west virginia department of environmental protection

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

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

Tuesday, October 25, 2016
WELL WORK PERMIT
Horizontal 6A / Horizontal 6A Well - 1

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

Re: Permit approval for 516600
47-095-02371-00-00

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: 516600
Farm Name: PETER, DONNA J.
U.S. WELL NUMBER: 47-095-02371-00-00
Horizontal 6A / Horizontal 6A Well - 1
Date Issued: 10/25/2016

API Number: _____

PERMIT CONDITIONS 4700502371

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. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.

8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

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

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WW-6B
(04/15)

API NO. 47- 95 -
OPERATOR WELL NO. 516600
Well Pad Name: WEU4

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

1) Well Operator:	EQT Production Company	306686	Tyler	Centerville	West Union
		Operator ID	County	District	Quadrangle

2) Operator's Well Number: 516600 Well Pad Name: WEU4

3) Farm Name/Surface Owner: Donna J. Peter Public Road Access: WV-18

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

5) Well Type (a) Gas x Oil _____ Underground Storage _____
Other _____
(b)If Gas Shallow x Deep _____
Horizontal x

JmH
6/7/16

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, Top of Marcellus 6649

8) Proposed Total Vertical Depth: 6680

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 16406

11) Proposed Horizontal Leg Length: 8122

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

13) Method to Determine Fresh Water Depths: By Offset wells

14) Approximate Saltwater Depths: 1128,1219,1222

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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 x

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

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WW-6B
(04/15)

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API NO. 47- 95 -
OPERATOR WELL NO. 516600
Well Pad Name: WEU4

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^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	750	750	668 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	2865	2865	1126 ft^3 / CTS
Production	5 1/2	New	P-110	20	16406	16406	500' above top producing zone
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40' above top perf or 80° inclination	
Liners							

DMH
6.7.16

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 H	1.07/1.86
Tubing	2 3/8	NA	.19	7700			
Liners							

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PACKERS

Kind:				
Sizes:				
Depths Set:				

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API NO. 47- 95 -
4709502371
OPERATOR WELL NO. 516600
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 2935'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

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6-7-16

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, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 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 cent at the shoe and one spaced every 500'.
- Production: One solid body cent 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, .25% Flake Loss Circulation Material (LCM) is used to combat the loss of the cement slurry to a thief zone.
Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temperature formations to speed the setting of cement slurries. 0.25% flake. Loss Circulation Material (LCM) is used to combat the loss of whole drilling fluid or cement slurry (not filtrate) to a thief zone.
Production:
Lead (Type H 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 (Type 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 % Calcuim Carbonate. Acid solubility.

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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.

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*Note: Attach additional sheets as needed.

6/7/16

Well 516600(WEU4H14)

EQT Production

West Union Quad

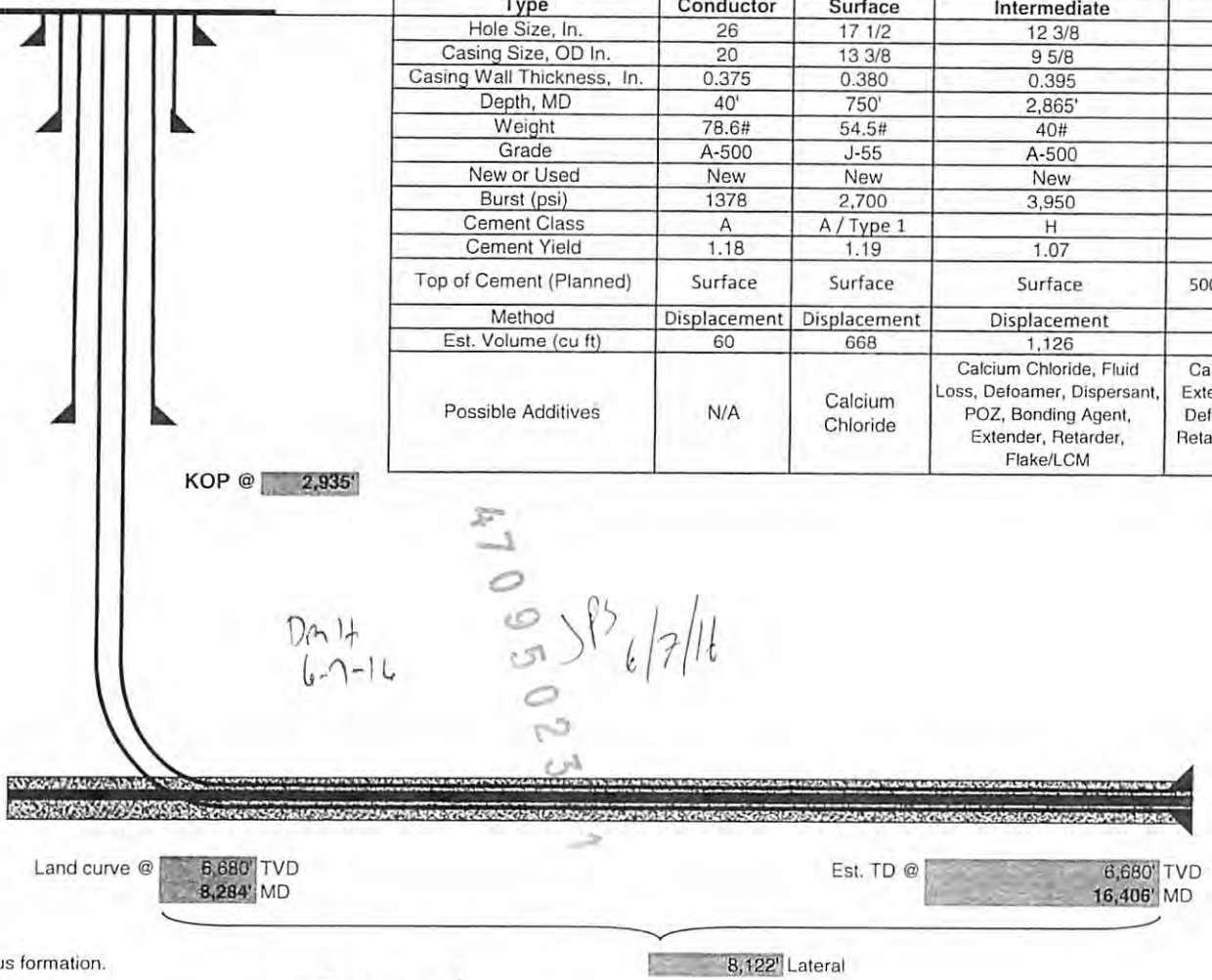
Tyler County, WV

Azimuth 330

Vertical Section 8283.63

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	2865	
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	16406 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'	16,406'
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	H
Cement Yield	1.18	1.19	1.07	1.07/1.86
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	3,051
Possible Additives	N/A	Calcium Chloride	Calcium Chloride, Fluid Loss, Defoamer, Dispersant, POZ, Bonding Agent, Extender, Retarder, Flake/LCM	Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent

Dan H 6-7-16

4709502371 JPS 6/7/16

Proposed Well Work:
Drill and complete a new horizontal well in the Marcellus formation.
Drill the vertical to an approximate depth of 2935'.
Kick off and drill curve. Drill lateral in the Marcellus. Cement casing.

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EQT Production

Hydraulic Fracturing Monitoring Plan

Pad ID: WEU4

Tyler County, WV

8/22/16

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 the WEU4 pad: 516600

Due to the apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water, or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 6,600' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability Alexander formation (approximately 5,200' TVD).

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 pre-notification of conventional well operators of the timing and location of the hydraulic fracturing, establishment of measures conventional 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 Conventional Well Operators

EQT, using available data (WV Geological Survey, WVDEP website, and IHS data service), has identified all known conventional wells and well operators within 500 feet of this pad and the lateral sections. A map showing these wells along with a list of the wells and operators is included in **Attachment A.**

Upon approval of this plan, EQT will notify these operators, via letter, of the hydraulic fracturing schedule for these wells. A copy of this letter is included in **Attachment B.**

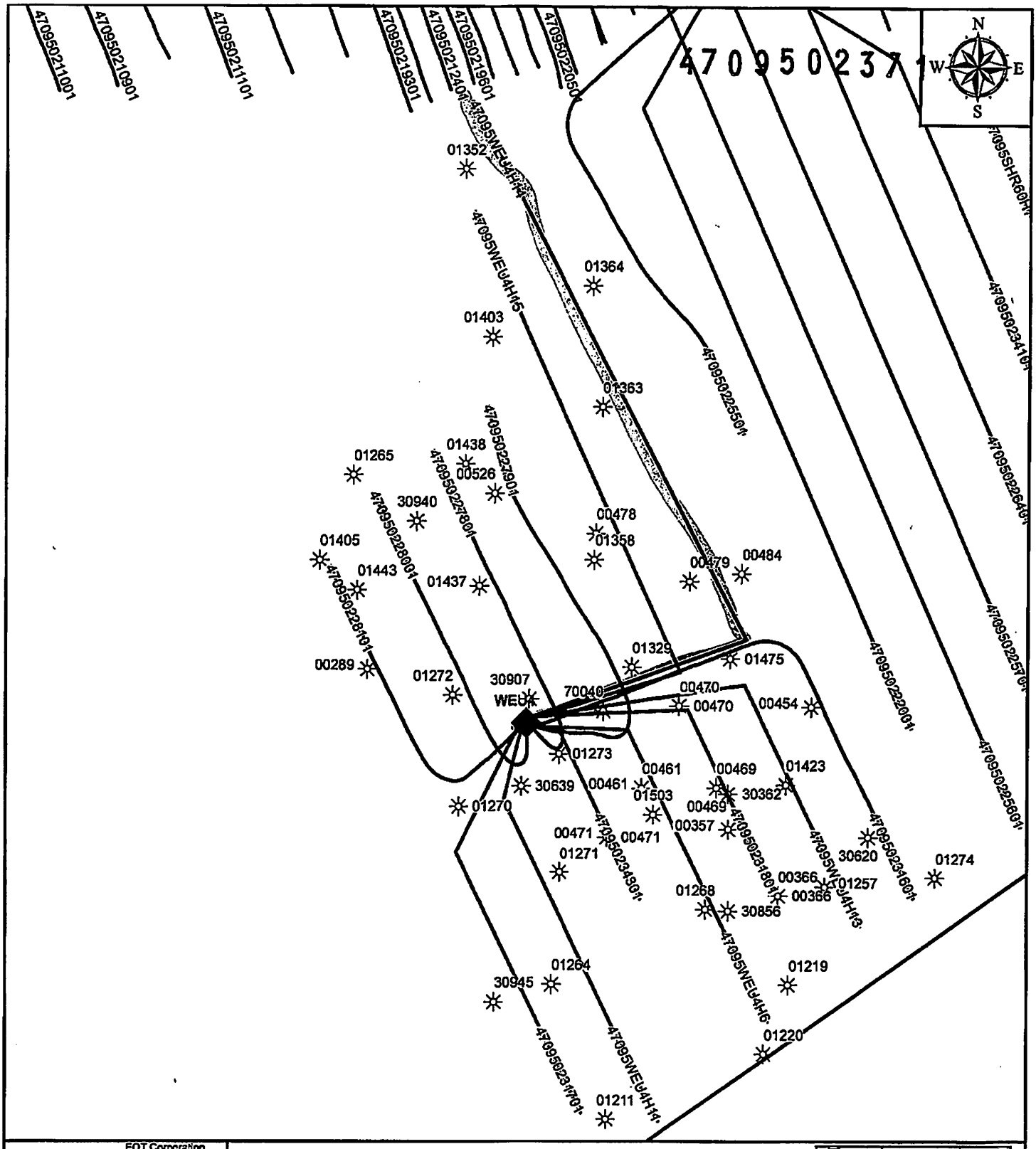
The letter provides recommendations to these conventional operators to 1) increase their monitoring of their wells during that time period, 2) ensure that their well head equipment is sound, and 3) provide immediate notification to EQT and the OOG in the event of any changes in their well conditions.

Specifically, the letter recommends that conventional well operators conduct the following activities during and after fracturing operations:

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 rated to 3,000 psi or other necessary equipment for wellhead integrity
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 conventional operators, and ongoing monitoring of the work upon request of OOG or immediately in the event of any noted abnormalities.



EQT

EQT Corporation
625 Liberty Avenue
Pittsburgh, PA 15222

WEU4

Vertical Offsets and Foreign Laterals within 500'

Legend

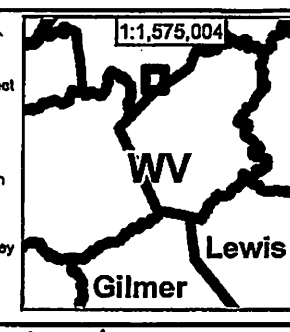
- WEU4 Vertical Offsets
- Genesee Spud
- Marcellus Spud
- Middlesex Spud
- Utica Spud
- GENESEO
- MARCELLUS
- MIDDLESEX
- POINT PLEASANT
- UTICA

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.



