

01/04/2019



---

west virginia department of environmental protection

---

Office of Oil and Gas  
601 57<sup>th</sup> Street, S.E.  
Charleston, WV 25304  
(304) 926-0450  
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, January 4, 2019  
WELL WORK PERMIT  
Horizontal 6A / Fracture

EQT PRODUCTION COMPANY  
625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Re: Permit approval for ERLEWINE 10H  
47-103-02955-00-00

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

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

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

James A. Martin  
Chief

A handwritten signature in blue ink, appearing to read 'James A. Martin', is written over the printed name and title.

Operator's Well Number: ERLEWINE 10H  
Farm Name: ERLEWINE, RICHARD  
U.S. WELL NUMBER: 47-103-02955-00-00  
Horizontal 6A Fracture  
Date Issued: 1/4/2019

Promoting a healthy environment.

API Number: 4710302955

## PERMIT CONDITIONS

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

---

### CONDITIONS

---

1. 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.
2. 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.
3. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
4. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
5. 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.
6. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.




---

 west virginia department of environmental protection
 

---

Office of Oil and Gas  
 601 57<sup>th</sup> Street  
 Charleston, WV 25304  
 (304) 926-0450  
 Fax (304) 926-0452

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

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

TO: EQT Production Company  
 625 Liberty Ave., Suite 1700  
 Pittsburgh, PA 15222

DATE: December 19, 2018  
 ORDER NO.: 2018-W-13

**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 “Operator”), collectively the “Parties.”

**FINDINGS OF THE CHIEF**

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

1. 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 Production Company is a “person” as defined by W. Va. Code §22-6-1(n), with a corporate address as 625 Liberty Ave., Suite 1700, Pittsburgh, PA 15222.
3. On September 20, 2018, EQT Production Company submitted well work permit applications identified as API#s 47-103-02950, 47-103-02951, 47-103-02952, 47-103-02953, 47-103-02954, 47-103-02955 and 47-103-03012. The proposed wells are to be located on the Erlewine Pad in Proctor District of Wetzel County, West Virginia.
4. On September 20, 2018, EQT Production Company requested a waiver for Wetland A as outlined in Attachment 1, from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-103-02950, 47-103-02951, 47-103-02952, 47-103-02953, 47-103-02954, 47-103-02955 and 47-103-03012.

## CONCLUSIONS OF LAW

1. West Virginia Code §22-1-6(d) requires, in part, that “in 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**

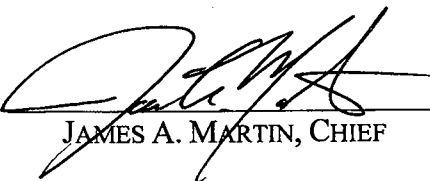
West Virginia Code §22-6A-12(b) requires, in part, that “[n]o well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland. The Office of Oil and Gas grants the request for a waiver for Wetland A from well location restriction requirements in W. Va. Code §22-6A-12(b) for the well work permit applications identified as API#s 47-103-02950, 47-103-02951, 47-103-02952, 47-103-02953, 47-103-02954, 47-103-02955 and 47-103-03012. The Office of Oil and Gas hereby **ORDERS** that EQT Production Company shall meet the following site construction and operational requirements for the Erlewine 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 twenty-four inches (24”) in height;
- b. Erosion control blankets shall be installed on all slopes and down gradient locations of the pad as erosion and sediment controlling BMPs;
- c. Wetland A shall have two layers of silt fence to prevent any sediment from reaching the wetland from the well pad. This along with temporary and permanent vegetative cover will prevent sediment from reaching the wetland.
- d. Disturbed areas not used for operations shall be seeded and mulched per the seeding tables in the WVDEP-OOG Erosion and Sediment Control Manual;
- e. Drill cuttings and associated drilling mud shall be disposed of in a permitted landfill;
- f. Waste generated by the flowback treatment systems shall be sent to offsite disposal at a permitted landfill;
- g. Weekly site inspections shall be conducted to monitor and maintain the integrity of the BMP storm water controls;
- h. Weekly storm water and spill prevention inspections shall be conducted focusing on storm water and spill prevention BMPs and maintenance of these BMPs;
- i. 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;
- j. Pad inspections shall be conducted no less than once a week to identify and mitigate potential deficiencies;
- k. All records from inspections shall be maintained on site for the life of the project and be available upon request.

Thus ORDERED, the 19th day of December 2018.

IN THE NAME OF THE STATE OF WEST VIRGINIA:

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

By:   
JAMES A. MARTIN, CHIEF

01/04/2019

11/3/14

Wetland and Perennial Stream Waiver Request

API Number: Multiple - see text below

Operator's Well Number: \_\_\_\_\_

API Numbers: 103-02950 to 103-029555; 103-02999; 103-03000; 103-03012

Well Operator: EQT Production Company

Well Number: \_\_\_\_\_ Well Pad Name: Erlewine

County, District, Quadrangle of Well Location: Wetzel County; Proctor District; New Martinsville Quadrangle

**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.

11/3/14

Wetland and Perennial Stream Waiver Request

01/04/2019

API Number: Multiple - see text below

Operator's Well Number: \_\_\_\_\_

API Numbers: 103-02950 to 103-029555; 103-02999; 103-03000; 103-03012

**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.**

The Erlewine Modification project is located in Wetzel County, WV. The limits of investigation (LOI) are 3.52 acres (AC) and encompass the entire limits of disturbance (LOD). One palustrine emergent (PEM) wetland was found within the LOI. This wetland is 0.03 AC and is located southeast of the existing well pad. The attached photographs and delineation map depict the site conditions, and the associated data sheet for the wetland is also enclosed. No perennial streams are present within the LOI.

- 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

a. The No-Action Alternative will prevent completion of the wells. The expansion will provide sufficient area for the additional equipment and vehicles needed for well completion operations.

b. Location alternatives for the project are not feasible. This is an existing well site.

c. The options to maintain the 100-foot buffer were not feasible. Expansion to the north would result in an excess of spoil material, and expansion to the east is prevented by the 1:1 and steeper slopes immediately outside the project LOD. Expansion to the west was limited by the existing topography and did not allow for sufficient space.

d. The current proposed design is the least environmentally damaging practical alternative based on the existing site conditions and the surrounding topography. The proposed design utilizes previous earth work at the site to limit the amount of additional earth work required. As noted above in the discussion of considered options, the steepness of the site topography limits the configurations to the south and east. The necessary space has been obtained with the minimum required earth disturbance and avoiding any direct resource impacts.



11/3/14

Wetland and Perennial Stream Waiver Request

API Number: Multiple - see text below

Operator's Well Number: \_\_\_\_\_

API Numbers: 103-02950 to 103-029555; 103-02999; 103-03000; 103-03012

- 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.**

Wetland A will be protected as follows:

- silt fence will be placed directly downslope of the disturbed area
- temporary and permanent vegetative cover will be located above the wetland
- additional silt fence will be installed between the orange safety fence surrounding the wetland and the silt fence directly downslope of the disturbed area
- the existing site drainage features, which include toe key drains, well pad sumps, ditches, culverts, and well pad drains, prevent any discharge to the wetland
- a sump and rip rap apron will be installed for drainage of the south expansion area and will prevent discharge into the wetland

- 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.

As outlined in Question 3, all existing drainage features on the site prevent discharge into the wetland.

Additional measures include:

- a second silt fence adjacent to the wetland and downslope of the initial silt fence
- temporary and permanent vegetation installed as soon as possible following disturbance above the wetland
- drainage features for the southern expansion that prevent discharge into the wetland

The attached exhibit provides a detail for the additional silt fence around the wetland.

1:80 12/4/2018 12:05:30 PM X:\Oil and Gas\EQT\201818070-078 Erlwine Pad\Cadd\Preliminary\Welland Protection Plan.dgn

**NOTES:**  
 AS SOON AS PRACTICABLE FOLLOWING DISTURBANCE, OPERATOR SHALL INITIATE TEMPORARY & PERMANENT SEEDING AS OUTLINED IN THE WEST VIRGINIA E&S BMP MANUAL.



**LEGEND**

- EXISTING TREE LINE
- EXISTING ROAD
- EXISTING RIGHT-OF-WAY
- PROPOSED RIGHT-OF-WAY
- PROPERTY LINE
- PROPOSED FENCE
- EXISTING FENCE
- EXISTING ELECTRIC LINE
- EXISTING GAS LINE
- PROPOSED GAS LINE
- PROPOSED WATER LINE
- LIMITS OF DISTURBANCE
- FILL LIMITS
- CUT LIMITS
- EXISTING INDEX CONTOUR LINE (10')
- EXISTING INTERMEDIATE CONTOUR LINE (10')
- PROPOSED INDEX CONTOUR LINE (10')
- PROPOSED INTERMEDIATE CONTOUR LINE (10')
- CHANNEL FLOW DIRECTION
- STREAM
- DELINEATED STREAM
- DELINEATED WETLAND BOUNDARY
- ASSUMED FLOODWAY BOUNDARY
- RIPARIAN BUFFER
- COMPOST FILTER SOCK (CFS)
- EROSION CONTROL BLANKET
- WATERBAR
- TRENCH PLUG
- EXISTING UTILITY POLE
- EXISTING STRUCTURE
- FEMA 100 YEAR FLOODPLAIN

RICHARD L. ERLEWINE  
 -06-48

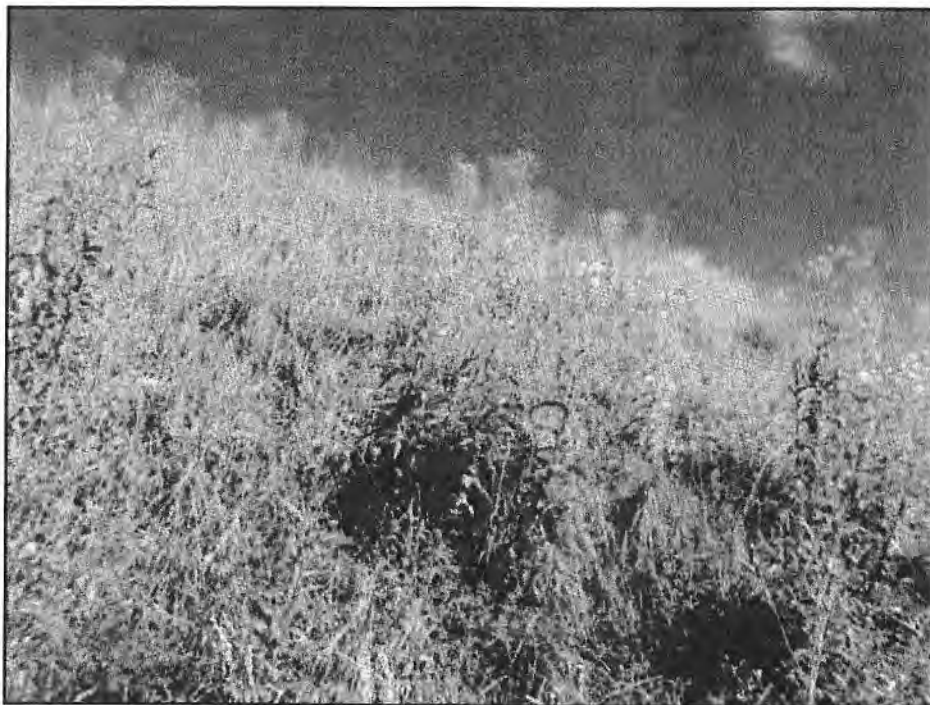


<b>NO.</b>	<b>DATE</b>	<b>REVISION</b>	<b>DIEFFENBAUCH &amp; HRITZ</b> 1095 Chaplin Road, Suite 200 Morgantown, WV 26501 www.dandhengineers.com P: 304.985.5555 F: 304.985.5557	<b>CLIENT</b> <b>EQT PRODUCTION COMPANY</b> 2400 ANSYS DRIVE, SUITE 200 CANONSBURG, PA 15317	<b>PROJECT</b> <b>ERLEWINE PAD SITE MODIFICATION</b>	<b>TITLE</b> 1" = 40' <b>SCALE:</b> AUG 29/17 <b>DATE:</b> 17070-015 <b>PROJECT NO.</b>	<b>TITLE</b> <b>WETLAND PROTECTION PLAN</b>	<b>1</b>	<b>DRAWING NO.</b>
------------	-------------	-----------------	--	---	---	---	--	----------	--------------------





**Photograph # 1**  
DP1: facing northeast



**Photograph # 2**  
DP2: facing north

PROJECT NO: 18070-078

DATE: 06/21/2018  
Page 1 of 3

CLIENT: EQT Production Company

  
DIEFFENBAUCH & HRITZ

PROJECT:  
Erlewine Modification  
Wetzel County, West Virginia



**Photograph # 3**  
Wetland A (DP3): facing west



**Photograph # 4**  
DP4: facing southeast



**Photograph # 5**  
DP5: facing south

**WETLAND DETERMINATION DATA FORM - Eastern Mountains and Piedmont Region**

Project/Site: Erlewine Modification City/County: Wetzel County Sampling Date: 9/14/2018  
 Applicant/Owner: EQT Production Company State: PA Sampling Point: DP3  
 Investigator(s): M. Wagner, Z. France Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 10-15  
 Subregion (LRR or MRLA): LRR N Lat: 39.68244377 Long: -80.79705042 Datum: NAD83  
 Soil Map Unit Name: Gilpin-Peabody complex (GpD) NWI Classification: PEM

Are climatic/hydrologic conditions of the site typical for this time of year? Yes X No \_\_\_\_\_ (If no, explain in Remarks)  
 Are vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present?  
 Are vegetation No, Soil No, or Hydrology No naturally problematic? Yes X No \_\_\_\_\_

**SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Remarks: Explain alternative procedures here or in a separate report.) <b>Plot located within Wetland A.</b>	

**HYDROLOGY**

Wetland Hydrology Indicators:	Secondary Indicators (minimum of two required)
<b>Primary Indicators (minimum of one is required: Check all that apply)</b> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> True Aquatic Plants (B14) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Saturation (A3) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Sediment Deposits (B2) <input type="checkbox"/> Recent Iron Reduction Tiled Soils (C6) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Algal Mat or Crust (B4) <input type="checkbox"/> Other (Explain in Remarks) <input checked="" type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> Aquatic Fauna (B13)	<input type="checkbox"/> Surface Soil Cracks (B6) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8) <input type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B18) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input type="checkbox"/> FAC-Neutral Test (D5)

<b>Field Observations:</b> Surface Water Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Water Table Present? Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____ Saturation Present? (includes capillary fringe) Yes _____ No <input checked="" type="checkbox"/> Depth (inches): _____	Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____
--	--

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:  
**Hydrology features are evident.**

VEGETATION - Use scientific names of plants

Sampling Point: DP3

	Absolute % Cover	Dominant Species?	Indicator Status	
<b>Tree Stratum</b> (Plot Size: 30 ft. radius )				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A) Total Number of Dominant Species Across All Strata: 2 (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
_____ = Total Cover				
<b>Sapling/Shrub Stratum</b> (Plot Size: 15-ft. radius )				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
_____ = Total Cover				<b>Hydrophytic Vegetation Indicators:</b> _____ 1 - Rapid Test for Hydrophytic Vegetation x _____ 2 - Dominance Test is >50% _____ 3 - Prevalence Index is ≤ 3.0' _____ 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) _____ 5 - Problematic Hydrophytic Vegetation <sup>1</sup>  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
<b>Herb Stratum</b> (Plot Size: 5 ft. radius )				
1. Barnyard grass ( <i>Echinochloa crus-galli</i> )	50	Yes	FAC	
2. Yellow nutsedge ( <i>Cyperus esculentus</i> )	20	Yes	FACW	
3. Rice cut grass ( <i>Leersia oryzoides</i> )	10	No	OBL	
4. Woolgrass ( <i>Scirpus cyperinus</i> )	10	No	FACW	
5. Japanese Stilt Grass ( <i>Microstegium vimineum</i> )	5	No	FAC	
6. Soft Rush ( <i>Juncus effusus</i> )	5	No	FACW	
7.				
8.				
9.				
10.				
11.				
12.				
100 = Total Cover				<b>Definitions of Vegetation Strata:</b> <b>Tree</b> - Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. <b>Sapling/shrub</b> - Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft. tall. <b>Herb</b> - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft. tall. <b>Woody vines</b> - All woody vines greater than 3.26 ft. in height  <b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<b>Woody Vine Stratum</b> (Plot Size: 30-ft. radius )				
1.				
2.				
3.				
4.				
5.				
6.				
_____ = Total Cover				
Remarks: (Include photo numbers here or on a separate sheet.)				
Hydrophytic vegetation is present.				





