



 west virginia department of environmental protection

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

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

Wednesday, April 17, 2019
 WELL WORK PERMIT
 Horizontal 6A / New Drill

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


Re: Permit approval for OXF43H34
 47-017-06885-00-00

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: OXF43H34
 Farm Name: CATHY JEAN WETZEL, ET A 
 U.S. WELL NUMBER: 47-017-06885-00-00
 Horizontal 6A New Drill
 Date Issued: 4/17/2019

PERMIT CONDITIONS

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

CONDITIONS

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

04/19/2019

API Number: _____

PERMIT CONDITIONS

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

EQT Production
Hydraulic Fracturing Monitoring Plan
Pad ID: OXF43
County: Doddridge

January 24, 2019

Purpose

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Doddridge County, WV prior to hydraulic fracturing at the following EQT wells on OXF43H34 and OXF43H35.

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation.

A report is required to be submitted along with a well work permit application.

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

1. Communications with Well Operators

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

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

EQT will recommend to these operators at a minimum to:

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

2. Reporting

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

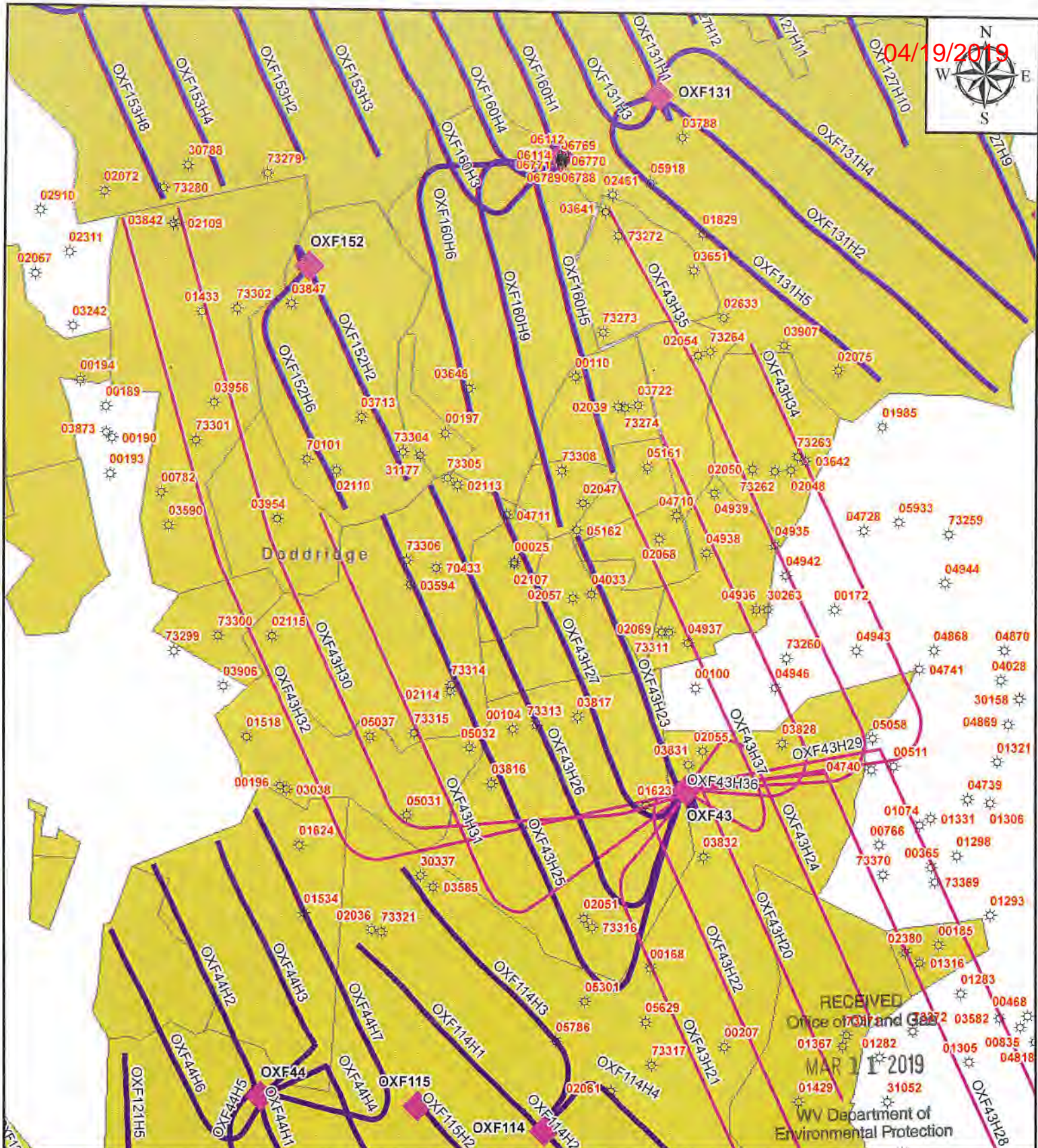
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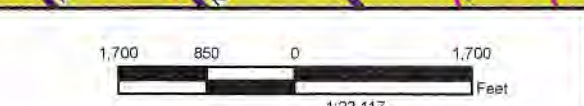
EQT
EQT Corporation
625 Liberty Avenue
Pittsburgh, PA 15222

OXF 43 - North

Vertical Offsets and Foreign Laterals within 1500'

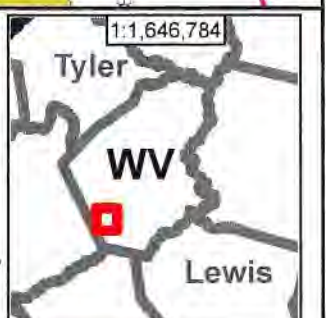
Legend

- Offset Well
- Pad
- Genesee Spud
- Genesee Planned
- Marcellus Spud
- Marcellus Planned
- Utica Spud
- Utica Planned
- EQT Lease
- County