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Attachment A

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	[redacted]				
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	[redacted]	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	ABDOGW	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	[redacted]	
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	[redacted]	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	[redacted]				
4709500469			UNKNOWN	999	GR	PSEUDO	39.3642	-80.8117					
4709500470			UNKNOWN	1027	GR	PSEUDO	39.3672	-80.8135					

Attachment A (2)

4709502371

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UWI	Name	Depth Top	Base Depth
47095012700000	BIG LIME	1920	2030
47095012700000	BIG INJUN /SD/	2030	2130
47095012700000	GORDON /SD/	2690	2750
47095012700000	RILEY /SD/	4550	4610
47095012700000	BENSON /SD/	4970	5040
47095014030000	BIG LIME	1868	1932
47095014030000	BIG INJUN /SD/	1976	2075
47095014030000	BEREA	2428	2430
47095014030000	RILEY /SD/	4512	4560
47095014030000	BENSON /SD/	4933	
47095013290000	BIG LIME	1870	2010
47095013290000	BIG INJUN /SD/	2010	2110
47095013290000	RILEY /SD/	4510	4580
47095013290000	BENSON /SD/	4580	5200
47095012740000	LITTLE LIME	1863	1877
47095012740000	BIG LIME	1895	1982
47095012740000	BIG INJUN /SD/	1982	2100
47095012740000	GORDON /SD/	2650	2700
47095012740000	RILEY /SD/	4500	4555
47095012740000	BENSON /SD/	4958	4963
47095012190000	BIG LIME	1790	1870
47095012190000	BIG INJUN /SD/	1870	1940
47095012190000	BEREA	2330	2340
47095012190000	GORDON /SD/	2540	2570
47095012190000	RILEY /SD/	4370	4440
47095012190000	BENSON /SD/	4810	4870
47095015030000	BIG LIME	1844	1933
47095015030000	BIG INJUN /SD/	1933	1977
47095015030000	RILEY /SD/	4510	4890
47095014750000	LITTLE LIME	1989	2025
47095014750000	BIG LIME	2025	2100
47095014750000	BIG INJUN /SD/	2106	2265
47095014750000	RILEY /SD/	4640	
47095014750000	BENSON /SD/	5090	5150
47095012680000	BIG LIME	1850	1935
47095012680000	BIG INJUN /SD/	1935	2050
47095012680000	GORDON /SD/	2600	2650
47095012680000	RILEY /SD/	4450	4510
47095012680000	BENSON /SD/	4897	4960
47095013630000	LITTLE LIME	1915	1935
47095013630000	BIG LIME	1945	2020
47095013630000	BIG INJUN /SD/	2020	2135
47095013630000	GORDON /SD/	2675	2730
47095013630000	RILEY /SD/	4525	
47095013630000	BENSON /SD/	4985	
47095014380000	BIG LIME	1847	1940

Perforated Formations

Attachment A(3)

4709502371

47095014380000	BIG INJUN /SD/	1940	2070
47095014380000	GORDON /SD/	2604	2620
47095014380000	RILEY /SD/	4495	4570
47095012650000	BIG LIME	1810	1865
47095012650000	BIG INJUN /SD/	1865	2055
47095012650000	BEREA	2408	
47095012650000	RILEY /SD/	4488	
47095012650000	BENSON /SD/	4912	
47095014050000	MAXTON	1790	1810
47095014050000	BIG LIME	1830	1902
47095014050000	BIG INJUN /SD/	1948	2032
47095014430000	LITTLE LIME	1863	1875
47095014430000	BIG LIME	1899	1990
47095014430000	GORDON /SD/	2680	2695
47095014430000	RILEY /SD/	4515	4595
47095014430000	BENSON /SD/	4925	
47095012200000	BIG LIME	1708	
47095012200000	BEREA	2255	
47095012200000	GORDON /SD/	2469	
47095012200000	RILEY /SD/	4339	
47095012200000	BENSON /SD/	4760	
47095014370000	LITTLE LIME	1809	1824
47095014370000	BIG LIME	1835	1943
47095014370000	BIG INJUN /SD/	1943	2050
47095014370000	GORDON /SD/	2600	2620
47095014370000	RILEY /SD/	4465	
47095014370000	BENSON /SD/	4900	4930
47095013520000	BIG LIME	1968	2035
47095013520000	BIG INJUN /SD/	2035	2114
47095013520000	RILEY /SD/	4600	4659
47095013520000	BENSON /SD/	4659	
47095013580000	LITTLE LIME	1840	1855
47095013580000	BIG LIME	1872	1965
47095013580000	BIG INJUN /SD/	1965	2080
47095013580000	GORDON /SD/	2635	2643
47095013580000	RILEY /SD/	4475	
47095013580000	BENSON /SD/	4915	
47095012730000	BIG LIME	2000	2110
47095012730000	BIG INJUN /SD/	2110	
47095012730000	GORDON /SD/	2770	2830
47095012730000	RILEY /SD/	4596	4660
47095012730000	BENSON /SD/	4955	5190
47095012570000	LITTLE LIME	1828	1838
47095012570000	BIG LIME	1860	
47095012570000	BIG LIME	1870	1956
47095012570000	BIG INJUN /SD/	1938	
47095012570000	BIG INJUN /SD/	1956	2060

Attachment A(4)

4709502371

47095012570000	WEIR /SD/	2207	
47095012570000	BEREA	2410	
47095012570000	GORDON /SD/	2615	
47095012570000	GORDON /SD/	2654	2675
47095012570000	RILEY /SD/	4457	
47095012570000	RILEY /SD/	4478	4534
47095012570000	BENSON /SD/	4905	
47095012570000	BENSON /SD/	4915	4927
47095014230000	BIG INJUN /SD/	2085	2196
47095014230000	GORDON /SD/	2745	2805
47095014230000	RILEY /SD/	4595	4668
47095014230000	BENSON /SD/	5030	
47095012110000	BIG LIME	1830	1920
47095012110000	BIG INJUN /SD/	1920	2020
47095012110000	WEIR /SD/	2170	2280
47095012110000	BEREA	2380	2390
47095012110000	GORDON /SD/	2580	2630
47095012110000	RILEY /SD/	4430	4520
47095012110000	BENSON /SD/	4850	4920
47095012640000	BIG LIME	1749	
47095012640000	BIG LIME	1760	1822
47095012640000	BIG INJUN /SD/	1822	1941
47095012640000	BIG INJUN /SD/	1834	
47095012640000	WEIR /SD/	2100	
47095012640000	BEREA	2302	
47095012640000	GORDON /SD/	2500	2535
47095012640000	GORDON /SD/	2500	
47095012640000	RILEY /SD/	4337	
47095012640000	RILEY /SD/	4358	4414
47095012640000	BENSON /SD/	4796	
47095012640000	BENSON /SD/	4802	4817
47095012710000	BIG LIME	1800	1910
47095012710000	BIG INJUN /SD/	1910	2010
47095012710000	GORDON /SD/	2570	2620
47095012710000	RILEY /SD/	4400	4490
47095012710000	BENSON /SD/	4840	4940
47095013640000	LITTLE LIME	1892	1905
47095013640000	BIG LIME	1924	2010
47095013640000	BIG INJUN /SD/	2016	2145
47095013640000	GORDON /SD/	2668	2715
47095013640000	RILEY /SD/	4535	4565
47095012720000	BIG LIME	1900	2010
47095012720000	BIG INJUN /SD/	2010	2110
47095012720000	GORDON /SD/	2670	2730
47095012720000	RILEY /SD/	4500	4590
47095012720000	BENSON /SD/	4920	5040

Attachment A (5)

4709502371

625 Liberty Ave, Suite 1700
Pittsburgh PA 15222
www.eqt.com

TEL: (412) 395-3305
FAX: (412) 395-2156

John Centofanti
Corporate Director,
Environmental Affairs

EQT

(date)

[Conventional Well Operator]
[address]
[state]

RE: Tyler County Hydraulic Fracturing Notice

Dear Sir/Madam,

EQT has developed a Marcellus pad (West Union 4 pad) located in Tyler County, WV. As an owner or operator of conventional natural gas wells in this area, we are requesting your assistance in this matter.

Due to the apparent presence of unique geological conditions, the potential for communication between deep geologic zones exists in this area. This potential communication, via natural gas, water, or both, may occur between hydraulically fractured wells in the Marcellus formation (approximately 6,600' TVD) and existing conventional natural gas wells in the partially-depleted, relatively high permeability, Alexander formation (approximately 5,200' TVD).

EQT anticipates conducting hydraulic fracturing at the West Union 4 pad during the [first,second, third,fourth] quarter of [year]. We have identified conventional natural gas wells operated by your company within 500' (lateral distance) of our new/planned laterals. Plats for each well on this pad are attached.

We recommend that conventional well operators conduct the following activities before, during, and after fracturing operations:

1. Inspect surface equipment, prior to fracturing, to establish integrity and establish 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 rated to 3,000 psi or other necessary equipment for wellhead integrity.
4. Notify the OOG and EQT if any changes in water, gas production, pressure, or other anomalies are identified.

Please feel free to contact me at 412-395-3305 with any questions or comments. You may also contact the West Virginia Office of Oil and Gas at 304-926-0440.

Sincerely,
EQT Production

John Centofanti
Corporate Director, Environmental Affairs

cc: James Martin, WV Office of Oil and Gas

Attachment B

April 28, 2016

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

4709502371

Re: Casing change on WEU4 (516600,)

Dear Mr. Smith,

EQT is requesting the 13 3/8" surface casing to be set at 750' KB, 50' below the coal at 696-700' KB. We will set the 9-5/8" intermediate string at 2865' KB, 50' below the base of the Gordon.

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

Sincerely,

Vicki Roark
Permitting Supervisor-WV

Enc.

4709502317

west virginia department of environmental protection

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

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

March 18, 2014

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

Re: Cement Variance Request

Dear Sir or Madam,

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

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

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

Sincerely,

James Peterson by SCS

James Peterson
Environmental Resources Specialist / Permitting

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WV Department of
Environmental Protection

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west virginia department of environmental protection

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

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

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.

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CONCLUSIONS OF LAW

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

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

ORDER

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

James Martin, Chief
Office of Oil and Gas

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WW-9
(4/16)

4709502371

API Number 47 - 95 - _____
Operator's Well No. 516600

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

4709502371

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 and residual solids

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

DMH 6-7-16

Proposed Disposal Method For Treated Pit Wastes:

JPS 6/7/16

_____ 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 _____

Company Official (Typed Name) Victoria J. Roark

Company Official Title Permitting Supervisor

Received
Office of Oil & Gas
JUN 14 2016

Subscribed and sworn before me this 11 day of May, 2016

Rebecca L Wanstreet Notary Public

My commission expires 4-7-20

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
REBECCA L. WANSTREET
EQT PRODUCTION COMPANY
PO BOX 280
BRIDGEPORT, WV 26330
My commission expires April 07, 2020

4709502371

Form WW-9

Operator's Well No. 516600

EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed no additional Prevegetation pH 6.3

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		

4709502371

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: [signature] Justin Snyder [signature]

Comments:

Received
Office of Oil & Gas
[illegible] 14 2016

Title: Oil & Gas inspector Date: 6/7/16

Field Reviewed? (✓) Yes ( ) No

WW-9 Attachment

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

4709502

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

Additives to be used in drilling medium?

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

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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

4709502371

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

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

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

TRI COUNTY WASTE WATER MANAGEMENT, INC.
1487 Toms Run Road
Holbrook, PA 15341
724-627-7178 Plant
724-499-5647 Office
Greene County/Waynesburg
Permit # TC-1009

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

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

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

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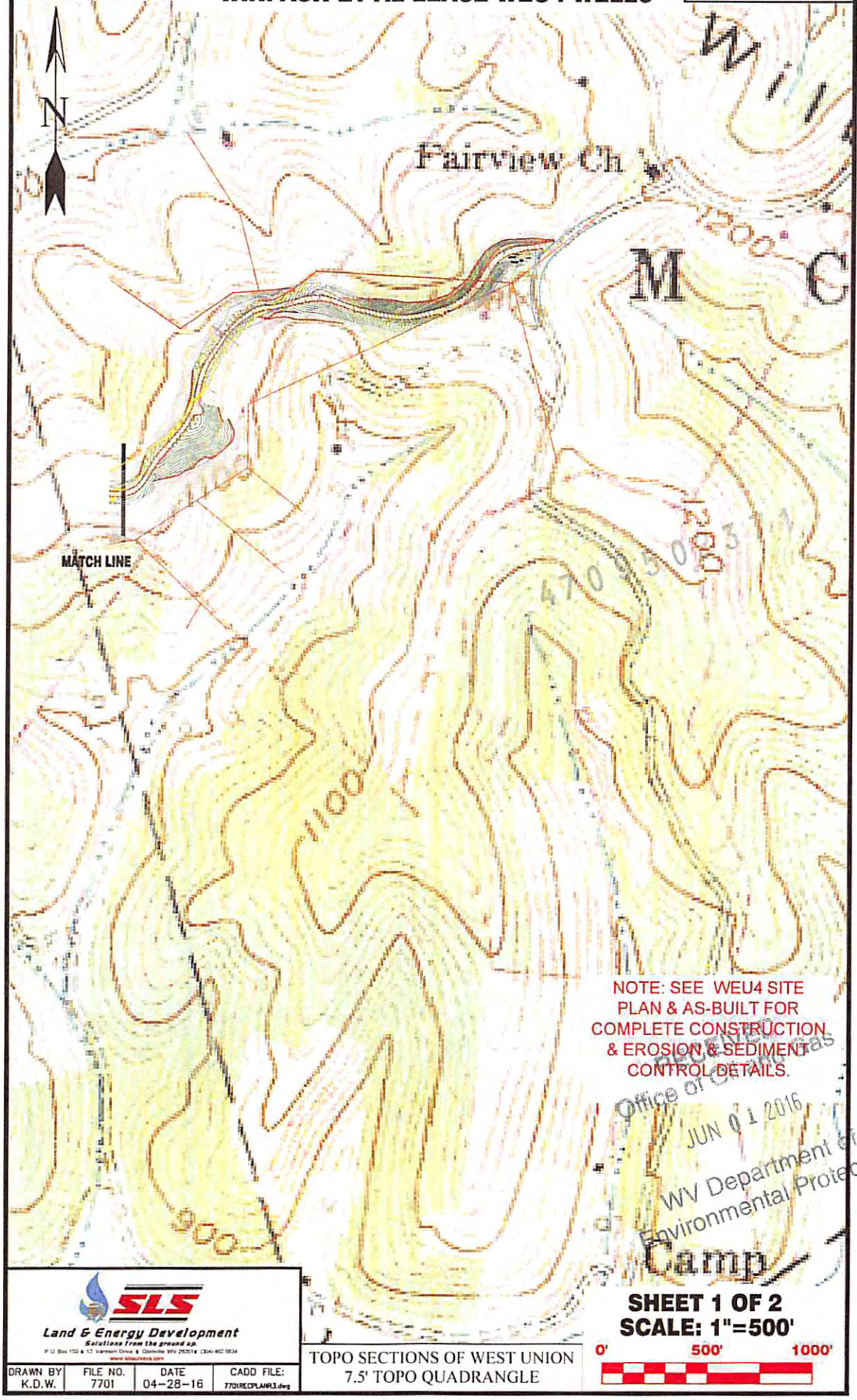
Form WW-9

W.H. ASH ET AL LEASE WEU4 WELLS

page of



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

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Land & Energy Development
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DRAWN BY	FILE NO.	DATE	CADD FILE:
K.D.W.	7701	04-28-16	7701RECPLAN3.dwg

