



---

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

Jim Justice , Governor  
Austin Caperton , Cabinet Secretary  
www.dep.wv.gov

Friday, April 07, 2017  
WELL WORK PERMIT  
Horizontal 6A / New Drill

EQT PRODUCTION COMPANY (A)  
120 PROFESSIONAL PLACE  
BUILDING II  
BRIDGEPORT, WV 26330

Re: Permit approval for 516540  
47-095-02403-00-00

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

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

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

James A. Martin  
Chief

Operator's Well Number: 516540  
Farm Name: PETER, DONNA J.  
U.S. WELL NUMBER: 47-095-02403-00-00  
Horizontal 6A / New Drill  
Date Issued: 4/7/2017

Promoting a healthy environment.

04/07/2017

# PERMIT CONDITIONS

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

## CONDITIONS

---

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

## PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

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

1) Well Operator: EQT Production Company

<u>306686</u>	<u>Tyler</u>	<u>Centerville</u>	<u>West Union</u>
---------------	--------------	--------------------	-------------------

  
Operator ID County District Quadrangle

2) Operator's Well Number: 516540 Well Pad Name: WEU4

3) Farm Name/Surface Owner: Donna J Peter Public Road Access: WW18

4) Elevation, current ground: 1079 Elevation, proposed post-construction: 1079

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

(b) If Gas Shallow  Deep   
Horizontal

*JPS 1/13/17* *DJH 1-3-17*

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Marcellus, 6680', 54', 2747 PSI

8) Proposed Total Vertical Depth: 6680

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 11709

11) Proposed Horizontal Leg Length: 3642

12) Approximate Fresh Water Strata Depths: 132,175,186,204

13) Method to Determine Fresh Water Depths: From offset wells

14) Approximate Saltwater Depths: 1128,1219,1222

15) Approximate Coal Seam Depths: 230,281,696

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

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: \_\_\_\_\_

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	A-500	78.6	40	40	60 ft <sup>3</sup> / CTS
Fresh Water	13 3/8	New	J-55	54.5	750	750	668 ft <sup>3</sup> / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	2865	2865	1126 ft <sup>3</sup> / CTS
Production	5 1/2	New	P-110	20	11709	11709	500' above top producing zone
Tubing	2 3/8		J-55	4.7			
Liners						May not be run, if run set 40' above top perf or 80° inclination	

DHH  
1-3-17  
SPS  
1/3/16

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	26	.375	1378	1102	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2700	2160	See Variance	1.19
Coal							
Intermediate	9 5/8	12 3/8	.395	3950	3160	Class H	1.07
Production	5 1/2	8 1/2	.361	12640	10112	Class A / H	1.123/2.098
Tubing	2 3/8	NA	.19	7700			
Liners							

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

WW-6B  
(10/14)

API NO. 47-095  
OPERATOR WELL NO. 516540  
Well Pad Name: WEU4

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

Drill and complete a new horizontal well in the Marcellus Formation. Drill the vertical to an approximate depth of 3143'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

*DWH*  
*1-3-17*

*JPS*  
*11/3/17*

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

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 250,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 250,000 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: Bow spring centralizers – One at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers– One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

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

Conductor: Class A no additives  
Surface (Type 1 Cement) 0-3% Calcium Chloride Used to speed the setting of cement slurries  
Intermediate (Class H Cement) 0-3% Calcium Chloride Used to speed the setting of cement slurries 0.25% flake Loss Circulation Material (LCM) 6% Super FL-300 (fluid loss/lengthens thickening time)  
Production  
Lead (Class A Cement) 0.2% CD-20 (dispersant makes cement easier to mix) 15% SuperFL-300 (fluid loss/lengthens thickening time) 15% SEC-10 (fluid loss) 50 50 POZ (extender)  
Tail (Class H Cement) 0.2% Super CR-1 (Retarder) Lengthens thickening time 3% Super FL-200 (fluid loss) 2% SEC-10 (fluid loss) 2% SuperFL-350 (fluid loss) Reduces amount of water lost to formation 60% Calcium Carbonate Acid solubility

25) Proposed borehole conditioning procedures:

Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.  
Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume. Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

\*Note: Attach additional sheets as needed.

45-02403

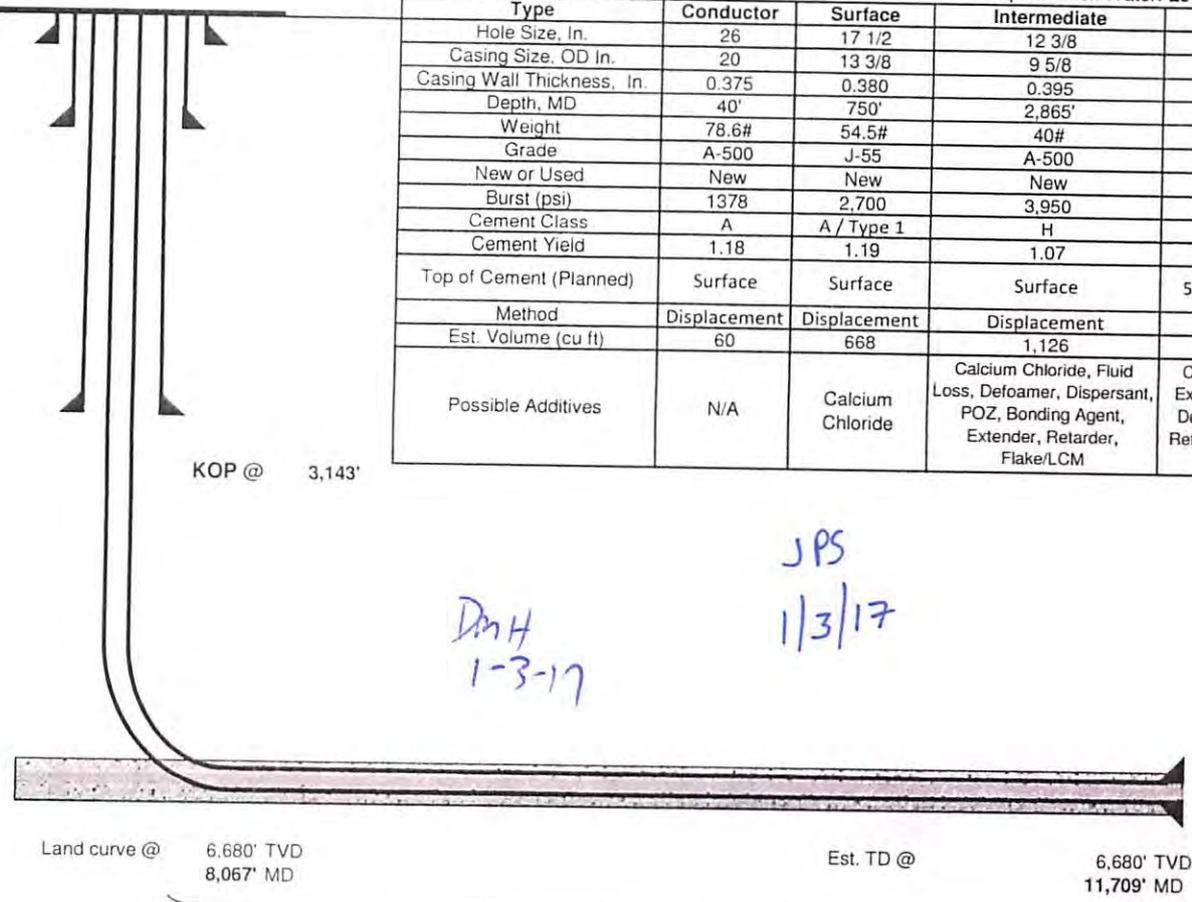
Well 516540(WEU4H13)  
 EQT Production  
 West Union Quad  
 Tyler County, WV

Azimuth 155  
 Vertical Section 5336

Note: Diagram is not to scale

Formations	Top TVD	Base TVD
Conductor	40	
Base Fresh Water	204	
Surface Casing	750	
Base Red Rock	1101	
Maxton	1838 - 2037	
Big Lime	2111 - 2395	
Weir	2403 - 2450	
Gantz	2490 - 2507	
Fifty foot	2604 - 2659	
Thirty foot	2690 - 2744	
Gordon	2770 - 2815	
Intermediate Casing	2655	
Forth Sand	2841 - 2903	
Bayard	3011 - 3148	
Warren	3374 - 3440	
Speechley	3460 - 3574	
Balltown A	3976 - 4088	
Riley	4574 - 4864	
Benson	4995 - 5058	
Alexander	5242 - 5324	
Sonyea	6328 - 6449	
Middlesex	6449 - 6496	
Genesee	6496 - 6570	
Geneseo	6570 - 6605	
Tully	6605 - 6626	
Hamilton	6626 - 6649	
Marcellus	6649 - 6702	
Production Casing	11709 MD	
Onondaga	6702	

Casing and Cementing		Deepest Fresh Water: 204'		
Type	Conductor	Surface	Intermediate	Production
Hole Size, In.	26	17 1/2	12 3/8	8 1/2
Casing Size, OD In.	20	13 3/8	9 5/8	5 1/2
Casing Wall Thickness, In.	0.375	0.380	0.395	0.361
Depth, MD	40'	750'	2,865'	11,709'
Weight	78.6#	54.5#	40#	20#
Grade	A-500	J-55	A-500	P-110
New or Used	New	New	New	New
Burst (psi)	1378	2,700	3,950	12,640
Cement Class	A	A / Type 1	H	A / H
Cement Yield	1.18	1.19	1.07	1.123 / 2.098
Top of Cement (Planned)	Surface	Surface	Surface	500' above top Producing Zone
Method	Displacement	Displacement	Displacement	Displacement
Est. Volume (cu ft)	60	668	1,126	1,880
Possible Additives	N/A	Calcium Chloride	Calcium Chloride, Fluid Loss, Defoamer, Dispersant, POZ, Bonding Agent, Extender, Retarder, Flake/LCM	Calcium Carbonate, Fluid Loss, Extender, Dispersant, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent



DMH  
 1-3-17  
 JPS  
 1/3/17

Proposed Well Work:  
 Drill and complete a new horizontal well in the Marcellus formation.  
 Drill the vertical to an approximate depth of 3143'.  
 Kick off and drill curve. Drill lateral in the Marcellus. Cement casing.

4709502403

4709502403

**EQT Production**  
**Hydraulic Fracturing Monitoring Plan**  
**Pad ID: WEU4**  
**Tyler County, WV**

**12/13/16**



## Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Tyler County, WV prior to hydraulic fracturing at the following EQT wells on WEU4 pad: 516540

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

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

### 1. Communications with Well Operators

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

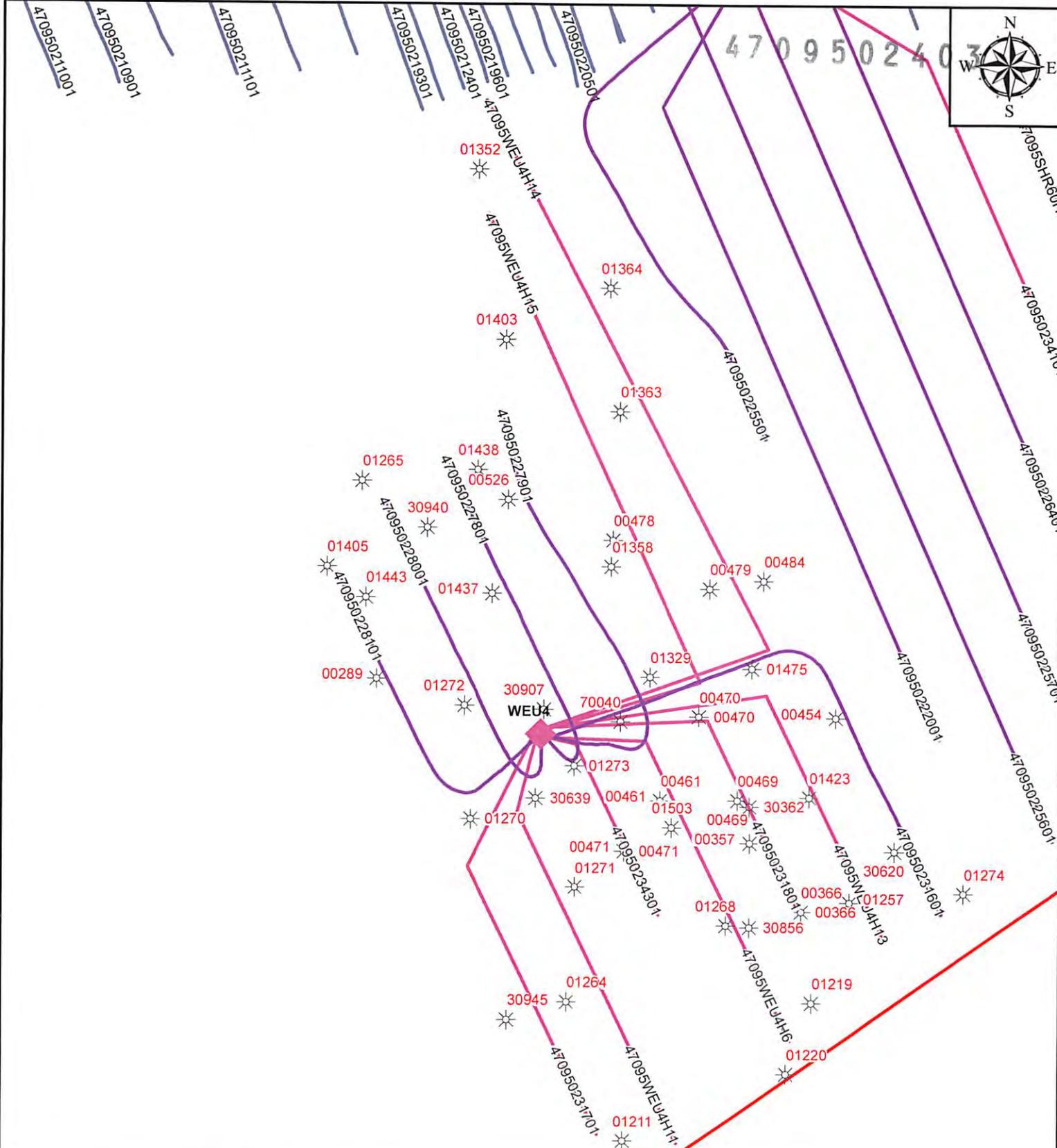
EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

EQT will recommend to these operators at a minimum to:

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

### 2. Reporting

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



**EQT** Corporation  
625 Liberty Avenue  
Pittsburgh, PA 15222

**WEU4**

Vertical Offsets and Foreign Laterals within 500'

Created By: \_\_\_\_\_ Printed By: meansR on 8/22/2016

**Legend**

- WEU4 Vertical Offsets
- Genesee Spud
- Marcellus Spud
- Middlesex Spud
- Utica Spud
- GENESIO
- MARCELLUS
- MIDDLESEX
- POINT PLEASANT
- UTICA

1,600 800 0 1,600 Feet

1:20,826

**Disclaimer:**

This map is confidential and is to be used only for the express informational purposes for which it was created. Unauthorized use, copying, or dissemination is strictly prohibited. EQT does not warrant the accuracy of the location of any items shown on this map, including, but not limited to, any structures, well or pipeline facilities, property boundaries, topography, roadways, or waterways. The items shown on the map may not have been placed on the map using survey lines or GPS coordinates. The specific location of any of the map items should be determined by a field survey performed by a licensed surveyor upon consultation with EQT.