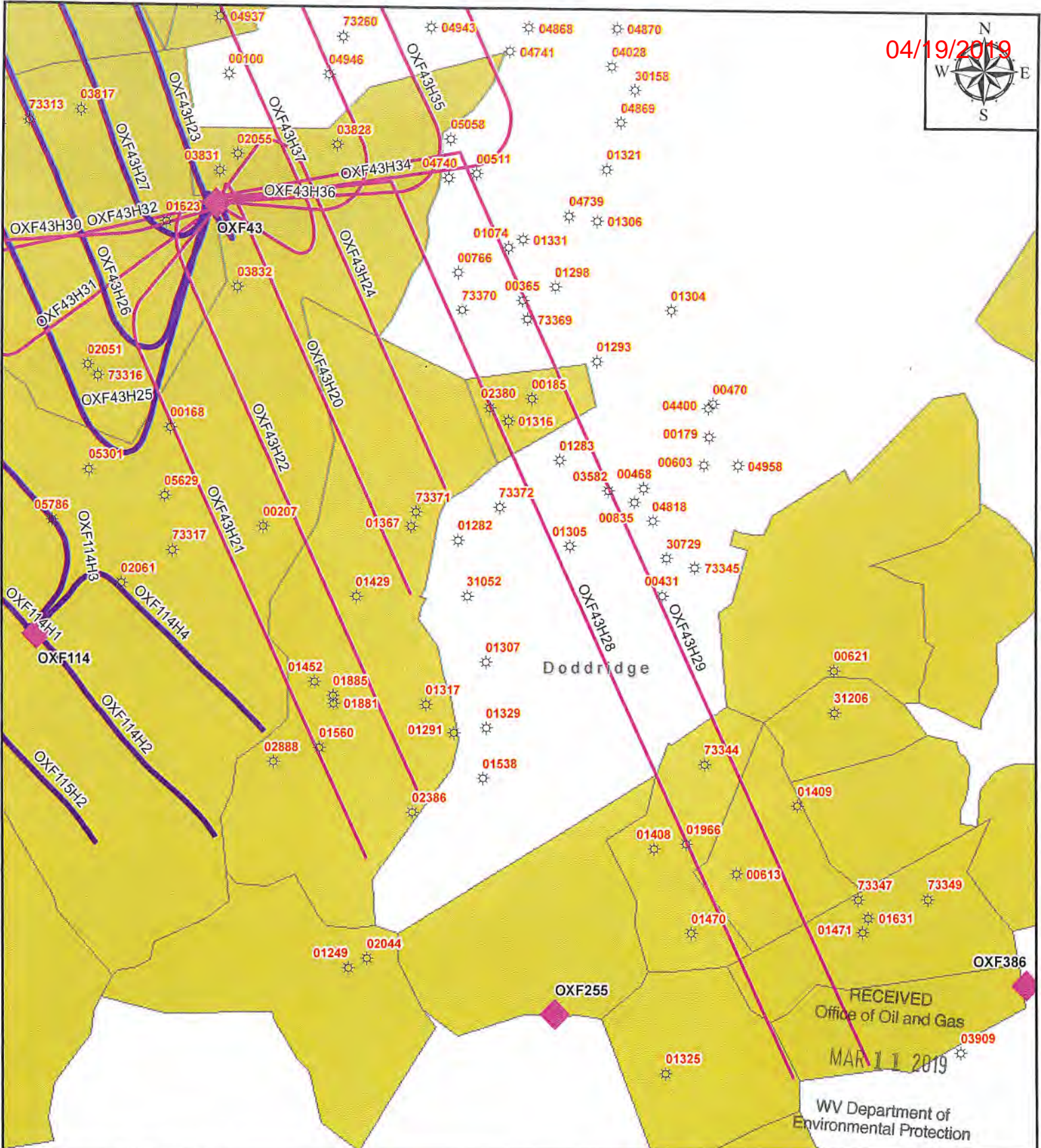


Disclaimer:

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.



04/19/2019



EQT
 EQT Corporation
 625 Liberty Avenue
 Pittsburgh, PA 15222

OXF 43 - South

Vertical Offsets and Foreign Laterals within 1500'

Created By: Kellen Waltman Printed By: madiganp on 1/24/2019

Legend

- Offset Well
- Pad
- Genesee Spud
- Genesee Planned
- Marcellus Spud
- Marcellus Planned
- Utica Spud
- Utica Planned
- EQT Lease
- County

1,300 650 0 1,300
 Feet
 1:17,675

Disclaimer:
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1:1,646,784

Tyler
 WV
 Lewis

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

1) Well Operator: EQT Production Company 306686 Doddridge South West/Cove Oxford
Operator ID County District Quadrangle

2) Operator's Well Number: OXF43H34 Well Pad Name: OXF43

3) Farm Name/Surface Owner: Cathy Jean Wetzel, et. al. Public Road Access: Rt. 20

4) Elevation, current ground: 1,229' (as-built) Elevation, proposed post-construction: 1,229'

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

Other _____

(b) If Gas Shallow Deep _____

Horizontal

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Target formation: Marcellus; Depth: 6,666'; Anticipated Thickness: 57'; Anticipated Target Pressure: 2,951 PSI

8) Proposed Total Vertical Depth: 6,666'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14,830'

11) Proposed Horizontal Leg Length: 5,626'

12) Approximate Fresh Water Strata Depths: 70', 221', 307', 382'

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

14) Approximate Saltwater Depths: N/A

15) Approximate Coal Seam Depths: 322'

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

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

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

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18)

CASING AND TUBING PROGRAM

TYPE	<u>Size (in)</u>	<u>New or Used</u>	<u>Grade</u>	<u>Weight per ft. (lb/ft)</u>	<u>FOOTAGE: For Drilling (ft)</u>	<u>INTERVALS: Left in Well (ft)</u>	<u>CEMENT: Fill-up (Cu. Ft.)/CTS</u>
Conductor	26	New	A-500	85.6	40	40	49 ft ³ / CTS
Fresh Water	13 3/8	New	J-55	54.5	532	532	546ft ³ / CTS
Coal							
Intermediate	9 5/8	New	A-500	40	5291	5291	2094ft ³ / CTS
Production	5 1/2	New	P-110	20	14830	14830	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							

TYPE	<u>Size (in)</u>	<u>Wellbore Diameter (in)</u>	<u>Wall Thickness (in)</u>	<u>Burst Pressure (psi)</u>	<u>Anticipated Max. Internal Pressure (psi)</u>	<u>Cement Type</u>	<u>Cement Yield (cu. ft./k)</u>
Conductor	26	30	.312	884	18	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	See Variance	1.19
Production	5 1/2	8 1/2	.361	12640	10112	Class A/H	1.123/2.098
Tubing	2 3/8	NA	.19	7700			
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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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 3989'. Kick off and drill curve. Drill the lateral in the Marcellus. Cement casing.

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

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.1%) of chemicals (including 15% Hydrochloric acid, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10,112 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 gallons of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 400,000 pounds of proppant 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 centralizer at the shoe and one spaced every 500'.
- Intermediate: Bow spring centralizers– One centralizer at the shoe and one spaced every 500'.
- Production: One solid body centralizer spaced every joint from production casing shoe to KOP

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

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

25) Proposed borehole conditioning procedures:

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

*Note: Attach additional sheets as needed.

PAF
3/16/19

04/19/2019



January 29, 2019

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

Re: Casing on OXF43

Dear Mr. Brewer,

EQT is requesting the 13-3/8" surface casing be set at 532' KB, 150' below the deepest fresh water. We will set the 9-5/8" intermediate string at 5291' KB, 50' below the base of the Alexander formation to shut off any water production from the Upper Devonian sands.

If you have any questions, please do not hesitate to contact me at 724-746-9073.

Sincerely,

A handwritten signature in black ink, appearing to read 'John Zavatchan'.

John Zavatchan
Landman - Permitting

Enc.