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

1) Well Operator: EQT Production Company 306686 Wetzel Proctor New Martinsville  
Operator ID County District Quadrangle

2) Operator's Well Number: Erlewine 10H Well Pad Name: Erlewine

3) Farm Name/Surface Owner: Erlewine, Richard et al Public Road Access: Wetzel County Route 1/2

4) Elevation, current ground: 1212 Elevation, proposed post-construction: 1212

5) Well Type (a) Gas  Oil  Underground Storage   
Other

(b) If Gas Shallow  Deep   
Horizontal

6) Existing Pad: Yes or No Yes

*Drill  
10-4-18*

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus, 6710, 50' thick, anticipated pressure is 3,800 to 4,400 psig

8) Proposed Total Vertical Depth: 6710

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 12098

11) Proposed Horizontal Leg Length: 4574

12) Approximate Fresh Water Strata Depths: 106

13) Method to Determine Fresh Water Depths: Depth of bit when water shows in the flowline or when drilling soap is injected

14) Approximate Saltwater Depths: 1678

15) Approximate Coal Seam Depths: 153, 374, 444, 644, 868, 999

16) Approximate Depth to Possible Void (coal mine, karst, other): None anticipated

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes  No

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas  
**OCT - 9 2018**  
WV Department of  
Environmental Protection

18)

**CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20	New	LS	94.1	90'	91'	40 CTS
Fresh Water	13.375	New	J55	54.5	1,205'	1,205'	1,038 CTS
Coal	13.375	New	J55	54.5	1,205'	1,205'	1,038 CTS
Intermediate	9.625	New	J55	36	2,406'	2,406'	998 CTS
Production	5.5	New	P110	20	12,097'	12,097'	Lead-422 Tail-2,731
Tubing	2.375	New	J55	4.7			N/A
Liners	N/A						

*DWT  
10-4-18*

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	24	0.375"	N/A	40 psi	Type 1	1.18
Fresh Water	13.375	17.5	0.380"	2,730 psi	2,184 psi	Premium HE-1 Class A	1.18
Coal	13.375	17.5	0.380"	2,730 psi	2,184 psi	Premium HE-1 Class A	1.18
Intermediate	9.625	12.25	0.352"	3,520 psi	2,816 psi	HalCem Class "A"	1.21
Production	5.5	8.75	0.361"	12,360 psi	10,1112 psi	Lead-Tuned Spacer3 Tail-1.21	Lead-2.37 Tail-1.21
Tubing	2.375	N/A	0.190"	7,700 psi			
Liners							

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

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

Well has been drilled to TD, propose to perforate and fracture the Marcellus and turn into production.

*DmH  
10-9-18*

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.1%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 400,000 pounds of sand per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): No additional

22) Area to be disturbed for well pad only, less access road (acres): No additional

23) Describe centralizer placement for each casing string:

Surface casing had bow spring centralizers placed on joints 3, 8, 13, 18, 23, 26, and 29.  
Intermediate casing had bow spring centralizers placed on joints 4, 8, 12, 16, 20, 24, 28, and 32.  
Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 4 to joint 224.  
Ran a total of 56 rigid spiral centralizers.  
Ran bow spring centralizers from joint 232 to joint 272 on every eighth joint. A total of 6 bow spring centralizers were run.

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

Fresh Water/Coal cement is typically Class A w/ 0.25 pps Cello-Flake and 1.0% to 3.0% CaCl<sub>2</sub>. Intermediate cement is a lead/tail blend with the lead being Class A with 10% Salt and 0.25 pps Cello-Flake. Tail is Class A with 0.25 pps Cello-Flake and 1.0% to 3.0% CaCl<sub>2</sub>. Production cement is a lead/tail blend with the lead being HES's GASSTOP blend w/ 0.8% Retarder and tail being HES's HALCEM blend w/ 0.65% Retarder and 0.1% Dispersant or SLB with lead/tail with the lead being Class A w/ 10% Salt or Class A w/ FlexSeal and the tail being Class A w/ 0.2% Dispersant, 0.4% Fluid Loss, 0.2% Anti-Foam, 0.15% Retarder, and 0.2% Anti-Settling Agent.

25) Proposed borehole conditioning procedures:

Fresh Water/Coal section will be done by circulating air through the drill string at TD between 30 and 90 minutes or until the well bore clears of cuttings.

Intermediate section will be done by circulating air and/or stiff foam through the drill string at TD between 30 and 120 minutes or until the well bore clears of cuttings.

Production section will be done by circulating drilling fluid through the drill string at TD between 120 to 720 minutes (a minimum of 3 bottoms up) until the shakers are clear of cuttings.

\*Note: Attach additional sheets as needed.

RECEIVED  
Office of Oil and Gas

OCT - 9 2018  
Page 3 of 3  
WV Department of  
Environment

Well: Erlewine #10H  
 State: West Virginia  
 County: Wetzel  
 District: Proctor  
 Prospect: Mary  
 Location: Surface: North = 4,392,650 East = 517,398 (UTM NAD 83)  
 PBHL: North = 4,391,156 East = 518,318 (UTM NAD 83)  
 PTD: 12650' MD / 6840' TVD

# STONE ENERGY - PROPOSED HORIZONTAL

Revision: 1-Oct-13

Permit Number: 47-103-  
 Permit Issued:  
 Post Construction Ground Elevation: 1212'  
 Kelly Bushing: 18'  
 Rig:  
 Spud Date:  
 TD Date:  
 Rig Release Date:

HOLE SIZE	PILOT HOLE FORMATION TOPS	WELLBORE DIAGRAM	CASING & CEMENTING DATA DIRECTIONAL DATA	MW & FLUID TYPE	HOLE DEV.
24" Hole then Driven	80' KB (62' BGL)		<b>CONDUCTOR PIPE</b> 20" x 3/8" wall L/S PE @ 80' (set in bedrock & grouted to surface)		Vertical
17-1/2" Hole	Shallowest FW 75' TVD Pittsburgh Coal 925' TVD Deepest FW 930' TVD 1190' TVD		<b>SURFACE CASING</b> 13-3/8" 54.5# J-55 STC @ 1190' MD/TVD Set through fresh water zones Set through coal zones Cemented to surface	Air / Mist	Vertical
12-1/4" Hole	Salt Water 1800' TVD Little Lime 2022' TVD Big Lime 2052' TVD Big Injun Sandstone 2152' TVD Base of Big Injun 2252' TVD 2400' TVD		<b>INTERMEDIATE CASING</b> 9-5/8" 36.0# J-55 LTC @ 2400' MD/TVD Set through potential salt water zones Set below base of Big Injun Cemented to surface	Stiff Foam	Vertical
8-3/4" Hole	Berea Sandstone 2620' TVD Gordon Sandstone 2865' TVD			Air / Dust	
8-3/4" Hole	Rhinestreet Shale (Base) 6186' TVD		KOP @ 6077' TVD	WBM In Curve	
8-3/4" Hole in Lateral	Middlesex Shale 6280' TVD West River Shale 6310' TVD Genesee Shale 6645' TVD Tully Limestone 6665' TVD Hamilton Shale 6725' TVD Marcellus Shale 6765' TVD Onondaga Limestone 6815' TVD		<p>Notes: Formation tops as per vertical pilot hole            Curve &amp; lateral tops will vary due to structural changes            Directional plan based upon best estimate of structure</p> <p>Landing Point (LP) @ 7500' MD / 6790' TVD            ~89.5° angle            ~162° azimuth</p> <p>TD @ 12650' MD / 6840' TVD            PRODUCTION CASING            5-1/2" 20.0# P-110 CDC @ 12650' MD            Top of Cement @ 1400' (~1000' inside 9-5/8")</p>	WBM In Lateral	~89.5'

Environmental Protection

Office of Oil and Gas

OCT 07 2013

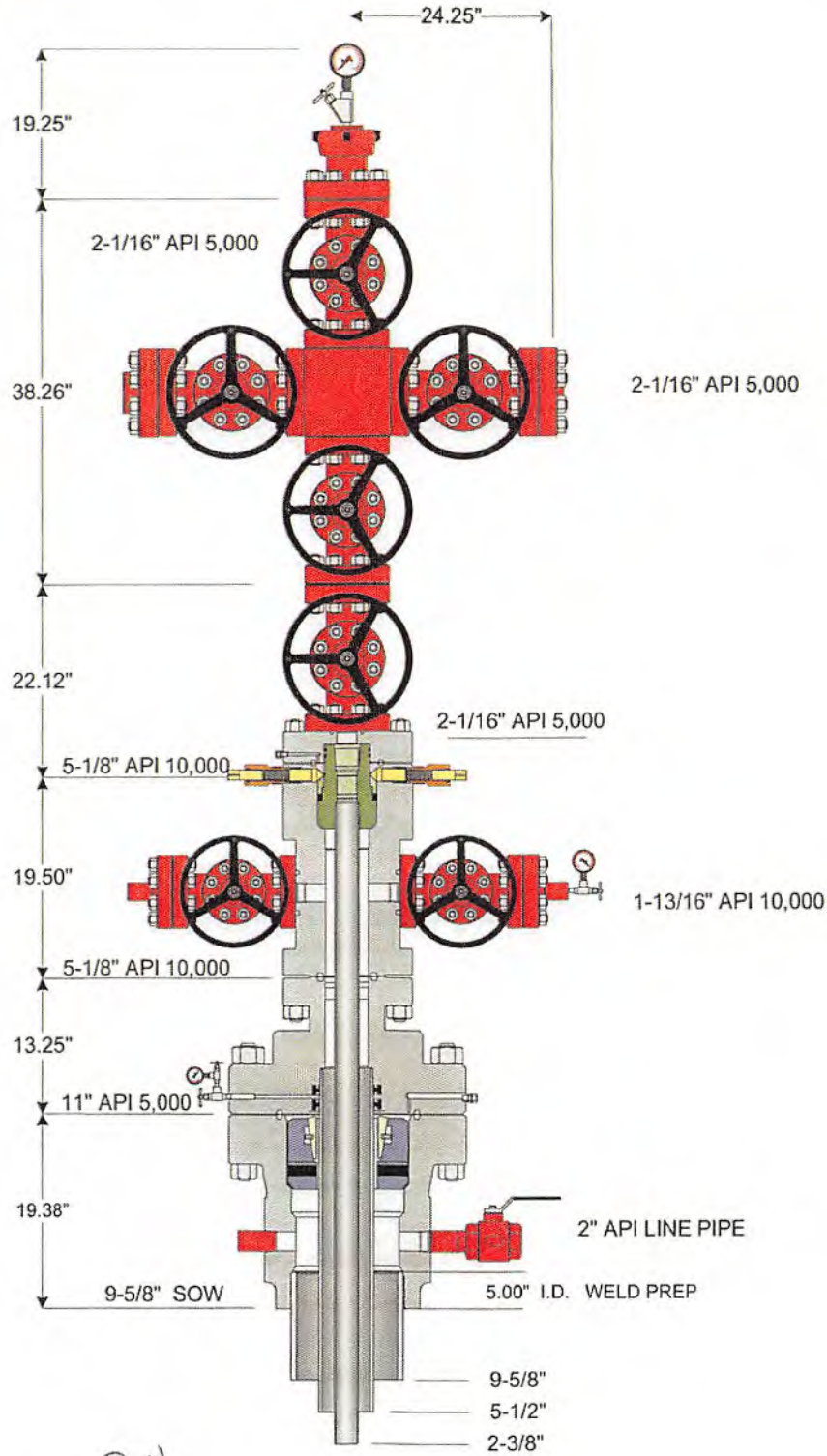
Office of Oil and Gas

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018

DMH  
10-2-13

47103 02052555

NOTE: THIS DRAWING IS NOT TO SCALE. THE DIMENSIONS REFLECTED ON THE DRAWING ARE ESTIMATED MEASUREMENTS AND FOR REFERENCE ONLY.



DMH  
10-2-13

RECEIVED  
Office of Oil and Gas



© 2010 Weatherford International Inc. All rights reserved

Customer: STONE ENERGY	Project: 46705	Quote: 99565 v 3
Tender, Project or Well: 2011- 2012 CONVENTIONAL MARCELLUS	Date: 07-17-2011	Drawn By: RF

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code 306686

Watershed (HUC 10) Tributary of Proctor Creek Quadrangle New Martinsville

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes  No

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- Land Application
- Underground Injection ( UIC Permit Number 0014, 8462, 4037 )
- Reuse (at API Number Various )
- Off Site Disposal (Supply form WW-9 for disposal location)
- Other (Explain \_\_\_\_\_)

*Dmit 10-4-18*

Will closed loop system be used? If so, describe: Yes, The closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are then prepared for transportation to an off-site disposal facility.

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

-If oil based, what type? Synthetic, petroleum, etc. Synthetic Mud

Additives to be used in drilling medium? See Attached

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A

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

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

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

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature *[Signature]*

Company Official (Typed Name) Erin Spine

Company Official Title Regional Land Supervisor

Subscribed and sworn before me this 2 day of October, 2018

*Rebecca L. Wanstreet* Notary Public

My commission expires 4-7-2020



RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

WW-9 Attachment

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

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

Additives to be used in drilling medium?

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

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection



Operator's Well No. Erlewine 10H

EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed No Additional Prevegetation pH \_\_\_\_\_

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type Granular 10-20-20

Fertilizer amount 1/3 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

Temporary		Permanent	
Seed Type	lbs/acre	Seed Type	lbs/acre
<u>KY-31</u>	<u>40</u>	<u>Orchard Grass</u>	<u>15</u>
<u>Alsike Clover</u>	<u>5</u>	<u>Alsike Clover</u>	<u>5</u>
<u>Annual Rye</u>	<u>15</u>		

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [Signature]

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Title: Oil & Gas Inspector

Date: 10-4-18

Field Reviewed?  Yes  No

01/04/2019  
10/30/13



## WW-9 ADDENDUM

### Drilling Medium Anticipated for This well

- Vertical section of well bore, down to KOP, will be drilled on air and/or a combination of air and drilling soap.
- From KOP through the curve section and horizontal section of well bore will be drilled on a brine-water based mud system.