1:1,575,004

WV  
Lewis  
Gilmer

04/07/2017

Attachment A-1

UWI	Date Abandon	COMP DATE	Operator	Elevation	Datum Type	Status	LATITUDE	LONGITUDE	PERMIT Date	PROJ FM Name	SPUD DATE	TD FORM Name	TOTAL DEPTH
4709500366		3/19/1975	EQUITABLE GAS COMPANY	914	KB	SWDOP	39.3602	-80.8087	9/9/1974	UNKNOWN	9/19/1974	MISSISSIPPIAN	1942.00
4709500471		8/26/1975	EQUITABLE GAS COMPANY	933	GR	SWDOP	39.3624	-80.8169	8/2/1974	UNKNOWN	8/12/1974	GORDON /SD/	2576.00
4709501329		12/9/1989	CONSOL GAS COMPANY	1086	KB	GAS	39.3686	-80.8158	11/7/1989	BENSON /SD/	11/17/1989	BENSON /SD/	5200.00
4709501352		12/9/1989	CONSOL GAS COMPANY	1106	KB	GAS	39.3869	-80.8238	11/15/1989	BENSON /SD/	11/25/1989	DEVONIAN /SH/	5170.00
4709501403		8/17/1990	CONSOL GAS COMPANY	1008	KB	GAS	39.3808	-80.8225	7/23/1990	BENSON /SD/	8/2/1990	DEVONIAN /SH/	5210.00
4709501405		8/1/1990	DAC ENERGY LLC	986	KB	GAS	39.3726	-80.8308	7/9/1990	BIG INJUN /SD/	7/19/1990	BEREA	2136.00
4709501423		9/7/1990	CONSOL GAS COMPANY	1166	KB	GAS	39.3643	-80.8084	8/15/1990	BENSON /SD/	8/25/1990	DEVONIAN /SD/	5225.00
4709501475		6/11/1992	CONSOL GAS COMPANY	1192	KB	GAS	39.3689	-80.8111	5/10/1992	BENSON /SD/	5/20/1992	DEVONIAN /SD/	5284.00
4709501503		12/8/1992	CONSOL GAS COMPANY	998	GR	GAS	39.3632	-80.8148	10/4/1992	BENSON /SD/	10/14/1992	DEVONIAN /SD/	5100.00
4709501437		12/11/1990	CONSOL GAS COMPANY	982	KB	GAS	39.3716	-80.8231	10/23/1990	BENSON /SD/	11/2/1990	DEVONIAN /SD/	5100.00
4709501438		1/3/1991	CONSOL GAS COMPANY	1004	KB	GAS	39.3761	-80.8238	11/29/1990	BENSON /SD/	12/9/1990	DEVONIAN /SD/	5100.00
4709501443		1/2/1991	CONSOL GAS COMPANY	1054	KB	GAS	39.3715	-80.8290	11/22/1990	BENSON /SD/	12/2/1990	DEVONIAN /SD/	5150.00
4709500461		9/21/1973	EQUITABLE GAS COMPANY	919	GR	SWDOP	39.3642	-80.8153	8/10/1973	UNKNOWN	8/20/1973	DEVONIAN /SD/	2556.00
4709530940	7/5/1966		HOPE NATURAL GAS	0	GR	PSEUDO	39.3740	-80.8261					
4709570040			CARTER OIL COMPANY	0	GR	PSEUDO	39.3670	-80.8171					
4709500469		1/17/1975	EQUITABLE GAS COMPANY	999	GR	SWDOP	39.3642	-80.8117	6/2/1974	UNKNOWN	6/12/1974	DEVONIAN /SD/	2659.00
4709500357	10/23/1974	9/1/1962	LENNOX OIL & GAS	947	GR	ABD-GW	39.3627	-80.8112	7/18/1962		8/2/1962	POCONO	2010.00
4709500366		1/1/1963	LENNOX OIL & GAS	886	GR	D&A-OG	39.3602	-80.8087	11/17/1962		12/2/1962	BIG INJUN /SD/	1942.00
4709500454	10/28/1949	6/27/1913	HOPE NATURAL GAS	1007	GR	ABD-GW	39.3672	-80.8072	5/1/1913		5/16/1913	HURON LOWER	2886.00
4709500471	5/17/1950	7/30/1910	HOPE NATURAL GAS	933	GR	ABD-GW	39.3624	-80.8169	6/14/1910		6/29/1910	HURON LOWER	3026.00
4709530362	9/2/1944	12/6/1910	HOPE NATURAL GAS	1022	GR	ABD-GW	39.3640	-80.8112	10/10/1910		10/25/1910	HURON LOWER	2661.00
4709530620	4/27/1950	3/10/1911	HOPE NATURAL GAS	905	GR	ABD-GW	39.3624	-80.8044	12/28/1910		1/12/1911	GORDON	2565.00
4709530639	6/14/1950	8/12/1911	HOPE NATURAL GAS	956	GR	ABD-GW	39.3643	-80.8211	6/2/1911		6/17/1911	POCONO	1999.00
4709530856	5/19/1955	6/20/1911	HOPE NATURAL GAS	968	GR	ABD-GW	39.3596	-80.8112	5/4/1911		5/19/1911	POCONO	2091.00
4709500289	10/24/1962	6/18/1960	STONESTREET LANDS	830	GR	ABDOGWN	39.3686	-80.8285	5/10/1960		5/25/1960	BIG INJUN /SD/	1908.00
4709530945	12/7/1968	5/21/1914	CONSOLIDATED GAS SUPPLY CORPORATION	0	GR	UNKWN	39.3563	-80.8224	4/6/1914		4/21/1914		
4709530907	11/8/1959	2/16/1902	HOPE NATURAL GAS	0	GR	UNKWN	39.3675	-80.8207	1/2/1902		1/17/1902		
4709501358		1/25/1990	CONSOL GAS COMPANY	1034	KB	GAS	39.3726	-80.8176	12/20/1989	BENSON /SD/	12/30/1989	DEVONIAN /SD/	5100.00
4709501363		1/30/1990	CONSOL GAS COMPANY	1107	KB	GAS	39.3782	-80.8172	12/30/1989	BENSON /SD/	1/9/1990	DEVONIAN /SD/	5190.00
4709501364		9/26/1990	CONSOL GAS COMPANY	1065	KB	GAS	39.3826	-80.8177	9/1/1990	BENSON /SD/	9/11/1990	DEVONIAN /SD/	5200.00
4709500470		8/28/1974	EQUITABLE GAS COMPANY	1027	GR	GSTGW	39.3672	-80.8135	3/24/1974	BIG INJUN /SD/	4/3/1974	GORDON	2657.00
4709501265		11/8/1988	CONSOL GAS COMPANY	993	KB	GAS	39.3757	-80.8292	10/15/1988	BENSON /SD/	10/25/1988	DEVONIAN /SD/	4992.00
4709501268		2/26/1989	CONSOL GAS COMPANY	1020	KB	GAS	39.3597	-80.8122	2/3/1989	BENSON /SD/	2/13/1989	DEVONIAN /SD/	5100.00
4709501270		2/23/1989	CONSOL GAS COMPANY	1072	KB	GAS	39.3635	-80.8241	1/29/1989	BENSON /SD/	2/8/1989	DEVONIAN /SD/	5200.00
4709501271		2/11/1989	CONSOL GAS COMPANY	953	KB	GAS	39.3611	-80.8192	1/17/1989	BENSON /SD/	1/27/1989	DEVONIAN /SD/	5102.00
4709501272		2/2/1989	CONSOL GAS COMPANY	1024	KB	GAS	39.3676	-80.8244	1/10/1989	BENSON /SD/	1/20/1989	DEVONIAN /SD/	5200.00
4709501273		2/17/1989	CONSOL GAS COMPANY	1130	KB	GAS	39.3654	-80.8193	1/23/1989	BENSON /SD/	2/2/1989	DEVONIAN /SD/	5300.00
4709501274		2/1/1991	CONSOL GAS COMPANY	1038	KB	GAS	39.3609	-80.8012	12/24/1990	BENSON /SD/	1/3/1991	DEVONIAN /SD/	5100.00
4709501211		10/10/1987	CONSOL GAS COMPANY	970	KB	GAS	39.3519	-80.8170	9/16/1987	BENSON /SD/	9/26/1987	DEVONIAN /SH/	5150.00
4709501219		12/14/1987	CONSOL GAS COMPANY	937	KB	GAS	39.3569	-80.8082	11/15/1987	BENSON /SD/	11/25/1987	DEVONIAN /SH/	5020.00
4709501220		1/7/1988	CONSOL GAS COMPANY	827	KB	GAS	39.3543	-80.8094	12/18/1987	BENSON /SD/	12/28/1987	DEVONIAN /SH/	4916.00
4709501257		10/24/1988	CONSOL GAS COMPANY	1030	KB	2GAS	39.3605	-80.8065	10/8/1988	BENSON /SD/	10/18/1988	DEVONIAN /SD/	5150.00
4709501264		11/15/1988	CONSOL GAS COMPANY	936	KB	GAS	39.3569	-80.8196	10/22/1988	BENSON /SD/	11/1/1988	DEVONIAN /SD/	5022.00
4709500478		9/1/1976	EQUITABLE GAS COMPANY	1049	GR	GAS	39.3736	-80.8175	7/18/1976		8/2/1976	BIG INJUN /SD/	2126.00
4709500479		7/1/1977	EQUITABLE GAS COMPANY	1010	GR	GSTG	39.3718	-80.8130	5/17/1977		6/1/1977	GANTZ /SD/	2417.00
4709500484		7/20/1977	EQUITABLE GAS COMPANY	1137	GR	GSTG	39.3721	-80.8105	6/12/1977		6/27/1977	GORDON	2450.00
4709500526		4/23/1980	EQUITABLE GAS COMPANY	1045	GR	GSTG	39.3750	-80.8224	8/2/1979		8/17/1979	POCONO	2170.00
4709500461			UNKNOWN	822	GR	PSEUDO	39.3642	-80.8153					
4709500469			UNKNOWN	999	GR	PSEUDO	39.3642	-80.8117					
4709500470			UNKNOWN	1027	GR	PSEUDO	39.3672	-80.8135					

4709502403

A Hackmont-A-2



95-02403

12/16

January 10, 2017

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

-  
-Re: Inspector sign off 47-09502403

Dear Mr. Smith,

Enclosed is the inspector sign off for the above API number. The cover sheet to the SSP was missing in the inspector sign off and he signed the table of contents in its place.

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark', written in a cursive style.

Vicki Roark  
Permitting Supervisor-WV

Enc.



west virginia department of environmental protection

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

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

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

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

**REPORT OF THE OFFICE**

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

**FINDINGS OF FACT**

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

Promoting a healthy environment.

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

**CONCLUSIONS OF LAW**

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

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

**ORDER**

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA

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



James Martin, Chief  
Office of Oil and Gas

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection

04/07/2017



---

west virginia department of environmental protection

---

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

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

March 18, 2014

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

Re: Cement Variance Request

Dear Sir or Madam,

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

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

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

Sincerely,

James Peterson  
Environmental Resources Specialist / Permitting

Promoting a healthy environment.

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of Environmental Protection  
04/07/2017



4709502403

November 15, 2016

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

Re: Casing plan on Wells (WEU4)

Dear Mr. Smith,

EQT is requesting the 13 3/8" surface casing to be set at 750' KB, 50' below the workable coal at 700' KB. We will set the 9-5/8" intermediate string at 2865' KB, 50' below the base of the Gordon formation.

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

Sincerely,

Vicki Roark  
Permitting Supervisor-WV

JRS  
11/3/17

DMH  
1-3-17

Enc.



WW-9  
(2/15)

API Number 47 - 095 - \_\_\_\_\_  
Operator's Well No. 516540 \_\_\_\_\_

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 Camp Mistake Run Quadrangle West Union

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: Flowback Water and Residual Solids

Will a synthetic liner be used in the pit? Yes  No  If so, what ml.? 60

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 \_\_\_\_\_)

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.

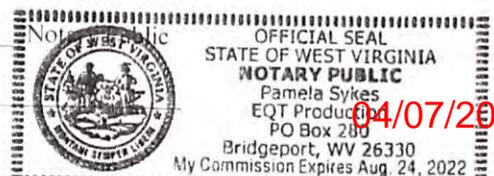
Company Official Signature *Victoria J. Roark*

Company Official (Typed Name) Victoria J. Roark

Company Official Title Permitting Supervisor

Subscribed and sworn before me this 13 day of Dec, 2016

My commission expires 8-24-22



*JPS  
1/3/17*

*DH  
1-3-17*

04/07/2017

EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed no additional Prevegetation pH 6.1

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
KY-31	40	Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		

Attach:

Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided)

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:

Comments:

Title: Oil + Gas Inspector

Date: 1-3-17

Field Reviewed? (  ) Yes (  ) No

# TABLE OF CONTENTS

<i>Section</i>	<i>Description</i>	<i>Pages</i>
I	Contacts, Schedules & Meetings	3-6
II	Maps & Diagrams	7-10
III	Well Work: Marcellus Region	11-13
	Well Work: Utica Region	13-14
IV	Chemical Inventory & SDS	15
V	BOP & Well Control for Marcellus and Utica Regions	16-20
VI	Hydrogen Sulfide	21-22
VII	Flaring	23
XIII	Collision Avoidance	24-26
IX	Deep Well Additional Requirements	27-29
X	Well Site Safety Plan Receipt Acknowledgement	30

DM#  
1-3-11

JPS  
1/3/17

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

<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  
1-3-17

JPS  
1/3/17

WW-9

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  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

# EQT Production Water plan Offsite disposals for Marcellus wells

**CWS TRUCKING INC.**

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

**LAD LIQUID ASSETS DISPOSAL INC.**

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

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

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

**Waste Management - Meadowfill Landfill**

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

**Waste Management - Northwestern Landfill**

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

**BROAD STREET ENERGY LL**

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

**TRIAD ENERGY**

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

**KING EXCAVATING CO.**

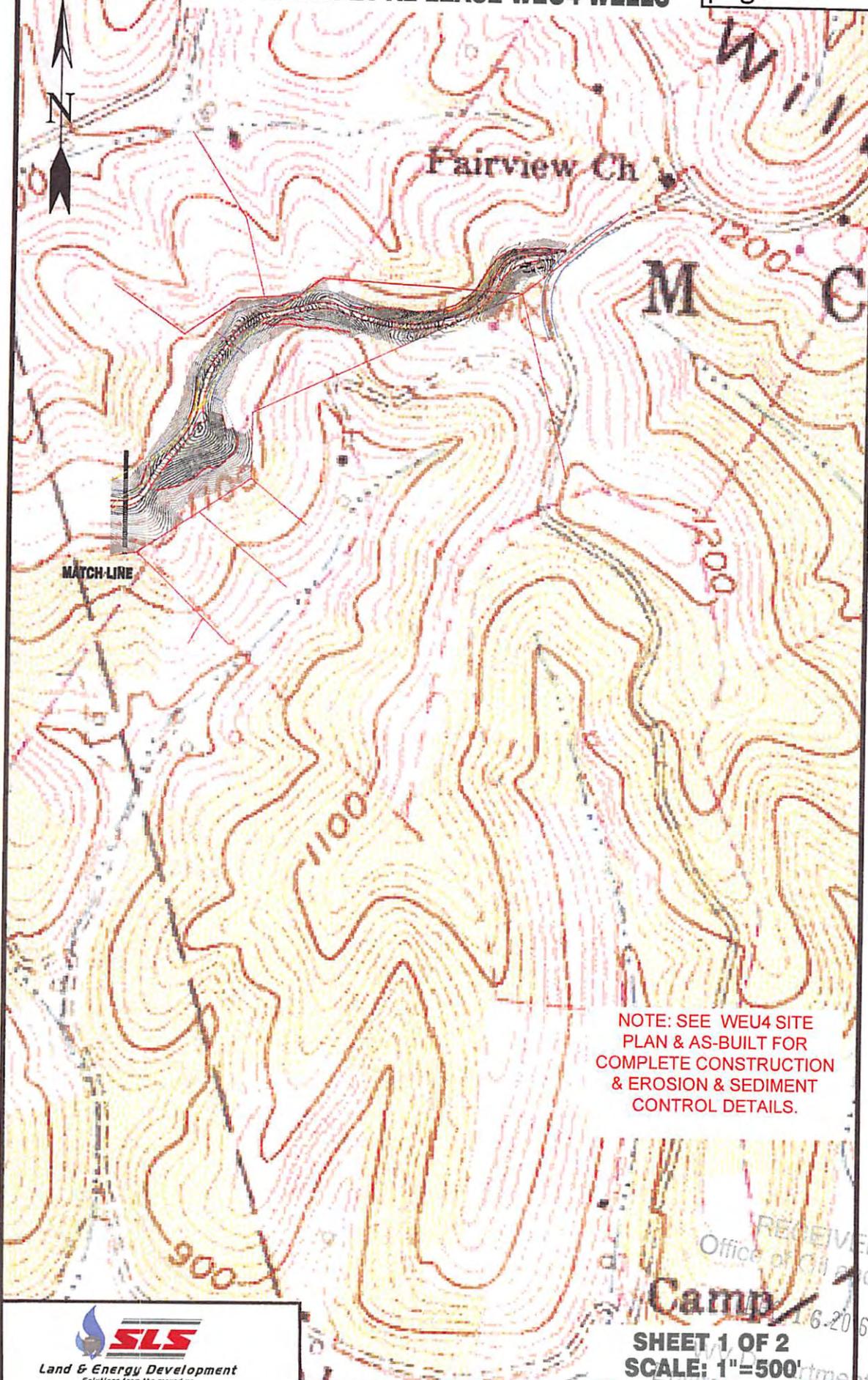
Advanced Waste Services  
101 River Park Drive  
New Castle, Pa. 16101  
Facility Permit# PAR000029132

RECEIVED  
Office of Oil and Gas

DEC 16 2016

WV Department of  
Environmental Protection  
04/07/2017

95-02403



NOTE: SEE WEU4 SITE  
 PLAN & AS-BUILT FOR  
 COMPLETE CONSTRUCTION  
 & EROSION & SEDIMENT  
 CONTROL DETAILS.