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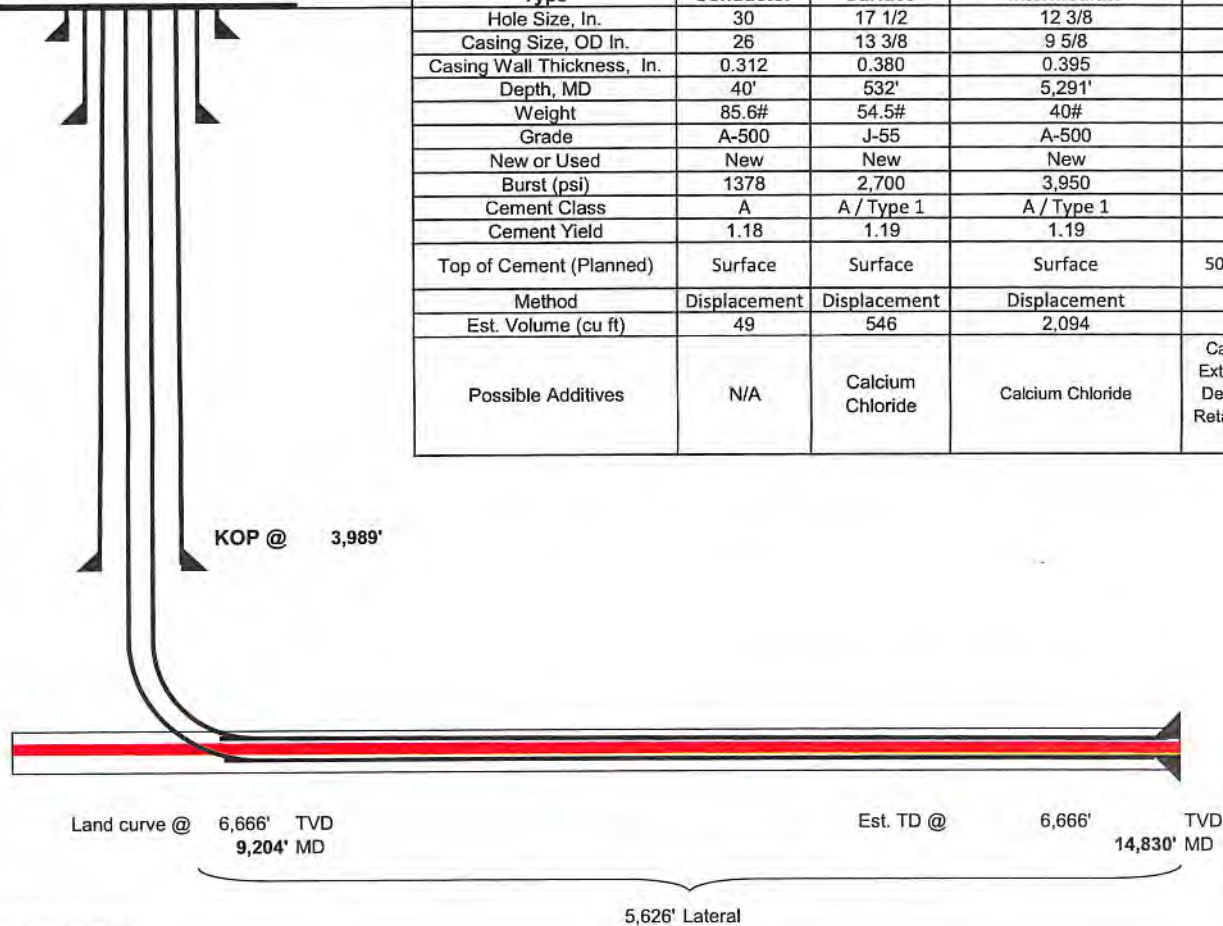
Well OXF43H34
EQT Production
Oxford Quad
Doddridge County, WV

Azimuth 336
 Vertical Section 6391
 Enerzia # 516244

Note: Diagram is not to scale

Formations	Top TVD	Base TVD
Conductor	40	
Base Fresh Water	382	
Surface Casing	532	
Base Red Rock	829	
Maxton	1103 - 1143	
Big Lime	1979 - 2047	
Big Injun	2091 - 2123	
Weir	2265 - 2391	
Gantz	2465 - 2547	
Fifty foot	2547 - 2604	
Thirty foot	2645 - 2681	
Gordon	2687 - 2736	
Forth Sand	2787 - 2854	
Bayard	2967 - 3038	
Warren	3301 - 3367	
Speechley	3367 - 3872	
Balltown A	3872 - 4230	
Riley	4470 - 4846	
Benson	4846 - 4940	
Alexander	5148 - 5241	
Intermediate Casing	5291	
Sonyea	6324 - 6474	
Middlesex	6474 - 6464	
Genesee	6464 - 6573	
Geneseo	6573 - 6615	
Tully	6615 - 6628	
Hamilton	6628 - 6646	
Marcellus	6646 - 6702	
Production Casing	6666	MD
Onondaga	6702	

Casing and Cementing				Deepest Fresh Water: 382'
Type	Conductor	Surface	Intermediate	Production
Hole Size, In.	30	17 1/2	12 3/8	8 1/2
Casing Size, OD In.	26	13 3/8	9 5/8	5 1/2
Casing Wall Thickness, In.	0.312	0.380	0.395	0.361
Depth, MD	40'	532'	5,291'	14,830'
Weight	85.6#	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	A / Type 1	A / H
Cement Yield	1.18	1.19	1.19	1.123 / 2.098
Top of Cement (Planned)	Surface	Surface	Surface	500' above top Producing Zone
Method	Displacement	Displacement	Displacement	Displacement
Est. Volume (cu ft)	49	546	2,094	#N/A
Possible Additives	N/A	Calcium Chloride	Calcium Chloride	Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent



Proposed Well Work:
 Drill and complete a new horizontal well in the Marcellus formation.
 Drill the vertical to an approximate depth of 3989'.
 Kick off and drill curve. Drill lateral in the Marcellus. Cement casing.

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WEST VIRGINIA GEOLOGICAL PROGNOSIS

Horizontal Well
OXF43H34

v 2016.2
Enertia # 516244

Drilling Objectives: Marcellus
County: Doddridge
Quad: Oxford
Elevation: 1242 KB 1229 GL
Surface location Northing: 241942.48 Easting: 1633357.51
Landing Point Northing: 243105.55 Easting: 1636701.91
Toe location Northing: 248245.01 Easting: 1634413.76
Recommended Azimuth 336 Degrees

TVD: 6666
Recommended LP to TD: 5,626'

Proposed Logging Suite: No pilot hole on this pad, formation depths from log run on a different OXF43 and OXF45 pads
Please have gamma tool behind bit and mudloggers rigged up on location by 6322.5' TVD.

Recommended Gas Tests: 1800, 2050, 2600, Intm Csg. Pt., 3400, 4900, 5250, KOP, (Gas test at any mine void)
Gas test during any trip or significant downtime while drilling the lateral section.