TOPO SECTIONS OF WEST UNION 7.5' TOPO QUADRANGLE

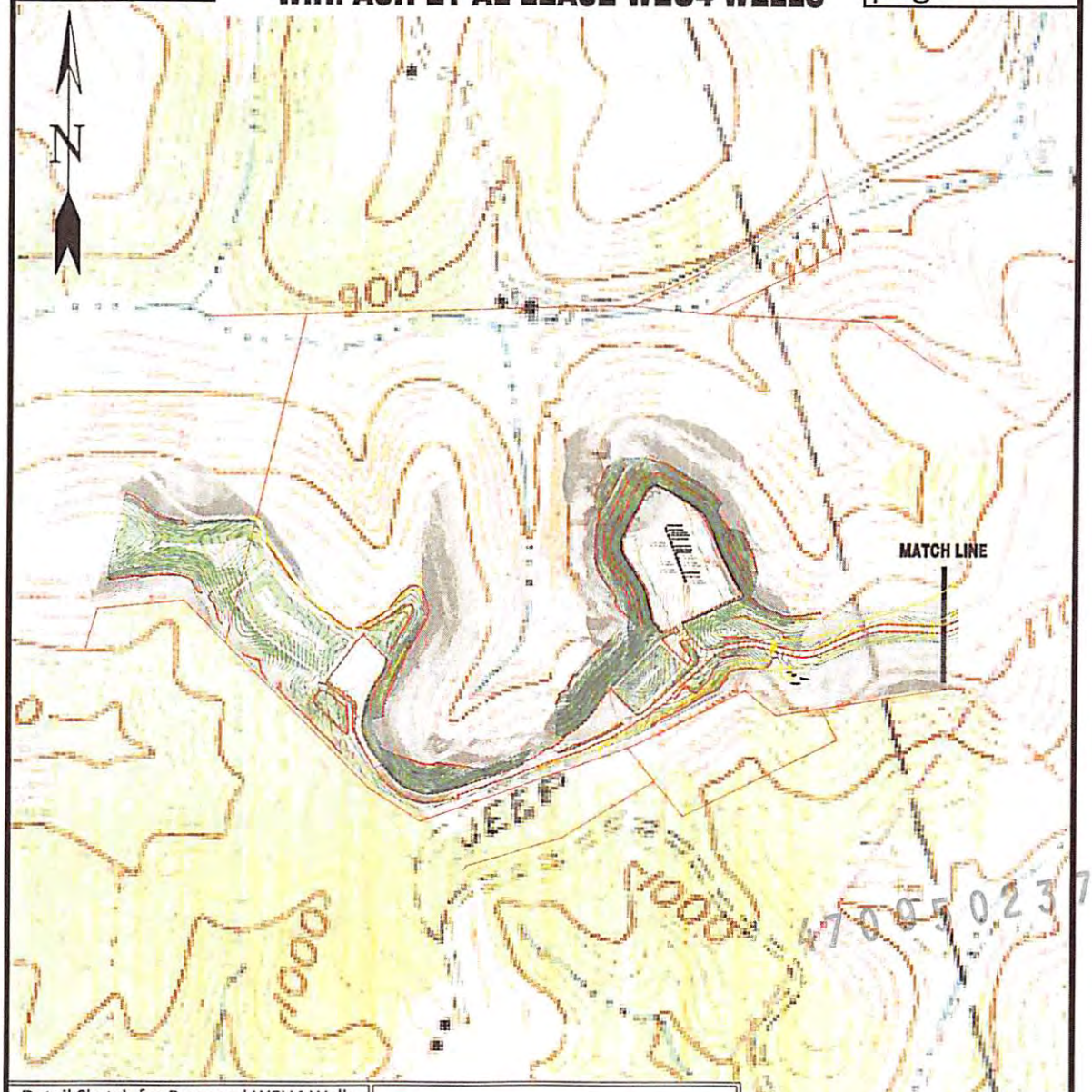
SHEET 1 OF 2
SCALE: 1"=500'

0' 500' 1000'

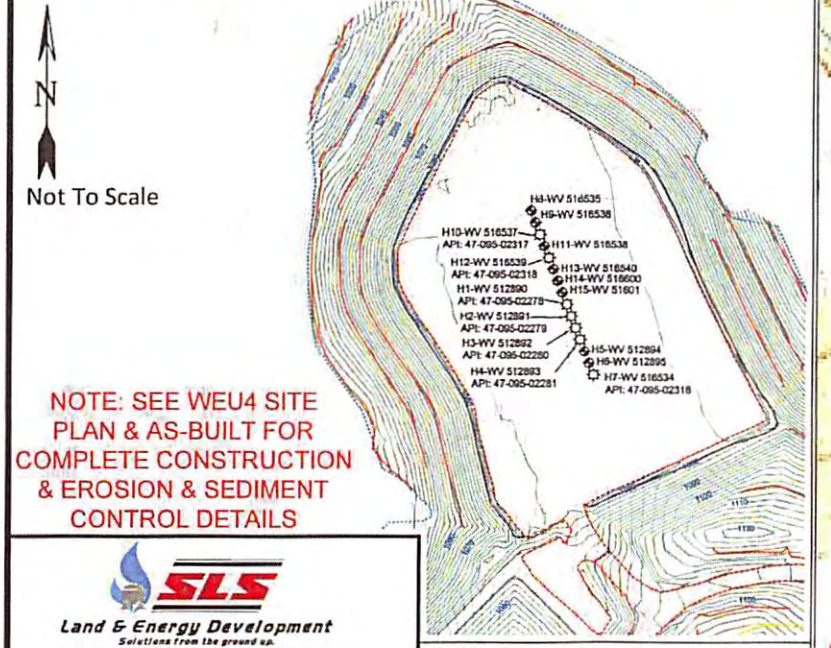
Form WW-9

W.H. ASH ET AL LEASE WEU4 WELLS

page of



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

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Solutions from the ground up.
P.O. Box 150 • 12 Vanhorn Drive • Glenville, WV 26351 • (304) 462-5634

DRAWN BY	FILE NO.	DATE	CADD FILE:
K.D.W.	7701	04-28-16	7701RECPLAN3.dwg

TOPO SECTIONS OF WEST UNION 7.5' TOPO QUADRANGLE

SHEET 2 OF 2
SCALE: 1"=500'

0' 500' 1000'

4709502371

Where energy meets innovation.™

Site Specific Safety Plan

EQT WEU 4 Pad

4709502371

Alma
Tyler County, WV

For Wells:

Date Prepared: **February 3, 2016**

EQT Production

Permitting Supervisor
Title

5/10/16
Date

WV Oil and Gas Inspector

Oil&Gas Inspector
Title

6/7/16
Date

Received
Office of Oil & Gas
JUN 4 '16

WW-6A1
(5/13)

Operator's Well No. 516600

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				

4709502371

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

RECEIVED
Office of Oil and Gas
JUN 01 2016
WV Department of
Environmental Protection

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

WW-6A1 attachment Operator's Well No. 516600

Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
126129	**Waco Oil & Gas Co. Inc., et al (current royalty owner)**		***	
	Willam 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		DB 433/777
	Equitrans, LP	EQT Production Company		DB 396/640
	Equitrans, LP	EQT Production Company		OG 440/107
126208	**Roxie Davis, et al (current royalty owner)**		***	
	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
126165	**Hester Britton, et al (current royalty owner)**			
	Asia Dell Cumberledge, et al (orignal 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
126187	**Jerry Ray Brown, et al (current royalty owner)**		***	
	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
126221	**EQT Mineral Purchasing Group, et al (current royalty owner)**			
	Ora E. Pratt, et al (original lessor)	Equitable Gas Company		DB 200/38
	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
	Formations below the base of the Fifth Sand			
126213	**BRC Appalachian Minerals I LLC, et al (current royalty owner)**		***	
	Carrie Robinson & J.B. Robinson (original lessor)	Hope Natural Gas Company		DB 70/483
	Hope Natural Gas Company	Consolidated Gas Supply Corporation		DB 169/26
	Consolidated Gas Supply Corporation	Consolidated Gas Transmission Corporation		DB 249/287
	Consolidated Gas Transmission Corporation	CNG Development Company		DB 253/57
	CNG Development Company	CNG Producing Company		1096/124 (Delaware)
	CNG Producing Company	Dominion Exploration & Production, Inc		unrecorded name change (filed with secretary of state 5/10/00)
	Dominion Exploration & Production, Inc	CNX Gas Company LLC		384/191
	CNX Gas Company LLC	EQT Production Company		525/244
126191	**EQT Mineral Purchasing Group (current royalty owner)**		***	
	D.L. Haught, et al (original lessor)	Equitable Gas Company		DB 195/469
	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

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WV Department of
Environmental Protection

126131	**CNX Gas Company, LLC (current royalty owner)**		***	
	Walton E. Smith, Jr., et ux (original lessor)	Equitable Gas Company		DB 211/555
	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
126130	**George Berklein, et al (current royalty owner)**		***	
	Donald Underwood, et al. (original lessor)	Equitable Gas Company		DB 191/313
	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
126164	**Robert Seckman, et al (current royalty owner)**		***	
	Retha Seckman, et al (original lessor)	Equitable Gas Company		DB 192/351
	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 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.

4709502371

RECEIVED
Office of Oil and Gas
JUN 01 2016
WV Department of
Environmental Protection

FORM WW 6 – SHEET 2 OF 2

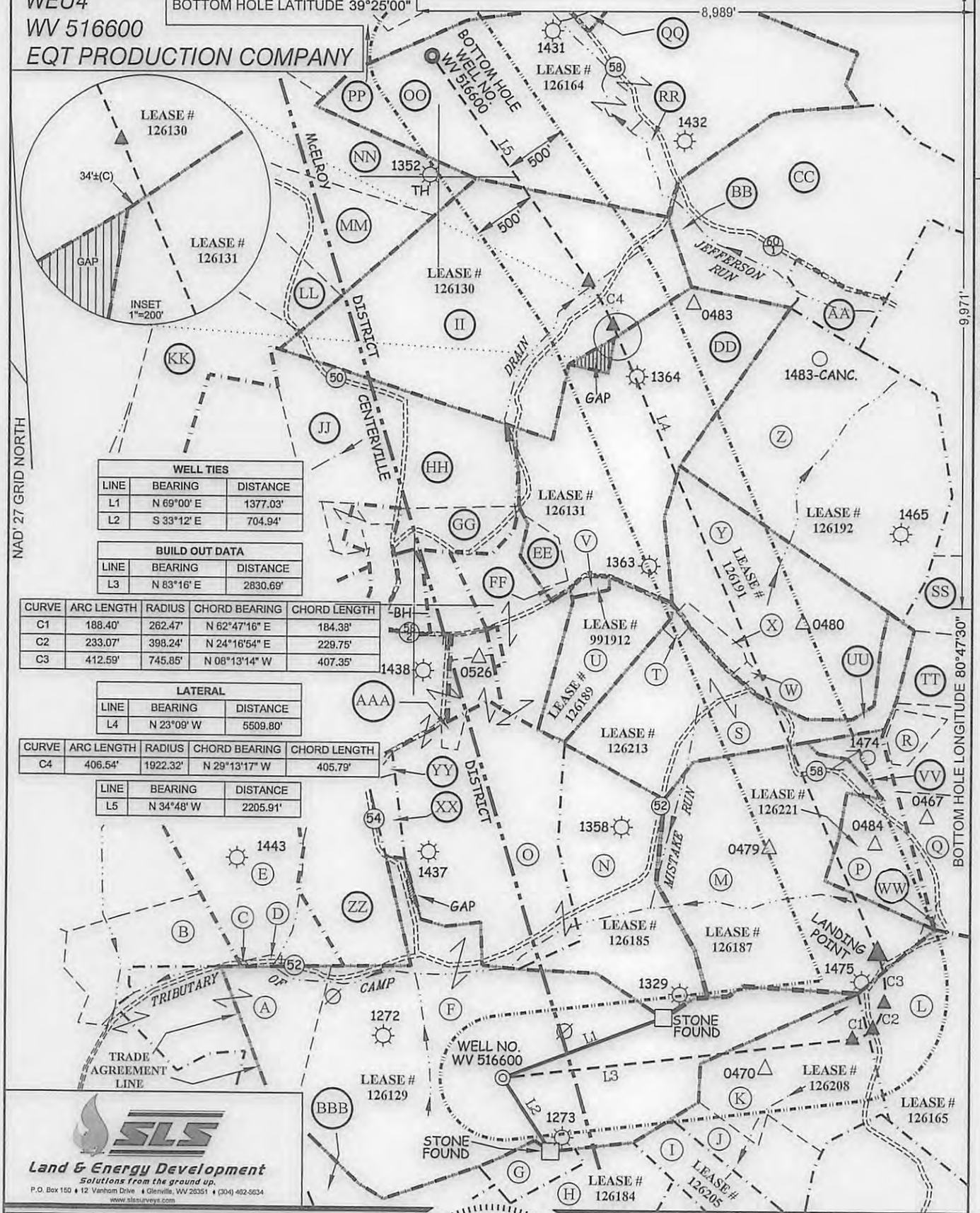
TOP HOLE LATITUDE 39°22'30" — 8,259'

BOTTOM HOLE LATITUDE 39°25'00" — 8,989'

TOP HOLE LONGITUDE 80°47'30" — 3,046' — 9,971'

BOTTOM HOLE LONGITUDE 80°47'30"

WEU4
WV 516600
EQT PRODUCTION COMPANY



WELL TIES		
LINE	BEARING	DISTANCE
L1	N 69°00' E	1377.03'
L2	S 33°12' E	704.94'

BUILD OUT DATA		
LINE	BEARING	DISTANCE
L3	N 83°16' E	2830.69'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	188.40'	262.47'	N 62°47'16" E	184.38'
C2	233.07'	398.24'	N 24°16'54" E	229.75'
C3	412.59'	745.85'	N 08°13'14" W	407.35'

LATERAL		
LINE	BEARING	DISTANCE
L4	N 23°09' W	5509.80'

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C4	406.54'	1922.32'	N 29°13'17" W	405.79'

LINE	BEARING	DISTANCE
L5	N 34°48' W	2205.91'