### Additives to be Used While Drilling

- Common additives when air drilling: KCl (CAS No. 1302-78-9 & 14808-60-7), soda ash (CAS No. 497-19-8), shale stabilizer (CAS No. 67-48-1 & 7732-1835), drilling soap (CAS No. 111-76-2), air hammer/motor lubricant.
- Common water based additives for mud drilling: NaCl (CAS No. 7647-14-5), KCl (CAS No. 7447-40-7), barite (CAS No. 13462-86-7 & 14808-60-7), starch (CAS No. 9005-25-8), PAC (CAS No. 9004-32-4), xanthum gum (CAS No. 11138-66-2), PHPA (CAS No. 64742-47-8), polysaccharide (CAS No. 11138-66-2), sulfonated asphaltic material (CAS No. 269-212-0 & 238-878-4), aluminum silicate (CAS No. 37287-16-4), gilsonite (CAS No. 12002-43-6), graphite (CAS No. 14808-60-7 & 7782-42-5), shale stabilizer (CAS No. 67-48-1 & 7732-18-5), fluid loss control polymers (CAS No. 9004-34-6), viscosity control polymers (CAS No. 11138-66-2 & 107-22-2), soda ash (CAS No. 497-19-8), sodium bicarbonate (CAS No. 144-55-8), NaOH (CAS No. 1310-73-2, 7647-14-5, & 7732-18-5), lime (CAS No. 1305-62-0), gypsum (CAS No. 778-18-9), citric acid (CAS No. 77-92-9), biocide (CAS No. 52-51-7 or 7732-18-5 + 67-56-1 + 141-43-5), CaCO<sub>3</sub> (CAS No. 471-34-1), cellulose fibers (CAS No. 14808-60-7), nut plug (CAS No. 9004-34-6 & 14808-60-7), cross-linking polymers (CAS No. 107-22-2 & 11138-66-2), other LCMs, surfactants (CAS No. 64-17-5), ROP enhancer/lubricant (CAS No. 8002-13-9), beads, corrosion inhibitor (CAS No. 7732-18-5), aluminum stearate (CAS No. 300-92-5), defoamer (CAS No. 246-771-9).

MSDS are available upon request.

DmH  
10-2-13

RECEIVED  
Office of Oil and Gas

OCT 0 7 2013

01/04/2019  
103255



**WW-9 ADDENDUM**

**Drill Cuttings Disposal Method**

- Closed loop drilling system will be incorporated. No waste pits will be constructed. All drill cuttings are put through a drier system and hauled to and disposed of at approved and permitted landfills.

**Landfills or Offsite Names and Permit Numbers**

Wetzel County Sanitary Landfill  
 Rt. 1, Box 156A  
 New Martinsville, WV 26155  
 SWF-1021 / WV01909185

Brooke County Sanitary Landfill  
 Colliers, WV 26035  
 SWF-1013 / WV0109029

DmH  
10-217

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

RECEIVED  
Office of Oil and Environmental Protection  
WV Department of Environmental Protection

OCT 07 2013

Well: Erlewine #10H  
 State: West Virginia  
 County: Wetzel  
 District: Proctor  
 Prospect: Mary  
 Location: Surface: North = 4,392,650 East = 517,398 (UTM NAD 83)  
 PBHL: North = 4,391,156 East = 518,318 (UTM NAD 83)  
 PTD: 12650' MD / 6840' TVD

# STONE ENERGY - PROPOSED HORIZONTAL

Revision: 1-Oct-13

Permit Number: 47-103-  
 Permit Issued:  
 Post Construction Ground Elevation: 1212'  
 Kelly Bushing: 18'  
 Rig:  
 Spud Date:  
 TD Date:  
 Rig Release Date:

HOLE SIZE	PILOT HOLE FORMATION TOPS	WELLBORE DIAGRAM	CASING & CEMENTING DATA DIRECTIONAL DATA	MW & FLUID TYPE	HOLE DEV.
24" Hole then Driven	80' KB (62' BGL)		<b>CONDUCTOR PIPE</b> 20" x 3/8" wall L/S PE @ 80' (set in bedrock & grouted to surface)		Vertical
17-1/2" Hole	Shallowest FW 75' TVD Pittsburgh Coal 925' TVD Deepest FW 930' TVD 1190' TVD		<b>SURFACE CASING</b> 13-3/8" 54.5# J-55 STC @ 1190' MD/TVD Set through fresh water zones Set through coal zones Cemented to surface	Air / Mist	Vertical
12-1/4" Hole	Salt Water 1800' TVD Little Lime 2022' TVD Big Lime 2052' TVD Big Injun Sandstone 2152' TVD Base of Big Injun 2252' TVD 2400' TVD		<b>INTERMEDIATE CASING</b> 9-5/8" 36.0# J-55 LTC @ 2400' MD/TVD Set through potential salt water zones Set below base of Big Injun Cemented to surface	Stiff Foam	Vertical
8-3/4" Hole	Berea Sandstone 2620' TVD Gordon Sandstone 2865' TVD			Air / Dust	
8-3/4" Hole	Minestreet Shale (Base) 6186' TVD			WBM in Curve	
8-3/4" Hole	Middlesex Shale 6280' TVD West River Shale 6310' TVD Geneseo Shale 6645' TVD Tully Limestone 6665' TVD Hamilton Shale 6725' TVD				
8-3/4" Hole in Lateral	Marcellus Shale 6765' TVD			WBM in Lateral	~89.5°
	Onondaga Limestone 6815' TVD				
				Landing Point (LP) @ 7500' MD / 6790' TVD ~89.5° angle ~162° azimuth	
				TD @ 12650' MD / 6840' TVD PRODUCTION CASING 5-1/2" 20.0# P-110 CDC @ 12650' MD Top of Cement @ 1400' (~1000' inside 9-5/8")	

Notes: Formation tops as per vertical pilot hole  
 Curve & lateral tops will vary due to structural changes  
 Directional plan based upon best estimate of structure

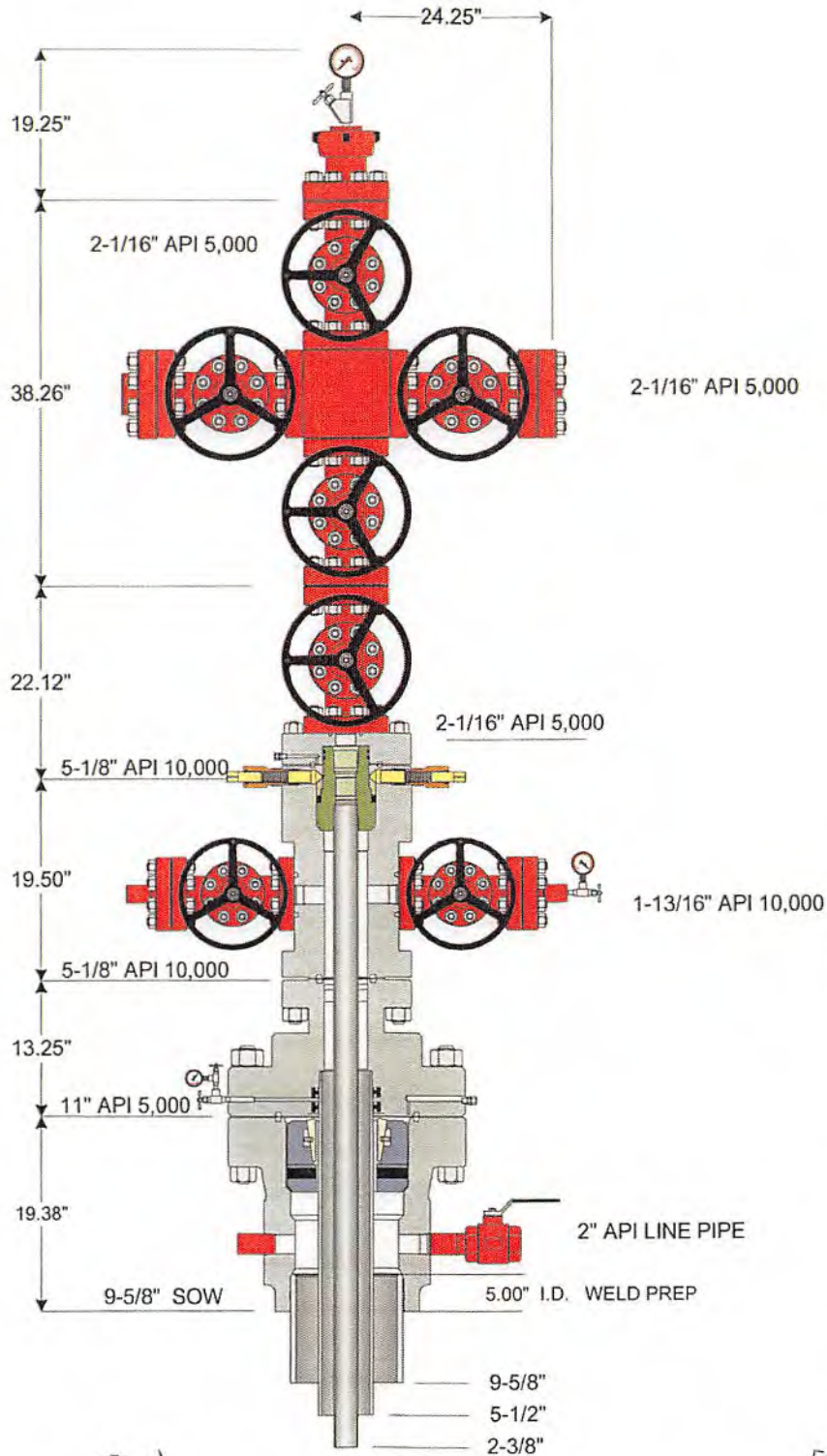
WV Department of Environmental Protection  
 WV Department of Oil and Gas  
 RECEIVED  
 Office of Oil and Gas  
 OCT - 9 2018  
 WV Department of Environmental Protection  
 OCT 07 2013

*DMH  
10-2-13*

10302955

01/04/2019

NOTE: THIS DRAWING IS NOT TO SCALE. THE DIMENSIONS REFLECTED ON THE DRAWING ARE ESTIMATED MEASUREMENTS AND FOR REFERENCE ONLY.



DMH  
10-2-17

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

RECEIVED  
Office of Oil and Gas

© 2010 Weatherford International Inc. All rights reserved



Customer: STONE ENERGY	Project: 46705	Quote: 99565 v 3
Tender, Project or Well: 2011- 2012 CONVENTIONAL MARCELLUS	Date: 07-17-2011	Drawn By: RF

# EQT Production Water plan

01/04/2019

## Offsite disposals for Marcellus wells

### **CWS TRUCKING INC.**

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

### **BROAD STREET ENERGY LLC**

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

### **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

### **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

### **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

### **KING EXCAVATING CO.**

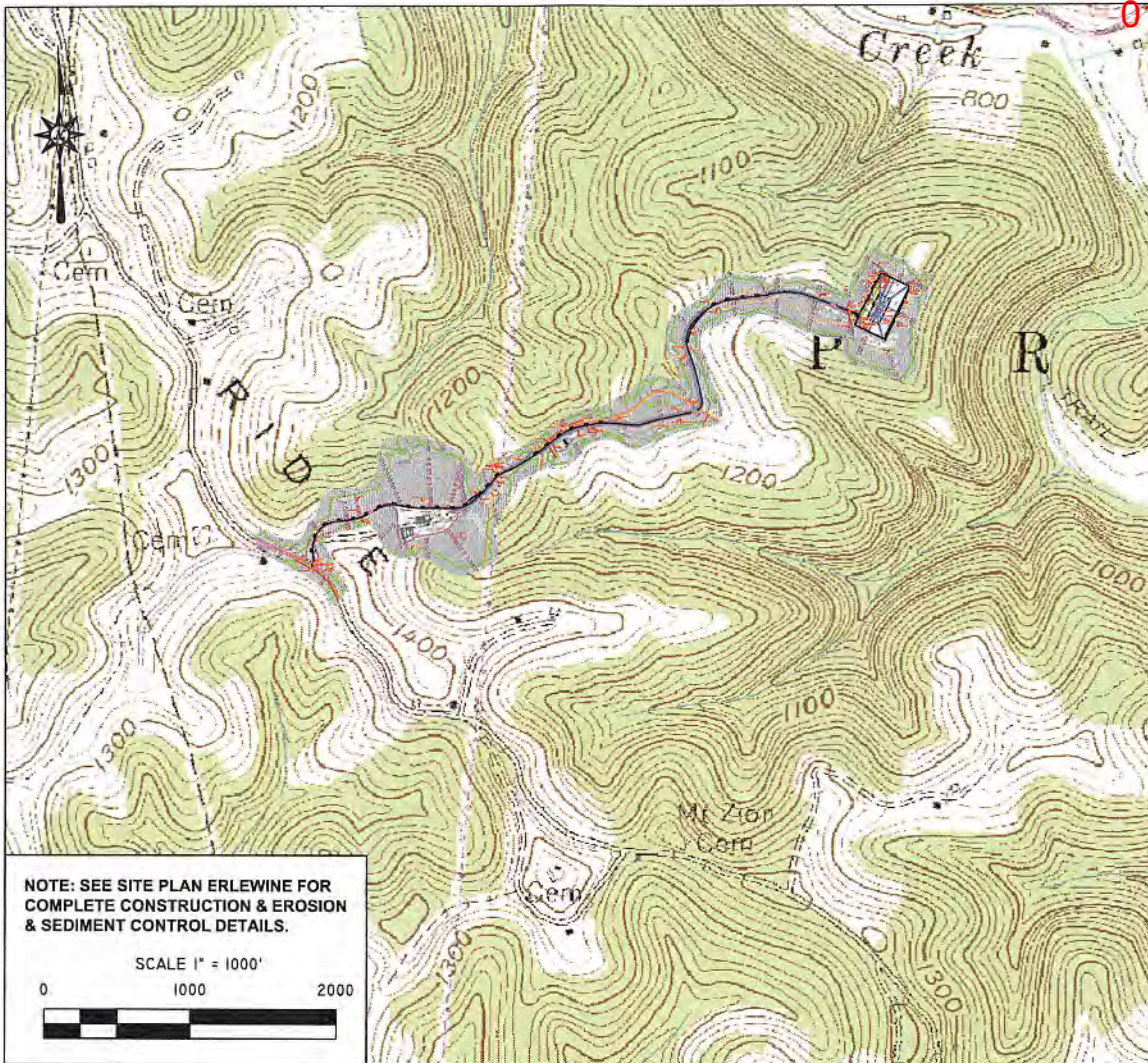
Advanced Waste Services  
101 River Park Drive  
New Castle, Pa. 16101  
Facility Permit# PAR000029132