ESTIMATED FORMATION TOPS

Formation	Top (TVD)	Base (TVD)	Lithology	Comments	Top RR	Base RR
Fresh Water Zone	1	382		FW @ 70,221,307,382.	21	41
Waynesburg A	321	322	Coal	No past, present, or permitted mining.	123	179
Maxton	1103	1143	Sandstone	No SW present in shallow offset wells.	181	211
Big Lime	1979	2047	Limestone		266	411
Big Injun	2091	2123	Sandstone	Storage is NOT of concern at this location	361	451
Weir	2265	2391	Sandstone		462	532
Top Devonian	2465				561	716
Gantz	2465	2547	Silty Sand		706	829
Fifty foot	2547	2604	Silty Sand		956	1073
Thirty foot	2645	2681	Silty Sand			Base of Red Rock
Gordon	2687	2736	Silty Sand			
Forth Sand	2787	2854	Silty Sand			
Bayard	2967	3038	Silty Sand			
Warren	3301	3367	Silty Sand			
Speechley	3367	3872	Silty Sand			
Balltown A	3872	4230	Silty Sand			
Riley	4470	4846	Silty Sand			
Benson	4846	4940	Silty Sand			
Alexander	5148	5241	Silty Sand	Base of Offset Well Perforations at 5207' TVD		
Int. csg pt	5291					
Elks	5241	6324	Gray Shales and Silts			
Sonyea	6324	6474	Gray shale			
Middlesex	6474	6464	Shale			
Genesee	6464	6573	Gray shale interbedded			
Genesee	6573	6615	Black Shale			
Tully	6615	6628	Limestone			
Hamilton	6628	6646	Gray shale with some			
Marcellus	6646	6702	Black Shale			
Purcell	6677	6680	Limestone			
-Lateral Zone	6666			Start Lateral at 6666'		
Cherry Valley	6686	6689	Limestone			
Onondaga	6702		Limestone			

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Target Thickness	57 feet
Max Anticipated Rock Pressure	2951 PSI

Comments:
Note that this is a TVD prog for a horizontal well (azimuth of 336 degrees; target formation = Marcellus). All measurements taken from estimated KB elevation. Water and coal information estimated from surrounding well data.
Intermediate casing point is recommended 50' beneath the Alexander to shut off any water production from the Upper Devonian sands. Intermediate casing should be cemented into the surface string, per WV regulations.
The estimated landing point TVD is 6666', rig geologist may adjust landing point. After the well is landed, drill to reported bed dips/ geologists' recommendation. The geologic structure is unknown at this time.

LATERAL DRILLING TOLERANCES

Mapview - Lateral: Deviate as little as possible to the left or right of the planned wellbore.
Mapview - TD: DO NOT EXTEND beyond recommended wellbore to avoid lease line.

RECOMMENDED CASING POINTS

Fresh Water/Coal	CSG OD	13 3/8	CSG DEPTH:	532	150' below freshwater
Intermediate 1:	CSG OD	9 5/8	CSG DEPTH:	5291	50' below Alexander
Production:	CSG OD	5 1/2	CSG DEPTH:	@ TD	



04/19/2019

January 29, 2019

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

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If you have any questions, please do not hesitate to contact me at 724-746-9073.

Sincerely,

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John Zavatchan
Landman - Permitting

Enc.

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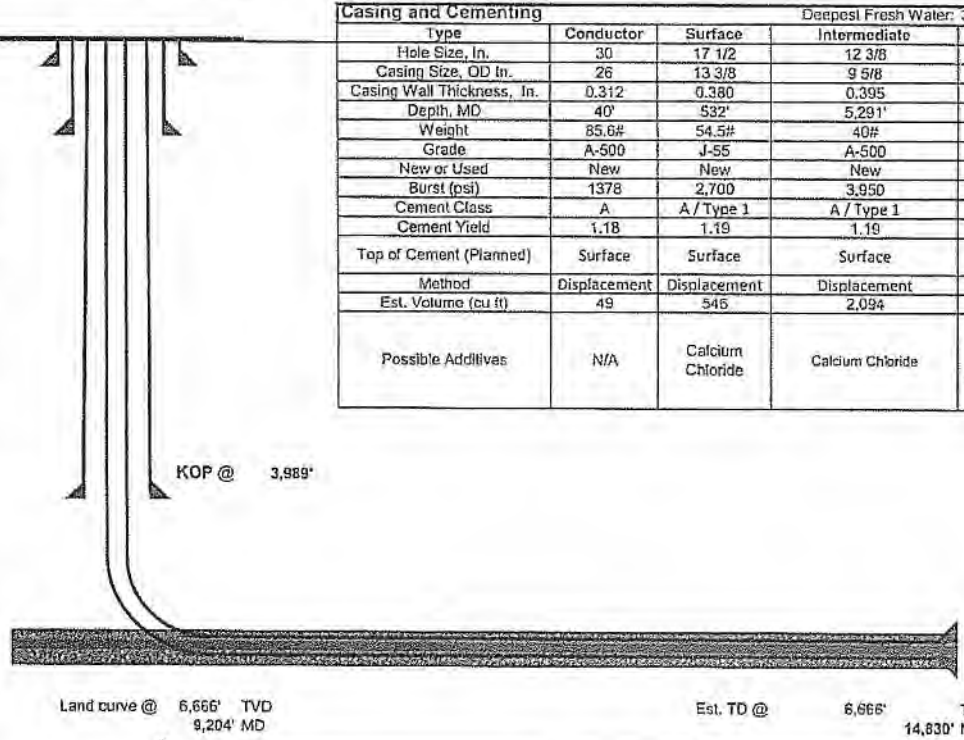
WV Department of
Environmental Protection

Well OXF43H34
 EQT Production
 Oxford Quad
 Doddridge County, WV

Azimuth 336
 Vertical Section 6391
 Enertia # 516244

Note: Diagram is not to scale

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Fifty foot	2547 - 2604	
Thirty foot	2645 - 2681	
Gordon	2687 - 2736	
Forth Sand	2787 - 2854	
Bayard	2967 - 3038	
Warren	3301 - 3367	
Speechley	3367 - 3872	
Balltown A	3872 - 4230	
Riley	4470 - 4846	
Benson	4846 - 4940	
Alexander	5148 - 5241	
Intermediate Casing	5291	
Sonyea	6324 - 6474	
Middlesex	6474 - 6464	
Genesee	6464 - 6573	
Genesee	6573 - 6615	
Tully	6615 - 6628	
Hamilton	6628 - 6646	
Marcellus	6646 - 6702	
Production Casing	6666 MD	
Onondaga	6702	



Casing and Cementing		Deepest Fresh Water: 382'		
Type	Conductor	Surface	Intermediate	Production
Hole Size, In.	30	17 1/2	12 3/8	8 1/2
Casing Size, OD In.	26	13 3/8	9 5/8	5 1/2
Casing Wall Thickness, In.	0.312	0.380	0.395	0.361
Depth, MD	40'	532'	5,291'	14,830'
Weight	85.6#	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	A / Type 1	A / H
Cement Yield	1.18	1.19	1.19	1.123 / 2.098
Top of Cement (Planned)	Surface	Surface	Surface	500' above top Producing Zone
Method	Displacement	Displacement	Displacement	Displacement
Est. Volume (cu ft)	49	546	2,094	#N/A
Possible Additives	N/A	Calcium Chloride	Calcium Chloride	Calcium Carbonate, Fluid Loss Extender, Dispersant, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, Anti-Settling/Suspension Agent

Proposed Well Work:
 Drill and complete a new horizontal well in the Marcellus formation.
 Drill the vertical to an approximate depth of 3989'.
 Kick off and drill curve. Drill lateral in the Marcellus. Cement casing.