NAD' 27 GRID NORTH

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www.slssurveys.com

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'27 S.P.C.(FT)	N. 318,392.30	E. 1,626,564.08
NAD'27 GEO.	LAT-(N) 39.366638	LONG-(W) 80.820880
NAD'83 UTM (M)	N. 4,357,488.40	E. 515,444.77
LANDING POINT		
NAD'27 S.P.C.(FT)	N. 319,421.37	E. 1,629,575.42
NAD'27 GEO.	LAT-(N) 39.369584	LONG-(W) 80.810283
NAD'83 UTM (M)	N. 4,357,817.24	E. 516,356.95
BOTTOM HOLE		
NAD'27 S.P.C.(FT)	N. 326,653.36	E. 1,625,952.97
NAD'27 GEO.	LAT-(N) 39.389292	LONG-(W) 80.823472
NAD'83 UTM (M)	N. 4,360,002.04	E. 515,216.60

C. VICTOR MOYERS
LICENSED
No. 849
STATE OF
WEST VIRGINIA
PROFESSIONAL SURVEYOR

C.V.M.
8-02-16

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

LEGEND

LEASE LINE	
SURFACE LINE	
WELL LATERAL	
OFFSET LINE	
TIE LINE	
FENCE	
CREEK	
ROAD	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
PLUGGED WELL	
STORAGE WELL	
CENTERVILLE DISTRICT TAX MAP–PARCEL	C–00–00
McELROY DISTRICT TAX MAP–PARCEL	M–00–00

SCALE 1" = 1000'

DATE SEPTEMBER 03, 20 15

REVISED 05/03/16, 05/26/16 & 08/02/16

OPERATORS WELL NO. WV 516600

API WELL NO. 47 — 095 — 02371
STATE — COUNTY — PERMIT

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

COUNTY NAME

PERMIT

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

DESIGNATED AGENT REX C. RAY
ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280
BRIDGEPORT, WV 26330

SLS
124568

FORM WW 6 – SHEET 1 OF 2

TOP HOLE LATITUDE 39°22'30" — 8,259'

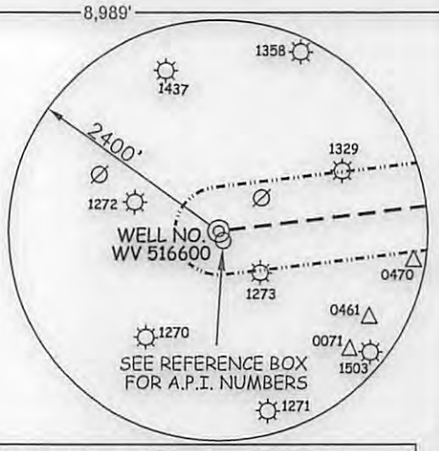
BOTTOM HOLE LATITUDE 39°25'00" — 8,989'

WEU4
WV 516600
EQT PRODUCTION COMPANY

A	RICHARD & YVONNE METCALF	61.57 AC.±	TM C-16-17
B	JOHN ANDERS II	19.75 AC.±	TM C-16-21.1
C	JOHN ANDERS II	0.09 AC.±	TM C-16-14.2
D	RICHARD & YVONNE METCALF	0.61 AC.±	TM C-16-14.1
E	CONRAD COSTILOW	46.17 AC.±	TM C-16-14
F	DONNA PETER	113.4 AC.±	TM C-16-22
G	PAUL WEEKLY (LIFE)	5 AC.±	TM C-16-28
H	PAUL WEEKLY (LIFE)	18 AC.±	TM C-16-27
I	EDWARD & CAROLYN WHITE	16 AC.±	TM M-21-40
J	EDWARD & CAROLYN WHITE	12.50 AC.±	TM M-21-39
K	EDWARD & CAROLYN WHITE	40 AC.±	TM M-21-38
L	ASIA CUMBERLEDGE	75.75 AC.±	TM M-21-32
M	BRUCE & SANDRA STONEKING	69.44 AC.±	TM M-21-28
N	BRUCE & SANDRA STONEKING	42.86 AC.±	TM M-21-29
O	ELIZABETH ABRUZZINO	109.94 AC.±	TM C-16-10
P	GARY DAVENPORT	16 AC.±	TM M-21-25
Q	PEGGY WHITE	45.88 AC.±	TM M-21-23
R	ROGER FERGUSON	3.053 AC.±	TM M-21-17.1
S	BOBBY & RITA DOLL	49 AC.±	TM M-21-11
T	GAMALIEL REYES ET AL	0.58 AC.±	TM M-21-10
U	PERRY HAUGHT JR.	16.21 AC.±	TM M-21-08
V	BILLY JO DOLL	0.58 AC.±	TM M-21-9.1
W	LESTER HAUGHT	0.25 AC.±	TM M-21-12
X	PERRY HAUGHT JR.	2.48 AC.±	TM M-21-13.1
Y	DONNIE & KIM WILMOTH	52.52 AC.±	TM M-21-13
Z	DONNIE & KIM WILMOTH	73.39 AC.±	TM M-21-14
AA	BARBARA WILLIER	5.90 AC.±	TM M-18-21
BB	BARBARA WILLIER	14 AC.±	TM M-18-22.1
CC	DONALD BIBLE SR.	39.26 AC.±	TM M-18-22
DD	DONNIE & KIM WILMOTH	63.29 AC.±	TM M-21-09
EE	KATHLEEN WINKELMAN	2.59 AC.±	TM M-21-9.2
FF	RANDY & CHARLEEN BYRD	0.88 AC.±	TM M-21-07
GG	CHRIS BAUM ET AL	13 AC.±	TM M-21-03
HH	CHRIS BAUM ET AL	14 AC.±	TM M-21-02
II	JAMES MEANS	90 AC.±	TM M-18-24
JJ	CHRIS BAUM ET AL	24 AC.±	TM ~~M-21-01~~
KK	WILLIAM & MARY DANIELS	45.86 AC.±	TM C-13-07
LL	PAUL DOLVIN	21.66 AC.±	TM C-13-06
MM	CHRIS BAUM ET AL	22.31 AC.±	TM C-13-05
NN	CHRIS BAUM ET AL	28 AC.±	TM C-13-5.1
OO	CLYDE SECKMAN ESTATE	111.75 AC.±	TM M-18-23
PP	BRENDA ASHLEY	22.65 AC.±	TM M-18-7.2
QQ	OK NAN KEYS	13.018 AC.±	TM M-18-07
RR	BILLY & ALTHA SECKMAN	1 AC.±	TM M-18-23.1
SS	PAUL WEEKLY (LIFE)	36 AC.±	TM M-21-15
TT	PAUL WEEKLY (LIFE)	36 AC.±	TM M-21-16
UU	DONNIE & KIM WILMOTH	7.50 AC.±	TM M-21-27
VV	PEGGY WHITE	5 AC.±	TM M-21-26
WW	TRUSTEES OF FAIRWIEW CHURCH	1 AC.±	TM M-21-24
XX	MARK & JOEL PROSSER	2.50 AC.±	TM C-16-15
YY	MARK & JOEL PROSSER	0.50 AC.±	TM C-16-12
ZZ	DAVID WOLFE	24.84 AC.±	TM C-16-16
AAA	RUTH & OLIN DOLL	1 AC.±	TM M-21-31
BBB	CHRIS BAUM ET AL	56.84 AC.±	TM C-16-23

TH

BH



TOP HOLE LONGITUDE 80°47'30" — 3,046'

BOTTOM HOLE LONGITUDE 80°47'30" — 9,971'

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

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NAD'27 GEO.	LAT-(N) 39.366638	LONG-(W) 80.820880
NAD'83 UTM (M)	N. 4,357,488.40	E. 515,444.77
	LANDING POINT	
NAD'27 S.P.C.(FT)	N. 319,421.37	E. 1,629,575.42
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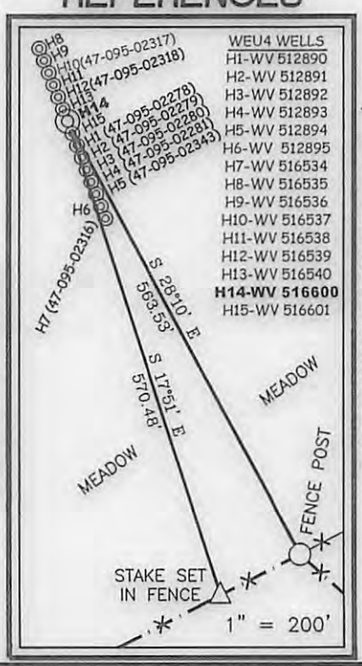
NAD'27 S.P.C.(FT)	N. 326,653.36	E. 1,625,952.97
NAD'27 GEO.	LAT-(N) 39.389292	LONG-(W) 80.823472
NAD'83 UTM (M)	N. 4,360,002.04	E. 515,216.60

REFERENCES



WEU4 WELLS
H1-WV 512890
H2-WV 512891
H3-WV 512892
H4-WV 512893
H5-WV 512894
H6-WV 512895
H7-WV 516534
H8-WV 516535
H9-WV 516536
H10-WV 516537
H11-WV 516538
H12-WV 516539
H13-WV 516540
H14-WV 516600
H15-WV 516601

ROYALTY OWNERS		
ROXIE DAVIS ET AL	53 AC.±	LEASE NO. 126208
HESTER BRITTON ET AL	76 AC.±	LEASE NO. 126165
JERRY RAY BROWN ET AL	85 AC.±	LEASE NO. 126187
EQT MINERAL PURCHASING GROUP ET AL	19 AC.±	LEASE NO. 126221
BRC APPALACHIAN MINERALS, LLC ET AL	55 AC.±	LEASE NO. 126213
EQT MINERAL PURCHASING GROUP	55 AC.±	LEASE NO. 126191
CNX GAS COMPANY	66 AC.±	LEASE NO. 126131
GEORGE BIRKLEIN ET AL	90 AC.±	LEASE NO. 126130
ROBERT SECKMAN ET AL	113 AC.±	LEASE NO. 126164

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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. WELL SPOT CIRCLE & TOPO MARK SCALE IS 1"=2000'.

I THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 849 C. Victor Moyers

C. VICTOR MOYERS LICENSED No. 849 STATE OF WEST VIRGINIA PROFESSIONAL SURVEYOR

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

DATE AUGUST 13 , 20 15

REVISED 05/03/16, 05/26/16 & 08/02/16

OPERATORS WELL NO. WV 516600

API WELL NO. 47 — 095 — 02371
STATE — COUNTY — PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500

FILE NO. 7701P516600R3

SCALE SEE NOTE 2

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 X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

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 & GAS CO. INC. ET AL ACREAGE 152±

PROPOSED WORK : LEASE NO. 126129

DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X 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'

COUNTY NAME

PERMIT

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

SLS

124568

097145

BK 1096 PG 0124

PAGE 1

State of Delaware

47095023

Office of Secretary of State

I, MICHAEL HARKINS, SECRETARY OF STATE OF THE STATE OF DELAWARE DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AGREEMENT OF MERGER OF "CNG DEVELOPMENT COMPANY" MERGING WITH AND INTO "CNG PRODUCING COMPANY" UNDER THE NAME OF "CNG PRODUCING COMPANY" AS RECEIVED AND FILED IN THIS OFFICE THE TWENTIETH DAY OF DECEMBER, A.D. 1990, AT 1 O'CLOCK P.M.

RECEIVED FOR RECORD NCCO 90 DEC 27 P 3:33 9

EVELYN T. A[illegible] RECORDER 000000

DEPARTMENT OF STATE OFFICE OF THE SECRETARY OF STATE 1833 1793 1970 DELAWARE

Michael Harkins, Secretary of State

AUTHENTICATION: 12897263

DATE: 12/20/1990

909354067

RECEIVED Office of Oil and Gas JUN 01 2016 WV Department of Environmental Protection

16/36248

State of West Virginia

Certificate

I, Ken Hechler, Secretary of State of the State of West Virginia, hereby certify that

riginals of an application by

CNG PRODUCING COMPANY

4709502371

for an amended certificate of authority to transact business in West Virginia are filed in my office, as required by the provisions of Chapter 31, Article 1, Sections 57 and 59 of the West Virginia Code and conform to law. Therefore, I issue this

AMENDED CERTIFICATE OF AUTHORITY

to transact business in West Virginia under the name of

DOMINION EXPLORATION & PRODUCTION, INC.

and I attach to this certificate a duplicate original of the application.

Given under my hand and the Great Seal of the State of West Virginia on

May 10, 2000

RECEIVED
Office of Oil and Gas
JUN 01 2016
WV Department of
Environmental Protection

Secretary of State

April 28, 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 516600
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,

Vicki Roark
Permitting Supervisor-WV

4709502371

RECEIVED
Office of Oil and Gas

JUN 01 2016

WV Department of
Environmental Protection

WW-6AC
(1/12)

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

Date of Notice Certification: 5/11/16

API No. 47- 95 -
Operator's Well No. 516600
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:	West Virginia	UTM NAD 83 Easting:	515444.769
County:	Tyler	Northing:	4357488.399
District:	Centerville	Public Road Access:	WV-18
Quadrangle:	West Union	Generally used farm name:	Donna J. Peter
Watershed:	Tributary of Camp Mistake Run		

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following: *PLEASE CHECK ALL THAT APPLY	OOG OFFICE USE ONLY
☐ 1. NOTICE OF SEISMIC ACTIVITY or ☑ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	☐ RECEIVED/ NOT REQUIRED
☐ 2. NOTICE OF ENTRY FOR PLAT SURVEY or ☑ NO PLAT SURVEY WAS CONDUCTED	☐ RECEIVED
☑ 3. NOTICE OF INTENT TO DRILL or ☐ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	☐ RECEIVED/ NOT REQUIRED
☐ WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	4702 9502371
☑ 4. NOTICE OF PLANNED OPERATION	☐ RECEIVED
☑ 5. PUBLIC NOTICE	☐ RECEIVED
☑ 6. NOTICE OF APPLICATION	☐ RECEIVED

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.

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JUN 01 2016
WV Department of
Environmental Protection

WW-6AC
(1/12)

Certification of Notice is hereby given:

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

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

NOTARY SEAL
OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
REBECCA L. WANSTREET
EQT PRODUCTION COMPANY
PO BOX 280
BRIDGEPORT, WV 26330
My commission expires April 07, 2020

Subscribed and sworn before me this 11 day of May 2016.