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

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

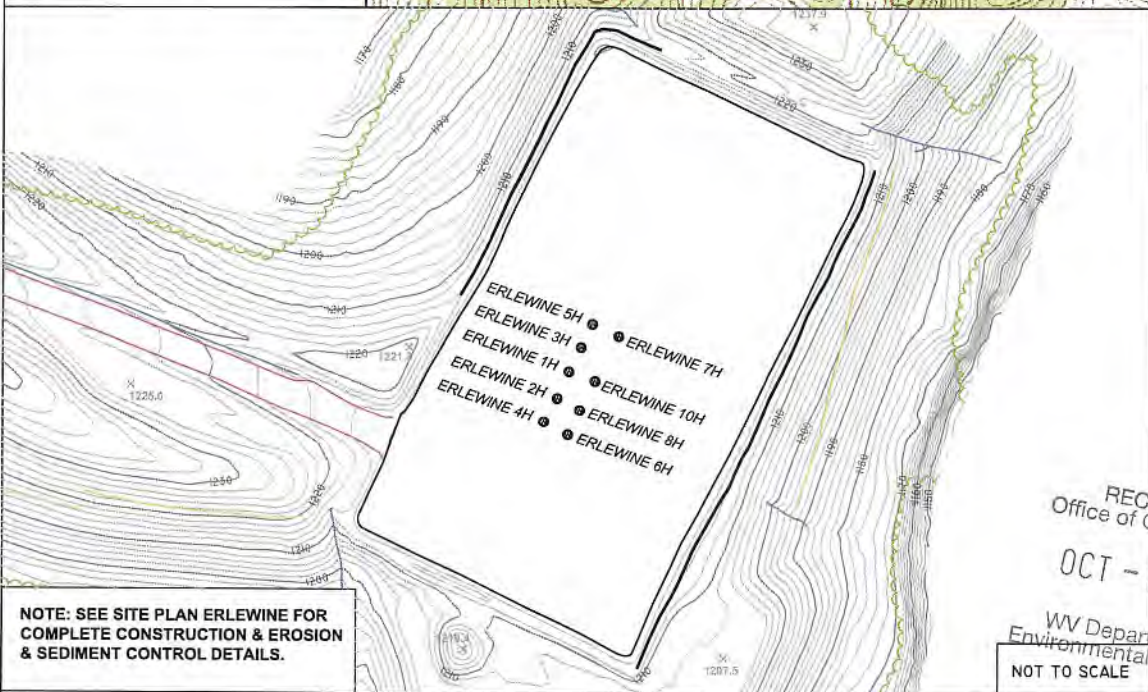
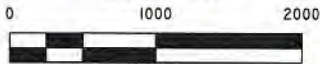
### **Waste Management - Northwestern Landfill**

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



NOTE: SEE SITE PLAN ERLEWINE FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

SCALE 1" = 1000'



NOTE: SEE SITE PLAN ERLEWINE FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection  
NOT TO SCALE

**Blue Mountain Inc.**  
11023 MASON DIXON HIGHWAY  
BURTON, WV 26562  
PHONE: (304) 662-6486

PREPARED FOR:  
**EQT Production Co. Inc.**  
115 Professional Place, P.O. Box 280  
Bridgeport, WV 26330

**ERLEWINE WELL**  
**TOPO SECTION OF NEW MARTINSVILLE 7.5'**  
**USGS TOPO QUADRANGLE**

**FORM WW9**

**JUNE 1, 2018**



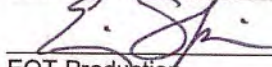
Where energy meets innovation.™

# Site Specific Safety and Environmental Plan

EQT  
Erlewine Pad  
New Martinsville  
Wetzel County, WV

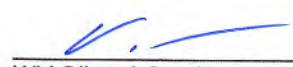
Erlewine 10H \_\_\_\_\_ For Wells: \_\_\_\_\_  
 \_\_\_\_\_

Date Prepared: **February 26, 2018**

  
 \_\_\_\_\_  
 EQT Production

Regional Land Supervisor  
 Title

10-2-18  
 Date

  
 \_\_\_\_\_  
 WV Oil and Gas Inspector

Oil + Gas Inspector  
 Title

10-4-18  
 Date



Anticipated Frac Additives  
Chemical Names and CAS numbers

01/04/2019

<u>Material</u>	<u>Ingredient</u>	<u>CAS Number</u>
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

*DMH  
10-4-18*

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

Topo Quad: NEW MARTINSVILLE, WV - OHIO 7.5'

Scale: 1" = 1000'

County: WETZEL

Date: 19 JULY 2018

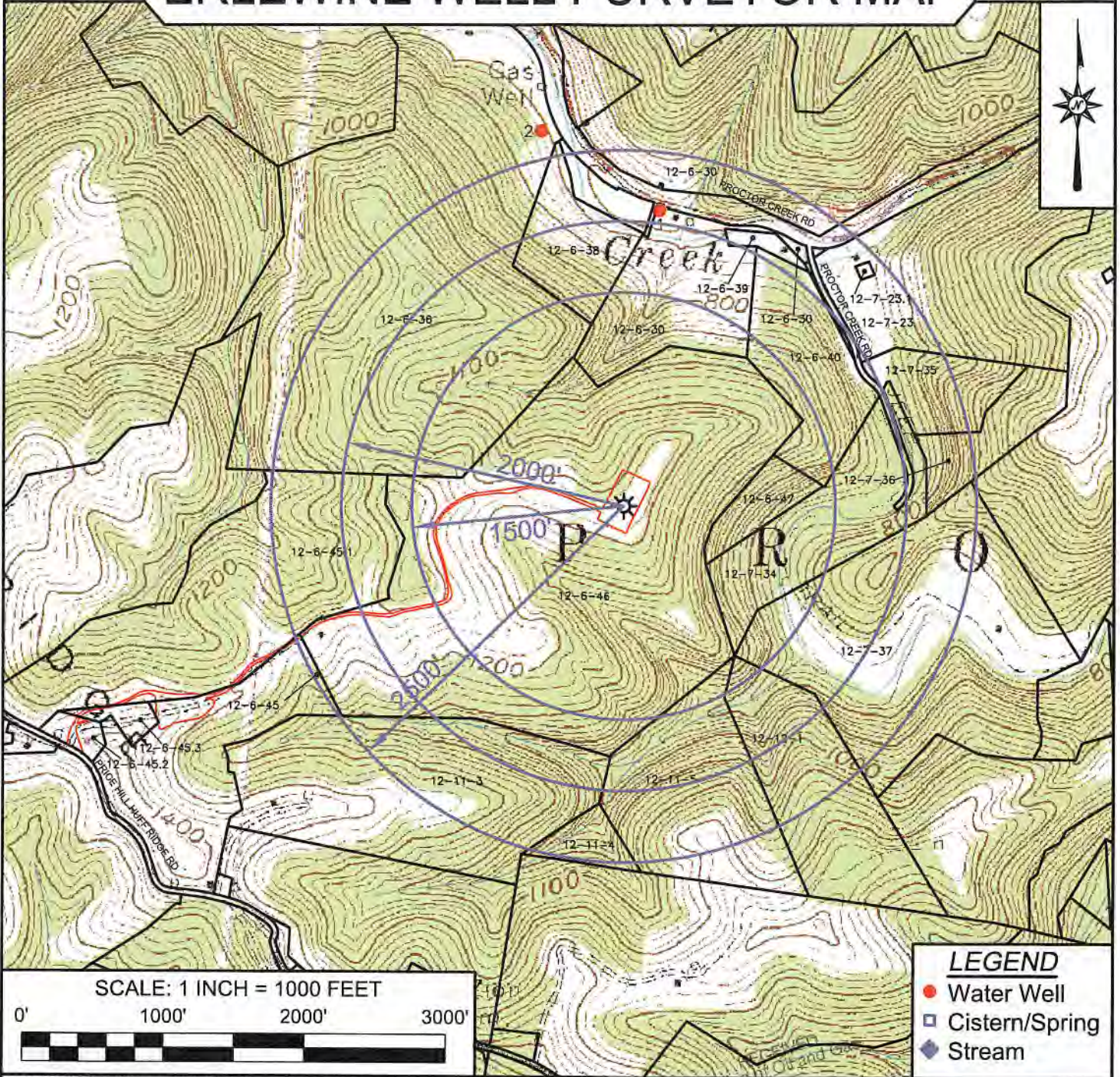
District: PROCTOR

Project No: 0493-17

Water

# ERLEWINE WELL PURVEYOR MAP

Topo



SURVEYING AND MAPPING SERVICES PERFORMED BY:



**Blue Mountain**  
 11023 MASON DIXON HIGHWAY  
 BURTON, WV 26562  
 PHONE: (304) 662-6486

PREPARED FOR:

**EQT Production Co. Inc.**  
 EQT Plaza  
 625 Liberty Ave, Suite 1700  
 Pittsburgh, PA 15222

Office of Oil and Gas  
 WV Department of Environmental Protection  
 OCT - 9 2018





## Table 1 – Water Source Identification

EQT Well Pad Name: ERLEWINE Submittal Date: 7-18-2018

EQT Well Number: ERLEWINE: 1H,2H, 3H, 4H, 5H, 6H, 7H, 8H, 10H

Survey / Engineering Company: BLUE MOUNTAIN INC.

Site Number: 1 Distance from Gas Well (feet): 2,052+/-

Surface Owner / Occupant: Albert Ray Anderson

Address: 100 N. Bridge St., Box 25, New Martinsville, WV 26155 Phone #: N/A

Field Located Date: 06-09-2017 Owner home during survey (yes/no): N/A

Coordinates: 39.689185° -80.796298° +/- decimal degrees – NAD 83

Contact Attempts (Date): 1<sup>st</sup>: 06-10-2017 2<sup>nd</sup>: N/A Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18; 2nd certified mailer returned undelivered

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

Site Number: 2 Distance from Gas Well (feet): 2,659+/-

Surface Owner / Occupant: Richard L. Earlewine

Address: Rt. 1 Box 72, Proctor, WV 26055 Phone #: N/A

Field Located Date: 06-09-2017 Owner home during survey (yes/no): N/A

Coordinates: 39.690677° -80.799289° (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 06-07-2017 2<sup>nd</sup>: 6-8-2018 Door Hanger Left: N/A

Comments: Certified mailer delivered 6-7-17; 2nd certified mailer delivered 6-8-18 yes to water testing.

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

Site Number: 3 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: David Michael Anderson

Address: 100 N Bridge St., Box 25, New Martinsville, WV 26155 Phone #: N/A

Field Located Date N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 06-10-2017 2<sup>nd</sup>: 6-5-2018 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-10-17; Certified mailer sent 6-5-18; 2<sup>nd</sup> certified mailer returned undelivered

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

Site Number: 4 Distance from Gas Well (feet) N/A

Surface Owner / Occupant: David Michael Anderson

Address: 100 N Bridge St., Box 25, New Martinsville, WV 26155 Phone #: N/A

Field Located Date: N/A Owner home during survey (Yes/No):

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 06-09-2017 2<sup>nd</sup>: 6-10-17 Date Door Hanger Left: 06-09-17

Comments: Certified mailer sent 6-5-18; 3<sup>rd</sup> certified mailer returned undelivered

<input type="checkbox"/> Landowner Requested Sampling
<input type="checkbox"/> Landowner Decline Sampling
<input checked="" type="checkbox"/> Unable to Contact <small>(Further contact attempts to be made by EQT's third party pre-drill sampling lab)</small>

Site Number: 5 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: David Michael Anderson

Address: 100 N Bridge St., Box 25, New Martinsville, WV 26155 Phone #: N/A

Field Located Date N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 06-10-2017 2<sup>nd</sup>: 6-5-2018 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18; 2<sup>nd</sup> certified mailer returned undelivered

<input type="checkbox"/> Landowner Requested Sampling
<input type="checkbox"/> Landowner Decline Sampling
<input checked="" type="checkbox"/> Unable to Contact <small>(Further contact attempts to be made by EQT's third party pre-drill sampling lab)</small>

Site Number: 6 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Christy Leek & Mary Wilson Est

Address: 195 Pike St, New Martinsville, WV 26155 Phone #: N/A

Field Located Date N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 06-07-2017 2<sup>nd</sup>: 6-8-2018 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18, Delivered 6-8-18. Owner name change since first attempt sent.

<input type="checkbox"/> Landowner Requested Sampling
<input type="checkbox"/> Landowner Decline Sampling
<input checked="" type="checkbox"/> Unable to Contact <small>(Further contact attempts to be made by EQT's third party pre-drill sampling lab)</small>

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

Site Number: 7 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Donald F. & Martha J. Arrick

Address: 17954 Energy Rd, Proctor, WV 26055 Cell Phone #: 304-780-9238

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 06-07-2017 2<sup>nd</sup>: 6-7-2018 Date Door Hanger Left: N/A

Comments: Certified 6-7-17; 2<sup>nd</sup> Certified mailer sent 6-5-18, was delivered on 6-7-18, spoke with Mr. Arrick 6-15-18 water well would like it tested. No house on property. Leave message if no answer. First call attempt to contact –left a voice mail on 6-26-18.

<input checked="" type="checkbox"/> Landowner Requested Sampling
<input type="checkbox"/> Landowner Decline Sampling
<input type="checkbox"/> Unable to Contact <small>(Further contact attempts to be made by EQT's third party pre-drill sampling lab)</small>

WV Department of  
Environmental Protection

Site Number: 8 Distance from Gas Well (feet): N/A  
 Surface Owner / Occupant: Kevin Goff

Address: PO Box 222, New Martinsville, WV 26155-0222 Phone #: 304-771-8800

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-20-2017 2<sup>nd</sup>: 6-11-2018 Date Door Hanger Left: N/A

Comments: Spoke with Mr. Goff 6-20-17. He stated he has 1 well. May not want water tested. Further phone calls unreturned. Certified mailer sent 6-5-18, was delivered on 6-11-18, 7-16-18 Returned letter stating doesn't Water tested.

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

Site Number: 9 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Kevin Goff

Address: PO Box 222, New Martinsville, WV 26155-0222 Phone #: 304-771-8800

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-20-17 2<sup>nd</sup>: 6-11-18 Date Door Hanger Left: N/A

Comments: Spoke with Mr. Goff 6-20-17. He stated he has 1 well. May not want water tested. Further phone calls unreturned. Certified mailer sent 6-5-18, was delivered on 6-11-18, 7-16-18 Returned letter stating doesn't Water tested.

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

Site Number: 10 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Rost Energy Company Inc.

Address: PO Box 615, Ligonier, PA 15658-0615 Phone #: N/A

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-6-17 2<sup>nd</sup>: 6-7-2018 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18, was delivered on 6-7-18

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

Site Number: 11 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Christy Leek & Mary Wilson Est

Address: 195 Pike St. New Martinsville, WV 26155 Phone #: N/A

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-6-17 2<sup>nd</sup>: 6-8-18 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18, was delivered on 6-8-18

<input type="checkbox"/> Landowner Requested Sampling
<input type="checkbox"/> Landowner Decline Sampling
<input checked="" type="checkbox"/> Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)

Site Number: 12 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Emma L. & John J. Moore

Address: 2616 Huff Ridge Rd. New Martinsville, WV 26155 Phone #: N/A

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-7-17 2<sup>nd</sup>: 6-7-18 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18, was delivered on 6-7-18.

<input type="checkbox"/> Landowner Requested Sampling
<input type="checkbox"/> Landowner Decline Sampling
<input checked="" type="checkbox"/> Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)

Site Number: 13 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Kevin Goff

Address: PO Box 222, New Martinsville, WV 26155 Phone #: 304-771-8800

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-20-2017 2<sup>nd</sup>: 6-11-18 Date Door Hanger Left: N/A

Comments: Spoke with Mr. Goff 6-20-17. He stated he has 1 well. May not want water tested. Further phone calls unreturned. Certified mailer sent 6-5-18, was delivered on 6-11-18, 7-16-18 Returned letter stating doesnt Water tested.