RECEIVED  
 Office of Oil and Gas  
 6-20-16

SHEET 1 OF 2  
 SCALE: 1"=500'



**SLS**  
 Land & Energy Development  
 Solutions from the ground up  
 P.O. Box 150 • 12 Vanhook Drive • Clarksburg, WV 26301 • (304) 462-9034  
 www.slsenergy.com

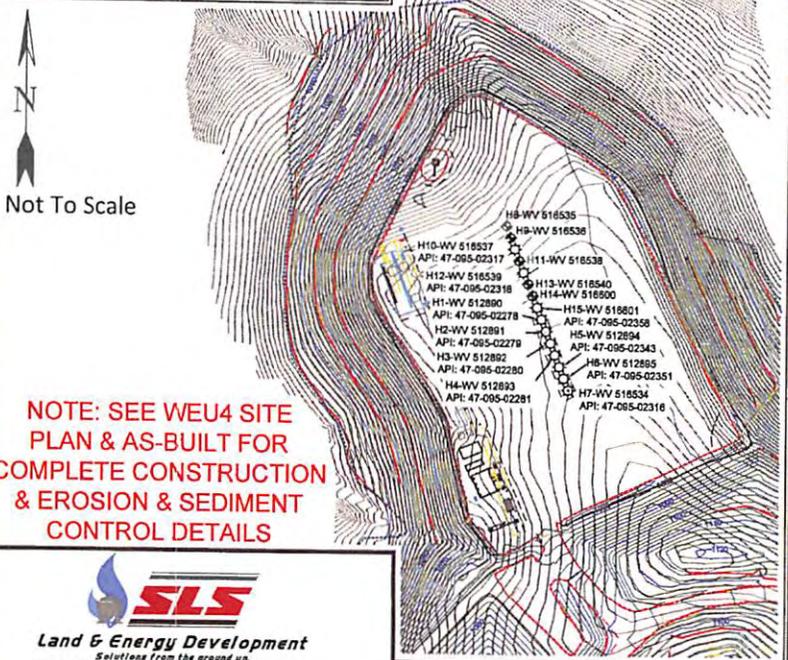
DRAWN BY K.D.W.	FILE NO. 7701	DATE 12-07-16	CADD FILE: 7701RECLANR1.dwg
--------------------	------------------	------------------	--------------------------------

TOPO SECTIONS OF WEST UNION  
 7.5' TOPO QUADRANGLE

04/07/2017



Detail Sketch for Proposed WEU4 Wells



NOTE: SEE WEU4 SITE PLAN & AS-BUILT FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

NOTE: SEE WEU4 SITE PLAN & AS-BUILT FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS



SHEET 2 OF 2  
SCALE: 1"=500'



DRAWN BY K.D.W.	FILE NO. 7701	DATE 12-07-16	CADD FILE: 7701REPLANR3.dwg
--------------------	------------------	------------------	--------------------------------

TOPO SECTIONS OF WEST UNION  
7.5' TOPO QUADRANGLE





# Site Specific Safety Plan

EQT WEU 4 Pad

Alma  
Tyler County, WV

For Wells:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date Prepared:

February 3, 2016

EQT Production

WV Oil and Gas Inspector

Title

Title

Date

Date

*[Handwritten Signature]*  
Permitting Supervisor  
12-13-16

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

**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				

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

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

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

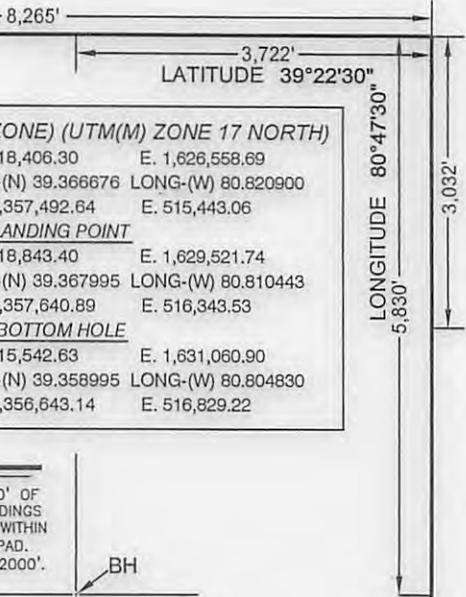
The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity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

Well Operator: EQT Production Company  
 By: Victoria Roark  
 Its: Permitting Supervisor

*Victoria Roark*  
 RECEIVED  
 Office of Oil and Gas

**WEU4**  
**WV 516540**  
**EQT PRODUCTION COMPANY**

(S.P.C. WV NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'27 S.P.C.(FT) N. 318,406.30 E. 1,626,558.69  
 NAD'27 GEO. LAT-(N) 39.366676 LONG-(W) 80.820900  
 NAD'83 UTM (M) N. 4,357,492.64 E. 515,443.06  
**LANDING POINT**  
 NAD'27 S.P.C.(FT) N. 318,843.40 E. 1,629,521.74  
 NAD'27 GEO. LAT-(N) 39.367995 LONG-(W) 80.810443  
 NAD'83 UTM (M) N. 4,357,640.89 E. 516,343.53  
**BOTTOM HOLE**  
 NAD'27 S.P.C.(FT) N. 315,542.63 E. 1,631,060.90  
 NAD'27 GEO. LAT-(N) 39.358995 LONG-(W) 80.804830  
 NAD'83 UTM (M) N. 4,356,643.14 E. 516,829.22



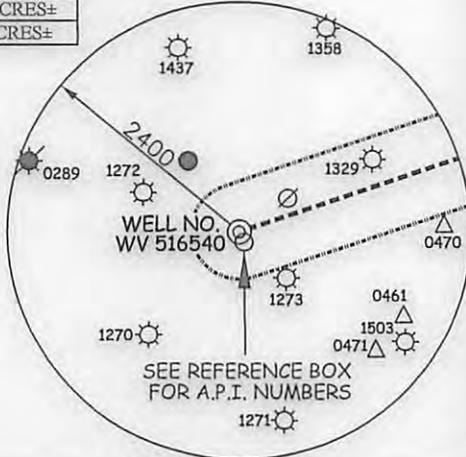
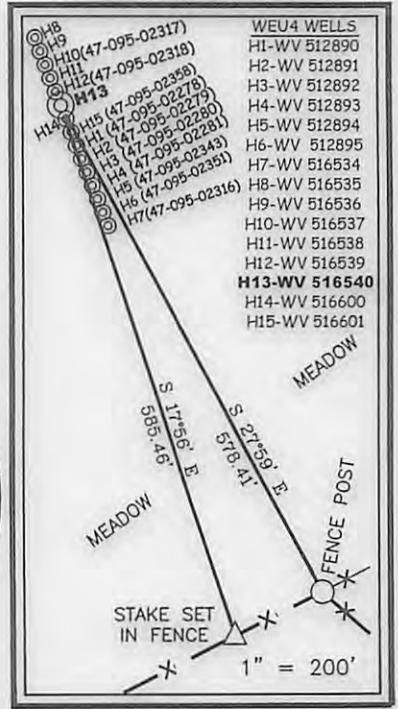
TYLER COUNTY		
TM-C-16-10	ELIZABETH ABRUZZINO	109.94 ACRES±
TM-C-16-14	CONRAD COSTILOW	46.17 ACRES±
TM-C-16-16	JEFFERY & ANITA HOOVER	24.84 ACRES±
TM-C-16-17	RICHARD & YVONNE METCALF	61.57 ACRES±
TM-C-16-22	DONNA PETER	113.4 ACRES±
TM-C-16-23	CHRIS BAUM ET AL	56.84 ACRES±
TM-C-16-24	LEONA LORKOVICH ET AL	45.89 ACRES±
TM-C-16-24.2	STONEWALL GAS COMPANY	2 ACRES±
TM-C-16-27	PAUL WEEKLEY (LIFE)	18 ACRES±
TM-C-16-28	PAUL WEEKLEY (LIFE)	5 ACRES±
TM-C-16-29	PAUL WEEKLEY (LIFE)	3.37 ACRES±
TM-C-18-02	KENDRA WYKE ET AL	9.5 ACRES±
TM-C-18-03	ANZANETTA DRAIN HRS	46.88 ACRES±
TM-M-21-25	GARY DAVENPORT	16 ACRES±
TM-M-21-28	BRUCE & SANDRA STONEKING	69.44 ACRES±
TM-M-21-29	BRUCE & SANDRA STONEKING	42.86 ACRES±
TM-M-21-32	ASIA CUMBERLEDGE	75.75 ACRES±
TM-M-21-34	BRUCE BOLAND	35.43 ACRES±
TM-M-21-35	UDORA KEYS	60.6 ACRES±
TM-M-21-36	THOMAS & RICHARD MARTIN	28.99 ACRES±
TM-M-21-37	CARL PERKINS FAMILY TRUST	50.25 ACRES±
TM-M-21-38	EDWARD II & CAROLYN WHITE	40 ACRES±
TM-M-21-39	EDWARD II & CAROLYN WHITE	12.5 ACRES±
TM-M-21-40	EDWARD II & CAROLYN WHITE	16 ACRES±
TM-M-21-41	BRYAN PRATT	23 ACRES±
TM-M-23-02	RICHARD & LISA HENDRICKSON	44.68 ACRES±
TM-M-23-3.1	JAMES & KATHRYN McNULTY	50.18 ACRES±
TM-M-23-07	MYRON & BETTY WHITE	15.15 ACRES±
DODDRIDGE COUNTY		
TM-WU-01-01	MYRON & BETTY WHITE	14.88 ACRES±
TM-WU-01-08	KENDRA (COTTRILL) WYKE	0.5 ACRES±
TM-WU-01-10	JUDITH BAGLEY	10.09 ACRES±
TM-WU-01-10.1	JASON & JENNIFER BAGLEY	1.42 ACRES±

**NOTES ON SURVEY**

1. NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.
2. SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

ROYALTY OWNERS		
JERRY RAY BROWN	76 AC.±	LEASE NO. 126187
ROXIE DAVIS ET AL	53 AC.±	LEASE NO. 126208
HESTER BRITTON ET AL	76 AC.±	LEASE NO. 126165
THOMAS E. & RICHARD S. MARTIN	28 AC.±	LEASE NO. 126257
FRANKLIN BUTLER ET AL	76 AC.±	LEASE NO. 126215

**REFERENCES**



**SLS**  
 Land & Energy Development  
 Solutions from the ground up.  
 P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634  
 www.slsurveys.com



I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. C. Victor Moyers  
 849

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE SEPTEMBER 3, 20 15  
 REVISED 02/26/16 & 12/07/16  
 OPERATORS WELL NO. WV 516540  
 API WELL NO. 47-095-02403 H13  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 7701P516540R2  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK)

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

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION:  
 PAD ELEVATION 1,079' WATERSHED TRIBUTARY OF CAMP MISTAKE RUN  
 DISTRICT CENTERVILLE COUNTY TYLER QUADRANGLE WEST UNION 7.5'

SURFACE OWNER DONNA J. PETER ACREAGE 113.40±  
 ROYALTY OWNER WACO OIL AND GAS INC. ET AL ACREAGE 152±  
 LEASE NO. 126129

PROPOSED WORK:  
 DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN OUT AND REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION MARCELLUS  
 ESTIMATED DEPTH 6,680'

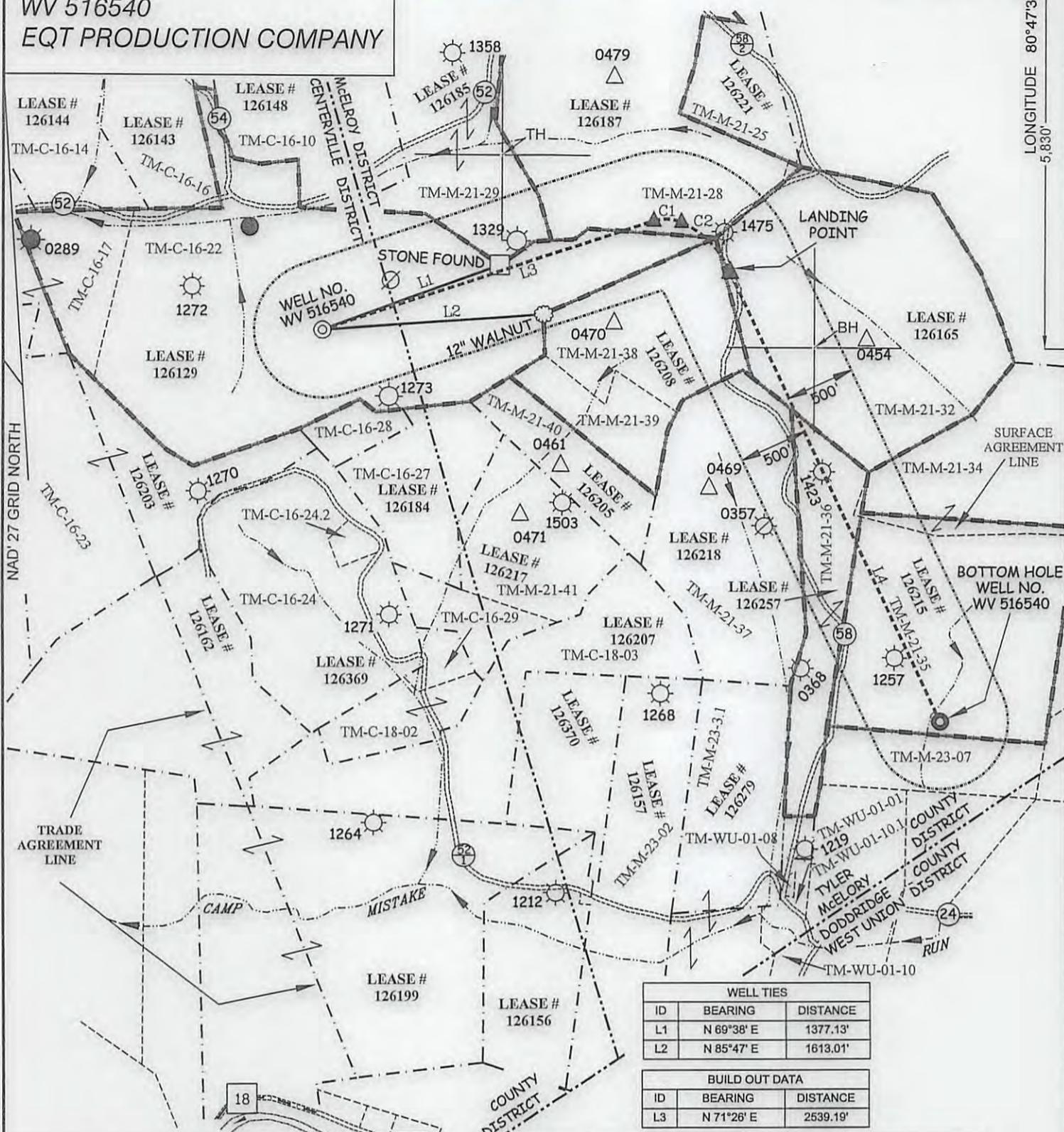
WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY  
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

04/07/2017

COUNTY NAME  
 PERMIT

**WEU4**  
**WV 516540**  
**EQT PRODUCTION COMPANY**

*West Union Quad*



WELL TIES		
ID	BEARING	DISTANCE
L1	N 69°38' E	1377.13'
L2	N 85°47' E	1613.01'