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 Environmental Protection

WW-9
(4/16)

04/19/2019

API Number 47 - _____ - _____
Operator's Well No. OXF43H34

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name EQT Production Company OP Code 306686

Watershed (HUC 10) Middle Fork Hughes River Quadrangle Oxford

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: N/A

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

Proposed Disposal Method For Treated Pit Wastes:

- 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 [Signature]

Company Official (Typed Name) John Zavatchan

Company Official Title Landman - Permitting

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Office of Oil and Gas
MAR 15 2019
W.V. Department of Environmental Protection

Subscribed and sworn before me this 8 day of March, 20 19

[Signature] Notary Public

My commission expires 8/21/2022



200E
3/14/18

EQT Production Company

Proposed Revegetation Treatment: Acres Disturbed No additional disturbance Prevegetation pH _____

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer type Granular 10-20-20

Fertilizer amount 1/3 lbs/acre

Mulch 2 Tons/acre

Seed Mixtures

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

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *[Signature]*

Comments: _____

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WV Department of
Environmental Protection

Title: O: H Gas Inspector Date: 3/11/19

Field Reviewed? Yes No

WW-9 Attachment

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

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

Additives to be used in drilling medium?

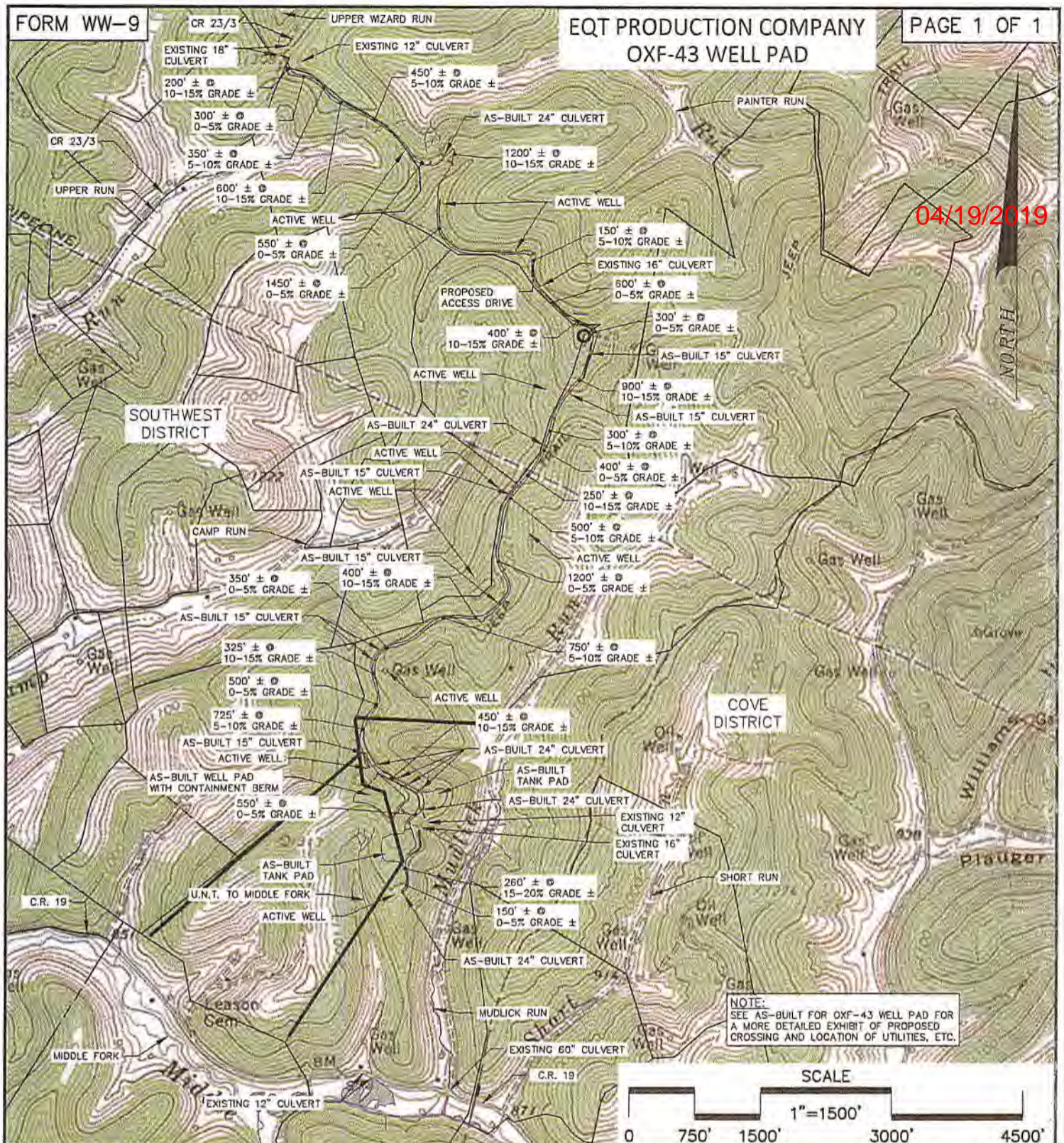
- Air - biodegradable oil lubricant, detergent, defoaming, water. Water based mud – Barite, viscosifier, alkalinity control, lime, filtration control, deflocculates, biodegradable oil lubricant, defoaming, walnut shell, salt, x-cide, carbonates. Oil based mud – synthetic base oil, emulsifier, salt, lime,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

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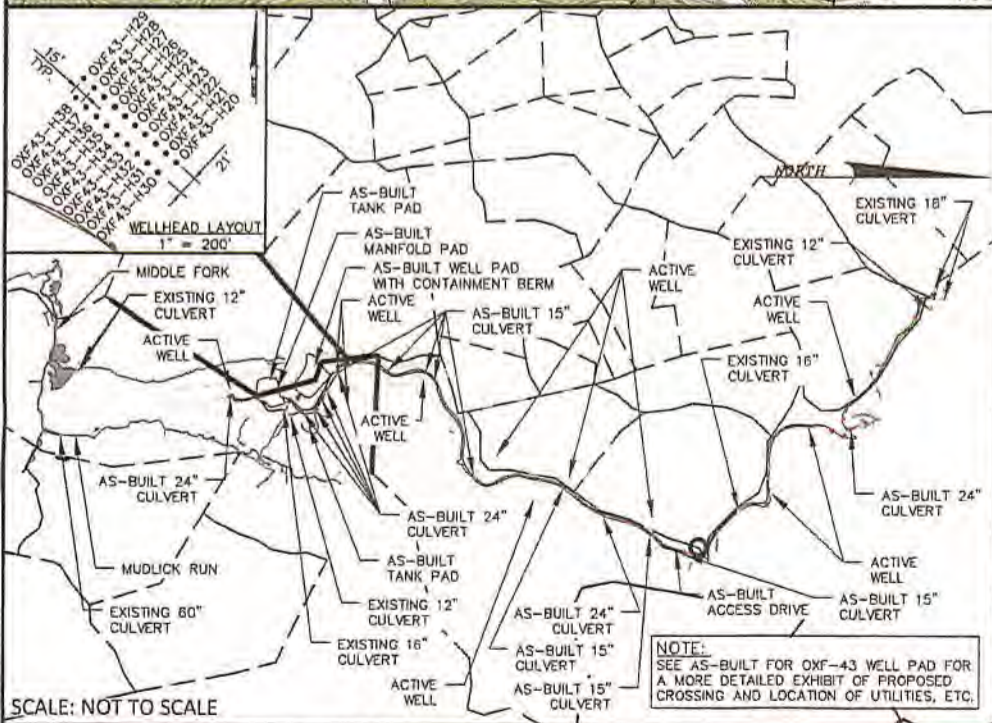
MAR 15 2019

WV Department of
Environmental Protection

04/19/2019



NOTE:
SEE AS-BUILT FOR OXF-43 WELL PAD FOR
A MORE DETAILED EXHIBIT OF PROPOSED
CROSSING AND LOCATION OF UTILITIES, ETC.



