2000 oily water	Office of Oil  MAR 1 2 2	015
	MAR 1 2 2	<del>013</del>

Site Number:19	Distance from Gas Well (ft):	1352	
Surface Owner/Occupant: William L & Norma L	. Jones		
Address: 54 Granite Dr., Fairmont, WV 26554		Phone #:	
Field Located Date: 10/22/14			
Coordinates: 39.4632189 , -80.1871172	(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: D	ate Door Hanger Left	:10/22/14
Comments: par. 29, uses city water			
			<del></del>
Cit III .			
Site Number:19	Distance from Gas Well (ft):	1352	
Surface Owner/Occupant: William L & Norma L			
Address: 54 Granite Dr., Fairmont, WV 26554		· · · · · · · · · · · · · · · · · · ·	
Field Located Date: 10/22/14		/no):no	
Coordinates: 39.4632189 , -80.1871172			
Contact Attempts (Date): 1st: 10/22/14 2nd: _	10/30/14 3rd: Da	ate Door Hanger Left:	10/22/14
Comments: par. 31, uses city water			
		-	
Site Number: 20	Distance from Gas Well (ft):	1456	
Surface Owner/Occupant: Daniel L & Florence N	M Sloan		
Address: 30 Granite Dr., Fairmont, WV 26554		Phone #:	· · · · · ·
Field Located Date: 10/22/14	Owner home during survey (yes/	/no):no	
Coordinates: 39.4636102 , -80.1869761	(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st: 10/22/14 2nd: _	10/30/14 3rd: Da	ate Door Hanger Left:	10/22/14
Comments: par. 28, uses city water			
<del></del>		•	
Site Number: 21_	Distance from Gas Well (ft):1	1216	
Surface Owner/Occupant: Henry L Jr. & Dianna	Sloan		
Address: 120 Norway Loop Rd., Fairmont, WV 2	26554	Phone #:	<del></del>
Field Located Date: 10/22/14	Owner home during survey (yes/		
Coordinates: 39.4637613 , -80.1881778			
Contact Attempts (Date): 1st: 10/22/14 2nd:	3rd: Da	ite Door Hanger Left:	Beceived
Comments: par. 24, no house on property		Off	ice of Oil &
			11.65 ()

Site Number: 22	Distance from Gas Well (ft): 1467
Surface Owner/Occupant: Lindsay Thompson (	Life WB 81-755)(DB961-784/790) C/O William Thompson
Address: RR 9 Box 215, Fairmont, WV 26554	Phone #:
Field Located Date: 10/22/14	<del></del>
Coordinates: 39.4640913 , -80.1873692	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger Left: 10/22/14
Comments: par. 23, uses city water	
Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant: Rose A Flanagan	· /
Address: 41 Quint Dr., Fairmont, WV 26554	Phone #:
	Owner home during survey (yes/no):yes
Coordinates: ,	
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14_ 3rd: Date Door Hanger Left: 10/22/14
Comments: par. 32, uses city water	
Site Number	Distance from Gas Woll (#):
Site Number:  Surface Owner/Occupant: Rose & Flanagan	Distance from Gas Well (ft):
Surface Owner/Occupant: Rose A Flanagan	<del></del>
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554	Phone #:
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14	Phone #:  Owner home during survey (yes/no): yes
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: ,	Owner home during survey (yes/no):
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: Contact Attempts (Date): 1st: 10/22/14 2nd:	Phone #:  Owner home during survey (yes/no): yes
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: ,	Owner home during survey (yes/no):
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: Contact Attempts (Date): 1st: 10/22/14 2nd:	Owner home during survey (yes/no):
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: Contact Attempts (Date): 1st: 10/22/14 2nd:	Owner home during survey (yes/no):
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: Contact Attempts (Date): 1st: 10/22/14 2nd: Comments: par. 33, uses city water	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  10/30/14 3rd: Date Door Hanger Left:10/22/14
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: ,  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 33, uses city water  Site Number:	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  10/30/14  3rd: Date Door Hanger Left:10/22/14  Distance from Gas Well (ft):
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: ,  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 33, uses city water  Site Number:  Surface Owner/Occupant: Rose A Flanagan	Phone #:  Owner home during survey (yes/no):
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: ,  Contact Attempts (Date): 1st: 10/22/14 2nd:  Comments: par. 33, uses city water  Site Number:  Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates: ,	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  10/30/14  3rd: Date Door Hanger Left:10/22/14  Distance from Gas Well (ft):  Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)
Surface Owner/Occupant: Rose A Flanagan  Address: 41 Quint Dr., Fairmont, WV 26554  Field Located Date: 10/22/14  Coordinates:	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  10/30/14  3rd: Date Door Hanger Left:10/22/14  Distance from Gas Well (ft):  Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)