BUILD OUT DATA		
ID	BEARING	DISTANCE
L3	N 71°26' E	2539.19'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	204.80'	293.36'	S 87°32'47" E	200.67'
C2	520.53'	677.13'	S 44°25'44" E	507.81'

LATERAL		
ID	BEARING	DISTANCE
L4	S 25°00' E	3641.99'

**SLS**  
**Land & Energy Development**  
*Solutions from the ground up.*  
P.O. Box 150 • 12 Vanhorn Drive • Glenview, WV 26351 • (304) 462-5634  
www.slsurveys.com

TYLER  
CENTERVILLE  
DODDRIDGE  
WEST UNION  
COUNTY DISTRICT

(S.P.C. WV NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'27 S.P.C.(FT) N. 318,406.30 E. 1,626,558.69  
 NAD'27 GEO. LAT-(N) 39.366676 LONG-(W) 80.820900  
 NAD'83 UTM (M) N. 4,357,492.64 E. 515,443.06  
**LANDING POINT**  
 NAD'27 S.P.C.(FT) N. 318,843.40 E. 1,629,521.74  
 NAD'27 GEO. LAT-(N) 39.367995 LONG-(W) 80.810443  
 NAD'83 UTM (M) N. 4,357,640.89 E. 516,343.53  
**BOTTOM HOLE**  
 NAD'27 S.P.C.(FT) N. 315,542.63 E. 1,631,060.90  
 NAD'27 GEO. LAT-(N) 39.358995 LONG-(W) 80.804830  
 NAD'83 UTM (M) N. 4,356,643.14 E. 516,829.22



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

LEGEND	
LEASE LINE	---
SURFACE LINE	----
WELL LATERAL	----
OFFSET LINE	----
TIE LINE	----
CREEK	~~~~~
ROAD	====
FENCE LINE	-----x-----x-----x-----
COUNTY ROUTE	-----x-----x-----x-----
PROPOSED WELL	⊙
EXISTING WELL	⊙
PERMITTED WELL	⊙
ABANDONED WELL	⊙
PLUGGED WELL	⊙
STORAGE WELL	⊙
CENTERVILLE DISTRICT TAX MAP-PARCEL	C-00-00
McELROY DISTRICT TAX MAP-PARCEL	M-00-00
WEST UNION DISTRICT TAX MAP-PARCEL	WU-00-00

SCALE 1" = 1000' FILE NO. 7701P516540R2  
 DATE SEPTEMBER 3, 20 15  
 REVISED 02/26/16 & 12/07/16  
 OPERATORS WELL NO. WV 516540  
 API WELL NO. 47 — 095 — 02403H6A  
 NO. STATE COUNTY PERMIT

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

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY  
 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

COUNTY NAME  
PERMIT

04/07/2017

WW-6A1 attachment

Operator's Well No.

516540

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
<b>126129</b>	<b><u>Waco Oil &amp; Gas Co. Inc., et al (current royalty owner)</u></b>		**	
	William H. Ash, et ux, et al (original lessor)	Equitable Gas Company		LB191/321
	Equitable Gas Company	Equitrans, Inc.		DB 274/471
	Equitrans, Inc.	Equitrans, LP		DB433/777
	Equitrans, LP	EQT Production Company		DB 396/640
	Equitrans, LP	EQT Production Company		OG 440/107
<b>126187</b>	<b><u>Jerry R Brown, et al (current royalty owner)</u></b>		**	
	Addie Keys, et al (original lessor)	Equitable Gas Company		LB195/475
	Equitable Gas Company	Equitrans, Inc.		DB 274/471
	Equitrans, Inc./Equitable Gas Company/Equitable Resources, Inc.	Equitrans, L.P.		DB 433/777
	Equitrans, L.P.	EQT Production Company		DB 396/640
<b>126208</b>	<b><u>Roxie Davis, et al (current royalty owner)</u></b>		**	
	Lucy Davis, et al. (original lessor)	Equitable Gas Company		DB 197/551
	Equitable Gas Company	Equitrans, Inc.		DB 274/471
	Equitrans, Inc./Equitable Gas Company/Equitable Resources, Inc.	Equitrans, L.P.		DB 433/777
	Equitrans, L.P.	EQT Production Company		DB 396/640
<b>126165</b>	<b><u>Hester Britton, et al (current royalty owner)</u></b>		**	
	Asia Dell Cumberledge, et al (original lessor)	Equitable Gas Company		LB192/360
	Equitable Gas Company	Equitrans, Inc.		DB 274/471
	Equitrans, Inc.	Equitrans, LP		DB 433/777
	Equitrans, LP	EQT Production Company		DB 396/640
<b>126257</b>	<b><u>Thomas E &amp; Richard S Martin (current royalty owner)</u></b>		**	
	Daisy Martin and Eli B. Martin (original lessor)	M.S. Lantz		197/259
	M.S. Lantz	Columbia Gas Transmission Corp		197/225
	Columbia Gas Transmission Corp	Columbia Natural Resources, Inc		291/175
	Columbia Natural Resources, Inc	Chesapeake Appalachia, LLC		349/536
	Chesapeake Appalachia, LLC	Statoil USA Onshore Properties, Inc		363/391
	Statoil USA Onshore Properties, Inc	Antero Resource Corporation		544/291
	Antero Resources Corporation	EQT Production Company		547/702
<b>126215</b>	<b><u>Franklin Butler, et al (current royalty owner)</u></b>		**	
	Christine Hylbert, et vir (original lessor)	Equitable Gas Company		198/402
	Equitable Gas Company	Equitrans, Inc.		DB 274/471
	Equitrans, Inc./Equitable Gas Company/Equitable Resources, Inc.	Equitrans, L.P.		DB 433/777
	Equitrans, L.P.	EQT Production Company		DB 396/640

\*\*We will pay a minimum one-eighth of the total amount paid to or received by or allowed to the owner of the working interest at the wellhead for the oil or gas so extracted, produced, or marketed before deducting the amount to be paid to or set aside for the owner of the oil or gas in place, on all such oil or gas to be extracted, produced, or marketed from the well.

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017



December 13, 2016

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

Re: WEU4 well pad, well number (516540)  
Centerville District, Tyler County

Dear Mr. Martin,

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark', is written over the typed name.

Vicki Roark  
Permitting Supervisor-WV

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

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

Date of Notice Certification: 12-14-16

API No. 47- 095 - 02403  
Operator's Well No. 516540  
Well Pad Name: WEU4

**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>515,443.06</u>
County: <u>Tyler</u>		Northing: <u>4,357,492.64</u>
District: <u>Centerville</u>	Public Road Access: <u>US19</u>	
Quadrangle: <u>West Union</u>	Generally used farm name: <u>Donna J Peter</u>	
Watershed: <u>Tributary of Camp Mistake Run</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 style="text-align: center;"><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>
---	---

**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.

DEC 16 2016  
WV Department of Environmental Protection  
04/07/2017

**Certification of Notice is hereby given:**

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

Well Operator: EQT Production Company  
By: Victoria Roark  
Its: Permitting Supervisor  
Telephone: 304-848-0076

Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Facsimile: 304-848-0041  
Email: vroark@eqt.com



Subscribed and sworn before me this 13 day of Dec 2016.  
*[Signature]* Notary Public  
My Commission Expires 8-24-22

**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  
DEC 16 2016  
WV Department  
Environmental Protection  
04/07/2017





December 22, 2016

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

Re: Revision of 47-095-02403

Dear Mr. Smith,

Enclosed is an updated 6A form for the Owner of Water Wells, Water information sheet and topo, and green card. A parcel of land, in which a water well was identified, has changed owners. EQT has mailed a complete copy of the permit application to the new owner. EQT would like to submit this correction for your files.

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Vicki Roark', is written over the typed name.

Vicki Roark  
Permitting Supervisor-WV

Enc.

RECEIVED  
Office of Oil and Gas  
DEC 27 2016  
WV Department of  
Environmental Protection

4709502403

**Owners of Water Wells:**

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

L Bruce & Sandra Jean Stoneking  
RD 1 Box BB  
Elkins WV 26241

Chase E Bartrug and Reba J. Bartrug  
3163 Jefferson Run Road  
Alma, WV 26320

RECEIVED  
Office of Oil and Gas  
DEC 27 2016  
WV Department of  
Environmental Protection

04/07/2017

U.S. Postal Service™  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

7016 1970 0000 4261 4910

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total P <sub>c</sub>	\$
Sent To	
Street a	
City, St	



Chase E & Reba J. Bartrug  
3163 Jefferson Run Road  
Alma, WV 26320  
516540 permit applic

PS Form 3800, April 2015 PSN 7530-02-000-8047 See Reverse for Instructions

RECEIVED  
Office of Oil and Gas  
DEC 27 2016  
WV Department of  
Environmental Protection

04/07/2017



SMITH LAND SURVEYING, INC.

P.O. BOX 150, GLENVILLE, WV 26351

(304) 462-5834 • FAX 462-5856

## WELL INFORMATION AND POTENTIAL WATER WELL SAMPLE DATA SHEET

**OPERATOR:** EQT Production Company

**LEASE NAME AND NUMBER:** WEU-4

### COMMENTS

The initial field and/or mapping review of the area surrounding the proposed well site revealed the below listed surface owner(s) that were potentially utilizing groundwater (potable) for Human Consumption or other purposes within 2500' of the proposed well site. (For location of each site see attached area map.)

### INDIVIDUAL CONTACTED OR NOTIFIED

Site: 1 Spacing 1220' Owner/Occupant: Donna Peter  
 Address: 733 Ridge Rd. Wilbur, WV 26320 Ph: (304)-758-4495  
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Water Well  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.369336  
Long : 80.823230  
Tax Map 16, Parcel 22

Site: 2 Spacing 1075' Owner/Occupant: Donna Peter  
 Address: 733 Ridge Rd. Wilbur, WV 26320 Ph: (304)-758-4495  
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Water Well  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.369112  
Long : 80.822699  
Tax Map 16, Parcel 22

Site: 3 Spacing 1030' Owner/Occupant: Donna Peter  
 Address: 733 Ridge Rd. Wilbur, WV 26320 Ph: (304)-758-4495  
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Spring  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.365439  
Long : 80.823990  
Tax Map 16, Parcel 22

Site: 4 Spacing 2050' Owner/Occupant: Bruce & Sandra Stoneking  
 Address: RR.1 Box 304 BB Elkins, WV 26241 Ph: RECEIVED  
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Water Well  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.370837  
Long : 80.815910  
Tax Map 21, Parcels 28 and 29

WV Department of  
Environmental Protection

Site: 5 Spacing 1425' Owner/Occupant: Bruce & Sandra Stoneking  
 Address: RR.1 Box 304 BB Elkins, WV 26241 Ph: Unknown  
 Field Contact Date: 04/23/2015 Located: Yes Date Located: 04/23/2015 Source: Water Well  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.370270  
Long : 80.818867  
Tax Map 21, Parcels 28 and 29

Site: 6 Spacing 2830' Owner/Occupant: Edward and Carolyn White  
 Address: 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521  
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Water Well  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.368035  
Long : 80.810833  
Tax Map 21, Parcel 38

Site: 7 Spacing 2070' Owner/Occupant: Edward and Carolyn White  
 Address: 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521  
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Water Well  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.366470  
Long : 80.813358  
Tax Map 21, Parcel 38

Site: 8 Spacing 2540' Owner/Occupant: Edward and Carolyn White  
 Address: 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521  
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Pond  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.365666  
Long : 80.811781  
Tax Map 21, Parcel 38

Site: 9 Spacing 2665' Owner/Occupant: Edward and Carolyn White  
 Address: 4316 Teen Barnes Rd. Jefferson, MD 21755 Ph: (301)-371-8521  
 Field Contact Date: 05/20/2015 Located: Yes Date Located: 05/20/2015 Source: Pond  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Lat : 39.366163  
Long : 80.811260  
Tax Map 21, Parcel 38

Site: 10 Spacing 1535' Owner/Occupant: Chase E. & Reba J. Bartrug  
 Address: 3163 Jefferson Run Road, Alma, WV 26320 Ph: Unknown  
 Field Contact Date: N/A Located: No Date Located: N/A Source: Water Well  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 11/11/16 2nd 11/21/16 Certified (3rd) 12/21/16  
 Comments: Lat : 39.370659  
Long : 80.819027  
Tax Map 16, Parcel 10

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Conrad Costilow  
 Address: 13310 Middle Island Rd. West Union, WV 26456 Ph: \_\_\_\_\_  
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
 Comments: Tax Map 16, Parcel 14  
No Response To Certified Letter As Of 12/21/2016

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Bryan W. Pratt  
 Address: 525 Cabin Lane, Alma, WV 26320 Ph: \_\_\_\_\_  
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 11/11/2016 2nd 11/21/16 Certified (3rd) 11/10/16  
 Comments: Tax Map 21, Parcel 41  
No Response To Certified Letter As Of 12/21/2016

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Paul Weekley (life)  
 Address: 4500 McElroy Creek Rd. Alma, WV 26320 Ph: Unknown  
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 11/11/16 2nd 11/21/16 Certified (3rd) 11/01/16  
 Comments: Tax Map 16, Parcel 28  
No Response to Certified Letter as of 12/21/16

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Chris Baum Jr. & Lynn k. Herstine  
 Address: 7214 Ridgeview Dr. SE, Waynesburg, OH 44688 Ph: Unknown  
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 11/11/16 2nd 11/21/16 Certified (3rd) 11/10/16  
 Comments: Tax Map 16, Parcel 23  
No Response to Certified Letter as of 12/21/16

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Leona Lorkovich  
 Address: 1719 Jackson St., Aliquippa, PA 15001 Ph: Unknown  
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/15 2nd 04/26/15 Certified (3rd) 04/17/15  
 Comments: Tax Map 16, Parcel 24  
No Response to Certified Letter as of 12/21/16

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Stonewall Gas Company  
 Address: 501 Martindale St. Suite 500, Pittsburgh, PA 15212 Ph: Unknown  
 Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
 If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/15 2nd 04/26/15 Certified (3rd) 04/17/15  
 Comments: Tax Map 16, Parcel 24.2  
No Response to Certified Letter as of 12/21/16

Office of Oil and Gas

DEC 27 2016

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Richard & Yvonne Metcalf  
Address: 128 Village Dr. Bridgeport, WV 26330 Ph: Unknown  
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 11/11/2016 2nd 11/21/2016 Certified (3rd) 11/10/2016  
Comments: Tax Map 16, Parcels 14.1 & 17  
No Response To Certified Letter As Of 12/21/2016

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: John Anders II  
Address: 804 Peters Run Rd., Wheeling, WV 26003 Ph: Unknown  
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/15 2nd 04/23/16 Certified (3rd) 04/17/15  
Comments: Tax Map 16, Parcel 14.2  
No Response To Certified Letter As Of 12/21/2016

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Gary Prosser  
Address: HC 74 Box 21, Wilbur, WV 26320 Ph: Unknown  
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 04/09/2015 2nd 04/23/2015 Certified (3rd) 04/17/2015  
Comments: Tax Map 16, Parcel 15  
No Response To Certified Letter As Of 12/21/2016

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: Jeffrey & Anita Hoover  
Address: 305 Ridge Rd., Alma, WV 26320 Ph: Unknown  
Field Contact Date: N/A Located: No Date Located: N/A Source: Unknown  
If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st 11/11/16 2nd 11/21/16 Certified (3rd) 11/10/16  
Comments: Tax Map 16, Parcel 16  
No Response To Certified Letter As Of 12/21/2016