ALL ROADS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV DEP OIL AND GAS BMP MANUAL. ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV DOT REGULATION. SEPARATE PERMITS MAY BE REQUIRED BY DOT.

APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV DEP OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFICATION TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

TEMPORARY SEED AND MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT AND STACK ALL MARKETABLE TIMBER.

STACKED BRUSH MAY BE USED FOR SEDIMENT CONTROL.

APPLICATIONS FOR SEPARATE PLC PERMITS ON THE ACCESS ROAD STREAM CROSSINGS HAVE BEEN PREPARED (IF APPLIES).

- = AS-BUILT CULVERT 18" MIN UNLESS OTHERWISE NOTED
- = EXISTING CULVERT
- = APPROXIMATE LIMIT OF DISTURBANCE

CONSTRUCTION AND RECLAMATION PLAN
OXF-43 WELL PAD
SOUTHWEST TAX DISTRICT
DODDRIDGE COUNTY, WV



RETTEW
RETTEW Associates, Inc.
One Robinson Plaza,
Suite 200
6600 Steubenville Pike,
Pittsburgh, PA 15205

DRAWN BY: DAW
DATE: 4/27/18
SCALE: AS NOTED



Where energy meets innovation.™

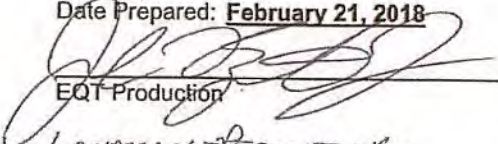
Site Specific Safety and Environmental Plan

EQT
OXF43 Pad
West Union
Doddridge County, WV

For Wells:

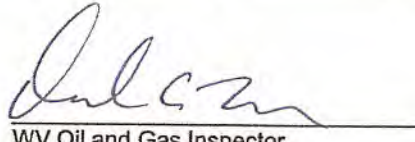
516238 516240 OXF43H34 OXF43H35
 (OXF43H30) (OXF43H31)

Date Prepared: **February 21, 2018**


 EQT Production

Landman Permitting
Title

3/16/19
Date



WV Oil and Gas Inspector

Oil + Gas Inspector
Title

3/11/19
Date

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 Environmental Protection

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

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

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

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

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

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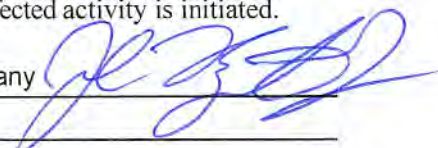
WV Department of
Environmental Protection

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: John Zavatchan 

Its: Landman - Permitting

Lease No. Grantor, Lessor, etc. Grantee, Lessee, etc. Royalty Book/Page

107429 Franklin Maxwell Heirs L.P. (current royalty owner)

W. Brent Maxwell, et al (original lessor)
 Fisher Oil Co.
 The Philadelphia Company of West Virginia
 Pittsburgh & West Virginia Gas Co.
 Equitable Gas Company
 Equitrans, Inc.
 Equitrans, L.P.
 Equitable Production-Eastern States, Inc.
 Equitable Production Company

Fisher Oil Co.
 The Philadelphia Company of West Virginia
 Pittsburgh & West Virginia Gas Company
 Equitable Gas Company
 Equitrans, Inc.
 Equitrans, L.P.
 Equitable Production-Eastern States, Inc.
 Equitable Production Company
 EQT Production Company

LB23/337
 LB32/120
 DB87/90
 DB121/303
 LB154/475
 DB329/645
 LB 192/19
 CB281/346
 CB281/346

109481 Adele McDougal, et al. (current royalty owner)

Jackson Leeson, et al. (original lessor)

The Philadelphia Co. of West Virginia
 Pittsburgh & West Virginia Gas Co.
 Equitable Gas Company
 Equitrans, Inc.
 Equitrans, L.P.
 Equitable Production-Eastern States, Inc.
 Equitable Production Company

The Philadelphia Co. of West Virginia

Pittsburgh & West Virginia Gas Co.
 Equitable Gas Company
 Equitrans, Inc.
 Equitrans, L.P.
 Equitable Production-Eastern States, Inc.
 Equitable Production Company
 EQT Production Company

LB21/76
 DB87/90
 DB121/303
 LB154/475
 DB329/645
 LB 192/19
 CB281/346
 CB281/346

1.20138 Jan E. Chapman (current royalty owner)

Edwin H. Chapman
 Union Oil and Gas Co.
 Wm. W. Gruber
 J. D. Brawner , et al
 Pennzoil Company
 Edwin H. Chapman
 J&S Gas Company
 Hugh Spencer
 Spencer Enterprises, LLC

Union Oil and Gas Co.
 Wm. W. Gruber
 J. D. Brawner , et al
 Pennzoil Company
 Edwin H. Chapman
 J&S Gas Company
 Hugh Spencer
 Spencer Enterprises, LLC
 Antero Resources Appalachian Corp

LB 69/72
 LB 70/482
 LB 72/259
 LB 88/264
 LB 91/563
 LB 94/225
 LB 95/137
 WB 33/68
 LB 396/611

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Antero Resources Appalachian Corp
Noble Energy, Inc
CNX Gas Company.LLC
Antero Resources Corporation

CNX Gas Company LLCand Noble Energy, Inc.
CNX Gas Company.LLC
Antero Resources Corporation
EQT Production Company

LB 411/478
LB 377/304
DB 387/216
DB 429/585

C-17-7-10-2

Kribe-4N **May Revocable Trust, et al. (Current Royalty Owner)**

S.W. Stout, et ux., et al. (Original Lessor)

**

The Carter Oil
Hope Natural Gas Company
Consolidated Gas Supply Corporation
Consolidated Gas Transmission Corporation

LB 14/135
LB 42/411
DB 143/345
LB 135/583

Corporation
CNG Transmission Corporation
CNG Development Company
CNG Producing Company
Dominion Exploration and Production
Inc

CNG Transmission Corporation
CNG Development Company
CNG Producing Company
Dominion Exploration & Production, Inc.