<input type="checkbox"/> Landowner Requested Sampling
<input checked="" type="checkbox"/> Landowner Decline Sampling
<input type="checkbox"/> Unable to Contact (Further contact attempts to be made by EQT's third party pre-drill sampling lab)

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

Site Number: 14 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: Linda Anderson

Address: 2641 Huff RDG New Martinsville, WV 26155 Phone #: N/A

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-8-17 2<sup>nd</sup>: 6-8-18 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18, was delivered on 6-8-18

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

Site Number: 15 Distance from Gas Well (feet): N/A

Surface Owner / Occupant: EQT Production Company

Address: EQT Plaza, 625 Liberty Ave, Suite 1700, Pittsburgh PA 15222 Phone #: N/A

Field Located Date: N/A Owner home during survey (Yes/No): N/A

Coordinates: N/A (decimal degrees – NAD 83)

Contact Attempts (Date): 1<sup>st</sup>: 6-8-17 2<sup>nd</sup>: 6-12-18 Date Door Hanger Left: N/A

Comments: Certified mailer sent 6-5-18, was delivered on 6-12-18. Stone Energy returned letter stating letter needs sent to EQT. 3<sup>rd</sup> attempt sent 7-12-18.

- Landowner Requested Sampling
- Landowner Decline Sampling
- Unable to Contact  
(Further contact attempts to be made by EQT's third party pre-drill sampling lab)

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

01/04/2019

Parcel 12-6-47



To Whom It May Concern:

BLUE MOUNTAIN has been contracted by EQT Production Company (EQT) to do some preliminary work for a proposed oil and gas well permit application.

In accordance with West Virginia Code 35-8-15, the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas, requires gas well operators to offer pre-drill water testing for existing water wells or developed springs actually used by the surface owner or water purveyor for consumption by humans or domestic animals, which are located within 1,500 feet of the proposed gas well pad. Please note that the WVDEP requires this water testing offer to a radius of 1,500 feet; however it is EQT's standard practice to conduct the water testing to a radius of 2,500 feet from the proposed gas well pad location.

EQT hereby notifies you (the surface owner and/or water purveyor) of the following:

- Your right to request sampling and analysis;
- The rebuttable presumption for contamination or deprivation of a fresh water source or supply;
- That refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability;
- Your independent right to sample and analyze any water supply at your own expense;
- That EQT will utilize an independent laboratory to analyze any sample;
- That you 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.

Therefore, EQT offers, at no charge to you, water testing of your water supply(s). Results of these tests will be sent to you upon our receipt from the independent testing laboratory.

Please notify BLUE MOUNTAIN at your earliest convenience if you are interested in having your potable water tested. Please have this letter with you at the time of contact so that the well number may be referenced.

Thank you for your cooperation in this matter.

BLUE MOUNTAIN  
11023 Mason Dixon Highway  
Burton, WV 26562  
Ph: (304) 662-6486

Date: 6-5-2018

Left/sent by: BLUE MOUNTAIN

RECEIVED  
Office of Oil and Gas

EQT Well Number: ERLEWINE: 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 10H

OCT - 9 2018

\*If you do not have a water well or other non-public water source, please make note of it and include your name and address when you return this sheet.

WV Department of  
Environmental Protection

If you do not feel the need to have your water well, spring, or other non-public water source sampled, please sign on the line below and return to the above address. This will signify that a sample has been offered to the surface owner and has been declined.

Name (please print): KEVIN GUFF

Address: 6-10-18 2393 ECK FILL RD  
MIDDLEBURGH, WV

Signature: [Handwritten Signature]

Date: 6-10-18 2018



01/04/2019

Parcel  
12-7-34



To Whom It May Concern:

BLUE MOUNTAIN INC. has been contracted by EQT Production Company (EQT) to do some preliminary work for a proposed oil and gas well permit application.

In accordance with West Virginia Code 35-8-15, the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas, requires gas well operators to offer pre-drill water testing for existing water wells or developed springs actually used by the surface owner or water purveyor for consumption by humans or domestic animals, which are located within 1,500 feet of the proposed gas well pad. Please note that the WVDEP requires this water testing offer to a radius of 1,500 feet; however it is EQT's standard practice to conduct the water testing to a radius of 2,500 feet from the proposed gas well pad location.

EQT hereby notifies you (the surface owner and/or water purveyor) of the following:

- Your right to request sampling and analysis;
- The rebuttable presumption for contamination or deprivation of a fresh water source or supply;
- That refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability;
- Your independent right to sample and analyze any water supply at your own expense;
- That EQT will utilize an independent laboratory to analyze any sample;
- That you 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.

Therefore, EQT offers, at no charge to you, water testing of your water supply(s). Results of these tests will be sent to you upon our receipt from the independent testing laboratory.

Please notify BLUE MOUNTAIN INC. at your earliest convenience if you are interested in having your potable water tested. Please have this letter with you at the time of contact so that the well number may be referenced.

Thank you for your cooperation in this matter.

BLUE MOUNTAIN INC.  
11023 Mason Dixon Highway  
Burton, WV 26562  
Ph: (304) 662-6486

Date: 6-5-2017

Left/sent by: BLUE MOUNTAIN INC.

RECEIVED  
Office of Oil and Gas

EQT Well Number: ERLEWINE: 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H,

10H

OCT - 9 2018

\*If you do not have a water well or other non-public water source, please make note of it and include your name and address when you return this sheet. WV Department of Environmental Protection

If you do not feel the need to have your water well, spring, or other non-public water source sampled, please sign on the line below and return to the above address. This will signify that a sample has been offered to the surface owner and has been declined.

Name (please print): \_\_\_\_\_ Address: \_\_\_\_\_

Signature: [Signature] Date: 6-12-18

01/04/2019

Parcel  
12-12-1



To Whom It May Concern:

BLUE MOUNTAIN has been contracted by EQT Production Company (EQT) to do some preliminary work for a proposed oil and gas well permit application.

In accordance with West Virginia Code 35-8-15, the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas, requires gas well operators to offer pre-drill water testing for existing water wells or developed springs actually used by the surface owner or water purveyor for consumption by humans or domestic animals, which are located within 1,500 feet of the proposed gas well pad. Please note that the WVDEP requires this water testing offer to a radius of 1,500 feet; however it is EQT's standard practice to conduct the water testing to a radius of 2,500 feet from the proposed gas well pad location.

EQT hereby notifies you (the surface owner and/or water purveyor) of the following:

- Your right to request sampling and analysis;
- The rebuttable presumption for contamination or deprivation of a fresh water source or supply;
- That refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability;
- Your independent right to sample and analyze any water supply at your own expense;
- That EQT will utilize an independent laboratory to analyze any sample;
- That you 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.

Therefore, EQT offers, at no charge to you, water testing of your water supply(s). Results of these tests will be sent to you upon our receipt from the independent testing laboratory.

Please notify BLUE MOUNTAIN at your earliest convenience if you are interested in having your potable water tested. Please have this letter with you at the time of contact so that the well number may be referenced.

Thank you for your cooperation in this matter.

BLUE MOUNTAIN  
11023 Mason Dixon Highway  
Burton, WV 26562  
Ph: (304) 662-6486

Date: 6-5-2018

Left/sent by: BLUE MOUNTAIN

EQT Well Number: ERLEWINE: 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 10H

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

\*If you do not have a water well or other non-public water source, please make note of it and include your name and address when you return this sheet.

If you do not feel the need to have your water well, spring, or other non-public water source sampled, please sign on the line below and return to the above address. This will signify that a sample has been offered to the surface owner and has been declined.

Name (please print): \_\_\_\_\_ Address: \_\_\_\_\_

Signature: [Signature] Date: 6-18-18



01/04/2019

To Whom It May Concern:

BLUE MOUNTAIN has been contracted by EQT Production Company (EQT) to do some preliminary work for a proposed oil and gas well permit application.

In accordance with West Virginia Code 35-8-15, the West Virginia Department of Environmental Protection (WVDEP), Office of Oil and Gas, requires gas well operators to offer pre-drill water testing for existing water wells or developed springs actually used by the surface owner or water purveyor for consumption by humans or domestic animals, which are located within 1,500 feet of the proposed gas well pad. Please note that the WVDEP requires this water testing offer to a radius of 1,500 feet; however it is EQT's standard practice to conduct the water testing to a radius of 2,500 feet from the proposed gas well pad location.

EQT hereby notifies you (the surface owner and/or water purveyor) of the following:

- Your right to request sampling and analysis;
- The rebuttable presumption for contamination or deprivation of a fresh water source or supply;
- That refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability;
- Your independent right to sample and analyze any water supply at your own expense;
- That EQT will utilize an independent laboratory to analyze any sample;
- That you 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.

Therefore, EQT offers, at no charge to you, water testing of your water supply(s). Results of these tests will be sent to you upon our receipt from the independent testing laboratory.

Please notify BLUE MOUNTAIN at your earliest convenience if you are interested in having your potable water tested. Please have this letter with you at the time of contact so that the well number may be referenced.

Thank you for your cooperation in this matter.

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

BLUE MOUNTAIN  
11023 Mason Dixon Highway  
Burton, WV 26562  
Ph: (304) 662-6486

Date:

Left/sent by: BLUE MOUNTAIN

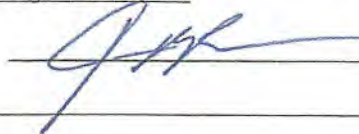
WV Department of  
Environmental Protection

EQT Well Number: ERLEWINE: 1H, 2H, 3H, 4H, 5H, 6H, 7H, 8H, 10H

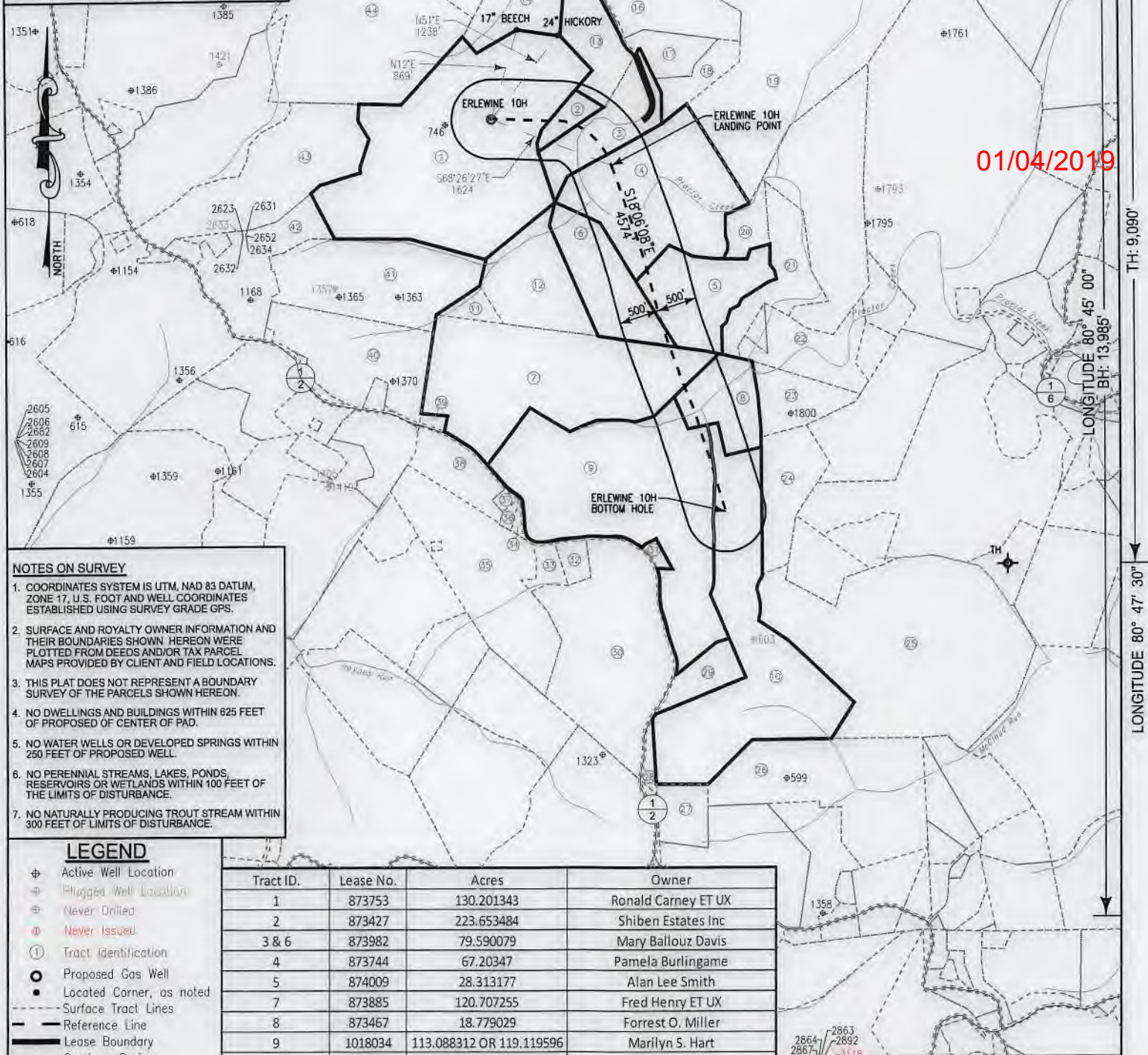
\*If you do not have a water well or other non-public water source, please make note of it and include your name and address when you return this sheet.

If you do not feel the need to have your water well, spring, or other non-public water source sampled, please sign on the line below and return to the above address. This will signify that a sample has been offered to the surface owner and has been declined.