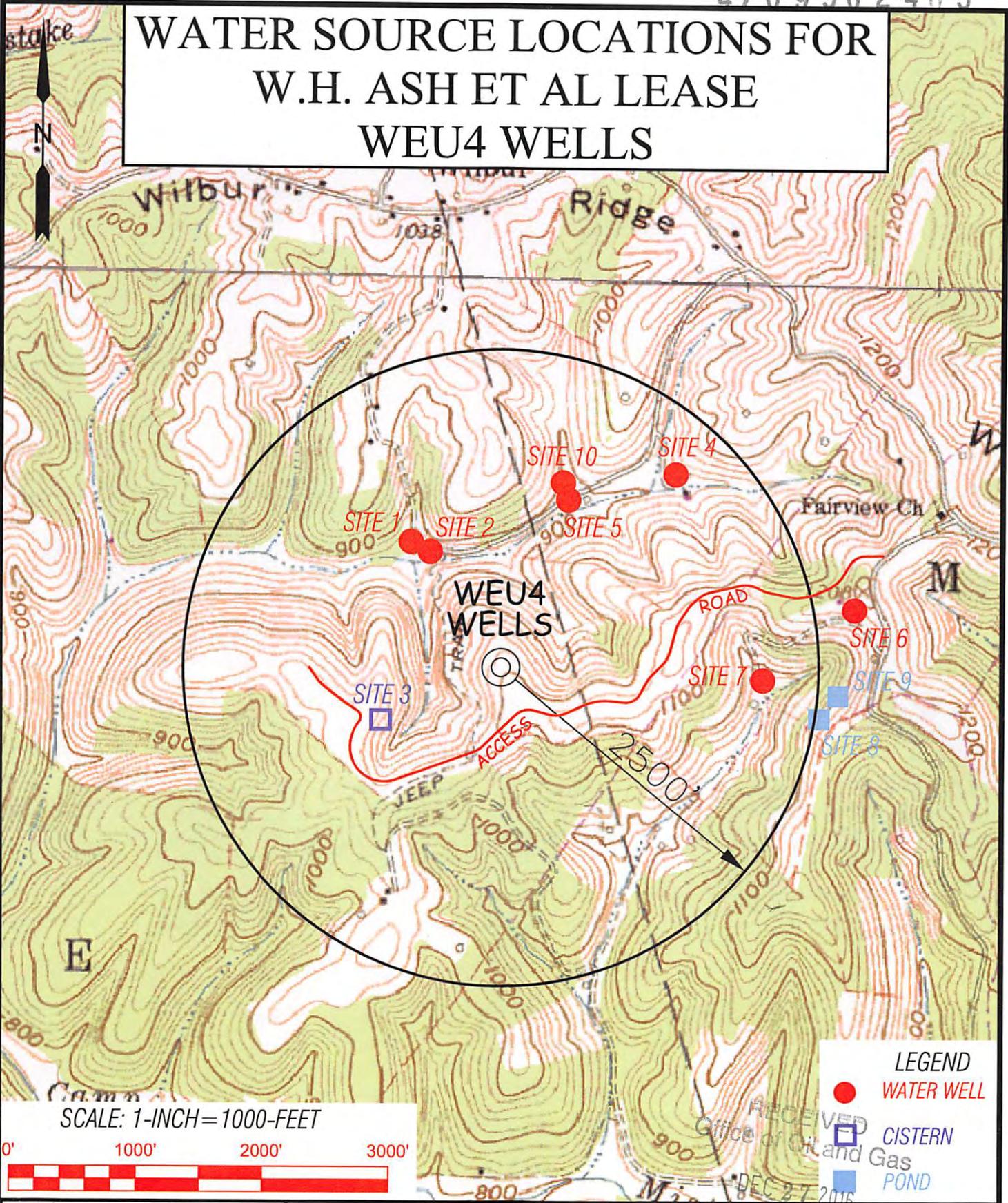
Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: \_\_\_\_\_  
Address: \_\_\_\_\_ Ph: \_\_\_\_\_  
Field Contact Date: \_\_\_\_\_ Located: \_\_\_\_\_ Date Located: \_\_\_\_\_ Source: \_\_\_\_\_  
If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st \_\_\_\_\_ 2nd \_\_\_\_\_ Certified (3rd) \_\_\_\_\_  
Comments: \_\_\_\_\_

Site: \_\_\_\_\_ Spacing \_\_\_\_\_ Owner/Occupant: \_\_\_\_\_  
Address: \_\_\_\_\_ Ph: \_\_\_\_\_  
Field Contact Date: \_\_\_\_\_ Located: \_\_\_\_\_ Date Located: \_\_\_\_\_ Source: \_\_\_\_\_  
If No, declined by who \_\_\_\_\_ Letter/Notice Date: 1st \_\_\_\_\_ 2nd \_\_\_\_\_ Certified (3rd) \_\_\_\_\_  
Comments: \_\_\_\_\_

RECEIVED  
Office of Oil and Gas  
DEC 27 2016

WV Department of  
Environmental Protection

# WATER SOURCE LOCATIONS FOR W.H. ASH ET AL LEASE WEU4 WELLS



**LEGEND**

- WATER WELL
- CISTERN
- POND

SCALE: 1-INCH=1000-FEET

0' 1000' 2000' 3000'

**Professional Energy Consultants**  
A DIVISION OF SMITH LAND SURVEYING, INC.

**SLS**  
SURVEYORS  
ENGINEERS  
ENVIRONMENTAL  
PROJECT MGMT.

(304) 452-9631  
WWW.SLSURVEYS.COM

DRAWN BY: K.G.M. FILE NO.: 7701 DATE: 12/22/16 CADD FILE: 7701WSWEU4R.dwg

TOPO SECTION OF:  
WEST UNION, WV 7.5' QUAD

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
CENTERVILLE	TYLER	16-22

OPERATOR:  
**EQT PRODUCTION COMPANY**  
115 PROFESSIONAL PLACE  
P.O. BOX 280  
BRIDGEPORT, WV 26330

RECEIVED  
Office of Oil and Gas  
DEC 27 2016  
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:** 12-14-16 **Date Permit Application Filed:** 12-14-16

**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  
DEC 16 2016  
WV Department of  
Environmental Protection  
**04/07/2017**

95-02403

Surface Owners:

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

7016 2140 0000 5639 1894

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$ \_\_\_\_\_

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$ _____
<input type="checkbox"/> Return Receipt (electronic)	\$ _____
<input type="checkbox"/> Certified Mail Restricted Delivery	\$ _____
<input type="checkbox"/> Adult Signature Required	\$ _____
<input type="checkbox"/> Adult Signature Restricted Delivery	\$ _____

Postage \$ \_\_\_\_\_

Total P&c \$ \_\_\_\_\_

Sent To **Donna J. Peter** VR

Street a. **733 Ridge Rd.**

City, State **Wilbur, WV 26320**

WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

**Surface Owners: Access Road:**

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

L Bruce & Sandra Jean Stoneking  
RD 1 Box BB  
Elkins WV 26241

✓

James B & Brenda J Stoneking  
2 Deerhaven Dr  
Wheeling WV 26241

Diane L Morgan & Glenn W Morgan  
590 Isner Creek Rd  
Elkins WV 26241

Richard Metcalf  
415 Wildlife Lane  
Bridgeport WV 26330

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

95-02403

7016 2140 0000 5639 1894

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

- Return Receipt (hardcopy) \$
- Return Receipt (electronic) \$
- Certified Mail Restricted Delivery \$
- Adult Signature Required \$
- Adult Signature Restricted Delivery \$

Postage  
\$

Total P  
\$

Sent To  
\$

Street a  
\$

City, State  
\$

**BRIDGEPORT MPO**  
DEC 14 2016  
26330-USPS

Postmark Here

**Donna J. Peter**  
733 Ridge Rd.  
Wilbur, WV 26320  
WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 2140 0000 5639 1917

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

- Return Receipt (hardcopy) \$
- Return Receipt (electronic) \$
- Certified Mail Restricted Delivery \$
- Adult Signature Required \$
- Adult Signature Restricted Delivery \$

Postage  
\$

Total  
\$

Sent  
\$

Street  
\$

City, State  
\$

**BRIDGEPORT MPO**  
DEC 14 2016  
26330-USPS

Postmark Here

**James B and Brenda Stoneking**  
2 Deerhaven Dr.  
Wheeling, WV 26241  
WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 2140 0000 5639 1900

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

- Return Receipt (hardcopy) \$
- Return Receipt (electronic) \$
- Certified Mail Restricted Delivery \$
- Adult Signature Required \$
- Adult Signature Restricted Delivery \$

Postage  
\$

Total P  
\$

Sent To  
\$

Street and  
\$

City, State  
\$

**BRIDGEPORT MPO**  
DEC 14 2016  
26330-USPS

Postmark Here

**L Bruce & Sandra Jean Stoneking**  
Rd 1 Box BB  
Elkins, WV 26241  
WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 2140 0000 5639 1924

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

- Return Receipt (hardcopy) \$
- Return Receipt (electronic) \$
- Certified Mail Restricted Delivery \$
- Adult Signature Required \$
- Adult Signature Restricted Delivery \$

Postage  
\$

Total P  
\$

Sent To  
\$

Street  
\$

City, State  
\$

**BRIDGEPORT MPO**  
DEC 14 2016  
26330-USPS

Postmark Here

**Diane L and Glenn W. Morgan**  
590 Isner Creek Rd.  
Elkins, WV 26241  
WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 2140 0000 5639 1931

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

- Return Receipt (hardcopy) \$
- Return Receipt (electronic) \$
- Certified Mail Restricted Delivery \$
- Adult Signature Required \$
- Adult Signature Restricted Delivery \$

Postage  
\$

Total P  
\$

Sent To  
\$

Street  
\$

City, State  
\$

**BRIDGEPORT MPO**  
DEC 14 2016  
26330-USPS

Postmark Here

**Richard Metcalfe**  
415 Wildlife Lane  
Bridgeport, WV 26330  
WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

04/07/2017

95-02403

Surface Owner: Pit/Impoundment

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

Richard Metcalf  
415 Wildlife Lane  
Bridgeport WV 26330

7016 2140 0000 5639 1894

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$  
 Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

Postage \$  
 Total P \$

Sent To  
 Street a  
 City, Sta

Donna J. Peter  
 733 Ridge Rd.  
 Wilbur, WV 26320  
 WEU4 Permit app and planned ops

BRIDGEPORT WFO  
 DEC 14 2016  
 26330-USPS

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 2140 0000 5639 1931

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$  
 Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

Postage \$  
 Total P \$

Sent To  
 Street a  
 City, Sta

Richard Metcalf  
 415 Wildlife Lane  
 Bridgeport, WV 26330  
 WEU4 Permit app and planned ops

BRIDGEPORT WFO  
 DEC 14 2016  
 26330-USPS

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

04/07/2017

Coal Owner:

Rosemary Brandon  
3913 Delaware Ave  
Kenner LA 70065

7016 2140 0000 5639 1948

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$ \_\_\_\_\_

Extra Services & Fees (check box and fee as appropriate)

Return Receipt (hardcopy) \$ \_\_\_\_\_

Return Receipt (electronic) \$ \_\_\_\_\_

Certified Mail Restricted Delivery \$ \_\_\_\_\_

Adult Signature Required \$ \_\_\_\_\_

Adult Signature Restricted Delivery \$ \_\_\_\_\_

Postage \$ \_\_\_\_\_

Total Po: \$ \_\_\_\_\_

Sent To \_\_\_\_\_

Street an \_\_\_\_\_

City, Stat \_\_\_\_\_

28330-USPS

DEC 14 2016

Post Here

Rosemary Brandon  
 3913 Delaware Ave.  
 Kenner, LA 70065  
 WEU4 Permit app

VR

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

RECEIVED  
 Office of Oil and Gas  
 DEC 16 2016  
 WV Department of  
 Environmental Protection  
 04/07/2017

95-02403

Owners of Water Wells:

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

L Bruce & Sandra Jean Stoneking  
RD 1 Box BB  
Elkins WV 26241

Elizabeth R. Abruzzino  
91 Springhill Chapel Rd  
Clarksburg WV 26301

7016 2140 0000 5639 1894

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To  
Street and  
City, State

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

Donna J. Peter  
733 Ridge Rd.  
Wilbur, WV 26320  
WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 2140 0000 5639 1900

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To  
Street and  
City, State,

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

L Bruce & Sandra Jean Stoneking  
Rd 1 Box BB  
Elkins, WV 26241  
WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

7016 2140 0000 5639 1955

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To  
Street and  
City, State

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

Elizabeth R. Abruzzino  
91 Springhill Chapel Rd.  
Clarksburg, WV 26301  
WEU4 Permit app

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

12/10/2017

**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).

**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

Department of Environmental Protection  
04/07/2017



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

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.**

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

**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  
DEC 16 2016  
WV Department of  
Environmental Protection

04/07/2017

WW-6A  
(8-13)

API NO. 47-095 - 02403  
OPERATOR WELL NO. 516540  
Well Pad Name: WEU4

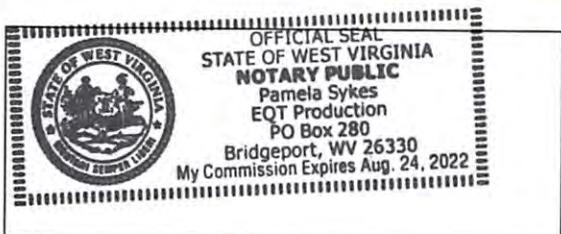
**Notice is hereby given by:**

Well Operator: EQT Production Company  
Telephone: 304-848-0076  
Email: vroark@eqt.com

Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Facsimile: 304-848-0041

**Oil and Gas Privacy Notice:**

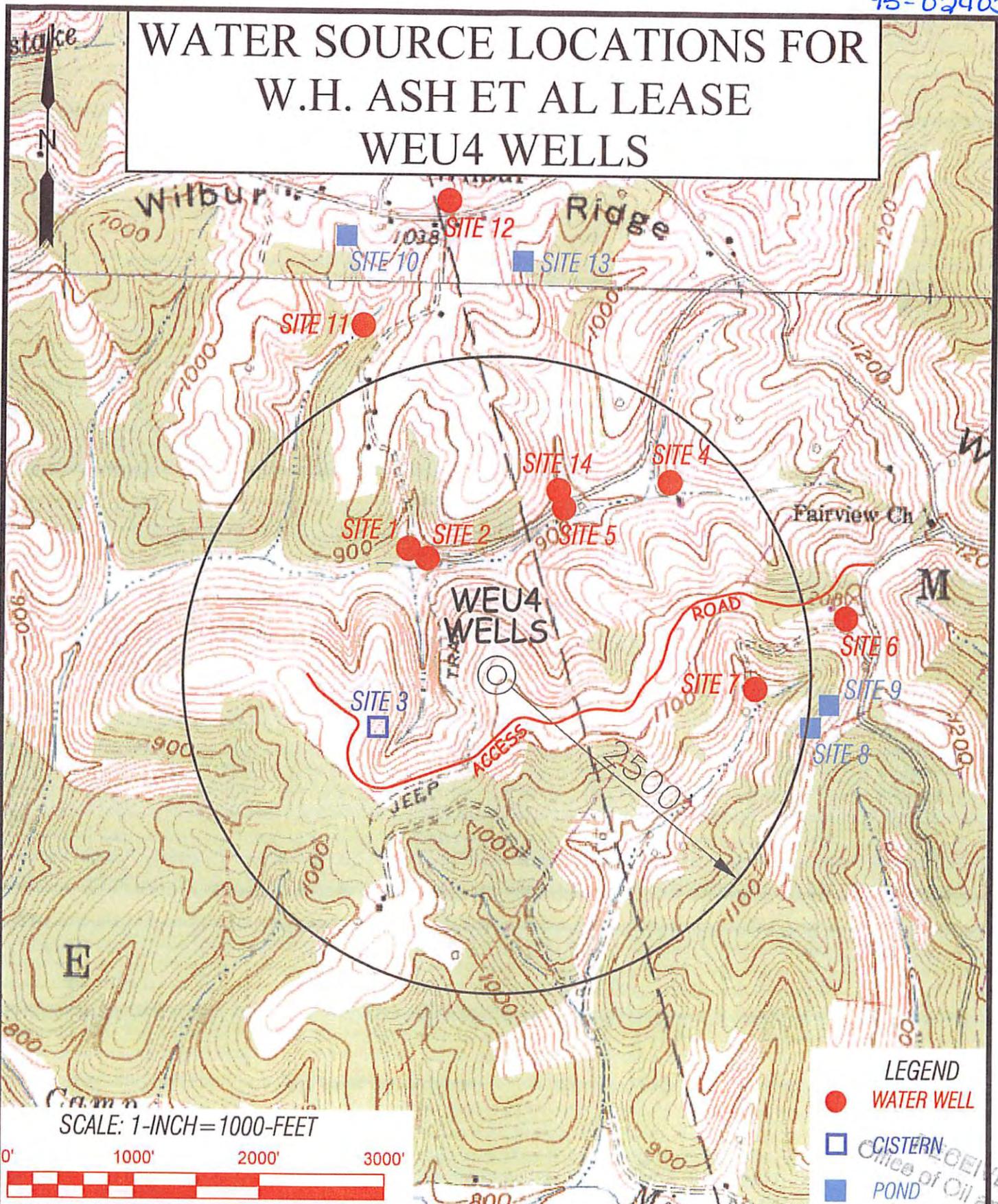
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory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