Rebecca L Wanstreet Notary Public

My Commission Expires 4-7-20

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.

4709502371

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WW-6A
(9-13)

API NO. 47- 95 -
OPERATOR WELL NO. 516600
Well Pad Name: WEU4

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

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

Date of Notice: 5/31/16 **Date Permit Application Filed:** 5/31/16

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: 4709502371

☑ 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

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WV Department of Environmental Protection

WW-6A
(8-13)

API NO. 47- 95 -
OPERATOR WELL NO. 516600
Well Pad Name: WEU4

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

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

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

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

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

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

4709502371

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

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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.

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

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

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

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WV Department of
Environmental Protection

WW-6A
(8-13)

API NO. 47- 95 -
OPERATOR WELL NO. 516600
Well Pad Name: WEU4

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.

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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.

WW-6A
(8-13)

API NO. 47- 95 -
OPERATOR WELL NO. 516600
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.

OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
REBECCA L. WANSTREET
EQT PRODUCTION COMPANY
PO BOX 280
BRIDGEPORT, WV 26330
My commission expires April 07, 2020

Subscribed and sworn before me this 11 day of May 2016.

Rebecca L Wanstreet Notary Public

My Commission Expires 4-7-20

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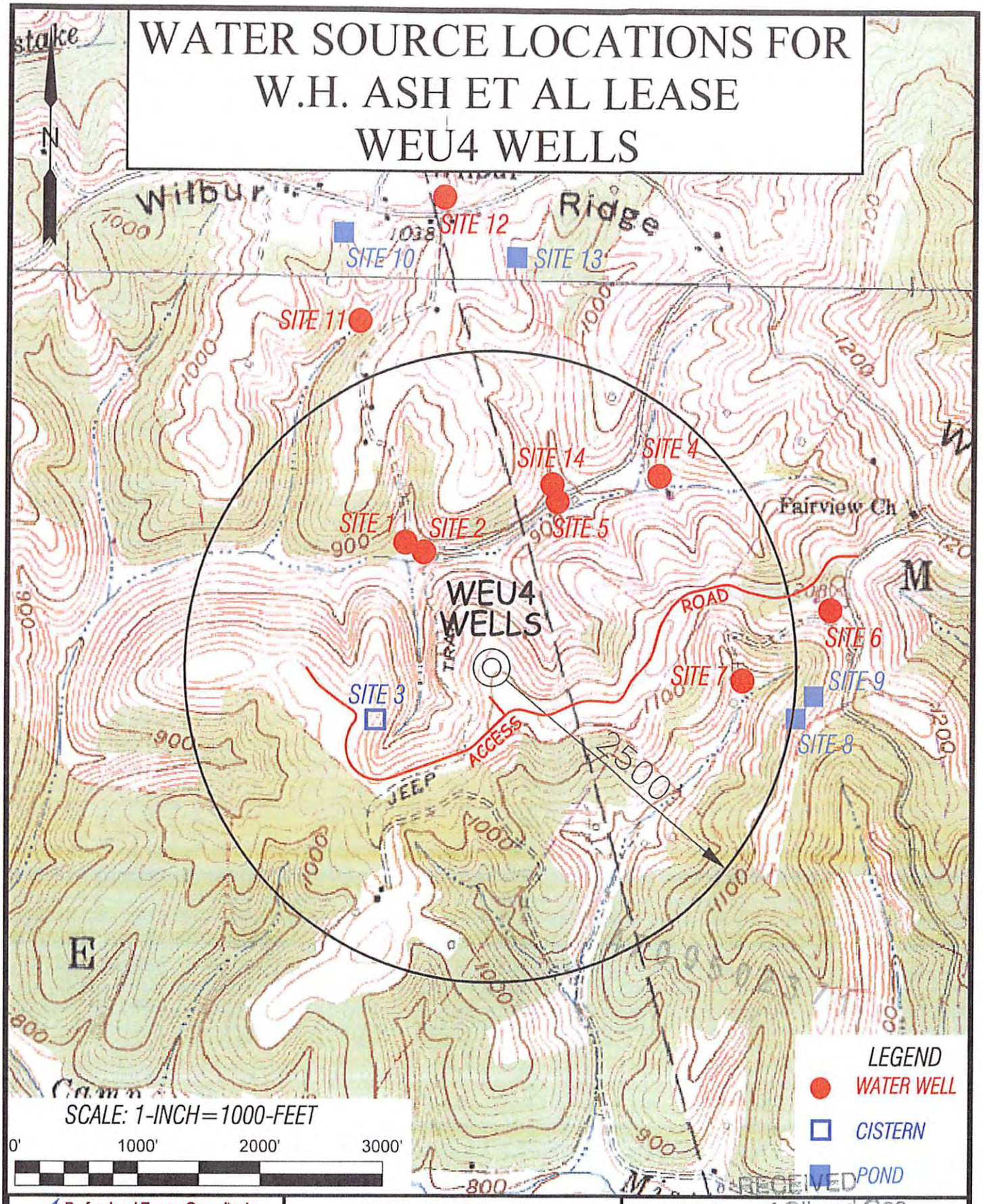
WATER SOURCE LOCATIONS FOR W.H. ASH ET AL LEASE WEU4 WELLS



Professional Energy Consultants A DIVISION OF SMITH LAND SURVEYING, INC SLS Surveyors Engineers Environmental Project Mgmt. (304) 462-5634 WWW.SLSSURVEYS.COM	TOPO SECTION OF: WEST UNION, WV 7.5' QUAD	OPERATOR: EQT PRODUCTION COMPANY 115 PROFESIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330	
DRAWN BY: K.D.W. / FILE NO.: 7701 / DATE: 05/11/16 / CADD FILE: 7701WSWEU4-R.dwg	DISTRICT: CENTERVILLE / COUNTY: TYLER / TAX MAP-PARCEL NO.: 16-22		

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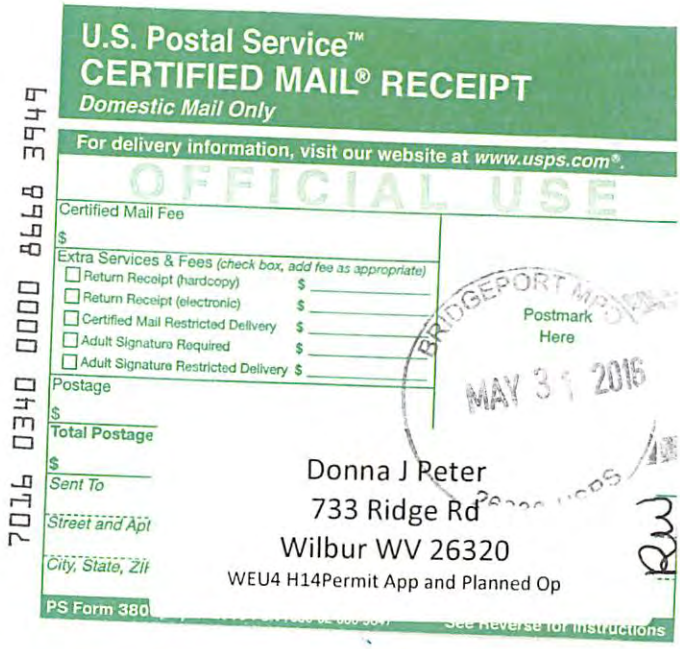
Surface Owners:

Donna J Peter
733 Ridge Rd
Wilbur WV 26320



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Surface Owners(road or other disturbance):

Donna J Peter
733 Ridge Rd
Wilbur WV 26320

L. Bruce and Sandra Jean Stoneking
RR1 Box 304-BB
Elkins WV 26241

James B. and Brenda J. Stoneking
2 Deerhaven Drive
Wheeling WV 26241

Diane L. Morgan and Glenn W. Morgan
590 Isner Creek Road
Elkins WV 26241

Richard Metcalf
415 Wildlife Lane
Bri

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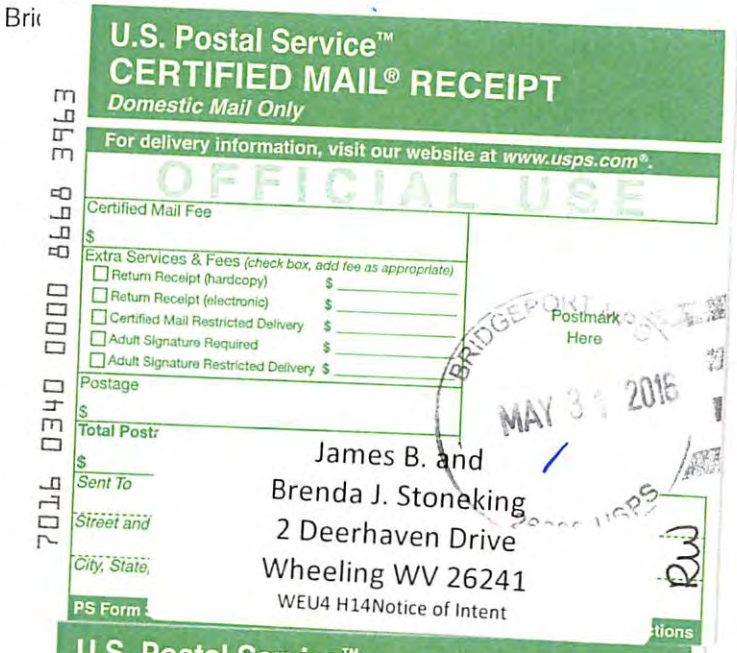

Surface Owners(Pits or impoundments):

Donna J Peter
733 Ridge Rd
Wilbur WV 26320

Richard Metcalf
415 Wildlife Lane
Bridgeport WV 26330

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Coal Owner

Rosemary Brandon
3913Delaware Avenue
Kenner, LA 70065

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Owners of Water Wells

Donna J Peter
733 Ridge Rd
Wilbur WV 26320

Bruce Stoneking
R.D. 1 Box BB
Elkins WV 26241

Frank and Elizabeth Abruzzino
91 Springhill Chapel Road
Clarksburg, WV 26301

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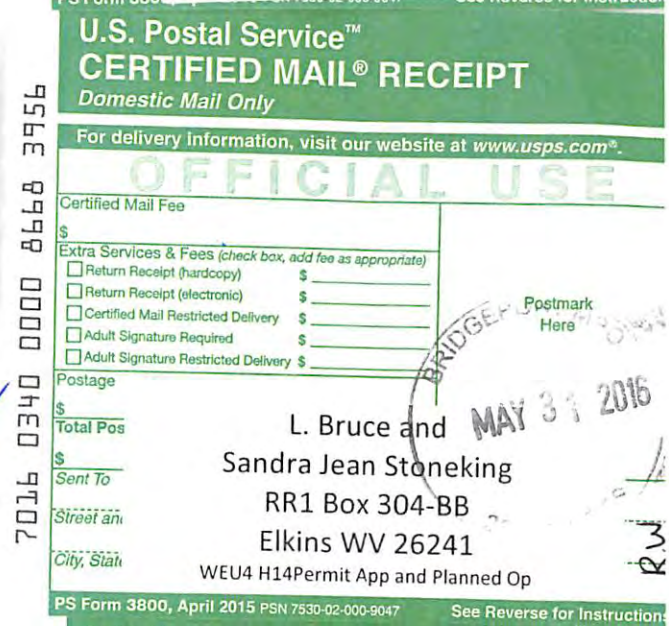

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Environmental Protection

WW-6A4
(1/12)

Operator Well No. 516600

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: 04/09/2016 **Date Permit Application Filed:** 04/19/2016

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: West Virginia
County: Tyler
District: Centerville
Quadrangle: West Union
Watershed: Tributary of Camp Mistake Run

UTM NAD 83 Easting: 515444.769
Northing: 4357488.399
Public Road Access: WV-18
Generally used farm name: Donna J. Peter

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 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is hereby given by:

Well Operator: EQT Production Company
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.

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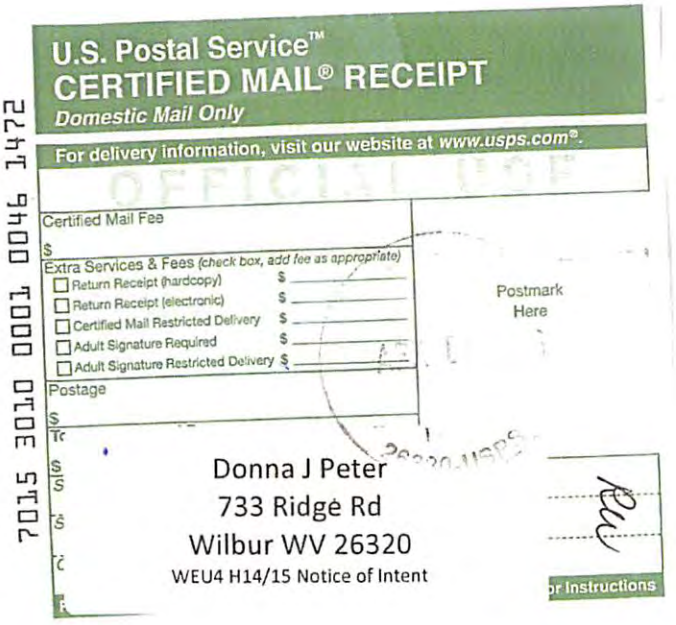
WV Department of
Environmental Protection

Surface Owners:

Donna J Peter
733 Ridge Rd
Wilbur WV 26320



4709502371

Surface Owners(road or other disturbance):