Site Number:	Distance from Gas Well (ft):	
Surface Owner/Occupant: Co. Commission of	Marion Co.	
Address: 200 Jackson St., Fairmont, WV 2655	Phone #:	
Field Located Date: 10/24/14		
Coordinates:,	(decimal degrees - NAD 83)	<del></del>
Contact Attempts (Date): 1st: 10/24/14 2nd:	3rd: Date Door Hange	r Left:
Comments: par. 39.3, uses city water		
0". 1		
Site Number:	Distance from Gas Well (ft):	
Surface Owner/Occupant: Hester A Malnick C/		
	26554 Phone #:	
	Owner home during survey (yes/no):yes	<u> </u>
Coordinates:,	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger	Left: 10/22/14
Comments: par. 43, uses city water		
		<del></del>
Site Number:	Distance from Gas Well (ft):	
	O Frank & Patricia Burton	
	6554 Phone #: _	
Field Located Date: 10/22/14	Owner home during survey (yes/no):yes	<u> </u>
Coordinates:,		
Contact Attempts (Date): 1st: 10/22/14 2nd:	10/30/14 3rd: Date Door Hanger	Left: 10/22/14
Comments: par. 44, uses city water		
Site Number:	Distance from Gas Well (ft):	
Surface Owner/Occupant: James W Shaver		<del></del>
Address: 231 Old Monongah Rd., Fairmont, W		
Field Located Date:	Owner home during survey (yes/no):no	_
Coordinates:,		
Contact Attempts (Date): 1st: 2nd: _	3rd: Date Door Hanger	
Comments: par. 72.1, uses city water		CH Of Oil & Gas
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Site Number:	Distance from Gas Well (ff): 704902388
Surface Owner/Occupant: George F McElroy	
Address: 31 Holbert Rd., Fairmont, WV 26554	Phone #:
Field Located Date:	Owner home during survey (yes/no):yes
Coordinates:,	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Hanger Left:
Comments: par. 45, no well, uses city water	
Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant: George F McElroy	
Address: 31 Holbert Rd., Fairmont, WV 26554	Phone #:
Field Located Date:	Owner home during survey (yes/no):yes
Coordinates:,	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Hanger Left:
Comments: par. 46, no well, uses city water	
Site Number:	Distance from Cos MA-H (ft)
Site Number:  Surface Owner/Occupant: George F McElroy	Distance from Gas Well (ft):
Address: 31 Holbert Rd., Fairmont, WV 26554	Phone #:
Field Located Date:	Owner home during survey (yes/no):yes
Coordinates:	(decimal degrees - NAD 83)
	3rd: Date Door Hanger Left:
Comments: par. 47, no well, uses city water	
Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant: Karl S Shaver Jr.	
Address: 129 Old Monongah Rd., Fairmont, W	/ 26554 Phone #:
	Owner home during survey (yes/no): yes
Coordinates:,	
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Hanger Left:
Comments: par. 70, no well, uses city water	Dacalved
	Office of Oil & Gas

Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant: Ida F Shaver	
Address: PO Box 854, Fairmont, WV 26554	Phone #:
Field Located Date:	
Coordinates:	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Hanger Left:
Comments: par. 71.2	
Site Number:	
Surface Owner/Occupant: _ David W & Shirleen	Distance from Gas Well (ft):
	Phone #:
	Owner home during survey (yes/no):yes
<del></del>	•
Comments: par. 39.1, no well, uses city water	3rd: Date Door Hanger Left:
par. 33.1, no wen, uses city water	
Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant:Darrell K Jr. & Christ	
Address: RR 9 Box 116, Fairmont, WV 26554	Phone #:
Field Located Date:	Owner home during survey (yes/no): no
Coordinates:,	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 2nd: _	3rd: Date Door Hanger Left:
Comments: par. 39.2	
Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant: Roger Grove	
Address: RR 9 Box 117, Fairmont, WV 26554	
Field Located Date:	Owner home during survey (yes/no):yes
Coordinates:,	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 2nd: _	3rd: Date Door Hanger Left:Received
Comments: par. 39, no well, uses city water	Office of Oil & Gas
	Olliop of the

Site Number:	Distance from Gas Well (ft):		
Surface Owner/Occupant: Roger K Grove & Re	ebecca D Dickens		
Address: RR 9 Box 117, Fairmont, WV 26554		Phone #:	
Field Located Date:			
Coordinates:,	(decimal degrees - NAD 83)	-	
Contact Attempts (Date): 1st: 2nd:	3rd: [	Date Door Hanger Left:	:
Comments: par. 43, no well, uses city water		<del> </del>	
Site Number:	Distance from Co. III. II. (f)		
Site Number: Michael I & Lica Dub	Distance from Gas Well (ft):		
Surface Owner/Occupant: Michael J & Lisa Dub			
Address: RR 9 Box 121, Fairmont, WV 26554			
Field Located Date:	Owner home during survey (ye	s/no):	
Coordinates:	(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st: 2nd: _	3rd: [	Date Door Hanger Left:	<del></del>
Comments: par. 54, no well, uses city water			<del></del>
Site Number:	Distance from Gas Well (ft):		
Surface Owner/Occupant: Henry L Jr. & Diana (		<del></del>	
Address: 120 Norway Rd., Fairmont, WV 26554		Phone #:	
Field Located Date:	Owner home during survey (yes		
Coordinates:	(decimal degrees - NAD 83)	· <u></u>	
Contact Attempts (Date): 1st: 2nd:	3rd:	Date Door Hanger Left:	
Comments: par. 25, no well, uses city water		· ·	
Site Number:	Distance from Gas Well (ft):		
Surface Owner/Occupant: Thomas H Reese			
Address: 14 Norway Loop Rd., Fairmont, WV 26	5554	Phone #:	
Field Located Date:	Owner home during survey (yes	s/no):yes	
Coordinates:,	(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st: 2nd: _	3rd: D	oate Door Hanger Left:	
Comments:par. 53, no well, uses city water			Received
		Offic	ce of Oil & Gas

Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant: Michael & Wendy H	artman
Address: RR 9 Box 224, Fairmont, WV 26554	Phone #:
Field Located Date:	
Coordinates:	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Hanger Left:
Comments: par. 42, no well, uses city water	
Site Number:	Distance from Gas Well (ft):
Surface Owner/Occupant: Larry A Shaver C/O	
Address: 78 Norway Rd., Fairmont, WV 26554	Phone #:
Field Located Date:	Owner home during survey (yes/no):no
Coordinates:,	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Hanger Left:
Comments: par. 41, no house on property	
Site Number:	Distance from Gas Well (ft):
Site Number: Surface Owner/Occupant: _ Charles H & Juanita	Distance from Gas Well (ft):
Surface Owner/Occupant: Charles H & Juanita	
Surface Owner/Occupant: Charles H & Juanita	C Davis
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554	C Davis Phone #:
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates:	Phone #:  Owner home during survey (yes/no): yes  (decimal degrees - NAD 83)
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates:	C Davis  Phone #:  Owner home during survey (yes/no):yes
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates: ,  Contact Attempts (Date): 1st: 2nd:	Phone #:  Owner home during survey (yes/no): yes  (decimal degrees - NAD 83)
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates: ,  Contact Attempts (Date): 1st: 2nd:	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83) 3rd: Date Door Hanger Left:
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates: ,  Contact Attempts (Date): 1st: 2nd:  Comments: par. 39, no well, uses city water	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  3rd: Date Door Hanger Left:  Distance from Gas Well (ft):
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates: ,  Contact Attempts (Date): 1st: 2nd:  Comments: par. 39, no well, uses city water  Site Number:	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  3rd: Date Door Hanger Left:  Distance from Gas Well (ft): C Davis
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates: ,  Contact Attempts (Date): 1st: 2nd:  Comments: par. 39, no well, uses city water  Site Number:  Surface Owner/Occupant: Charles H & Juanita	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  3rd: Date Door Hanger Left:  Distance from Gas Well (ft):
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates: ,  Contact Attempts (Date): 1st: 2nd:  Comments: par. 39, no well, uses city water  Site Number:  Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  3rd: Date Door Hanger Left:  Distance from Gas Well (ft): C Davis Phone #:
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates:  Contact Attempts (Date): 1st: 2nd:  Comments: par. 39, no well, uses city water  Site Number:  Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates:	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  3rd: Date Door Hanger Left:  Distance from Gas Well (ft): C Davis  Phone #:  Owner home during survey (yes/no): yes  (decimal degrees - NAD 83)
Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:  Coordinates: ,  Contact Attempts (Date): 1st: 2nd:  Comments: par. 39, no well, uses city water  Site Number:  Surface Owner/Occupant: Charles H & Juanita  Address: 10 Quint Dr., Fairmont, WV 26554  Field Located Date:	Phone #:  Owner home during survey (yes/no):yes  (decimal degrees - NAD 83)  3rd: Date Door Hanger Left:  Distance from Gas Well (ft): C Davis  Phone #:  Owner home during survey (yes/no): yes  (decimal degrees - NAD 83)

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Site Number:	Distance from Gas Well (ft):	O
Surface Owner/Occupant: Harry A Windon		
Address: 27 Quint Dr., Fairmont, WV 26554	Phone :	#:
Field Located Date:		
Coordinates:,	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Han	ger Left:
Comments: par. 35, no well, uses city water		
Site Number:	Distance from Gas Well (ft):	
Surface Owner/Occupant: Harry A Windon		
Address: 27 Quint Dr., Fairmont, WV 26554	Phone #	<del></del> #:
Field Located Date:	Owner home during survey (yes/no): yes	s
Coordinates:,	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 2nd: _	3rd: Date Door Hang	ger Left:
Comments: par. 36, no well, uses city water		
Site Number:	Distance from Gas Well (ft):	
Surface Owner/Occupant: E J Morgan Investme		
Address: 1150 Colfax Rd., Fairmont, WV 26554		<del></del> :
Field Located Date:	Owner home during survey (yes/no): no	
Coordinates:,	(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st: 2nd: _		ger Left:
Comments: par. 45.2, apartment complex		
Site Number:	Distance from Gas Well (ft):	
Surface Owner/Occupant: Thomas P Morgan		
Address: 508 Old Monongah Rd., Fairmont, WV		:
Field Located Date:		
Coordinates:,		
Contact Attempts (Date): 1st: 2nd:	3rd: Date Door Hang	ger Left:
		110001100
		Office of Oil & Gas