Name (please print): Jason Ranson- Director of Drilling, Land Address: EQT Plaza, 625 Liberty Ave, Suite 1700 Pittsburgh PA 15222

Signature:  Date: 7-27-18

**Erlewine 10H**  
**Erlewine**  
**EQT Production Company**



**NOTES ON SURVEY**

- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

**LEGEND**

- ⊕ Active Well Location
- ⊖ Plugged Well Location
- ⊘ Never Drilled
- ⊙ Never Issued
- ① Tract Identification
- Proposed Gas Well
- Located Corner, as noted
- - - Surface Tract Lines
- - - Reference Line
- Lease Boundary
- Creek or Drain
- Ⓢ WV County Route
- Ⓡ WV State Route

Tract ID.	Lease No.	Acres	Owner
1	873753	130.201343	Ronald Carney ET UX
2	873427	223.653484	Shiben Estates Inc
3 & 6	873982	79.590079	Mary Ballouz Davis
4	873744	67.20347	Pamela Burlingame
5	874009	28.313177	Alan Lee Smith
7	873885	120.707255	Fred Henry ET UX
8	873467	18.779029	Forrest O. Miller
9	1018034	113.088312 OR 119.119596	Marilyn S. Hart
10	873995	106.09744	Kenneth Starkey

( ⊕ ) Denotes Location of Well on United States Topographic Maps



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

*L. L. S. 687*  
L. L. S. 687



FILE NO: W2192 (BK 65-61)  
DRAWING NO:  
SCALE: 1" = 1800'  
MINIMUM DEGREE OF ACCURACY: 1:2500  
PROVEN SOURCE OF ELEVATION: NGS CORS Station

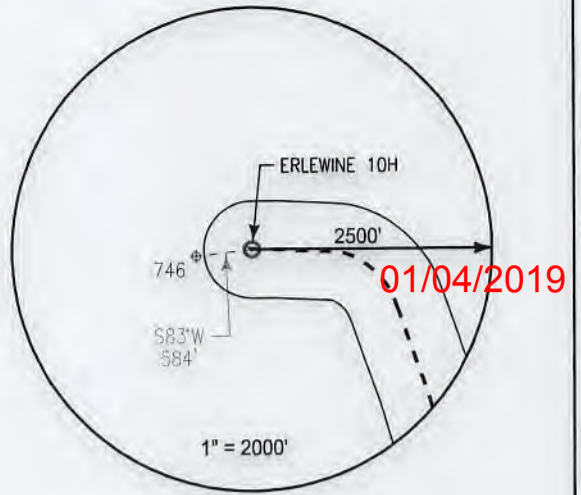


DATE: DECEMBER 11 20 18  
OPERATORS WELL NO: ERLEWINE 10H  
API WELL NO  
47 - 103 - 02955  
STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
(IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
LOCATION ELEVATION: 1,220' WATERSHED: TRIBUTARY OF PROCTOR CREEK QUADRANGLE: NEW MARTINSVILLE 7.5'  
DISTRICT: Proctor COUNTY: Wetzel  
SURFACE OWNER: Richard Erlewine ACREAGE: 135 ±  
ROYALTY OWNER: Ronald Carney, et ux LEASE NO: 873753 ACREAGE: 130.20 ±  
PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 6,840'  
WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson  
ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280  
Bridgeport, WV 26330 Bridgeport, WV 26330

**Erlewine 10H**  
**Erlewine**  
**EQT Production Company**

Tract ID.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	6	46	Wetzel	Proctor	Richard L. Erlewine	136.18
2	6	47	Wetzel	Proctor	Victor Richard Reed ET AL	5.55
3	7	34	Wetzel	Proctor	Kevin Goff	23.31
4	7	37	Wetzel	Proctor	Rost Energy Company	64.56
5	12	2	Wetzel	Proctor	Emma L. & John J. Moore	31.57
6	12	1	Wetzel	Proctor	Kevin Goff	28.69
7	11	12	Wetzel	Proctor	Emma Louise Wilson	89.99
8	12	14	Wetzel	Proctor	Rost Energy Company	20.65
9	12	27.1	Wetzel	Proctor	Sharon Henthorn	110.05
10	12	28	Wetzel	Proctor	David J. & Freeman J. Miller	90.96
11	11	4	Wetzel	Proctor	Emma Louise Wilson	4.24
12	11	5	Wetzel	Proctor	Emma L. & John J. Moore	30.34
13	6	40	Wetzel	Proctor	Kevin S. Goff	19.13
14	6	30	Wetzel	Proctor	Albert Ray Anderson	102.63
15	6	39	Wetzel	Proctor	Ethyl Anderson EST	1.42
16	7	23	Wetzel	Proctor	Clegg Family Irrevocable Trust	47.68
17	7	35	Wetzel	Proctor	Clegg Family Irrevocable Trust	9.94
18	7	36	Wetzel	Proctor	Clegg Family Irrevocable Trust	9.8
19	7	24	Wetzel	Proctor	Lane C. & Minervar Evans	164.2
20	7	38	Wetzel	Proctor	Rost Energy Company	7.96
21	12	3	Wetzel	Proctor	Rost Energy Company	22.57
22	12	6	Wetzel	Proctor	Rost Energy Company	22.81
23	12	5	Wetzel	Proctor	Rost Energy Company	15.92
24	12	28.1	Wetzel	Proctor	Bill Hershberger ET AL	22.32
25	12	45	Wetzel	Proctor	Peter G. Stansberry	128.22
26	12	63	Wetzel	Proctor	Blue Group Operating Inc.	63.98
27	12	61	Wetzel	Proctor	Blue Group Operating Inc.	10.97
28	12	44.3	Wetzel	Proctor	Roger J. Powell	2.32
29	12	44.2	Wetzel	Proctor	Roger J. Powell	10.27
30	12	44	Wetzel	Proctor	Charles G. Shepard	72.43
31	12	27	Wetzel	Proctor	Sharon Henthorne	1.45
32	11	25.2	Wetzel	Proctor	AM Smith ER & SJ Headley	4.1
33	11	25.3	Wetzel	Proctor	Joyce A. Meeden	4.3
34	11	N/A	Wetzel	Proctor	N/A	0.86
35	11	24	Wetzel	Proctor	Bradley Ray Nice	69.92
36	11	28	Wetzel	Proctor	John A. Helmick	1.07
37	11	20.1	Wetzel	Proctor	Debra Lynn Oates	1.06
38	11	20	Wetzel	Proctor	John A. Helmick	15.26
39	11	9	Wetzel	Proctor	Emily D. Wilson	1.18
40	11	11	Wetzel	Proctor	Christy Leek	41.66
41	11	3	Wetzel	Proctor	Wilson Mary & Christy Leek EST	52.33
42	6	45	Wetzel	Proctor	Christy Leek	29.51
43	6	45.1	Wetzel	Proctor	Donald F. & Martha J. Arrick	53.9
44	6	36	Wetzel	Proctor	Richard L. Erlewine	127.14



**Notes:**  
**ERLEWINE 10H As-Built coordinates are**  
 NAD 27 N: 433,666.003 E: 1,634,896.001  
 NAD 27 Lat: 39.683424 Long: -80.797301  
 NAD 83 UTM N: 4,392,649.675 E: 517,397.616  
**ERLEWINE 10H As-Built Landing Point coordinates are**  
 NAD 27 N: 433,069.373 E: 1,636,405.970  
 NAD 27 Lat: 39.681846 Long: -80.791906  
 NAD 83 UTM N: 4,392,475.602 E: 517,860.672  
**ERLEWINE 10H As-Built Bottom Hole coordinates are**  
 NAD 27 N: 428,724.763 E: 1,637,826.330  
 NAD 27 Lat: 39.669976 Long: -80.786639  
 NAD 83 UTM N: 4,391,159.220 E: 518,315.453  
 West Virginia Coordinates system of 1927 (North Zone)  
 based upon Differential GPS Measurements  
 Plat orientation, Corner and well ties are based upon  
 the grid north meridian  
 Well location references are based upon the grid north  
 meridian.  
 UTM coordinates are NAD83, Zone 17, Meters.

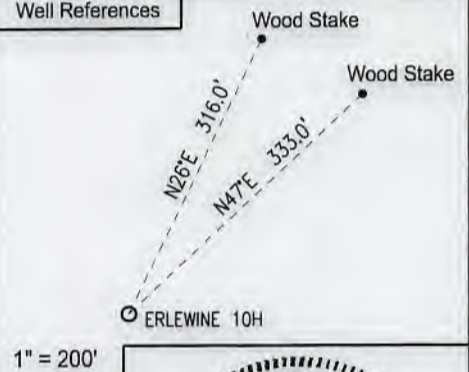
**LEGEND**

- ⊕ Active Well Location
- Proposed Gas Well
- Located Corner, as noted
- Surface Tract Lines
- Reference Line
- ▬ Lease Boundary
- Creek or Drain
- Ⓢ WV County Route
- Ⓡ WV State Route

**ERLEWINE PAD**

- ERLEWINE 5H
- ERLEWINE 3H
- ERLEWINE 1H
- ERLEWINE 2H
- ERLEWINE 4H
- ERLEWINE 7H
- ERLEWINE 10H
- ERLEWINE 8H
- ERLEWINE 6H

**Well References**



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

*Thomas C. Smalls*  
 L. L. S. 687



FILE NO: W2192 (BK 65-61)  
 DRAWING NO:  
 SCALE: 1" = 1000'  
 MINIMUM DEGREE OF ACCURACY:  
 1:2500  
 PROVEN SOURCE OF ELEVATION:  
 NGS CORS Station

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

DATE: DECEMBER 11 20 18  
 OPERATORS WELL NO: ERLEWINE 10H  
 API WELL NO  
 47 - 103 - 02955  
 STATE COUNTY PERMIT

WELL TYPE:  OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  
 (IF GAS) PRODUCTION:  STORAGE  DEEP  SHALLOW  
 LOCATION ELEVATION: 1,220' WATERSHED: TRIBUTARY OF PROCTOR CREEK QUADRANGLE: NEW MARTINSVILLE 7.5'  
 DISTRICT: Proctor COUNTY: Wetzel  
 SURFACE OWNER: Richard Erlewine ACREAGE: 135 ±  
 ROYALTY OWNER: Ronald Carney, et ux LEASE NO: 873753 ACREAGE: 130.20 ±  
 PROPOSED WORK:  DRILL  CONVERT  DRILL DEEPER  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  
 PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY)  
 PLUG AND ABANDON  CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus ESTIMATED DEPTH: 6,840'  
 WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson  
 ADDRESS: 115 Professional Place PO Box 280 ADDRESS: 115 Professional Place PO Box 280  
 Bridgeport, WV 26330 Bridgeport, WV 26330

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

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

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

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

RECEIVED  
Office of Oil and Gas

OCT - 9 2018


WV Department of  
Environmental Protection

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

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

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

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

Well Operator: EQT Production Company  
 By: Erin Spine   
 Its: Regional Land Supervisor

WW-6A1 attachment

Operator's Well No.

Erlewine 10H

<u>Lease No.</u>	<u>Grantor, Lessor, etc.</u>	<u>Grantee, Lessee, etc.</u>	<u>Royalty</u>	<u>Book/Page</u>
<u>873753</u>	<b><u>Ronald Carney, et ux, et al (current royalty owner)</u></b> Richard L. Erlewine (original lessor) Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	134A/131 183A/305
<u>873427</u>	<b><u>Shiben Estates Inc, et al (current royalty owner)</u></b> Shiben Estates, Inc (original lessor) Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	149A/276 183A/305
<u>873982</u>	Robert L. Anderson (original lessor) Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	145A/898 183A/305
<u>873744</u>	Pamela Burlingame (original lessor) Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	126A/341 183A/305
<u>874009</u>	Alan Lee Smith (original lessor) Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	160A/941 183A/305
<u>873982</u>	Robert L. Anderson (original lessor) Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	145A/898 183A/305
<u>873885</u>	<b><u>Fred Henry, et al (current royalty owner)</u></b> Fred Henry (original lessor) Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	132A/392 183A/305
<u>873467</u>	James W. Arman Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	160A/947 183A/305
<u>1018034</u>	Marilyn S Hart, et al Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	119A/347 183A/305
<u>873995</u>	Kenneth Starkey Stone Energy Corporation	Stone Energy Corporation EQT Production Company	**	139A/826 183A/305

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

\*\* Per West Virginia Code Section 22-6-8.

WW-6A1 (Attachment)

Operator's Well Number: Erlewine #10H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6, Section 8(d)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Map/Parcel	Code
Ronald Carney, et ux	Stone Energy Corporation	1/8	123A/459	12-6-46	A
Ralph Douglas Huff, et ux	Stone Energy Corporation	1/8	123A/461	12-6-46	A
Nita L. Adkins, et vir	Stone Energy Corporation	1/8	123A/463	12-6-46	A
Judy Donato	Stone Energy Corporation	1/8	123A/467	12-6-46	A
Charlene Wade, et vir	Stone Energy Corporation	1/8	123A/471	12-6-46	A
Doreen Judge	Stone Energy Corporation	1/8	123A/473	12-6-46	A
Gerald Judge	Stone Energy Corporation	1/8	123A/475	12-6-46	A
Chesapeake	Stone Energy Corporation	1/8	350/1	12-6-46	A
Joyce Ellen Weltz	Stone Energy Corporation	1/8	123A/465	12-6-46	A
Shiben	Stone Energy Corporation	1/8	294/442	12-6-47	B
Chesapeake	Stone Energy Corporation	1/8	112A/22	12-6-47	B
Seigler Family Trust	Stone Energy Corporation	1/8	57/324	12-6-47	B
Mary Bllouz	Stone Energy Corporation	1/8	341/25	12-6-47	B
Deborah Rein	Stone Energy Corporation	1/8	57/324	12-6-47	B
Rosalyn Metzeger	Stone Energy Corporation	1/8	57/324	12-6-47	B
Shiben	Stone Energy Corporation	1/8	294/442	12-7-34	C
Chesapeake	Stone Energy Corporation	1/8	112A/22	12-7-34	C
Seigler Family Trust	Stone Energy Corporation	1/8	57/324	12-7-34	C
Mary Bllouz	Stone Energy Corporation	1/8	341/25	12-7-34	C
Deborah Rein	Stone Energy Corporation	1/8	57/324	12-7-34	C
Rosalyn Metzeger	Stone Energy Corporation	1/8	57/324	12-7-34	C
Pamela Burlingame	Stone Energy Corporation	1/8	126A/341	12-7-37	D
Mary J. Burton	Stone Energy Corporation	1/8	126A/335	12-7-37	D
Naoma Jones	Stone Energy Corporation	1/8	126A/337	12-7-37	D
Linda Roberts	Stone Energy Corporation	1/8	126A/339	12-7-37	D
Shiben	Stone Energy Corporation	1/8	294/442	12-12-1	E
Chesapeake	Stone Energy Corporation	1/8	112A/22	12-12-1	E
Seigler Family Trust	Stone Energy Corporation	1/8	57/324	12-12-1	E
Mary Bllouz	Stone Energy Corporation	1/8	341/25	12-12-1	E
Deborah Rein	Stone Energy Corporation	1/8	57/324	12-12-1	E
Rosalyn Metzeger	Stone Energy Corporation	1/8	57/324	12-12-1	E
Wanda R. Springston	Stone Energy Corporation	1/8	119A/353	12-12-27.1	G
Joyce Meeden	Stone Energy Corporation	1/8	122A/853	12-12-27.1	G
Marilyn S. Hart	Stone Energy Corporation	1/8	119A/347	12-12-27.1	G
Janet Lea Reeves	Stone Energy Corporation	1/8	119A/349	12-12-27.1	G
Beverly Kay Campbell	Stone Energy Corporation	1/8	119A/351	12-12-27.1	G
BRC App Minerals	Stone Energy Corporation	1/8	102A/505	12-12-27.1	G

OCT - 9 2018

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:

Well Operator Stone Energy Corporation

By   
Title Land Coordinator

WV Department of Environmental Protection

RECEIVED  
Office of Oil and Gas  
OCT 2 2018  
WV DEPT OF ENVIRONMENTAL PROTECTION



WW-6A1 (Attachment)