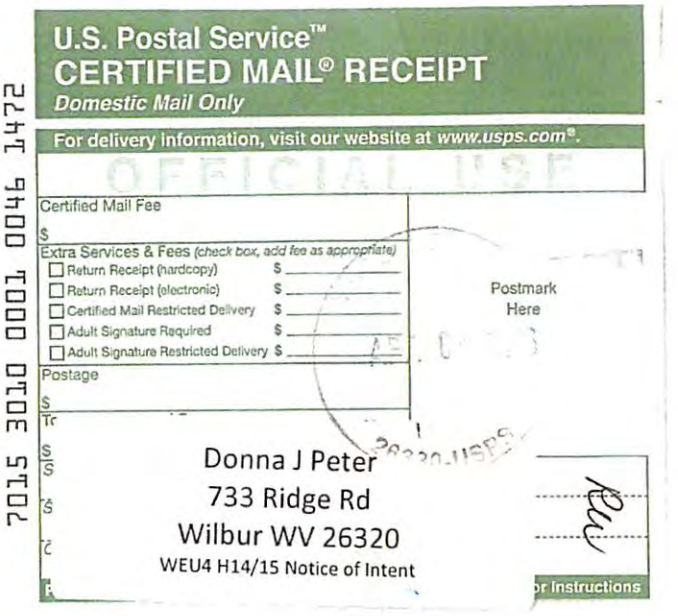
Donna J Peter
733 Ridge Rd
Wilbur WV 26320

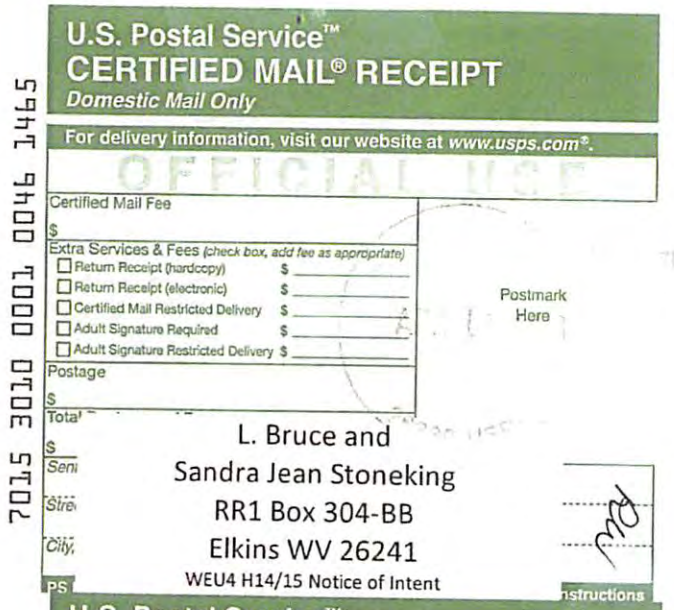
L. Bruce and Sandra Jean Stoneking
RR1 Box 304-BB
Elkins WV 26241

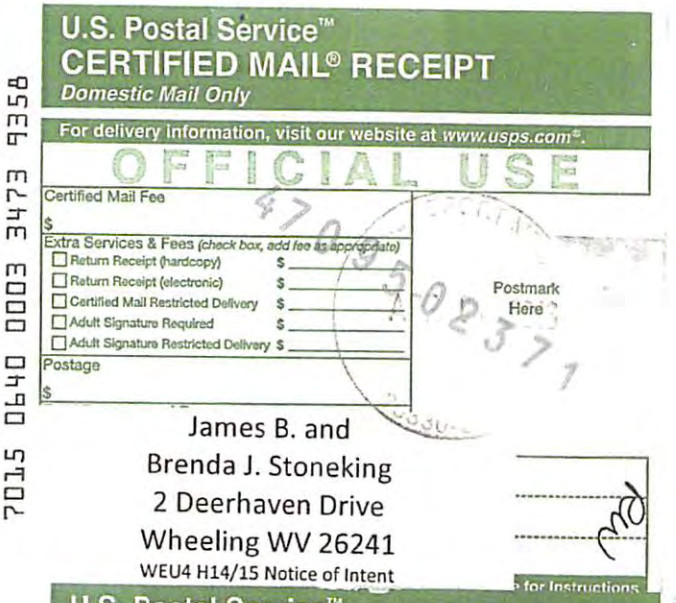
James B. and Brenda J. Stoneking
2 Deerhaven Drive
Wheeling WV 26241

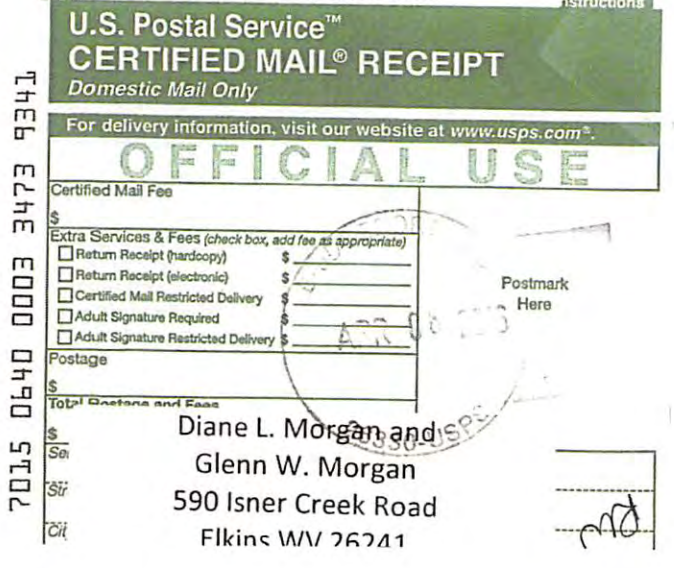
Diane L. Morgan and Glenn W. Morgan
590 Isner Creek Road
Elkins WV 26241

Richard Metcalf
415 Wildlife Lane
Bridgeport WV 26330







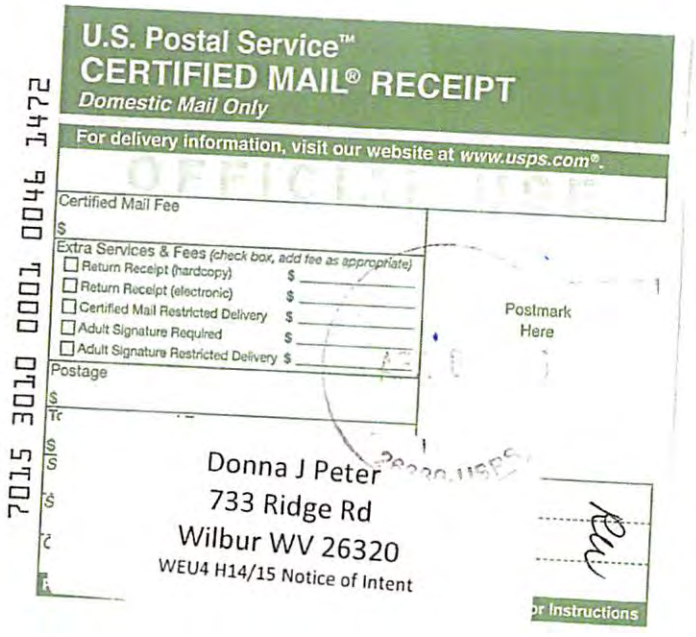


RECEIVED
Office of Oil and Gas
JUN 01 2016
WV Department of
Environmental Protection

Surface Owners(Pits or impoundments):

Donna J Peter
733 Ridge Rd
Wilbur WV 26320

Richard Metcalf
415 Wildlife Lane
Bridgeport WV 26330



4709502371

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Office of Oil and Gas

JUN 01 2016

WV Department of
Environmental Protection

Owners of Water Wells

Donna J Peter
733 Ridge Rd
Wilbur WV 26320

Bruce Stoneking
R.D. 1 Box BB
Elkins WV 26241

Frank and Elizabeth Abruzzino
91 Springhill Chapel Road
Clarksburg, WV 26301

7016 0950 0237 1

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JUN 01 2016
WV Department of
Environmental Protection

WW-6A5
(1/12)

Operator Well No. 516600

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: 5/31/16 **Date Permit Application Filed:** 5/31/16

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: See Attached
Address:

Name: See Attached
Address:

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

State: West Virginia
County: Tyler
District: Centerville
Quadrangle: West Union
Watershed: Tributary of Camp Mistake Run

UTM NAD 83 Easting: 515444.769
Northing: 4357488.399
Public Road Access: WV 18
Generally used farm name: Donna J. Peter

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

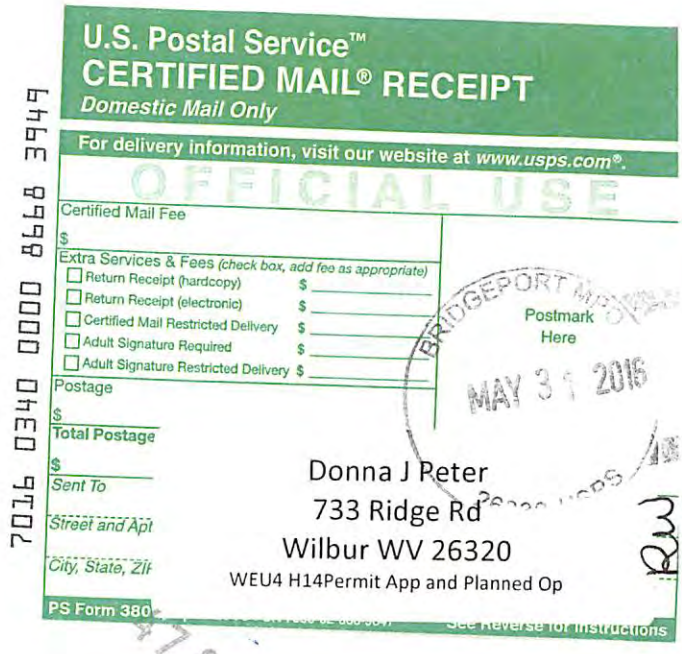
Well Operator: EQT Production Company
Telephone: 304-848-0076
Email: vroark@eqt.com

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.

Surface Owners:

Donna J Peter
733 Ridge Rd
Wilbur WV 26320



4709502371

RECEIVED
Office of Oil and Gas

JUN 01 2016

WV Department of
Environmental Protection

Surface Owners(road or other disturbance):

Donna J Peter
733 Ridge Rd
Wilbur WV 26320

L. Bruce and Sandra Jean Stoneking
RR1 Box 304-BB
Elkins WV 26241

James B. and Brenda J. Stoneking
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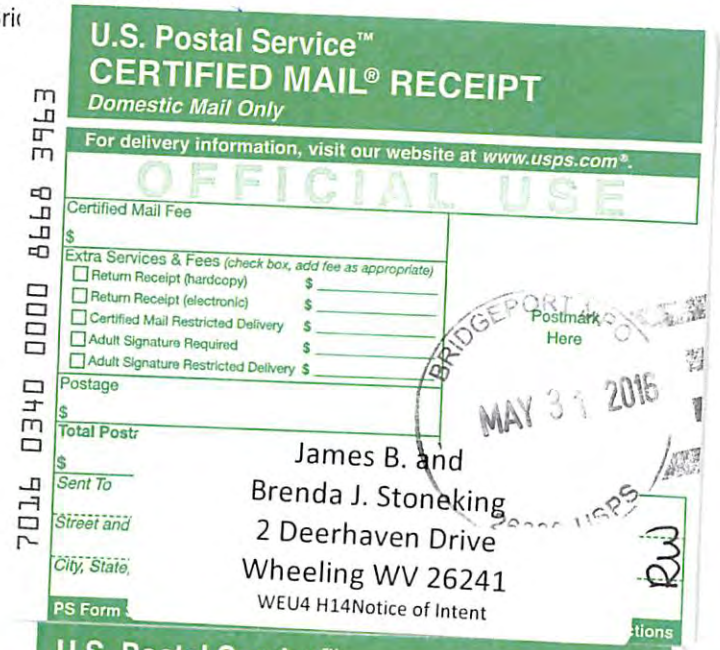
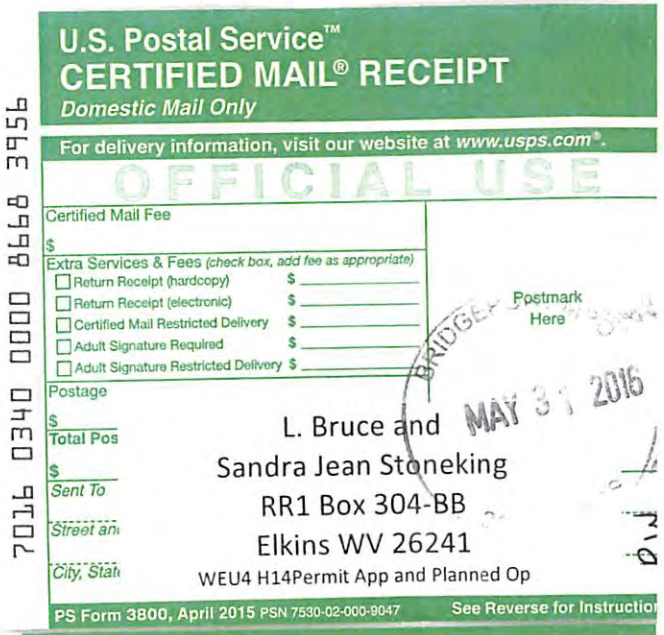
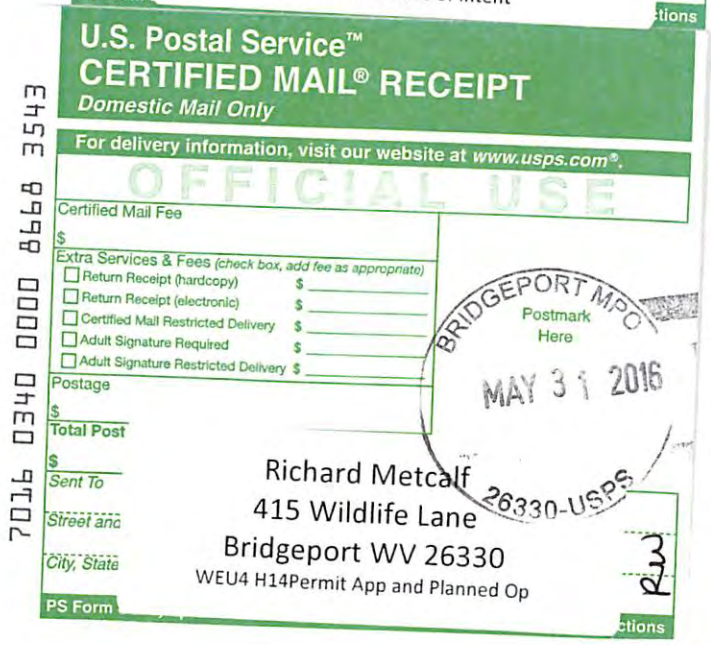
Diane L. Morgan and Glenn W. Morgan
590 Isner Creek Road
Elkins WV 26241