*[Signature]*  
Subscribed and sworn before me this 13 day of Dec., 2016.  
*[Signature]* Notary Public  
My Commission Expires 8-24-22

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department  
Environmental Protection  
04/07/2017

# WATER SOURCE LOCATIONS FOR W.H. ASH ET AL LEASE WEU4 WELLS



**LEGEND**

- WATER WELL
- CISTERN
- POND

SCALE: 1-INCH=1000-FEET



**Professional Energy Consultants**  
ADIVISION OF SMITHLAND SURVEYING, INC.

**SLS**  
SURVEYORS  
ENGINEERS  
ENVIRONMENTAL  
PROJECT MGMT.

DRAWN BY: K.D.W.  
FILE NO.: 7701  
DATE: 05/27/15  
CADD FILE: 7701WSNEU4.dwg

TOPO SECTION OF:  
WEST UNION, WV 7.5' QUAD

DISTRICT	COUNTY	TAX MAP-PARCEL NO.
CENTERVILLE	TYLER	16-22

OPERATOR:  
**EQT PRODUCTION COMPANY**  
115 PROFESSIONAL PLACE  
P.O. BOX 280  
BRIDGEPORT, WV 26330

RECEIVED  
Office of Oil and Gas  
DEC 16 2015  
Department of Environmental Protection

**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:** 11/07/2016 **Date Permit Application Filed:** 11/17/2016

**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: See Attached  
Address: \_\_\_\_\_  
\_\_\_\_\_

Name: See Attached  
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>515,443.06</u>
County:	<u>Tyler</u>	Northing:	<u>4,357,492.64</u>
District:	<u>Centerville</u>	Public Road Access:	<u>US19</u>
Quadrangle:	<u>West Union</u>	Generally used farm name:	<u>Donna J Peter</u>
Watershed:	<u>Tributary of Camp Mistake Run</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/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: EQT Production Company  
Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Telephone: 304-848-0076  
Email: vroark@eqt.com  
Facsimile: 304-848-0041

Authorized Representative: Victoria Roark  
Address: 115 Professional Place PO Box 280  
Bridgeport WV 26330  
Telephone: 304-848-0076  
Email: vroark@eqt.com  
Facsimile: 304-848-0041

**Oil and Gas Privacy Notice:**

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

RECEIVED  
Office of Oil and Gas  
DEPT 162016  
WV Department of  
Environmental Protection

04/07/2017

**Surface Owners:**

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection

04/07/2017



**Surface Owners: Access Road:**

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

L Bruce & Sandra Jean Stoneking  
RD 1 Box BB  
Elkins WV 26241

James B & Brenda J Stoneking  
2 Deerhaven Dr  
Wheeling WV 26241

Diane L Morgan & Glenn W Morgan  
590 Isner Creek Rd  
Elkins WV 26241

Richard Metcalf  
415 Wildlife Lane  
Bridgeport WV 26330



RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection 04/07/2017



7016 0750 0000 9581 4115

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage  
\$

Postmark Here

L. Bruce and  
 Sandra Jean Stoneking  
 RR1 Box 304-BB  
 Elkins WV 26241  
 WEU4 H13 Notice of Intent

for Instructions

7016 0750 0000 9581 4122

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage  
\$

Postmark Here

Donna J Peter  
 733 Ridge Rd  
 Wilbur WV 26320  
 WEU4 H13 Notice of Intent

for Instructions

7016 0750 0000 9581 4092

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage  
\$

Postmark Here

Diane L. Morgan and  
 Glenn W. Morgan  
 590 Isner Creek Road  
 Elkins WV 26241  
 WEU4 H13 Notice of Intent

for Instructions

7016 0750 0000 9581 4108

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage  
\$

Postmark Here

James B. and  
 Brenda J. Stoneking  
 2 Deerhaven Drive  
 Wheeling WV 26003  
 WEU4 H14 Notice of Intent

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



7015 0640 0005 9572 4681

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee  
\$

Extra Services & Fees (check box, add fee as appropriate)

<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$

Postage  
\$

Total Postage and Fees  
\$

Postmark Here

RECEIVED  
 Office of Oil and Gas  
 DEC 16 2016  
 Environmental Protection Department of

Richard Metcalf  
 415 Wildlife Lane  
 Bridgeport WV 26330  
 WEU4 H13 Notice of Intent

for Instructions

Surface Owner: Pit/Impoundment

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

Richard Metcalf  
415 Wildlife Lane  
Bridgeport WV 26330

7016 0750 0900 9581 4122

U.S. Postal Service™  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage and Fees	\$

Postmark Here

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320  
WEU4 H13 Notice of Intent

for Instructions

7015 0640 0005 9572 4681

U.S. Postal Service™  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee	\$
Extra Services & Fees (check box, add fee as appropriate)	
<input type="checkbox"/> Return Receipt (hardcopy)	\$
<input type="checkbox"/> Return Receipt (electronic)	\$
<input type="checkbox"/> Certified Mail Restricted Delivery	\$
<input type="checkbox"/> Adult Signature Required	\$
<input type="checkbox"/> Adult Signature Restricted Delivery	\$
Postage	\$
Total Postage and Fees	\$

Postmark Here

Richard Metcalf  
415 Wildlife Lane  
Bridgeport WV 26330  
WEU4 H13 Notice of Intent

for Instructions

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

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

**Date of Notice:** 12-14-16 **Date Permit Application Filed:** 12-14-16

**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: <u>See Attached</u>	Name: <u>See Attached</u>
Address: _____	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>515,443.06</u>
County: <u>Tyler</u>		Northing: <u>4,357,492.64</u>
District: <u>Centerville</u>	Public Road Access: <u>US19</u>	
Quadrangle: <u>West Union</u>	Generally used farm name: <u>Donna J Peter</u>	
Watershed: <u>Tributary of Camp Mistake Run</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: <u>EQT Production Company</u>	Address: <u>115 Professional Place PO Box 280</u>
Telephone: <u>304-848-0076</u>	<u>Bridgeport WV 26330</u>
Email: <u>vroark@eqt.com</u>	Facsimile: <u>304-848-0041</u>

**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  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

Surface Owners:

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320



7016 2140 0000 5639 1894

**U.S. Postal Service™**  
**CERTIFIED MAIL® RECEIPT**  
*Domestic Mail Only*

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$ \_\_\_\_\_

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$ \_\_\_\_\_

Return Receipt (electronic) \$ \_\_\_\_\_

Certified Mail Restricted Delivery \$ \_\_\_\_\_

Adult Signature Required \$ \_\_\_\_\_

Adult Signature Restricted Delivery \$ \_\_\_\_\_

Postage \$ \_\_\_\_\_

Total P&C \$ \_\_\_\_\_

Sent To **Donna J. Peter** *VR*

Street a **733 Ridge Rd.**

City, Sta **Wilbur, WV 26320**

WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions



RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection

04/07/2017

Surface Owner: Pit/Impoundment

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

Richard Metcalf  
415 Wildlife Lane  
Bridgeport WV 26330

U.S. Postal Service™  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

BRIDGEPORT WV  
DEC 14 2016  
26330-USPS

Certified Mail Fee \$  
Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

Postage \$  
Total P \$

Sent To  
Street #  
City, Sta

Donna J. Peter  
733 Ridge Rd.  
Wilbur, WV 26320  
WEU4 Permit app and planned ops

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

U.S. Postal Service™  
**CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

BRIDGEPORT WV  
DEC 14 2016  
26330-USPS

Certified Mail Fee \$  
Extra Services & Fees (check box, add fee as appropriate)  
 Return Receipt (hardcopy) \$  
 Return Receipt (electronic) \$  
 Certified Mail Restricted Delivery \$  
 Adult Signature Required \$  
 Adult Signature Restricted Delivery \$

Postage \$  
Total P \$

Sent To  
Street #  
City, Sta

Richard Metcalf  
415 Wildlife Lane  
Bridgeport, WV 26330  
WEU4 Permit app and planned ops

Postmark Here

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

04/07/2017

**Surface Owners: Access Road:**

Donna J Peter  
733 Ridge Rd  
Wilbur WV 26320

L Bruce & Sandra Jean Stoneking  
RD 1 Box BB  
Elkins WV 26241

James B & Brenda J Stoneking  
2 Deerhaven Dr  
Wheeling WV 26241

Diane L Morgan & Glenn W Morgan  
590 Isner Creek Rd  
Elkins WV 26241

Richard Metcalf  
415 Wildlife Lane  
Bridgeport WV 26330



RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection  
04/07/2017

95-02403

7016 2140 0000 5639 1917

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To \$

Street and \$

City, State \$

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

**Donna J. Peter**  
733 Ridge Rd.  
Wilbur, WV 26320

WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

VR

7016 2140 0000 5639 1917

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To \$

Street and \$

City, State \$

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

**James B and Brenda Stoneking**  
2 Deerhaven Dr.  
Wheeling, WV 26241

WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

VR

7016 2140 0000 5639 1917

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To \$

Street and \$

City, State \$

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

**L Bruce & Sandra Jean Stoneking**  
Rd 1 Box BB  
Elkins, WV 26241

WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

VR

7016 2140 0000 5639 1924

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To \$

Street and \$

City, State \$

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

**Diane L and Glenn W. Morgan**  
590 Isner Creek Rd.  
Elkins, WV 26241

WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

VR

7016 2140 0000 5639 1931

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)®.

**OFFICIAL USE**

Certified Mail Fee \$

Extra Services & Fees (check box, add fee as appropriate)

Return Receipt (hardcopy) \$

Return Receipt (electronic) \$

Certified Mail Restricted Delivery \$

Adult Signature Required \$

Adult Signature Restricted Delivery \$

Postage \$

Total Post \$

Sent To \$

Street and \$

City, State \$

**BRIDGEPORT WFO**  
DEC 14 2016  
26330-USPS

Postmark Here

**Richard Metcalf**  
415 Wildlife Lane  
Bridgeport, WV 26330

WEU4 Permit app and planned ops

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

VR

04/07/2017



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Earl Ray Tomblin  
Governor

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

Revised September 4, 2015

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

Subject: DOH Permit for the WEU 4 Well Pad, Tyler County ✓

- |                |                |                |
|----------------|----------------|----------------|
| 512890 WEU4H1  | 512891 WEU4H2  | 512892 WEU4H3  |
| 512893 WEU4H4  | 512894 WEU4H5  | 512895 WEU4H6  |
| 516534 WEU4H7  | 516535 WEU4H8  | 516536 WEU4H9  |
| 516537 WEU4H10 | 516538 WEU4H11 | 516539 WEU4H12 |
| 516540 WEU4H13 | 516600 WEU4H14 | 516601 WEU4H15 |

Dear Mr. Martin,

This well site will be accessed from DOH Permit #06-2015-0241 issued to EQT Production Company for access to the State Road for a well site located off of Tyler County Route 58 SLS.

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

Very Truly Yours,

Gary K. Clayton P.E.  
Regional Maintenance Engineer  
Central Office Oil & Gas Coordinator

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



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

<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

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection

04/07/2017

**WVDEP OOG  
ACCEPTED AS-BUILT**

*WJ* 4/4/2016

# WEU-4 AS-BUILT EQT PRODUCTION

PERMITTED WELLS: API# 47-095-02278, 47-095-02316, 47-095-02317

PROPOSED WELL NUMBERS: H6-WV5120, H9-WV516536, H11-WV516538, H13-WV516540

SITUATE ON WATERS OF CAMP MISTAKE RUN  
TYLER COUNTY, WV

## LOCATION

### PROJECT INFORMATION

PROJECT NAME: WEU-4 AS BUILT SITE PLAN

TAX PARCEL:  
CENTERVILLE DISTRICT  
MAP 16  
McELROY DISTRICT  
MAP 21

### SURFACE OWNER:

L. B. & SANDRA STONEKING  
McELROY DISTRICT  
TYLER COUNTY, WV  
TOTAL PROPERTY AREA 69.4± ACRES

DONNA J. PETER  
McELROY & CENTERVILLE DISTRICT  
TYLER COUNTY, WV  
TOTAL PROPERTY AREA 113.4± ACRES

RICHARD & YVONNE METCALF  
CENTERVILLE DISTRICT  
TYLER COUNTY, WV  
TOTAL PROPERTY AREA 61.57± ACRES

### OIL AND GAS ROYALTY OWNER:

WACO OIL & GAS COMPANY, INC. ETAL  
CENTERVILLE DISTRICT  
TYLER COUNTY, WV  
TOTAL PROPERTY AREA 152± ACRES

### SITE LOCATION:

THE WEU-4 SITE IS NORTH OF CAMP MISTAKE OFF COUNTY ROUTE 58. THE ENTRANCE TO THE SITE IS APPROXIMATELY 0.13 MILE SOUTH WEST OF COUNTY ROUTE 58 AND COUNTY ROUTE 602 INTERSECTION.

### LOCATION COORDINATES

WEU-4 SITE ENTRANCE  
LATITUDE: 39.369173 LONGITUDE: -80.810214 (NAD 83)  
LATITUDE: 4,357,772 LONGITUDE: 516,363 (UTM NAD 83 METERS)

WEU-4 CENTER OF WELL PAD  
LATITUDE: 39.366539 LONGITUDE: -80.820845 (NAD 83)  
LATITUDE: 4,357,477 LONGITUDE: 515,448 (UTM NAD 83 METERS)

WEU-4 FLOW CENTER OF FLOW BACK PIT  
LATITUDE: 39.365395 LONGITUDE: -80.821021 (NAD 83)  
LATITUDE: 4,357,350 LONGITUDE: 515,433 (UTM NAD 83 METERS)

WEU-4 FLOW CENTER OF COMPLETION PIT  
LATITUDE: 39.365901 LONGITUDE: -80.825772 (NAD 83)  
LATITUDE: 4,357,406 LONGITUDE: 515,024 (UTM NAD 83 METERS)

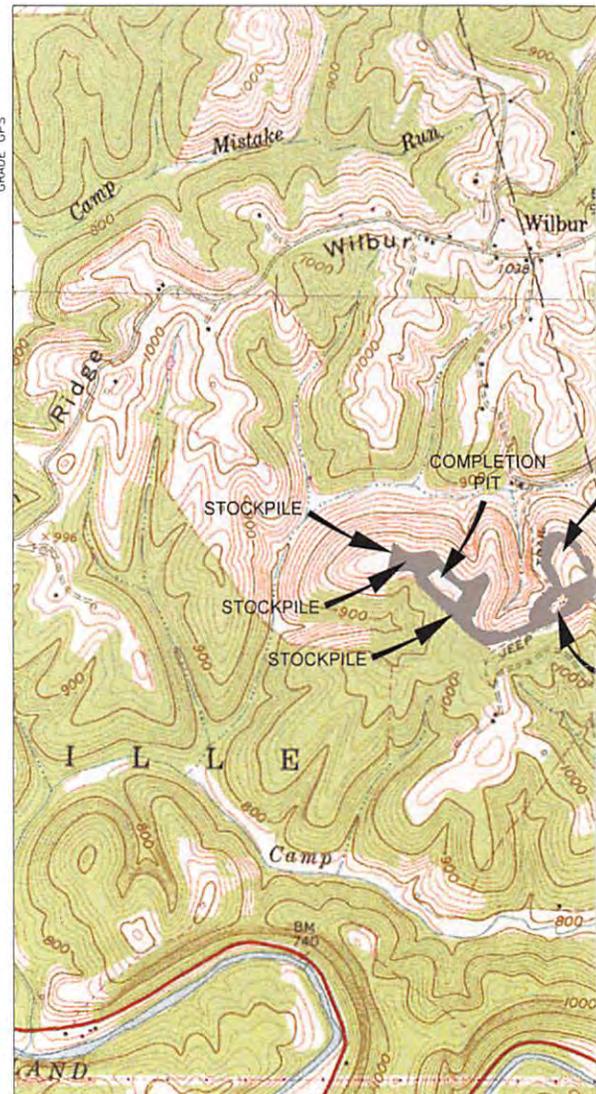
### SITE DISTURBANCE COMPUTATIONS

TOTAL AS-BUILT DISTURBANCE = 35.8± ACRES

### GENERAL DESCRIPTION

THE WEU-4 PAD AND PITS ARE BEING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS

GRID NORTH AND ELEVATIONS  
MARKED HEREON WERE  
ESTABLISHED BY SURVEY  
GRADE GPS



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

RECEIVED  
Office of Oil and Gas  
DEC 16 2016

WV Department of  
Environmental Protection  
SCALE: 1  
04/07/2017

# T SITE PLAN ON COMPANY

-002279, 47-095-02280, 47-095-02281,  
AND 47-095-02318

94, H6-WV512895, H8-WV516535,  
, H14-WV516600 AND H15-WV516601

N MCELROY AND CENTER DISTRICTS,  
ST VIRGINIA

## N MAP



SHIRLEY QUAD

WEST UNION QUAD

### LIST OF DRAWINGS

- 1 - COVER SHEET
- 2 - INDEX SHEET
- 3 - WEU-4 ACCESS ROAD
- 4 - WEU-4 FLOWBACK PIT / PAD
- 5 - WEU-4 ACOMPLETION PIT / STOCKPILE
- 6 - ACCESS ROAD PROFILE
- 7 - ACCESS ROAD PROFILE, FLOW BACK PIT AND COMPLETION PIT PROFILES

### LEGEND

LIMITS OF DISTURBANCE	---
COMPOST FILTER SOCK	---
AS-BUILT LOD	---
EX. ROAD EDGE OF GRAVEL/DIRT	---
EX. ROAD EDGE OF PAVEMENT	---
EX. ROAD CENTERLINE	---
EX. DITCHLINE	---
EX. CULVERT	---
EX. FENCELINE	X X
EX. GATE	---
EX. OVERHEAD UTILITY	---
EX. OVERHEAD UTILITY R/W	---
EX. POWER POLE	---
EX. CUY WIRE	---
EX. TELEPHONE LINE	---
EX. GASLINE	---
EX. GASLINE R/W	---
EX. WATERLINE	---
EX. STRUCTURE	---
EX. PIPELINE MARKER	---
RIG FOOTPRINT	---
EDGE OF GRAVEL PAD	---
EDGE OF BERM	---
EX. SUPER SILT FENCE	---
EX. REINFORCED SILT FENCE	---
TOP BERM	---
GRAVEL	---
RIP RAP	---
ORIGINAL GROUND 2' CONTOURS	---
AS BUILT 2' CONTOURS	---
PHOTO NUMBER & LOCATION	①
AS-BUILT WELL LOCATIONS	---
PROPOSED WELL LOCATIONS	---
SPOT ELEVATIONS	---
MATCHLINE	---

*DMH 4/4/16*

REVISION	DATE	DESCRIPTION	BY



THIS DOCUMENT WAS PREPARED BY:  
SMITH LAND SURVEYING, INC.  
FOR: EQT



### WEU-4 AS-BUILT SITE PLAN

THIS DOCUMENT WAS PREPARED BY:  
SMITH LAND SURVEYING, INC.  
FOR: EQT PRODUCTION COMPANY

DATE:	03/02/2016
EQT:	
SCALE:	1" = 1000'
DESIGNED BY:	K.E.S.
FILE NO:	7701
SHEET:	1 OF 7

GRID NORTH AND SURVEYED ELEVATIONS SHOWN HEREON WERE ESTABLISHED BY DGPS SURVEY GRADE.

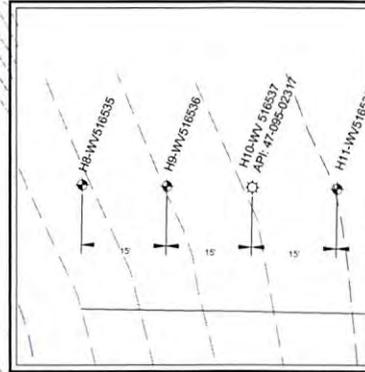


# WEU-4 AS BUILT SITE PLAN

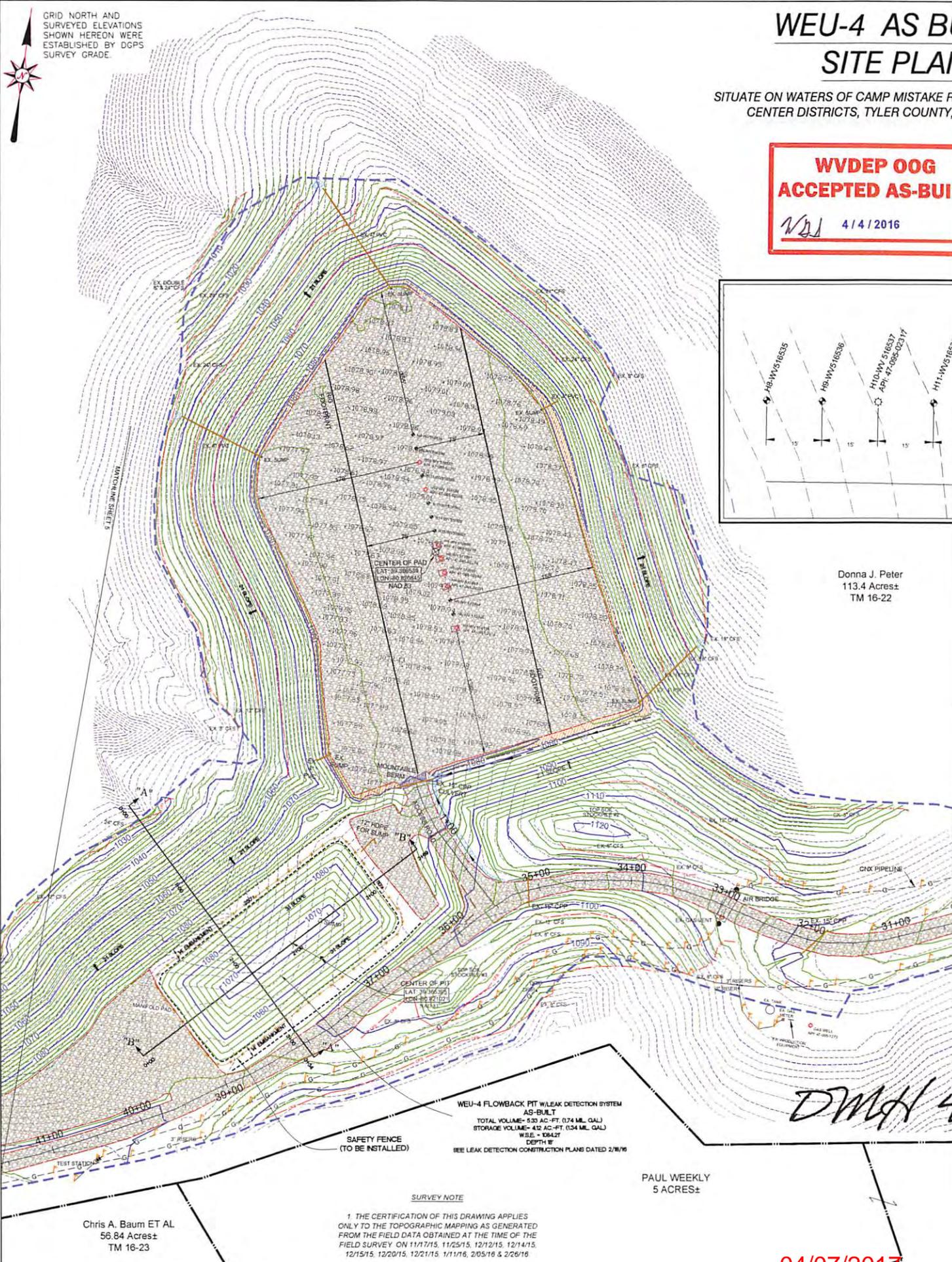
SITUATE ON WATERS OF CAMP MISTAKE P CENTER DISTRICTS, TYLER COUNTY,

**WVDEP OOG  
ACCEPTED AS-BUILT**

*WJ* 4/4/2016



Donna J. Peter  
113.4 Acres±  
TM 16-22



WEU-4 FLOWBACK PIT W/LEAK DETECTION SYSTEM  
AS-BUILT  
TOTAL VOLUME= 630 AC-FT. (274 MIL. GAL.)  
STORAGE VOLUME= 432 AC-FT. (134 MIL. GAL.)  
WRE = 104LZT  
DEPTH 8'  
SEE LEAK DETECTION CONSTRUCTION PLANS DATED 2/16/16

SAFETY FENCE  
(TO BE INSTALLED)

PAUL WEEKLY  
5 ACRES±

Chris A. Baum ET AL  
56.84 Acres±  
TM 16-23

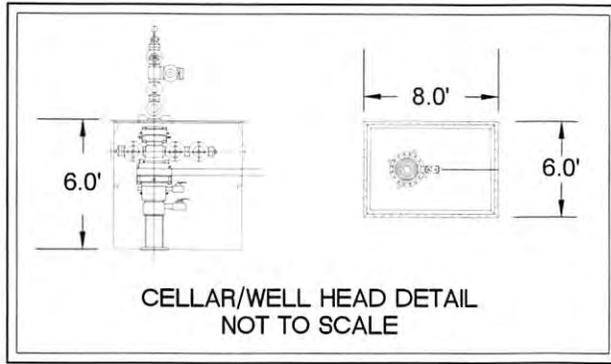
**SURVEY NOTE**

1 THE CERTIFICATION OF THIS DRAWING APPLIES ONLY TO THE TOPOGRAPHIC MAPPING AS GENERATED FROM THE FIELD DATA OBTAINED AT THE TIME OF THE FIELD SURVEY ON 11/17/15, 11/25/15, 12/12/15, 12/14/15, 12/15/15, 12/20/15, 12/21/15, 1/11/16, 2/05/16 & 2/26/16

*DW*

04/07/2017

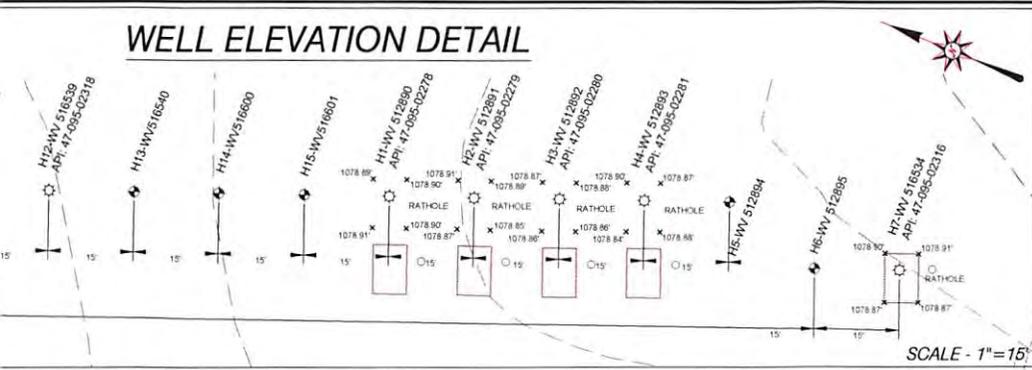
JILT  
 UN IN MCELROY AND  
 WEST VIRGINIA



L. B. & SANDRA  
 STONEKING  
 42.86 ACRES±

REVISION	DATE	DESCRIPTION	BY
REV 1	3/31/16	ADDED TYPICAL CELLAR DETAIL	WW

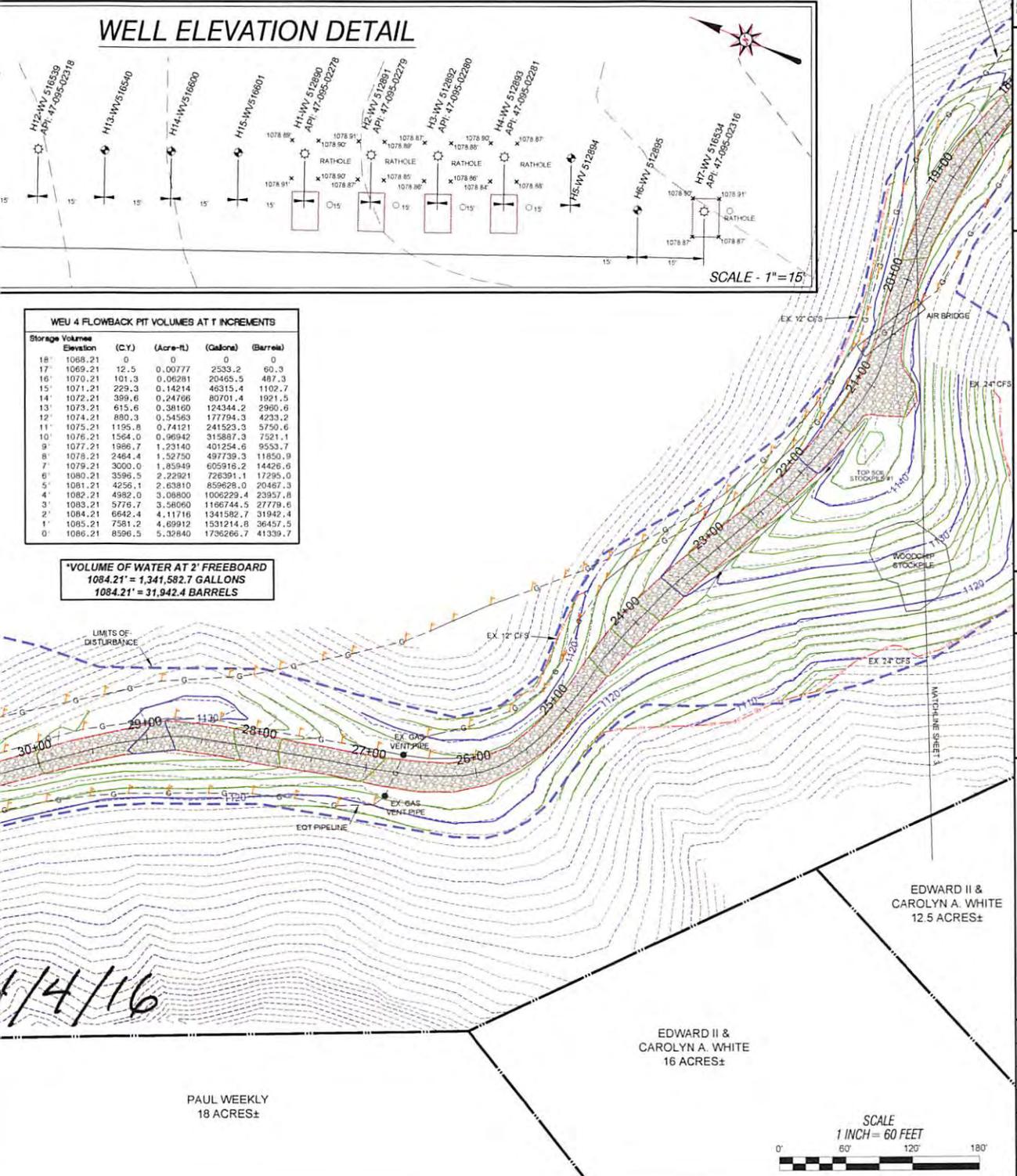
**WELL ELEVATION DETAIL**



**WEU 4 FLOWBACK PIT VOLUMES AT T INCREMENTS**

Storage Elevation	Volume (C.Y.)	(Acre-ft)	(Gallons)	(Barrels)
18'	0	0	0	0
17'	12.5	0.00777	2533.2	60.3
16'	101.3	0.06281	20465.5	487.3
15'	223.3	0.14214	46315.4	1102.7
14'	359.6	0.24766	80701.4	1921.5
13'	615.6	0.38160	124344.2	2990.6
12'	890.3	0.54563	177794.3	4233.2
11'	1195.8	0.74121	241523.3	5750.6
10'	1564.0	0.96942	315887.3	7521.1
9'	1986.7	1.23140	401254.6	9553.7
8'	2464.4	1.52750	497739.3	11850.9
7'	3000.0	1.85949	605916.2	14426.6
6'	3596.5	2.22921	726391.1	17295.0
5'	4256.1	2.63810	859626.0	20467.3
4'	4982.0	3.08800	1006229.4	23957.8
3'	5776.7	3.58060	1196744.5	27779.6
2'	6642.4	4.11716	1341592.7	31942.4
1'	7581.2	4.69912	1531214.8	36457.5
0	8596.5	5.32840	1736266.7	41339.7

**\*VOLUME OF WATER AT 2' FREEBOARD**  
 1084.21' = 1,341,582.7 GALLONS  
 1084.21' = 31,942.4 BARRELS



THIS DOCUMENT WAS PREPARED BY:  
 SMITH LAND SURVEYING, INC.  
 FOR: EQT

**WEU-4 AS-BUILT SITE PLAN**  
 THIS DOCUMENT WAS PREPARED BY:  
 SMITH LAND SURVEYING, INC.  
 FOR: EQT PRODUCTION COMPANY

DATE:	03/02/2016
EQT:	
SCALE:	1" = 60'
DESIGNED BY:	K. E. S.
FILE NO:	7701
SHEET:	4 OF 7
7701 WEU-4 AS-BUILT SITE PLAN	



04/07/2017



Office of Oil and Gas

West Virginia Department of Environmental Protection  
Office of Oil & Gas  
601 57th Street SE  
Charleston, WV 25304-2345

DEP Office Use only
Date Received by Oil & Gas:
Assigned Impoundment ID #: <u>095-WPA-00015</u>

## Permit Associated Impoundment / Pit Registration

**Instruction:** This form is to be used to register impoundments or waste pits, greater than 5,000 bbls, that are associated with a WVDEP, Office of Oil and Gas, well drilling permit. An associated impoundment or pit means it has been designed and included in the well drilling permit application, will follow the reclamation time frame of well work permit, and will be approved in conjunction with the well work permit. An impoundment ID number will be assigned by WVDEP, Office of Oil and Gas, to all impoundments and pits. This impoundment ID number will be sent to the applicant following receipt of this form by WVDEP. Please reference this impoundment ID number with all future correspondence and reference to this impoundment. Conditions as described in W.Va. State Rule §35-4-21 will be followed as it relates to impoundments and pits.