DB 328/398
DB 139/41
CB 1096/0124 (Delaware)
CB 82/07 (Delaware)

CONSOL Energy Holdings LLC VI
CONSOL Gas Company
CNX Gas Company LLC
Antero Resources

Consol Energy Holdings LLC VI
CONSOL Gas Company
CNX Gas Company LLC
Antero Resources
EQT Production Company

DB 293/252
DB 293/252
DB 292/469
DB 387/180
DB 429/585

**Term Oil and Gas Production
Development LLC(current Royalty
Owner)**

Mary V. Gaston , etal
The Philadelphia Company of West
Virginia
Pittsburgh and West Virginia Gas
Company
Equitable Gas Company
Equitrans Inc.
Equitrans, LP
Equitable Production Company

The Philadelphia Company of West Virginia
Pittsburgh and West Virginia Gas Company
Equitable Gas Company
Equitrans Inc.
Equitrans, LP
Equitable Production Company
EQT Production Company

LB 33/26
DB 87/90
DB 121/303
LB 154/475
LB 192/19
LB 192/19
Mis 16/705

WV Department of
Environmental Protection

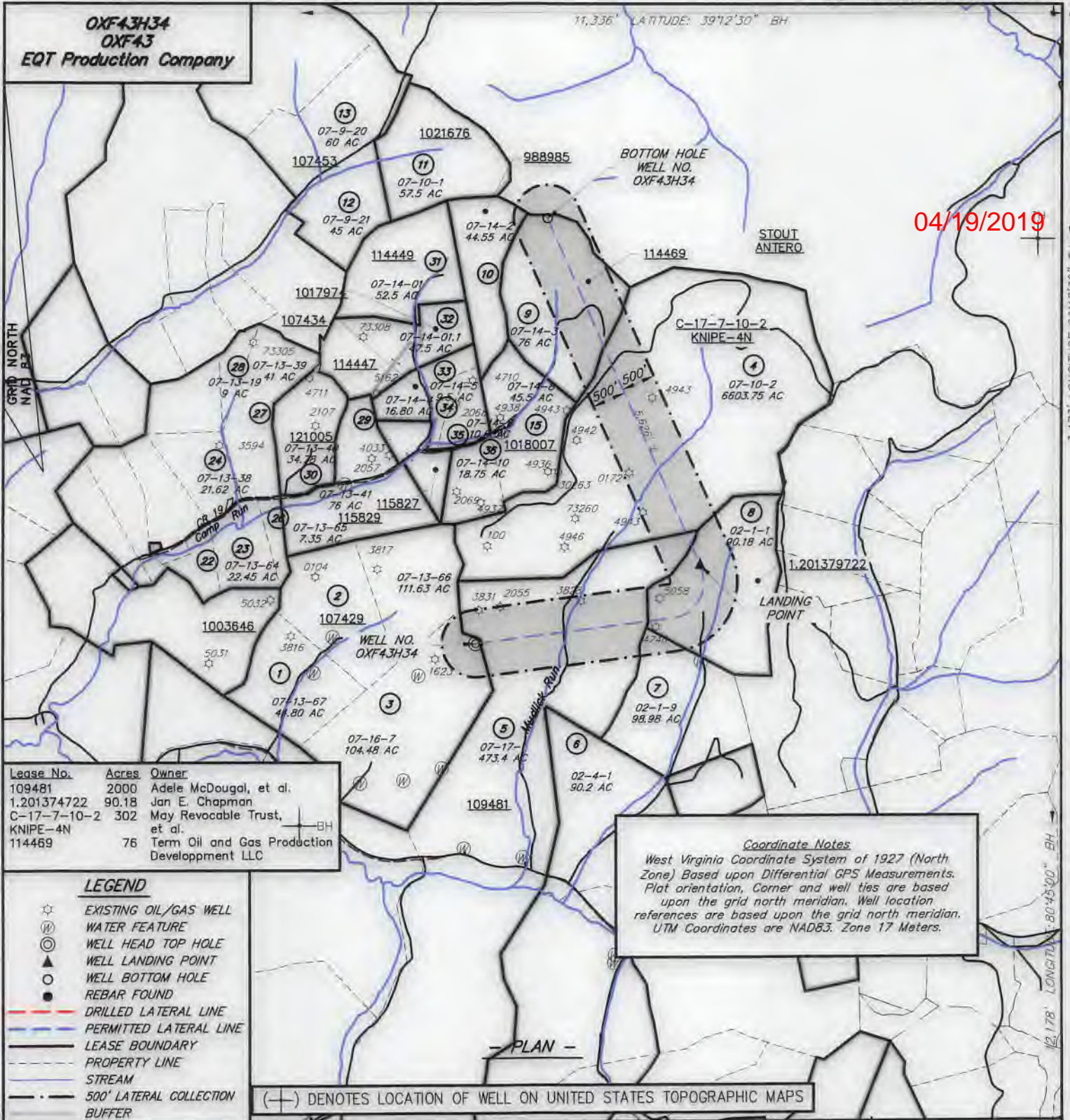
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4701706885
04/19/2019

OXF43H34
OXF43
EQT Production Company

04/19/2019



Lease No.	Acres	Owner
109481	2000	Adele McDougal, et al.
1.201374722	90.18	Jan E. Chapman
C-17-7-10-2 KNIPE-4N	302	May Revocable Trust, et al.
114469	76	Term Oil and Gas Production Development LLC

LEGEND

- ☆ EXISTING OIL/GAS WELL
- ⊙ WATER FEATURE
- ⊙ WELL HEAD TOP HOLE
- ▲ WELL LANDING POINT
- WELL BOTTOM HOLE
- REBAR FOUND
- DRILLED LATERAL LINE
- - - PERMITTED LATERAL LINE
- LEASE BOUNDARY
- - - PROPERTY LINE
- STREAM
- - - 500' LATERAL COLLECTION BUFFER

Coordinate Notes
West Virginia Coordinate System of 1927 (North Zone) Based upon Differential GPS Measurements. Plat orientation, Corner and well ties are based upon the grid north meridian. Well location references are based upon the grid north meridian. UTM Coordinates are NAD83. Zone 17 Meters.

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

- PLAN -



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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

[Handwritten Signature]



SEAL

FILE NO.: EES-60635
DRAWING NO.: OXF43_Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: ±3'
PROVEN SOURCE OF ELEVATION: GPS

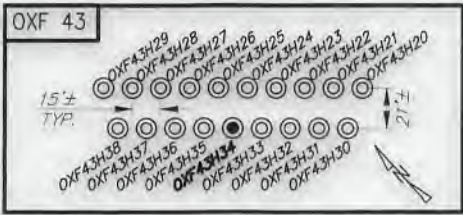
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

DATE DECEMBER 18, 20 18
OPERATORS WELL NO. OXF43H34
API WELL NO. 47 17 06885
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION, ELEVATION: 1254' (Ground) 1229' (Prop.) WATERSHED: Middle Fork Hughes River QUADRANGLE: OXFORD
DISTRICT: SOUTH WEST / COVE COUNTY: DODDRIDGE
SURFACE OWNER: Cathy Jean Wetzel, ET AL ACREAGE: 104.48± AC
ROYALTY OWNER: Franklin Maxwell Heirs L. P. LEASE NO.: 107429 ACREAGE: 255± AC
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6666'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson
ADDRESS: 115 Professional Pl. P.O. Box 280 ADDRESS: 115 Professional Pl. P.O. Box 280
Bridgeport, WV 26330 Bridgeport, WV 26330