Richard Metcalf
415 Wildlife Lane
Bri



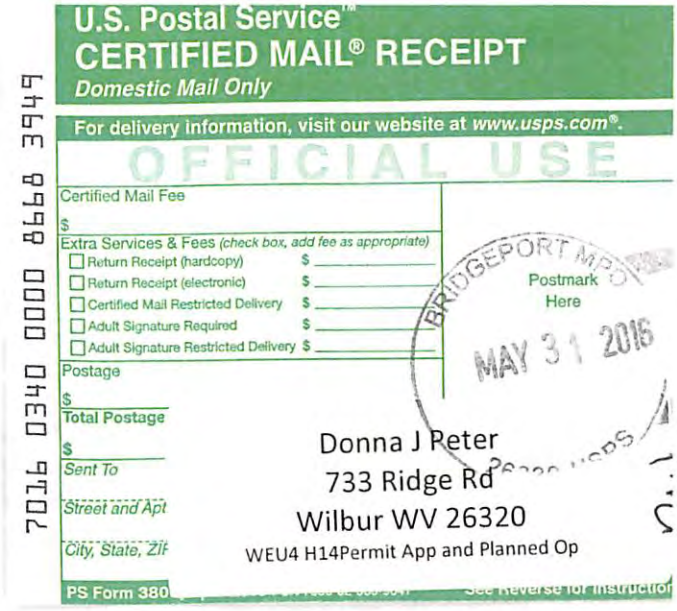




Surface Owners(Pits or impoundments):

Donna J Peter
733 Ridge Rd
Wilbur WV 26320

Richard Metcalf
415 Wildlife Lane
Bridgeport WV 26330



4709502371

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 57th Street, SE
Charleston, WV 25304

4708502371

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

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

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

RECEIVED
Office of Oil and Gas
JUN 01 2016
WV Department of
Environmental Protection

Anticipated Frac Additives

Chemical Names and CAS numbers

Material	Ingredient	CAS Number
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

4709502377

RECEIVED
Office of Oil and Gas

JUN 01 2016

WV Department of
Environmental Protection

Anticipated Frac Additives
Chemical Names and CAS numbers

4709502371

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

DmH
6-7-16

4709502371

Received
Office of Oil & Gas
JUN 14 2016

WEU4 SITE PLAN
EQT PRODUCTION COMPANY

SITUATE ON THE WATERS OF CAMP MISTAKE RUN IN MCELROY AND CENTERVILLE DISTRICTS, TYLER COUNTY, WEST VIRGINIA

PROJECT INFORMATION

PROJECT NAME: WEU4

TAX PARCEL
MCELROY AND CENTERVILLE DISTRICTS
TYLER COUNTY, WV
TAX MAP 16 PARCEL 22

SURFACE OWNER
DONNA J. PETER
TOTAL PROPERTY AREA 113.47 ACRES
TAX MAP 16 PARCEL 22

L.B. & SANDRA STONEKING
TOTAL PROPERTY AREA 69.441 ACRES
TAX MAP 21 PARCEL 28

RICHARD & YVONNE METCALF
TOTAL PROPERTY AREA 81.574 ACRES
TM 16-17

OIL AND GAS ROYALTY OWNER
WACO OIL & GAS CO. INC ET AL
WEST UNION DISTRICT
DODDRIDGE COUNTY, WV
TOTAL PROPERTY AREA 152.1 ACRES

SITE LOCATION
THE WEU4 WELL SITE IS SITUATE ON THE WATERS OF CAMP MISTAKE RUN APPROXIMATELY 0.58 MILES WEST OF COUNTY ROUTE 58. THE ENTRANCE IS LOCATED APPROXIMATELY 0.30 MILES SOUTHWEST FROM THE INTERSECTION OF COUNTY ROUTE 82 AND COUNTY ROUTE 58.

LOCATION COORDINATES

WEU4 SITE ENTRANCE
LATITUDE 39.369729 LONGITUDE -80.610071 (NAD 83 NORTH)

WEU4 RIG FOOTPRINT
LATITUDE 39.366719 LONGITUDE -80.620708 (NAD 83 NORTH)

WEU4 PUMP PAD
LATITUDE 39.365689 LONGITUDE -80.625669 (NAD 83 NORTH)

WEU4 FLOWBACK PIT
LATITUDE 39.365318 LONGITUDE -80.621116 (NAD 83 NORTH)

WEU4 TRUCK PAD
LATITUDE 39.364952 LONGITUDE -80.621587 (NAD 83 NORTH)

WEU4 COMPLETION PIT MANIFOLD PAD
LATITUDE 39.365408 LONGITUDE -80.624945 (NAD 83 NORTH)

WEU4 COMPLETION PIT
LATITUDE 39.365884 LONGITUDE -80.625618 (NAD 83 NORTH)

SITE DISTURBANCE COMPUTATIONS

ACCESS ROAD NO. 1 & NO. 2 = 6.01± ACRES
STOCKPILE SITES 1-6 = 4.28± ACRES
RIG FOOTPRINT = 3.25 ACRES
MANIFOLD PAD & FLOWBACK PIT = 2.31± ACRES
COMPLETION PIT = 3.33± ACRES
TOTAL SITE DISTURBANCE = 19.18± ACRES

ENTRANCE PERMIT

EQT PRODUCTION COMPANY WILL OBTAIN AN ENTRANCE PERMIT (FORM MM-109) FROM THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MISS UTILITY STATEMENT

MISS UTILITY OF WEST VIRGINIA WAS NOTIFIED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN. TICKET #1326176253. IN ADDITION, MISS UTILITY WILL BE CONTACTED PRIOR TO START OF THE PROJECT.

FLOODPLAIN NOTE

THE PROPOSED LIMITS OF DISTURBANCE FOR THIS PROJECT IS LOCATED IN FEMA FLOOD ZONE X PER THE FLOOD INSURANCE RATE MAP (FIRM) NUMBER 54095C0300C, DATED MAY 3, 2010.

ENVIRONMENTAL NOTES

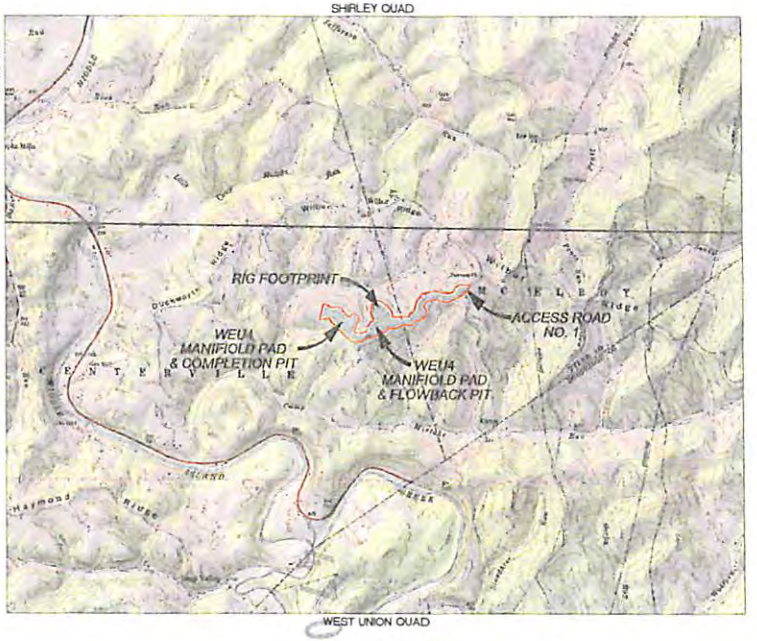
A WETLAND DELINEATION WAS PERFORMED ON APRIL 25-26, 2013 BY POTESTA AND ASSOCIATES, INC TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WVDEP). THE MAY 29, 2013 REPORT PROJECT # 0108-14-1447-1570L WAS PREPARED BY POTESTA AND ASSOCIATES, INC SUMMARIZES THE RESULTS OF THE FIELD DELINEATION. THE REPORT DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE OR THE WVDEP. IT IS STRONGLY RECOMMENDED THAT THE AFOREMENTIONED AGENCIES BE CONSULTED IN AN EFFORT TO GAIN WRITTEN CONFIRMATION OF THE DELINEATION DESCRIBED BY THIS REPORT PRIOR TO ENGAGING CONSTRUCTION ON THE PROPERTY DESCRIBED HEREIN. THE DEVELOPER SHALL OBTAIN THE APPROPRIATE PERMITS FROM THE FEDERAL AND/OR STATE REGULATORY AGENCIES PRIOR TO ANY PROPOSED IMPACTS TO WATERS OF THE U.S. INCLUDING WETLAND FILLS AND STREAM CROSSINGS.

HORIZONTAL & VERTICAL CONTROL

COORDINATES AND ELEVATIONS USED FOR ALL LAYOUTS AND DESIGNS WERE BASED UPON MAPPING FURNISHED BY SMITH LAND SURVEYING.

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

SHIRLEY QUAD



WEST UNION QUAD

2000 0 2000
SCALE 1" = 2000'

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 & Gas
JUN 14 2016

WEU4 NAD 83 WELL LOCATIONS

WELL	WV	WELL STATUS	API	LAT	LON	NORTHING	EASTING
H1	5-0890	PROPOSED	47-095-02278	39.366615	-80.620668	14399.40	1495153.70
H2	5-0891	PROPOSED	47-095-02279	39.366606	-80.620648	14380.62	1495139.09
H3	5-0892	PROPOSED	47-095-02280	39.366568	-80.620629	14357.62	1495144.68
H4	5-0893	PROPOSED	47-095-0228	39.366578	-80.620609	14357.41	1495149.88
H5	5-0894	PROPOSED		39.366588	-80.620589	14361.41	1495155.27
H6	5-0895	PROPOSED		39.366598	-80.620569	14379.41	1495160.66
H7	5-0655	PROPOSED		39.366615	-80.620549	14381.41	1495166.05
H8	5-0655	PROPOSED		39.366948	-80.620827	14351.37	1495090.58
H9	5-0656	PROPOSED		39.366938	-80.620807	14351.37	1495095.95
H10	5-0657	PROPOSED		39.366927	-80.620787	14485.58	1495101.34
H11	5-0658	PROPOSED		39.366916	-80.620767	14469.58	1495106.73
H12	5-0659	PROPOSED		39.366795	-80.620767	14469.58	1495112.12
H13	5-0660	PROPOSED		39.366684	-80.620629	14357.62	1495144.68
H14		PROPOSED		39.366674	-80.620708	14627.59	1495127.91
H15		PROPOSED		39.366684	-80.620688	14645.59	1495138.70

APPROVED
WVDEP OOG
8/28/2015

DISTURBED AREA BY PROPERTY OWNER	
PROPERTY OWNER	DISTURBED AREA
L.B. & SANDRA STONEKING	0.42 AC
RICHARD & YVONNE METCALF	2.25 AC
DONNA J. PETER	20.08 AC
TOTAL	22.75 AC

JPB 6/7/16

DMH 6-7-16

LIST OF DRAWINGS

1 - COVER SHEET
2 - NOTES
3 - OVERALL SHEET INDEX & VOLUMES
4 - EXISTING UTILITY PLAN
5-7 - ACCESS ROAD PLAN
9 - RIG FOOTPRINT DET.
10-11 - FLOWBACK PIT NO. 1 SECTIONS
12-13 - FLOWBACK PIT NO. 2 SECTIONS
14 - TYPICAL SECTIONS
15 - ACCESS ROAD NO. 1 PROFILE
16-20 - ACCESS ROAD NO. 1 SECTIONS
21 - ACCESS ROAD NO. 1 SECTIONS & ACCESS ROAD NO. 2 PROFILE & SECTIONS
22 - ACCESS ROAD COORDINATE LAYOUT
23 - 24 TOPSOIL STORAGE AREAS PROFILES & SECTIONS
25 - SPOIL STORAGE AREA PROFILE & SECTIONS
26 - 29 - WEU4 RECLAMATION PLANS
30 - 33 - CONSTRUCTION DETAILS

OPERATOR	ENGINEER	SURVEYOR
EQT PRODUCTION COMPANY OPERATOR ID: 306686 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 PHONE: (304) 348-3870	RK&K ENGINEERS 242 NORTH TORNADO WAY SUITE 1 KEYSER, WV 26726 PHONE: (304) 788-3370	SMITH LAND SURVEYING, INC 12 VANHORN DRIVE P.O. BOX 150 GLENVILLE, WV 26351 PHONE: (304) 462-5634

RUMMEL, KLEPPER & KAHL, LLP
242 NORTH TORNADO WAY, SUITE 1
KEYSER, WEST VIRGINIA 26726
T: 304.788.3370 F: 304.788.3577
WWW.RKK.COM
RK&K ENGINEERS

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING, INC.
SURVEYORS
ENGINEERS
ENVIRONMENTAL
PROJECT MGMT
WWW.SLSSURVEYS.COM
(304) 462-5634
SLS

DAVID G. VANHORN
LICENSED
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER

THIS DOCUMENT WAS PREPARED BY RK&K ENGINEERS FOR EQT PRODUCTION COMPANY

COVER SHEET
WEU4
McELROY DISTRICT
CENTERVILLE DISTRICT
TYLER COUNTY, WV

DATE: 04/30/2015
SCALE: 1" = 2,000
DESIGNED BY: HWH
FILE NO: 208
SHEET 1 OF 33
REV: 08/25/2015

4706502371

WEU-4 AS-BUILT SITE PLAN
EQT PRODUCTION COMPANY

PERMITTED WELLS: API# 47-095-02278, 47-095-002279, 47-095-02280, 47-095-02281, 47-095-02316, 47-095-02317, 47-095-02318 AND 47-095-02343

PROPOSED WELL NUMBERS: H6-WV512895, H8-WV516535, H9-WV516536, H11-WV516538, H13-WV516540, H14-WV516600 AND H15-WV516601

SITUATE ON WATERS OF CAMP MISTAKE RUN IN MCELROY AND CENTER DISTRICTS, TYLER COUNTY, WEST VIRGINIA

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: 59.44± 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 60/2 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: 515,446 (UTM NAD 83 METERS)