Operator's Well Number: Erlewine #10

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6, Section 8(d)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Map/Parcel	Code
Chesapeake App.	Stone Energy Corporation	1/8	136A/209	12-12-28	H
Ruth Blake	Stone Energy Corporation	1/8	139A/788	12-12-28	H
Kenneth Franklin Blake	Stone Energy Corporation	1/8	139A/520	12-12-28	H
Nora V Blake	Stone Energy Corporation	1/8	139A/824	12-12-28	H
Love L Postlethwait	Stone Energy Corporation	1/8	139A/625	12-12-28	H
Rosetta B Hassig	Stone Energy Corporation	1/8	139A/844	12-12-28	H
Lena J Morris	Stone Energy Corporation	1/8	139A/323	12-12-28	H
Faith Ileen Blake	Stone Energy Corporation	1/8	139A/790	12-12-28	H
Kenneth Starkey	Stone Energy Corporation	1/8	139A/826	12-12-28	H
Fred Henry et ux	Stone Energy Corporation	1/8	132A/392	12-11-12	F
Bayer Materials Science LLC	Stone Energy Corporation	1/8	127A/713	12-11-12	F
Ralph Douglas Huff	Stone Energy Corporation	1/8	139A/892	12-11-12	F
Joyce Ellen Weltz	Stone Energy Corporation	1/8	123A/465	12-11-12	F
Brian R. Hoskins	Stone Energy Corporation	1/8	139A/602	12-11-12	F
Richard Highland Smith	Stone Energy Corporation	1/8	135A/409	12-11-12	F
Dwight Stanley Smith	Stone Energy Corporation	1/8	135A/425	12-11-12	F
Alan Lee Smith	Stone Energy Corporation	1/8	137A/206	12-11-12	F
Judith A Krueger	Stone Energy Corporation	1/8	306/347	12-11-12	F
Alberta Nichols	Stone Energy Corporation	1/8	137A/212	12-11-12	F
Florence E Straub	Stone Energy Corporation	1/8	135A/393	12-11-12	F
Gladys V. Anthony	Stone Energy Corporation	1/8	137A/214	12-11-12	F
Emma J Rufener	Stone Energy Corporation	1/8	137A/374	12-11-12	F
Dale J Huggins	Stone Energy Corporation	1/8	137A/216	12-11-12	F
Rhonda Lynn White	Stone Energy Corporation	1/8	137A/218	12-11-12	F
Mark Scott Hoskins	Stone Energy Corporation	1/8	137A/220	12-11-12	F
Gladys Rine	Stone Energy Corporation	1/8	137A/226	12-11-12	F
Pearl Keller	Stone Energy Corporation	1/8	137A/228	12-11-12	F
Homer Jessie Smith	Stone Energy Corporation	1/8	20/340	12-11-12	F
Craig M Hoskins	Stone Energy Corporation	1/8	137A/222	12-11-12	F

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:

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

Well Operator Stone Energy Corporation

By   
 Title Land Coordinator

Office of Oil and Gas  
 OCT 10 2018  
 WV Department of Environmental Protection



01/04/2019

September 26, 2018

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

Re: Erlewine well pad, well numbers Erlewine 8H and Erlewine 10H  
Proctor District, Wetzel County

Dear Mr. Brewer,

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'E. Spine'.

Erin Spine  
Regional Land Supervisor

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

01/04/2019  
4710302955

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

Date of Notice Certification: 10-2-18

API No. 47- 103 - 02955  
Operator's Well No. Erlewine 10H  
Well Pad Name: Erlewine

**Notice has been given:**

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	<u>WV</u>	UTM NAD 83	Easting:	<u>517,398</u>
County:	<u>Wetzel</u>		Northing:	<u>4,392,650</u>
District:	<u>Proctor</u>	Public Road Access:	<u>Wetzel County Route 1/2</u>	
Quadrangle:	<u>New Martinsville</u>	Generally used farm name:	<u>Richard Erlewine</u>	
Watershed:	<u>Tributary of Proctor Creek</u>			

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

<p>Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input checked="" type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or</p> <p style="padding-left: 40px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p><b>OOG OFFICE USE ONLY</b></p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
<p>RECEIVED Office of Oil and Gas OCT - 9 2018 WV Department of Environmental Protection</p>	

**Required Attachments:**


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

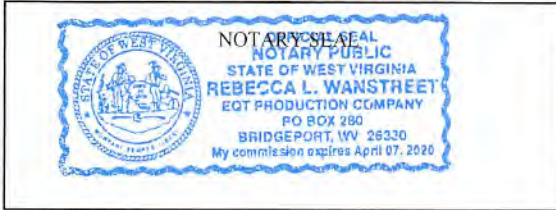
01/04/2019

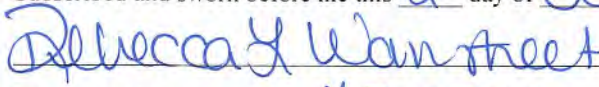
4710302955

**Certification of Notice is hereby given:**

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

Well Operator:	EQT Production Company	Address:	2400 Ansys Drive Suite 200 Canonsburg PA 15317
By:	Erin Spine 	Facsimile:	304-848-0041
Its:	Regional Land Supervisor	Email:	espine@eqt.com
Telephone:	304-848-0035		



Subscribed and sworn before me this 2 day of October 2018.  
 Notary Public  
 My Commission Expires 4-7-2020

**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](mailto:depprivacyofficer@wv.gov).

RECEIVED  
 Office of Oil and Gas  
 OCT - 9 2018  
 WV Department of  
 Environmental Protection

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

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

**Date of Notice:** 10/3/18 **Date Permit Application Filed:** 10/3/18

**Notice of:**

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

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

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

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

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

SURFACE OWNER(s)  
Name: See Attached  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: See Attached  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)  
Name: See Attached  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: See Attached  
Address: \_\_\_\_\_

COAL OPERATOR  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: See Attached  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

RECEIVED  
Office of Oil and Gas  
**OCT - 9 2018**  
WV Department of  
Environmental Protection

**Surface Owner:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

**Surface Owner Access Road:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

EQT Production Company  
625 Liberty Ave, Suite 1700  
Pittsburgh PA 15222

**Surface Owner Pits/ Impoundment/Potential AST Site** 01/04/2019

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy Leek (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

**Coal Owners:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

CNX RCPC LLC  
1000 Consol Energy Dr  
Canonsburg PA 15317

**Water Purveyors:**

N/A

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

01/04/2019

**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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018

**Well Location Restrictions**

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

WV Department of  
Environmental Protection

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 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

RECEIVED  
Office of Oil and Gas  
10/17 - 9 2018  
WV Department of  
Environmental Protection

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



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

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

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

**Comment Requirements**

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

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

**Permit Denial or Condition**

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

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

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

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

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

WW-6A  
(8-13)

API NO. 47- 103 - 02955  
OPERATOR WELL NO. Erlewine 104 **01/04/2019**  
Well Pad Name: Erlewine

**Notice is hereby given by:**

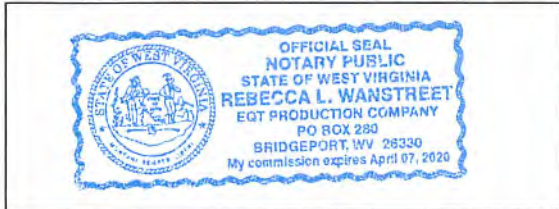
Well Operator: EQT Production Company  
Telephone: 304-848-0035  
Email: espine@eqt.com



Address: 2400 Ansys Drive Suite 200 Canonsburg PA 15317  
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](mailto:depprivacyofficer@wv.gov).



Subscribed and sworn before me this 2 day of October 2018.  
Rebecca L. Wanstreet Notary Public  
My Commission Expires 4-7-2020

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

01/04/2019

Topo Quad: NEW MARTINSVILLE, WV - OHIO 7.5'

Scale: 1" = 1000'

County: WETZEL

Date: 19 JULY 2018

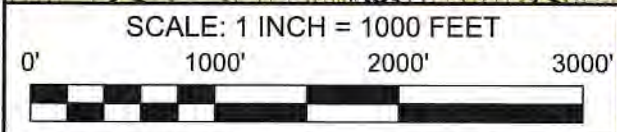
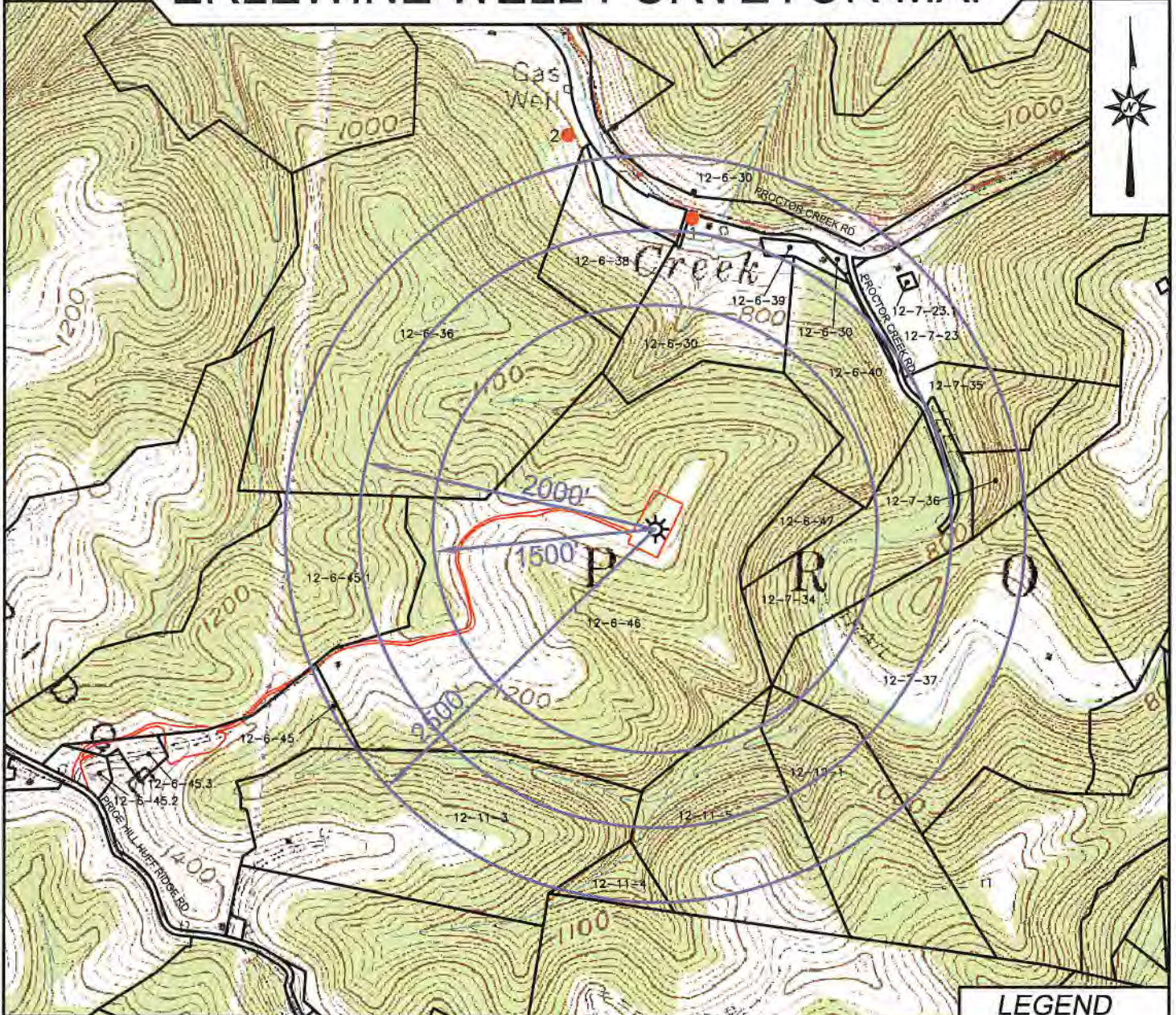
District: PROCTOR

Project No: 0493-17

Water

# ERLEWINE WELL PURVEYOR MAP

Topo



**LEGEND**

- Water Well
- Cistern/Spring
- ◆ Stream

**Blue Mountain**  
 11023 MASON DIXON HIGHWAY  
 BURTON, WV 26562  
 PHONE: (304) 662-6486

SURVEYING AND MAPPING SERVICES PERFORMED BY: \_\_\_\_\_  
 PREPARED FOR:  
**EQT Production Co. Inc.**  
 EQT Plaza  
 625 Liberty Ave, Suite 1700  
 Pittsburgh, PA 15222

ACT - 9 2018  
 WV Department of Environmental Protection

Office of Oil and Gas

**Surface Owner:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

**Surface Owner Access Road:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

EQT Production Company  
625 Liberty Ave, Suite 1700  
Pittsburgh PA 15222

**Surface Owner Pits/ Impoundment/Potential AST Site**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy Leek (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

**Coal Owners:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

CNX RCPC LLC  
1000 Consol Energy Dr  
Canonsburg PA 15317

**Water Purveyors:**

N/A

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

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

**Instructions to Persons Named on Page WW-6A**

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

**Comment and Waiver Provisions**

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

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

**VOLUNTARY STATEMENT OF NO OBJECTION**

I, EQT Production Company, hereby state that I have read the Instructions to Persons Named on Page WW-6A and the associated provisions listed above, and that I have received copies of a Notice of Application, an Application for a Well Work Permit on Form WW-6A and attachments consisting of pages one (1) through \_\_\_\_\_, including the erosion and sediment control plan, if required, and the well plat, all for proposed well work on the tract of land as follows:

State: <u>WV</u>	UTM NAD 83 Easting: <u>517,398</u>
County: <u>Wetzel</u>	Northing: <u>4,392,650</u>
District: <u>Proctor</u>	Public Road Access: <u>Wetzel County Route 1/2</u>
Quadrangle: <u>New Martinsville</u>	Generally used farm name: <u>Richard Erlewine</u>
Watershed: <u>Tributary of Proctor Creek</u>	

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued on those materials.

- \*Please check the box that applies
- SURFACE OWNER
  - SURFACE OWNER (Road and/or Other Disturbance)
  - SURFACE OWNER (Impoundments/Pits)
  - COAL OWNER OR LESSEE
  - COAL OPERATOR
  - WATER PURVEYOR
  - OPERATOR OF ANY NATURAL GAS STORAGE FIELD

**FOR EXECUTION BY A NATURAL PERSON**

Signature: \_\_\_\_\_  
 Print Name: \_\_\_\_\_  
 Date: \_\_\_\_\_

**FOR EXECUTION BY A CORPORATION, ETC.**

Company: EQT Production Company  
 By: Todd Klaner  
 Its: Regional Land Manager

Signature: [Signature]  
 Date: 10/03/2018

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of Environmental Protection

**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](mailto:depprivacyofficer@wv.gov).

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

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

**Notice Time Requirement:** Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

**Date of Notice:** 09/15/2018      **Date Permit Application Filed:** 09/25/2018

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

- HAND DELIVERY       CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: <u>See Attached</u>	Name: <u>See Attached</u>
Address: _____	Address: _____
_____	_____

**Notice is hereby given:**

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

State: <u>WV</u>	UTM NAD 83	Easting: <u>517,398</u>
County: <u>Wetzel</u>		Northing: <u>4,392,650</u>
District: <u>Proctor</u>	Public Road Access: <u>Wetzel County Route 1/2</u>	
Quadrangle: <u>New Martinsville</u>	Generally used farm name: <u>Richard Erlewine</u>	
Watershed: <u>Tributary of Proctor Creek</u>		

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/office/default.aspx](http://www.dep.wv.gov/oil-and-gas/office/default.aspx).