Site Number:		Distance from Gas Well (ft):		
Surface Owner/Occupant: Samuel J C	utrone			
Address: 33 Lois Lane, Fairmont, WV	26554		Phone #:	•
Field Located Date:		Owner home during survey (y		
Coordinates:,				
Contact Attempts (Date): 1st:			Date Door Hanger Let	ft:
Comments: par. 60, owner said groun		<del></del>		
		<del>-</del>		
Site Number:		Distance from Gas Well (ft):_	·	
Surface Owner/Occupant: Samuel J Co	utrone			
Address: 33 Lois Lane, Fairmont, WV 2	26554		Phone #:	
Field Located Date:		Owner home during survey (y	es/no):yes	
Coordinates:,		(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st:	2nd: _	3rd:	Date Door Hanger Lef	t:
Comments:par. 61, owner said ground	dwater s	pring on adjoining property (TM	13 - P 41)	
Site Number: Surface Owner/Occupant:Samuel J Cu		Distance from Gas Well (ft):		
Address: 33 Lois Lane, Fairmont, WV 2	26554	<del></del>		
Field Located Date:		Owner home during survey (ye	es/no):yes	
Coordinates:,		(decimal degrees - NAD 83)		
Contact Attempts (Date): 1st:	_ 2nd: _	3rd:	Date Door Hanger Left	t:
Comments: par. 62, owner said ground	dwater sp	oring on adjoining property (TM	13 - P 41)	
O': Al				
Site Number:		Distance from Gas Well (ft):		
Surface Owner/Occupant: Golden A Co		) Jackie Hess		
Address: RR 9 Box 143, Fairmont, WV	26554		Phone #:	<del></del>
Field Located Date:		Owner home during survey (ye	es/no):no	
Coordinates:,		(decimal degrees - NAD 83)		Received
Contact Attempts (Date): 1st:	_ 2nd: _	3rd:	Date Door Hanger Left	ic <del>e of Oil</del> & G
Comments: par. 74, Church (New Life	Worship	)		MAR 1 2 2015
				MIWIL Y PO COLO

Site Number:		Distance from Gas Well (f	t):
Surface Owner/Occupant: Co. Com	mission of I		
Address: 200 Jackson St., Fairmon	it, WV 2655	54	Phone #:
Field Located Date:			
Coordinates:,		(decimal degrees - NAD 8	33)
Contact Attempts (Date): 1st:	2nd:_	3rd:	Date Door Hanger Left:
Comments: par. 38, no well, uses of	ity water		
Site Number:		Distance from Gas Well (ft	t):
Surface Owner/Occupant:			
			Phone #:
Field Located Date:		Owner home during survey	
Coordinates:,			
			Date Door Hanger Left:
Comments:			<del></del>
Site Number:		Distance from Gas Well (ft	
Surface Owner/Occupant:			
Address:			
Field Located Date:		Owner home during survey	
Contest Attempts (Date), 4st		(decimal degrees - NAD 83)	
Comments: (Date): 1st:		3rd:	
Comments:			
	_		
Site Number:		Distance from Gas Well (ft)	):
Surface Owner/Occupant:			· · · · · · · · · · · · · · · · · · ·
Field Located Date:		Owner home during survey	
Coordinates:,		(decimal degrees - NAD 83)	
Contact Attempts (Date): 1st:	2nd:	3rd:	Date Door Hanger Left:
Comments:			
			MAR 1 2 2015
			MAR I D LOIS

# STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

	e: <u>4/28/2014</u>	Date of Planned	Entry:	5/5/2014
Delivery metho	od pursuant to West Virginia Code § 22-6A-1			
	AL SERVICE X CERTIFIED MAIL	, , =	OUIRES	A RECEIPT OR SIGNATURE CONFIRMATION
Pursuant to We	est Virginia Code & 22-64-10(a) prior to filing a	manuelà anniliantian di		THEOLIST ON SIGNATURE CONFIRMATION
prior to such en pursuant to sec records. The no and gas explora	est Virginia Code § 22-6A-10(a), prior to filing a tany plat surveys required pursuant to this artintry to: (1) The surface owner of such tract; (2) ction thirty-six, article six, chapter twenty-two otice shall include a statement that copies of thation and production may be obtained from the the Secretary's web site, to enable the surface	to any owner or lessee of coal second this code; and (3) any owner of this code; and (3) any owner of this code; and Sediment Conference, which statement shall in Secretary, which statement shall in	at least s ams ben if minera trol Manu	even days but no more than forty-five days leath such tract that has filed a declaration als underlying such tract in the county tax
Notice is heret	by provided to:			
X SU	RFACE OWNER(S)	X MIN	NERAL C	DWNER(S)
	rl S. Shaver, Jr.		IS. Shav	• •
	9 Old Monongah Rd. irmont, WV 26554	Address: 129	Old Mo	nongah Rd. V 26554
Coa <u>§22</u> <b>Notice is hereb</b> Pursuant to Wes	st Virginia Code § 22-6A-10(a), notice is hereby			additional forms if necessary planning entry to conduct a plat survey on
he tract of land	as follows:			
State	West Virginia	Approx Latitudo 9 Logoitudos	00.40	070 / 00 40000
_	West Virginia Marion	Approx. Latitude & Longitude:		970 / -80.19990
County: _	Marion	Approx. Latitude & Longitude:	39.46	659 / -80.19501
County: _ Dist/Map/Par: _	Marion Grant / Map 14 / Parcels 30, 31, 73	Approx. Latitude & Longitude: Approx. Latitude & Longitude:	39.46 39.46	659 / -80.19501 519 / -80.19089 39.46079 / -80.19467
County: _ Dist/Map/Par: _ Quadrangle: _	Marion	Approx. Latitude & Longitude:	39.46 39.46 CR56	659 / -80.19501 519 / -80.19089 39.46079 / -80.19467 /3 and CR56/4
County: Dist/Map/Par: Quadrangle: Watershed: Copies of the sobtained from th (304-926-0450).	Marion Grant / Map 14 / Parcels 30, 31, 73 Fairmont West	Approx. Latitude & Longitude: Approx. Latitude & Longitude: Public Road Access: Generally Used Farm Name: and the statues and rules related to the statues and rules rul	39.46 39.46 CR56 Shave	659 / -80.19501 519 / -80.19089 39.46079 / -80.19467 /3 and CR56/4 er I gas exploration and production may be 01 57th Street, SE, Charleston, WV 25304
County: Dist/Map/Par: Quadrangle: Watershed: Copies of the sobtained from th 304-926-0450).	Marion Grant / Map 14 / Parcels 30, 31, 73 Fairmont West West Fork River  state Erosion and Sediment Control Manual are Secretary, at the WV Department of Environm. Copies of such documents or additional inforty/oil-and-gas/pages/default.aspx.	Approx. Latitude & Longitude: Approx. Latitude & Longitude: Public Road Access: Generally Used Farm Name: and the statues and rules related to the statues and rules rul	39.46 39.46 CR56 Shave	659 / -80.19501 519 / -80.19089 39.46079 / -80.19467 /3 and CR56/4 er I gas exploration and production may be 01 57th Street, SE, Charleston, WV 25304