WEU-4 FLOW CENTER OF FLOW BACK PIT
LATITUDE: 39.365395 LONGITUDE: -80.821921 (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

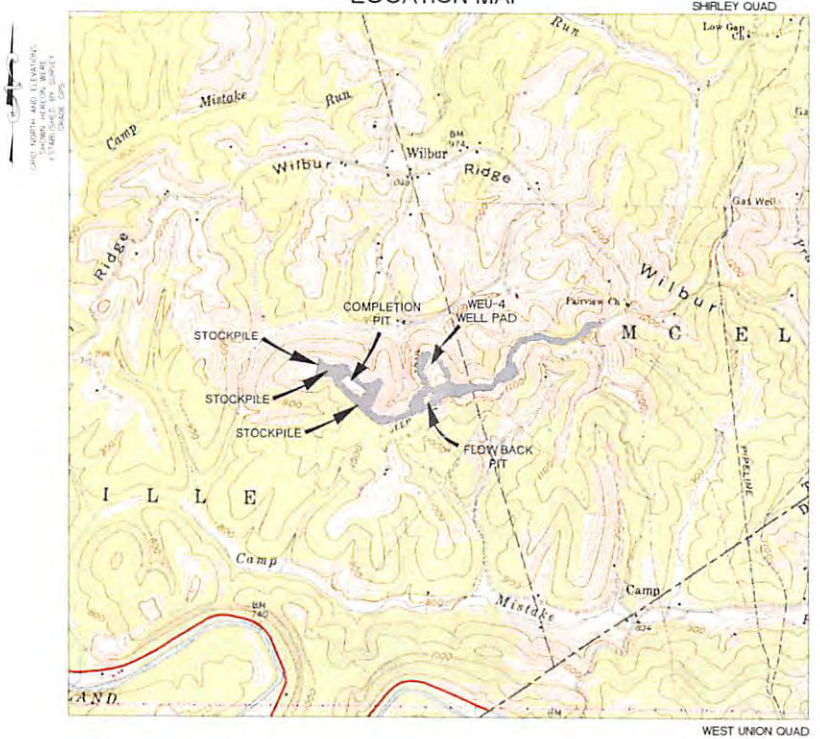
TOTAL AS-BUILT DISTURBANCE = 35.6± ACRES

GENERAL DESCRIPTION

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

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!!

LOCATION MAP



SCALE: 1"=1000'

LIST OF DRAWINGS

1 - COVER SHEET
2 - INDEX SHEET
3 - WEU-4 ACCESS ROAD
4 - WEU-4 FLOWBACK PIT / PAD
5 - WEU-4 COMPLETION 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
EX. GATE
EX. OVERHEAD UTILITY
EX. OVERHEAD UTILITY W/ ♥
EX. POWER POLE
EX. GUY WIRE
EX. TELEPHONE LINE
EX. GASLINE
EX. GASLINE W/ ♥
EX. ♥ATERLINE
EX. STRUCTURE
EX. PIPELINE MARKER
REF. 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
AS-BUILT ♥ELL LOCATIONS
PROPOSED ♥ELL LOCATIONS
ROAD ELEVATIONS
MATCHLINE

Received
Office of Oil & Gas
JUN 14 2016

JPS 6/7/16

DMH 6-7-16

4709502371

NO.	DATE	DESCRIPTION	BY
1	5/31/16	ADDED TYPICAL CELLAR DETAIL	WPK
2	5/10/16	ADDED WELL INFORMATION	K.E.S.

EQT — Where energy meets innovation

SLS — Land & Energy Development

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

ROY H. FISH, 15176, STATE OF WEST VIRGINIA, REGISTERED PROFESSIONAL SURVEYOR

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

7701 WEU-4 ASBUILTS dwg

4709502371

WVDEP OOG
ACCEPTED AS-BUILT
VJJ 4/4/2016

WEU-4 AS-BUILT SITE PLAN
EQT PRODUCTION COMPANY

PERMITTED WELLS: API# 47-095-02278, 47-095-002279, 47-095-02280, 47-095-02281, 47-095-02316, 47-095-02317 AND 47-095-02318
PROPOSED WELL NUMBERS: H6-WV512894, H6-WV512895, H8-WV516535, H9-WV516536, H11-WV516538, H13-WV516540, H14-WV516600 AND H15-WV516601

SITUATE ON WATERS OF CAMP MISTAKE RUN IN MCELROY AND CENTER DISTRICTS, TYLER COUNTY, WEST VIRGINIA

PROJECT INFORMATION

PROJECT NAME: WEU-4 AS BUILT SITE PLAN

TAX PARCEL
CENTERVILLE DISTRICT
MAP 16
MCELROY DISTRICT
MAP 21

SURFACE OWNER

J. B. & SANDRA STONEKING
MCELROY DISTRICT
TYLER COUNTY, WV
TOTAL PROPERTY AREA: 59.44± ACRES

DONNA J. PETER
MCELROY & CENTERVILLE DISTRICT
TYLER COUNTY, WV
TOTAL PROPERTY AREA: 111.4± 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 56. THE ENTRANCE TO THE SITE IS APPROXIMATELY 0.13 MILE SOUTH WEST OF COUNTY ROUTE 56 AND COUNTY ROUTE 80/2 INTERSECTION.

LOCATION COORDINATES

WEU-4 SITE ENTRANCE
LATITUDE 39.369173 LONGITUDE -80.810214 (NAD 83)
LATITUDE 4 357 772 LONGITUDE 515 363 (UTM NAD 83 METERS)

WEU-4 CENTER OF WELL PAD
LATITUDE 39.368539 LONGITUDE -80.823845 (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 -80.821321 (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)

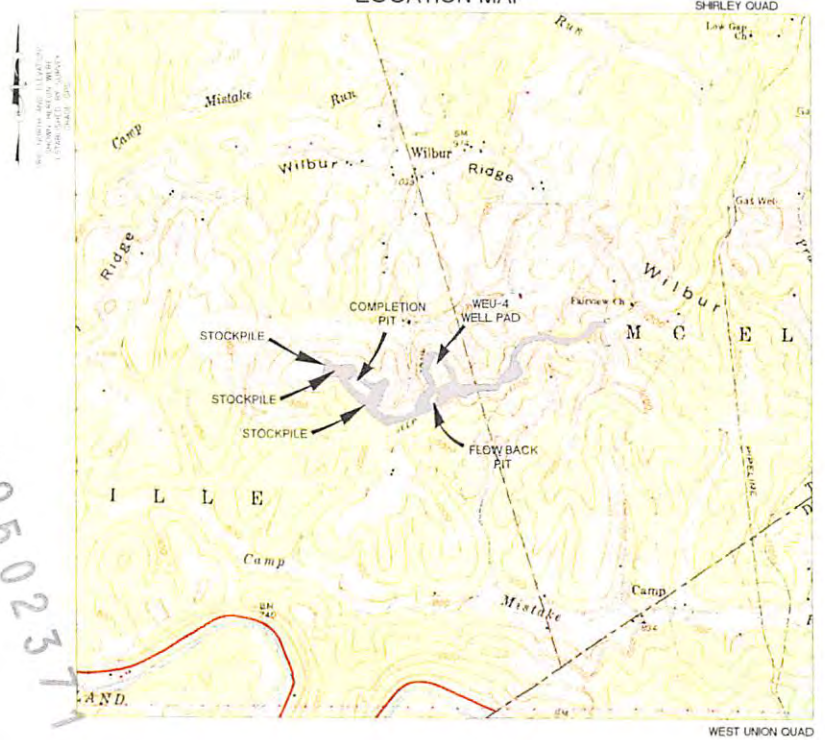
SITE DISTURBANCE COMPUTATIONS

TOTAL AS BUILT DISTURBANCE: 11.16 ACRES

GENERAL DESCRIPTION

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

LOCATION MAP



SCALE: 1"=1000'

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

LIMIT 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
EX. GATE
EX. OVERHEAD UTILITY
EX. OVERHEAD UTILITY W/ ♦
EX. POWER POLE
EX. GUY WIRE
EX. TELEPHONE LINE
EX. GASLINE
EX. GASLINE W/ ♦
EX. WATERLINE
EX. STRUCTURE
EX. PIPELINE MARKER
NEW 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
AS-BUILT WELL LOCATIONS
PROPOSED WELL LOCATIONS
SPOT ELEVATIONS
MATCHLINE

DMH 4/4/16

47095023717

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Office of Oil & Gas
JUN 14 2016

MISS Utility of West Virginia
1-800-245-4848
West Virginia State Law
Section XV Chapter 24 c.1
Requires that you call two business days before you dig in the state of West Virginia
It's the Law!

EQT — Where energy meets innovation

SLS — Land & Energy Development

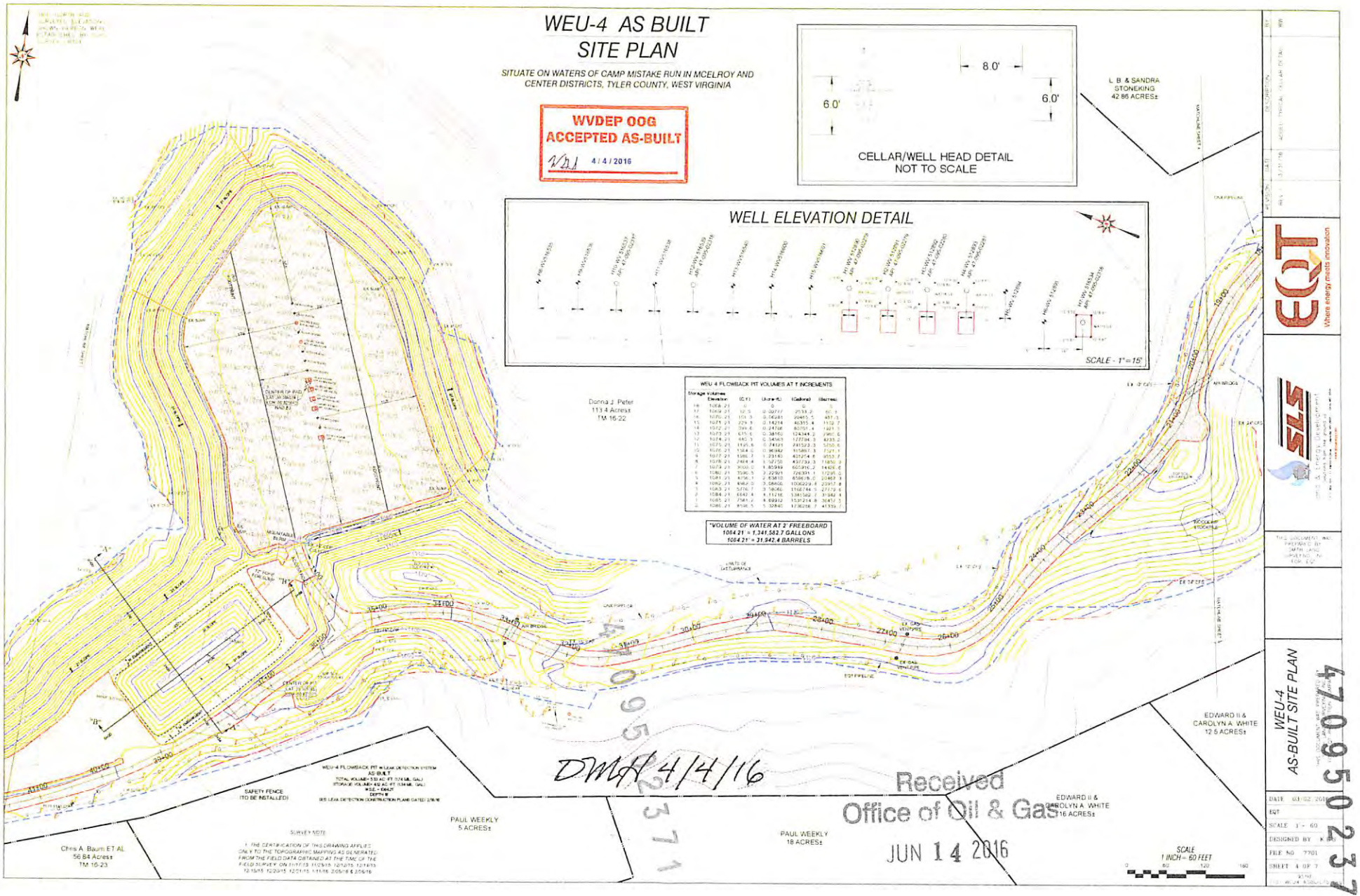
THIS DOCUMENT WAS PREPARED BY: JARED L. ERICKSON, P.S. FOR EQT

JOE R. HALL 15176 STATE OF WEST VIRGINIA

WEU-4 AS-BUILT SITE PLAN

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

47095023717


WEU-4 AS BUILT
SITE PLAN
SITUATE ON WATERS OF CAMP MISTAKE RUN IN MCELROY AND CENTER DISTRICTS, TYLER COUNTY, WEST VIRGINIA
WVDEP OOG
ACCEPTED AS-BUILT
4/4/2016
8.0'
6.0'
6.0'
CELLAR/WELL HEAD DETAIL
NOT TO SCALE
WELL ELEVATION DETAIL
SCALE - 1"=15'
L. B. & SANDRA STONEKING 42.86 ACRES±
Donna J. Peter 113.4 Acres± TM 16-22
WEU 4 FLOWBACK PIT VOLUMES AT 1' INCREMENTS
*VOLUME OF WATER AT 2' FREEBOARD
1084.21' = 1,341,582.7 GALLONS
1084.21' = 31,942.4 BARRELS
EDWARD II & CAROLYN A. WHITE 12.5 ACRES±
EDWARD II & CAROLYN A. WHITE 16 ACRES±
PAUL WEEKLY 5 ACRES±
PAUL WEEKLY 18 ACRES±
Chris A. Baum ET AL 56.84 Acres± TM 16-23
SAFETY FENCE (TO BE INSTALLED)
SURVEY NOTE
SCALE 1 INCH = 60 FEET
EQT
Where energy meets innovation
SLS
WEU-4 AS-BUILT SITE PLAN
DATE 03/02/2016
EQT
SCALE 1" = 60'
DESIGNED BY
FILE NO 7701
SHEET 4 OF 7
4709502371
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