**Notice is hereby given by:**

Well Operator: EQT Production Company  
 Address: 2400 Ansys Drive Suite 200 Canonsburg PA 15317  
 Telephone: 304-848-0035  
 Email: espine@eqt.com  
 Facsimile: 304-848-0041

Authorized Representative: Erin Spine  
 Address: 2400 Ansys Drive Suite 200 Canonsburg PA 15317  
 Telephone: 304-848-0035  
 Email: espine@eqt.com  
 Facsimile: 304-848-0041

OCT - 9 2018

RECEIVED  
WV Department of Environmental Protection

**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](mailto:depprivacyofficer@wv.gov).

**Surface Owner:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

**Surface Owner Access Road:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

EQT Production Company  
625 Liberty Ave, Suite 1700  
Pittsburgh PA 15222

**Surface Owner Pits/ Impoundment/Potential AS 17014** 01/04/2019

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy Leek (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

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

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

**Surface Owner Waiver:**

I, EQT Production Company, hereby state that I have read the notice provisions listed above and hereby waive the notice requirements under West Virginia Code § 22-6A-16(b) for the tract of land as follows:

State:	<u>WV</u>	UTM NAD 83	Easting:	<u>517,398</u>
County:	<u>Wetzel</u>		Northing:	<u>4,392,650</u>
District:	<u>Proctor</u>	Public Road Access:	<u>Wetzel County Route 1/2</u>	
Quadrangle:	<u>New Martinsville</u>	Generally used farm-name:	<u>Richard Erlewine</u>	
Watershed:	<u>Tributary of Proctor Creek</u>			

Name: Todd Klaner, Regional Land Manager  
Address: 625 Liberty Ave Suite 1700  
Pittsburgh PA 15222

Signature: 

Date: 10/03/2018

**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](mailto:depprivacyofficer@wv.gov).



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

4710-02955

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

**Date of Notice:** 10/3/18 **Date Permit Application Filed:** 10/3/18

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

- CERTIFIED MAIL RETURN RECEIPT REQUESTED
- HAND DELIVERY

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

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

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

Name: See Attached  
Address: \_\_\_\_\_  
\_\_\_\_\_

Name: See Attached  
Address: \_\_\_\_\_  
\_\_\_\_\_

**Notice is hereby given:**

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

State:	<u>WV</u>	UTM NAD 83	Easting:	<u>517,398</u>
County:	<u>Wetzel</u>		Northing:	<u>4,392,650</u>
District:	<u>Proctor</u>	Public Road Access:	<u>Wetzel County Route 1/2</u>	
Quadrangle:	<u>New Martinsville</u>	Generally used farm name:	<u>Richard Erlewine</u>	
Watershed:	<u>Tributary of Proctor Creek</u>			

**This Notice Shall Include:**

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1) A copy of this code section; (2) The information required to be provided by **W. Va. Code § 22-6A-10(b)** to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

Well Operator: EQT Production Company  
Telephone: 304-848-0035  
Email: espine@eqt.com

Address: 2400 Ansys Drive Suite 200 Canonsburg PA 15317  
Facsimile: 304-848-0041

RECEIVED  
Office of Oil and Gas

OCT - 9 2018

WV Department of  
Environmental Protection

**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](mailto:depprivacyofficer@wv.gov).

**Surface Owner:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

**Surface Owner Access Road:**

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

EQT Production Company  
625 Liberty Ave, Suite 1700  
Pittsburgh PA 15222

**Surface Owner Pits/ Impoundment/Potential AST Site** 01/04/2019

RICHARD L ERLEWINE  
1834 PROCTOR CREEK RD  
PROCTOR WV 26055-1449

Don Arrick  
17954 Energy Road  
Proctor, WV 26055

Emily Diane Wilson  
3453 Huff Ridge Road  
New Martinsville, WV 26155

Linda Stoneking  
6139 American Ridge Road  
New Martinsville, WV 26155

Christy Leek (Leek) Wilson  
2997 Huff Ridge Road  
New Martinsville, WV 26155

Linda (Anderson) Seagrave  
2641 Huff Ridge  
New Martinsville, WV 26155

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

01/04/2019  
4710 02955



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
**Division of Highways**

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

Jim Justice  
Governor

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

September 13, 2018

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 Erlewine NMA13 Pad, Wetzel County  
Erlewine 1H Erlewine 2H Erlewine 3H Erlewine 4H Erlewine 5H  
Erlewine 6H Erlewine 7H Erlewine 8H Erlewine 9H Erlewine 10H

Dear Mr. Martin,

This well site will be accessed from an encroachment permit #06-2011-0131 transferred to EQT Production Company for access to the State Road for a well site located off of Wetzel County Route 1/2 SLS.

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

Very Truly Yours,

Handwritten signature of Gary K. Clayton in cursive.

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

Cc: Nick Bumgardner  
EQT Production Company  
CH, OM, D-6  
File

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection

**Anticipated Frac Additives**  
**Chemical Names and CAS numbers**

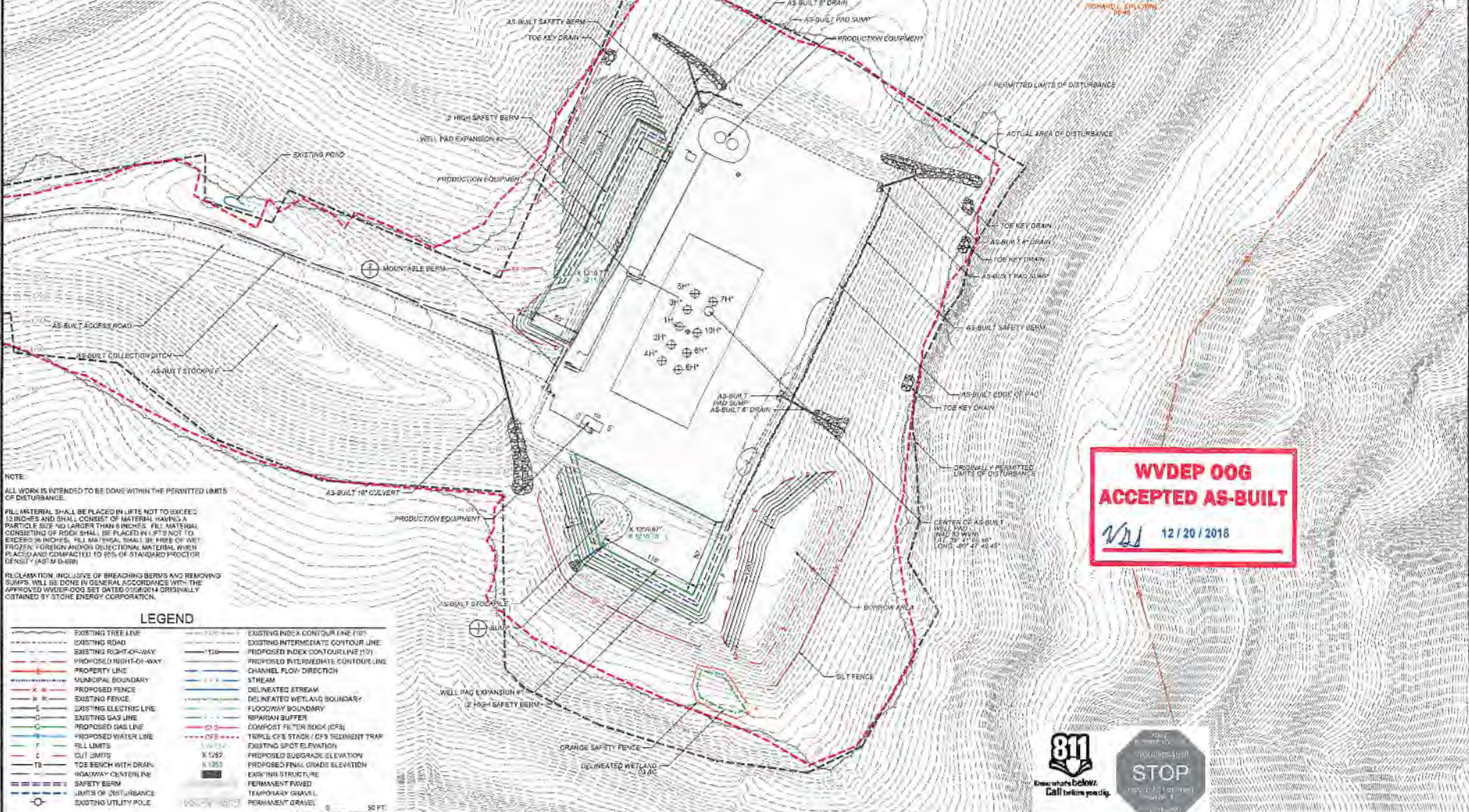
4710 01/04/2019  
‡ 02955

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

RECEIVED  
Office of Oil and Gas  
OCT - 9 2018  
WV Department of  
Environmental Protection



ERLEWINE WELL COORDINATES					
UNIVERSAL TRANSVERSE MERCATOR (UTM) Zone 17N North American Datum (NAD) 83 (CONUS 83) NPT'S			WEST VIRGINIA NORTH STATE PLAINS N. NORTH AMERICA DATUM (NAD) 83 SURVEY 99		
WELL ID	API #	NOR (M)	EASTING	NORTHING	EASTING
1	104-0250	4,302,652.17	517,202.10	433,710.38	1,003,431.87
2	104-0912	4,302,646.67	517,389.89	433,692.45	1,003,430.32
3	104-0261	4,302,657.66	517,394.76	433,728.81	1,003,446.22
4	103-0252	4,302,641.15	517,386.89	433,675.52	1,003,421.87
5	104-0290	4,302,648.19	517,397.81	433,724.25	1,003,451.01
6	104-0253	4,302,638.35	517,392.89	433,665.66	1,003,430.46
7	104-0300	4,302,649.50	517,402.92	443,737.82	1,003,475.01
8	104-0264	4,302,647.82	517,399.76	433,684.70	1,003,446.41
10	104-0266	4,302,644.06	517,393.00	433,701.83	1,003,457.81
Center of Pad		4,302,657.50	517,403.70	443,727.32	1,003,472.83



**NOTE**  
 ALL WORK IS INTENDED TO BE DONE WITHIN THE PERMITTED LIMITS OF DISTURBANCE.  
 FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 18 INCHES AND SHALL CONSIST OF MATERIAL HAVING A PARTICLE SIZE NO LARGER THAN 4 INCHES. FILL MATERIAL CONSISTING OF ROCK SHALL BE PLACED IN LIFTS NOT TO EXCEED 18 INCHES. FILL MATERIAL SHALL BE FREE OF ANY FROZEN, FOREIGN AND/OR OBSTRUCTIONAL MATERIAL WHEN PLACED AND COMPACTED TO 95% OF STANDARD PROCTOR DENSITY (ASTM D-698).  
 RECLAMATION, INCLUDING OF BREACHING BERMS AND REMOVING SUMPS, WILL BE DONE IN GENERAL ACCORDANCE WITH THE APPROVED WVDEP OOG SET DATED 05/08/14 ORIGINALLY OBTAINED BY STONE ENERGY CORPORATION.

LEGEND	
	EXISTING TREE LINE
	EXISTING ROAD
	EXISTING RIGHT-OF-WAY
	PROPOSED RIGHT-OF-WAY
	PROPERTY LINE
	MUNICIPAL BOUNDARY
	PROPOSED FENCE
	EXISTING FENCE
	EXISTING ELECTRIC LINE
	EXISTING GAS LINE
	PROPOSED GAS LINE
	PROPOSED WATER LINE
	WELL LIMITS
	CUT LIMITS
	TOE BERM WITH DRAIN
	ROADWAY CENTERLINE
	SAFETY BERM
	LIMITS OF DISTURBANCE
	EXISTING UTILITY POLE
	EXISTING INDEX CONTOUR LINE (10')
	EXISTING INTERMEDIATE CONTOUR LINE
	PROPOSED INDEX CONTOUR LINE (2')
	PROPOSED INTERMEDIATE CONTOUR LINE
	CHANNEL FLOW DIRECTION
	STREAM
	DELINEATED STREAM
	DELINEATED WETLAND BOUNDARY
	FLOODWAY BOUNDARY
	RIPIARIAN BUFFER
	COMPACT FILL TRUCK BERM (CFB)
	TRIPLE CFB STACK (CF3) SEDIMENT TRAP
	EXISTING SPOT ELEVATION
	PROPOSED SUBGRADE ELEVATION
	PROPOSED FINAL GRADE ELEVATION
	EXISTING STRUCTURE
	PERMANENT PAVED
	TEMPORARY GRAVEL
	PERMANENT GRAVEL

**WVDEP OOG  
 ACCEPTED AS-BUILT**  
*WJ* 12/20/2018



DATE	11/07/18
SCALE	AS SHOWN
DESIGNER	SEE DRAWING
DRAWN	SEE DRAWING
PROJECT NO.	16076-078
PROJECT NAME	ERLEWINE PAD SITE MODIFICATION
CLIENT	EQT PRODUCTION COMPANY
PROJECT LOCATION	ERLEWINE PAD
PROJECT ADDRESS	1000 Church Road, Suite 200, Morgantown, WV 26505
PROJECT PHONE	304.285.5000
PROJECT FAX	304.285.5001
PROJECT EMAIL	info@erlewine.com
PROJECT WEBSITE	www.erlewine.com
PROJECT CONTACT	John H. Hartzell, P.E.
PROJECT CONTACT PHONE	304.285.5000
PROJECT CONTACT FAX	304.285.5001
PROJECT CONTACT EMAIL	john.hartzell@erlewine.com
PROJECT CONTACT WEBSITE	www.erlewine.com
PROJECT CONTACT ADDRESS	1000 Church Road, Suite 200, Morgantown, WV 26505
PROJECT CONTACT CITY	Morgantown, WV
PROJECT CONTACT STATE	West Virginia
PROJECT CONTACT ZIP	26505
PROJECT CONTACT COUNTRY	USA
PROJECT CONTACT PROJECT NO.	16076-078
PROJECT CONTACT PROJECT NAME	ERLEWINE PAD SITE MODIFICATION
PROJECT CONTACT CLIENT	EQT PRODUCTION COMPANY
PROJECT CONTACT PROJECT LOCATION	ERLEWINE PAD
PROJECT CONTACT PROJECT ADDRESS	1000 Church Road, Suite 200, Morgantown, WV 26505
PROJECT CONTACT PROJECT PHONE	304.285.5000
PROJECT CONTACT PROJECT FAX	304.285.5001
PROJECT CONTACT PROJECT EMAIL	info@erlewine.com
PROJECT CONTACT PROJECT WEBSITE	www.erlewine.com
PROJECT CONTACT PROJECT CONTACT	John H. Hartzell, P.E.
PROJECT CONTACT PROJECT CONTACT PHONE	304.285.5000
PROJECT CONTACT PROJECT CONTACT FAX	304.285.5001
PROJECT CONTACT PROJECT CONTACT EMAIL	john.hartzell@erlewine.com
PROJECT CONTACT PROJECT CONTACT WEBSITE	www.erlewine.com
PROJECT CONTACT PROJECT CONTACT ADDRESS	1000 Church Road, Suite 200, Morgantown, WV 26505
PROJECT CONTACT PROJECT CONTACT CITY	Morgantown, WV
PROJECT CONTACT PROJECT CONTACT STATE	West Virginia
PROJECT CONTACT PROJECT CONTACT ZIP	26505
PROJECT CONTACT PROJECT CONTACT COUNTRY	USA