County:	Marion Grant / Map 14 / Parcels 30, 31, 73 Fairmont West West Fork River  state Erosion and Sediment Control Manual are Secretary, at the WV Department of Environm. Copies of such documents or additional inforty/oil-and-gas/pages/default.aspx.	Approx. Latitude & Longitude: Approx. Latitude & Longitude: Public Road Access: Generally Used Farm Name: and the statues and rules related to the statues and rules rul	39.46 39.46 CR56 Shave	659 / -80.19501 519 / -80.19089 39.46079 / -80.19467 /3 and CR56/4 er I gas exploration and production may be 01 57th Street, SE, Charleston, WV 25304
County: Dist/Map/Par: Quadrangle: Watershed: Copies of the sobtained from the 304-926-0450). www.dep.wv.gov	Marion  Grant / Map 14 / Parcels 30, 31, 73  Fairmont West  West Fork River  state Erosion and Sediment Control Manual are Secretary, at the WV Department of Environm. Copies of such documents or additional inforw/oil-and-gas/pages/default.aspx.  by given by:	Approx. Latitude & Longitude: Approx. Latitude & Longitude: Public Road Access: Generally Used Farm Name:  Ind the statues and rules related to mental Protection headquarters, local mation related to horizontal drilling	39.46 39.46 CR56 Shave	659 / -80.19501 519 / -80.19089 39.46079 / -80.19467 /3 and CR56/4 er I gas exploration and production may be 01 57th Street, SE, Charleston, WV 25304 e obtained from the Secretary by visiting
County: Dist/Map/Par: Quadrangle: Watershed: Copies of the sobtained from th (304-926-0450). www.dep.wv.gov	Marion Grant / Map 14 / Parcels 30, 31, 73 Fairmont West West Fork River  State Erosion and Sediment Control Manual are Secretary, at the WV Department of Environm. Copies of such documents or additional inforty/oil-and-gas/pages/default.aspx.  By given by: EQT Production Company	Approx. Latitude & Longitude: Approx. Latitude & Longitude: Public Road Access: Generally Used Farm Name:  Ind the statues and rules related to the statue and rules related to the statue and related to the statue and related to horizontal drilling and the statue and related to horizontal drilling and the statue and rules related to horizontal drilling and the statue and rules related to horizontal drilling and the statue and rules related to horizontal drilling and the statue and rules related to horizontal drilling and rules related to horizontal drilling and rules rul	39.46 39.46 CR56 Shave o oil and ated at 6 g may be	659 / -80.19501 519 / -80.19089 39.46079 / -80.19467 /3 and CR56/4 er I gas exploration and production may be 01 57th Street, SE, Charleston, WV 25304 e obtained from the Secretary by visiting