### Section 1 – Operator Information

Operator Name:	<u>EQT Production Company</u>		
Operator ID:	<u>306686</u>		
Address: Street	<u>115 Professional Place P.O. Box 280</u>		
City:	<u>Bridgeport</u>	State: <u>WV</u>	Zip: <u>26330</u>
Contact Name:	<u>Ron Furby</u>	Contact Title:	<u>Senior manager Water Operations</u>
Contact Phone:	<u>304-543-9849</u>	Contact Email:	<u>rfurby@eqt.com</u>

### Section 2 – Engineering / Design Contractor Information

Design will be contracted	<input type="checkbox"/>	Designed in-house	<input checked="" type="checkbox"/>
Company Name:	<u>Smith Land Surveying, Inc. &amp; RK&amp;K Engineers</u>		
Address: Street	<u>12 Vanhorn Drive; P.O. Box 150</u>		
City:	<u>Glenville</u>	State: <u>WV</u>	Zip: <u>26351</u>
Contact Name:	<u>Wes Wayne</u>	Contact Title:	<u>Design Coordinator</u>
Contact Phone:	<u>304-462-5634</u>	Contact Email:	<u>wwayne@sissurveys.com</u>
Certifying Professional Engineer:	<u>David G. Vanscoy</u>		
Professional Engineer Registration Number:	<u>WV PE No. 6649</u>		

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of Environmental Protection



Office of Oil and Gas

**Section 3 - Impoundment / Pit Information**

Type of Structure. Check one of two choices below.

Freshwater Impoundment

Waste Pit

Note: Any waste in a pit will make it a waste pit

Name of Structure (Company Name :) WEU 4 Flowback Pit

County: Tyler

District: McElroy and Centerville

USGS 7.5' Quad Map Name: West Union

Farm Name: \_\_\_\_\_

Pad Name: WEU 4 Site

Surface Owner Name: Donna J. Peter (113.4 acres)

Physical Description of Location: The entrance is located approximately 0.3 miles southwest from the intersection of county route 62 and county route 58.

(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22, left on Buffalo Creek)

Watershed (nearest perennial): Camp Mistake Run

Distance (Drainage Distance) to nearest perennial stream: 3504 Feet

Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxxx))

Latitude: 39.365318

Longitude (Use negative sign): -80.821116

UTM Coordinates : 1690974.032

E

14295682.845

N

Access Road Coordinates (junction of state highway access)

Latitude: 39.369229

Longitude (Use negative sign): -80.810071

UTM Coordinates : 1694092.650

E

14297113.217

N

Approximate Dimensions

Length: 248'

Width: 115'

Height: 17'

Note: If irregularly shaped, give approximate dimensions of long axis

Total Capacity – Provide all units of measure below:

Barrels: 39,834

Gallons: 1,673,044

Acre-Feet: 5.135

Capacity with 2' Freeboard – Provide all units of measure below:

Barrels: 30,342

Gallons: 1,274,345

Acre-Feet: 3.911

Incised volume:

Barrels: 3,722

Gallons: 156,336

Acre-Feet: 0.480

Net impounded volume: (Total volume less incised volume.)

Barrels: 36,112

Gallons: 1,516,708

Acre-Feet: 4.655

Anticipated Construction Start Date (estimation, non-binding): To be determined

Note: No construction may begin on Associated impoundment until WVDEP issues the drilling permit. At least 7 calendar days prior to confirmed construction start date, notify the Office of Oil & Gas, and the local Oil and Gas inspector of construction start date. Use form IMP-2, "Notification of Impoundment / Pit Construction."

Office of Oil and Gas  
Department of Environmental Protection  
6/2016  
Page 2 of 4



**Section 4 - Associated Well Numbers and API Numbers.** List associated well numbers and API number. API numbers may not be assigned at time of registering this impoundment, if so list as pending.

Well Number(s):	API Number(s) – If issued:
WV 512890 (H1)	
WV 512891 (H2)	
WV 512892 (H3)	
WV 512893 (H4)	
WV 512894 (H5)	
WV 512895 (H6)	
Proposed Wells H7 thru H15	

**Section 5 - Required Information Checklist To Register Permit Associated Impoundments or Pits.** Include the following information and plans with application.

- Engineered Construction Plans, certified by WV Registered P.E.
- Erosion and Sediment Control Plan, certified by WV Registered P.E.
- Reclamation Plan, certified by WV Registered P.E.

**Section 6 – Dam Standard Qualifying Evaluation**

- The design of this structure has been evaluated by the applicant to determine it does NOT qualify to be defined as a dam, under W.Va Rule §47-34. If the design of this structure qualifies it to be defined as a dam, all permits regulating dams will be required prior to registering the structure with the Office of Oil and Gas. The dam standard, from the WVDEP, Div. Of Water and Waste, is available for review at: <http://www.dep.wv.gov/WWE/ee/ds/Pages/default.aspx>

**Section 7 –Comments – Provide any additional comments concerning this project**

RECEIVED  
 Office of Oil and Gas  
 DEC 16 2016  
 WV Department of  
 Environmental Protection





**Section 8 - Application Certification**

I hereby certify that the information listed above is true and accurate. I understand that this pit/impoundment is to be constructed only in a location appropriate for the storage of water, including wastewater, and will be constructed in accordance with plans designed and certified by a West Virginia registered professional engineer. I further recognize that all required plans have been submitted to the Office of Oil and Gas. I understand that after construction, and prior to any fluid being placed in the pit/impoundment, it shall be inspected by a West Virginia registered professional engineer to ensure compliance with the certified design and construction plan, and that the professional engineer shall certify that this structure was constructed in accordance with design and construction plans. I understand that such certification shall be in writing to the Chief and that no fluids may be placed in the pit/impoundment until the certification has been filed with the chief. I agree that this pit/impoundment shall be constructed, maintained, operated and closed in accordance with all applicable laws and rules, including the requirements of W. Va. Code R § 35-4-2.

Name: Victoria J. Roark  
Title: Permitting Supervisor  
Signature: [Handwritten Signature]

Taken, subscribed and sworn to before me this, 24 Day of June 20 15  
Notary Public: Rebecca L. Heater  
My commission expires: 4-7-20

Notary Seal:



**Section 9. Submittal Instructions**

Submit original paper copy of application to:  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
Impoundment Registration  
601 57<sup>th</sup> Street, SE  
Charleston WV 25304

Email PDF file format of this application and all related engineering Plans to :  
Depimpoundments@wv.gov

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of Environmental Protection



Office of Oil and Gas

West Virginia Department of  
Environmental Protection  
Office of Oil & Gas  
601 57th Street SE  
Charleston, WV 25304-2345

95-02403

DEP Office Use only
Date Received by Oil & Gas:
Assigned Impoundment ID #: <u>095-WPA-00010</u>

## Permit Associated Impoundment / Pit Registration

**Instruction:** This form is to be used to register impoundments or waste pits, greater than 5,000 bbls, that are associated with a WVDEP, Office of Oil and Gas, well drilling permit. An associated impoundment or pit means it has been designed and included in the well drilling permit application, will follow the reclamation time frame of well work permit, and will be approved in conjunction with the well work permit. An impoundment ID number will be assigned by WVDEP, Office of Oil and Gas, to all impoundments and pits. This impoundment ID number will be sent to the applicant following receipt of this form by WVDEP. Please reference this impoundment ID number with all future correspondence and reference to this impoundment. Conditions as described in W.Va. State Rule §35-4-21 will be followed as it relates to impoundments and pits.

### Section 1 – Operator Information

Operator Name:	<u>EQT Production Company</u>		
Operator ID:	<u>306686</u>		
Address: Street	<u>115 Professional Place P.O. Box 280</u>		
City:	<u>Bridgeport</u>	State:	<u>WV</u> Zip: <u>26330</u>
Contact Name:	<u>Ron Furby</u>	Contact Title:	<u>Senior manager Water Operations</u>
Contact Phone:	<u>304-543-9849</u>	Contact Email:	<u>rfurby@eqt.com</u>

### Section 2 – Engineering / Design Contractor Information

Design will be contracted	<input type="checkbox"/>	Designed in-house	<input checked="" type="checkbox"/>
Company Name:	<u>Smith Land Surveying, Inc. &amp; RK&amp;K Engineers</u>		
Address: Street	<u>12 Vanhorn Drive; P.O. Box 150</u>		
City:	<u>Glenville</u>	State:	<u>WV</u> Zip: <u>26351</u>
Contact Name:	<u>Wes Wayne</u>	Contact Title:	<u>Design Coordinator</u>
Contact Phone:	<u>304-462-5634</u>	Contact Email:	<u>wwayne@slssurveys.com</u>
Certifying Professional Engineer:	<u>David G. Vanscoy</u>		
Professional Engineer Registration Number:	<u>WV PE No. 6649</u>		

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection

Page 1 of 4

04/07/2017



Office of Oil and Gas

## Section 3 - Impoundment / Pit Information

Type of Structure. Check one of two choices below:

 Freshwater Impoundment Waste Pit

Note: Any waste in a pit will make it a waste pit

Name of Structure (Company Name :) WEU 4 Completion PitCounty: TylerDistrict: McElroy and CentervilleUSGS 7.5' Quad Map Name: West Union

Farm Name: \_\_\_\_\_

Pad Name: WEU 4 SiteSurface Owner Name: Donna J. Peter (113.4 acres) & Richard Metcalf (61.57 acres)Physical Description of Location: The entrance is located approximately 0.3 miles southwest from the intersection of county route 62 and county route 58.

(Note: Give general location, example: 2 miles south of Smalltown, WV on Rt. 22, left on Buffalo Creek)

Watershed (nearest perennial): Camp Mistake RunDistance (Drainage Distance) to nearest perennial stream: 3,389 Feet

Location Coordinates (NAD83, Decimal Degrees (xx.xxxx, -xx.xxxx))

Latitude: 39.365884Longitude (Use negative sign): -80.825816

UTM Coordinates :

1689645.289

E

14295886.330

N

Access Road Coordinates (junction of state highway access)

Latitude: 39.369229Longitude (Use negative sign): -80.810071

UTM Coordinates :

1694092.650

E

14297113.217

N

## Approximate Dimensions

Length: 468'Width: 160'Height: 17'

Note: If irregularly shaped, give approximate dimensions of long axis.

Total Capacity – Provide all units of measure below:

Barrels: 145,496Gallons: 6,110,828Acre-Feet: 18.753

Capacity with 2' Freeboard – Provide all units of measure below:

Barrels: 120,048Gallons: 5,043,030Acre-Feet: 15.473

Incised volume:

Barrels: 34,111Gallons: 1,432,654Acre-Feet: 4.397

Net impounded volume: (Total volume less incised volume.)

Barrels: 111,385Gallons: 4,678,174Acre-Feet: 14.356Anticipated Construction Start Date (estimation, non-binding): To be determined

Note: No construction may begin on Associated impoundment until WVDEP issues the drilling permit. At least 7 calendar days prior to confirmed construction start date, notify the Office of Oil &amp; Gas, and the local Oil and Gas inspector of construction start date. Use form IMP-2, "Notification of Impoundment / Pit Construction."



**Section 4 - Associated Well Numbers and API Numbers.** List associated well numbers and API number. API numbers may not be assigned at time of registering this impoundment, if so list as pending.

Well Number(s):	API Number(s) – If issued:
WV 512890 (H1)	
WV 512891 (H2)	
WV 512892 (H3)	
WV 512893 (H4)	
WV 512894 (H5)	
WV 512895 (H6)	
Proposed Wells H7 thru H15	

**Section 5 - Required Information Checklist To Register Permit Associated Impoundments or Pits.** Include the following information and plans with application.

- Engineered Construction Plans, certified by WV Registered P.E.
- Erosion and Sediment Control Plan, certified by WV Registered P.E.
- Reclamation Plan, certified by WV Registered P.E.

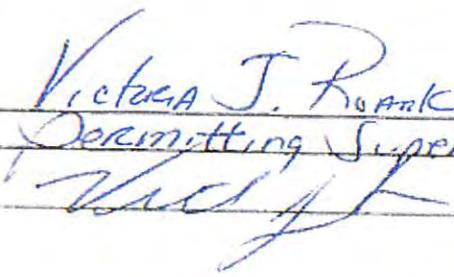
**Section 6 – Dam Standard Qualifying Evaluation**

- The design of this structure has been evaluated by the applicant to determine it does NOT qualify to be defined as a dam, under W.Va Rule §47-34. If the design of this structure qualifies it to be defined as a dam, all permits regulating dams will be required prior to registering the structure with the Office of Oil and Gas. The dam standard, from the WVDEP, Div. Of Water and Waste, is available for review at: <http://www.dep.wv.gov/WWE/ee/ds/Pages/default.aspx>

**Section 7 –Comments – Provide any additional comments concerning this project**

**Section 8 - Application Certification**

I hereby certify that the information listed above is true and accurate. I understand that this pit/impoundment is to be constructed only in a location appropriate for the storage of water, including wastewater, and will be constructed in accordance with plans designed and certified by a West Virginia registered professional engineer. I further recognize that all required plans have been submitted to the Office of Oil and Gas. I understand that after construction, and prior to any fluid being placed in the pit/impoundment, it shall be inspected by a West Virginia registered professional engineer to ensure compliance with the certified design and construction plan, and that the professional engineer shall certify that this structure was constructed in accordance with design and construction plans. I understand that such certification shall be in writing to the Chief and that no fluids may be placed in the pit/impoundment until the certification has been filed with the chief. I agree that this pit/impoundment shall be constructed, maintained, operated and closed in accordance with all applicable laws and rules, including the requirements of W. Va. Code R § 35-4-2.

Name: Victoria J. Rank  
Title: Permitting Supervisor  
Signature: 

Taken, subscribed and sworn to before me this, 24 Day of June 20 15  
Notary Public: Rebecca L. Heater  
My commission expires: 4-7-20

Notary Seal:



**Section 9. Submittal Instructions**

Submit original paper copy of application to:  
West Virginia Department of Environmental Protection  
Office of Oil and Gas  
Impoundment Registration  
601 57<sup>th</sup> Street, SE  
Charleston WV 25304

Email PDF file format of this application and all related engineering Plans to :  
Depimpoundments@wv.gov

RECEIVED  
Office of Oil and Gas  
DEC 16 2016  
WV Department of  
Environmental Protection