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 is a secure your personal information and the secure your personal information and the secure your personal information.

any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@WV.gov.

08/28/2015

WW-6A5 (1/12)

Operator Well No.

515715

#### STATE OF WEST VIRGINIA

#### DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

Date of Notice	equirement: notice shall be provided no late : 3/11/2015 D	ate Permit Applica		3/11/2015
Delivery metho	od pursuant to West Virginia Code § 22-6A-	16(c)		7 7"
CERTI	FIED MAIL HAN			
return receipt re the planned ope required to be p drilling of a horiz damages to the s	/a. Code § 22-6A-16(c), no later than the date for equested or hand delivery, give the surface owner ration. The notice required by this subsection sharovided by subsection (b), section ten of this artice tontal well; and (3) A proposed surface use and contains affected by oil and gas operations to the equired by this section shall be given to the surface.	whose land will be un all include: (1) A copy the to a surface owne compensation agreem extent the damages a	used for the drilling of of this code section; r whose land will be used tent containing an off are compensable under	f a horizontal well notice of (2) The information used in conjunction with the fer of compensation for er article six-b of this chapter.
Notice is hereby	provided to the SURFACE OWNER(s)			
	isted in the records of the sheriff at the time of no	otice):		
Name:	Karl S. Shav	ver Jr. Name:		
Address:	POA for Larry A. S	Shaver 🧖 Address:		
Notice is hereby	129 Old Monongah	Road		is developed a planned
Notice is hereby Pursuant to Wes operation on the State: County:	129 Old Monongah given: it Virginia Code § 22-6A-16(c), notice is hereby giv	Road	he tract of land as fol Easting: Northing:	is developed a planned
Notice is hereby Pursuant to Wes operation on the State: County: District:	129 Old Monongah r given: at Virginia Code § 22-6A-16(c), notice is hereby give e surface owner's land for the purpose of drilling a WV Marion	ven that the undersig a horizontal well on t UTM NAD 83	the tract of land as fol Easting: Northing:	os developed a planned llows: 569,550.930000 4,368,308.940000
Notice is hereby Pursuant to Wes operation on the State: County: District: Quadrangle:	129 Old Monongah r given: It Virginia Code § 22-6A-16(c), notice is hereby give e surface owner's land for the purpose of drilling a WV Marion Grant	ven that the undersig a horizontal well on t UTM NAD 83 Public Road Access	the tract of land as fol Easting: Northing:	os developed a planned flows: 569,550.930000 4,368,308.940000 CR 56
operation on the State: County: District: Quadrangle: Watershed:  This Notice Shal Pursuant to Wes to be provided be horizontal well; surface affected information rela	r given:  It Virginia Code § 22-6A-16(c), notice is hereby given:  Extra virginia Code § 22-6A-16(c), notice is hereby given:  WV  Marion  Grant  Fairmont West 7.5'  Booths Creek  I Include:  It Virginia Code § 22-6A-16(c), this notice shall include:  It Virginia Code § 22-6A-10(b) to a surface owner and (3) A proposed surface use and compensation by oil and gas operations to the extent the dama atted to horizontal drilling may be obtained from the located at 601 57th Street, SE, Charleston, WV 253	ven that the undersign a horizontal well on the UTM NAD 83  Public Road Access Generally used far the whose land will be used a greement contain ges are compensable the Secretary, at the Vena agreement, at the Vena Road Road Road Road Road Road Road Roa	the tract of land as fol Easting: Northing: s: m name: is code section; (2) The sed in conjunction with ing an offer of compe- e under article six-b of NV Department of En	is developed a planned flows:  569,550.930000 4,368,308.940000 CR 56 Shaves  the information required th the drilling of a ensation for damages to the f this chapter. Additional vironmental Protection
Notice is hereby Pursuant to Wes operation on the State: County: District: Quadrangle: Watershed:  This Notice Shal Pursuant to Wes to be provided b horizontal well; surface affected information rela headquarters, lo pages/default.as	r given:  It Virginia Code § 22-6A-16(c), notice is hereby given:  Extra surface owner's land for the purpose of drilling and the purpose of d	ven that the undersign a horizontal well on the UTM NAD 83  Public Road Access Generally used far show the second will be used a greement contain ges are compensable the Secretary, at the Wild (304-926-0450) of the secretary of the wild (304-926-0450) of the wild (304-926-0	the tract of land as fol Easting: Northing: s: m name: dis code section; (2) The sed in conjunction with ing an offer of compete e under article six-b of NV Department of Enter by visiting www.deg	is developed a planned flows:  569,550.930000  4,368,308.940000  CR 56  Shaven  The information required the drilling of a ensation for damages to the fthis chapter. Additional twironmental Protection p.wv.gov/oil-and-gas/
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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 contactived Office of Oil & Gas



#### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

Earl Ray Tomblin Governor

February 23, 2015

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

Subject: DOH Permit for the FAW 55 Pad Site, Marion County

515709 FAW 55 H1	515710 FAW 55 H2	515711 FAW 55 H3
515712 FAW 55 H4	515713 FAW 55 H5	515714 FAW 55 H6
515715 FAW 55 H7 ✓	515716 FAW 55 H8	515717 FAW 55 H9
515718 FAW 55 H10		

Dear Mr. Martin,

This well site will be accessed from Permit #04-2014-1380 applied for by EQT Production Company for access to the State Road. The well site is located off of Marion County Route 56 SLS. The approved DOH permit must be received before construction of or any use of this access to the roadway.

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

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

**EQT Production Company** 

CH, OM, D-4. File

Received Office of Oil & Gas

## Anticipated Frac Additives Chemical Names and CAS numbers

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

Received
Office of Oil & Gas