OXF43H34
OXF43
EQT Production Company



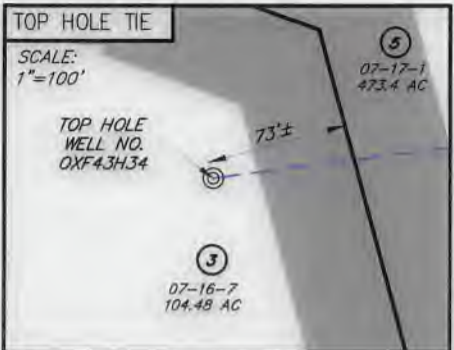
OXF43H34 Well Point Coordinates

Top Hole Coordinates		
NAD 27 S.P.C. (Ft.)	N: 241,942.484	E: 1,633,357.510
NAD 27 GEO	LAT: 39.157030	LONG: 80.792963
NAD 83 UTM 17N (M)	N: 4,334,232.6	E: 517,903.0
NAD 83 S.P.C. (Ft.)	N: 241,977.8	E: 1,601,916.7

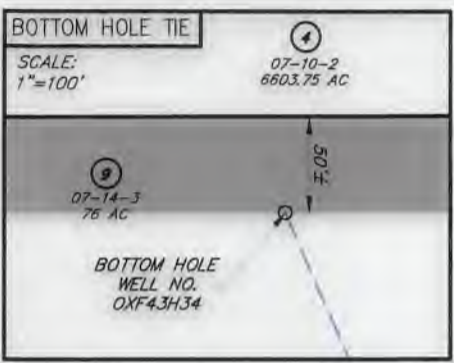
Landing Point Coordinates		
NAD 27 S.P.C. (Ft.)	N: 243,105.549	E: 1,636,701.910
NAD 27 GEO	LAT: 39.160355	LONG: 80.781229
NAD 83 UTM 17N (M)	N: 4,334,604.0	E: 518,916.0
NAD 83 S.P.C. (Ft.)	N: 243,141.0	E: 1,605,350.0

Bottom Hole Coordinates		
NAD 27 S.P.C. (Ft.)	N: 248,245.011	E: 1,634,413.760
NAD 27 GEO	LAT: 39.174375	LONG: 80.789558
NAD 83 UTM 17N (M)	N: 4,336,158.0	E: 518,192.8
NAD 83 S.P.C. (Ft.)	N: 248,280.3	E: 1,602,972.9

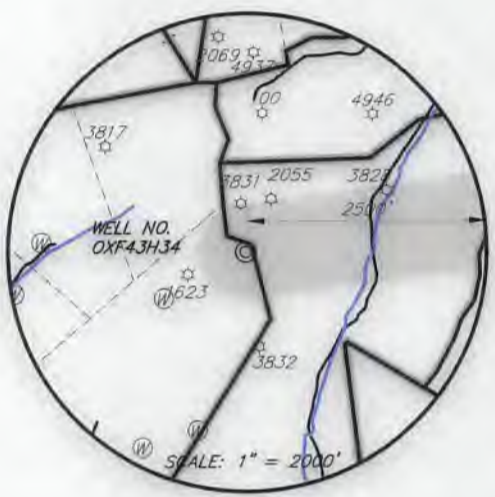
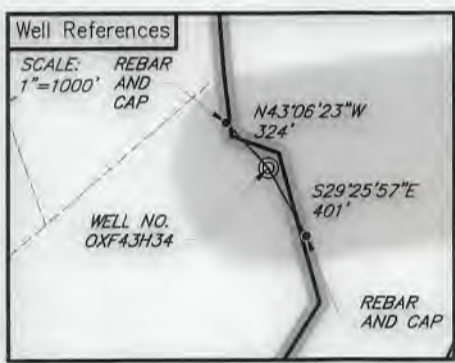
04/19/2019



NO.	SURFACE OWNER
3	CATHY JEAN WETZEL, ET AL
4	I L (IKE) MORRIS
5	RANDY E. & WILLIAM LEE HUFF
8	ARNOLD DALE ALAN & BRYAN ALAN & DAVID LYNN GEE
9	JANICE S. MCGORMACK



NO.	ADJACENT OWNER
7	WM & RANDY HUFF DECEDENTS
10	WILLIAM A. ARMENTROUT & SANDRA MATHENY



LEGEND

- ☆ EXISTING OIL/GAS WELL
- ⊙ WATER FEATURE
- ⊙ WELL HEAD TOP HOLE
- ▲ WELL LANDING POINT
- WELL BOTTOM HOLE
- REBAR FOUND
- DRILLED LATERAL LINE
- PERMITTED LATERAL LINE
- LEASE BOUNDARY
- PROPERTY LINE
- STREAM
- 500' LATERAL COLLECTION BUFFER



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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

[Signature]



FILE NO.: EES-60635
DRAWING NO.: OXF43_Well Plat
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: ±3'
PROVEN SOURCE OF ELEVATION: GPS

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

DATE DECEMBER 18, 20 18
OPERATORS WELL NO. OXF43H34
API WELL NO. 47 17 06895
STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL (IF GAS) PRODUCTION: STORAGE DEEP SHALLOW
LOCATION, ELEVATION: 1254' (Ground) 1229' (Prop.) WATERSHED: Middle Fork Hughes River QUADRANGLE: OXFORD
DISTRICT: SOUTH WEST / COVE COUNTY: DODDRIDGE
SURFACE OWNER: Cathy Jean Wetzel, ET AL ACREAGE: 104.48± AC
ROYALTY OWNER: Franklin Maxwell Heirs L. P. LEASE NO.: 107429 ACREAGE: 255± AC
PROPOSED WORK: DRILL CONVERT DRILL DEEPER FRACTURE OR STIMULATE PLUG OFF OLD FORMATION
 PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)
 PLUG AND ABANDON CLEAN OUT AND REPLUG TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6666'

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Jason Ranson
ADDRESS: 115 Professional Pl. P.O. Box 280 ADDRESS: 115 Professional Pl. P.O. Box 280
Bridgeport, WV 26330 Bridgeport, WV 26330

WWW.ENCOMPASSSERVICES.COM PLOT DATE: 12/18/2018 CAD FILE: OXF 43_WELL PLAT-2018-12-18.DWG



4701706885
04/19/2019

EQT Production Company
2400 Ansys Drive, Suite 200
Canonsburg, PA 15317
www.eqt.com

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

February 28, 2019

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

Re: OXF43H34 Gas Well
Southwest/Cove District, Doddridge County

Dear Mr. Brewer,

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

Sincerely,

John Zavatchan
Landman - Permitting

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MAR 11 2019
WV Department of
Environmental Protection

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

Date of Notice Certification: 03/08/2019

API No. 47- _____
Operator's Well No. OXF43H34
Well Pad Name: OXF43

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:	517,903.0
County:	Doddridge		Northing:	4,334,232.6
District:	South West/Cove	Public Road Access:		Rt. 20
Quadrangle:	Oxford	Generally used farm name:		Cathy Jean Wetzel, et. al.
Watershed:	Middle Fork Hughes River			

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

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

Required Attachments:

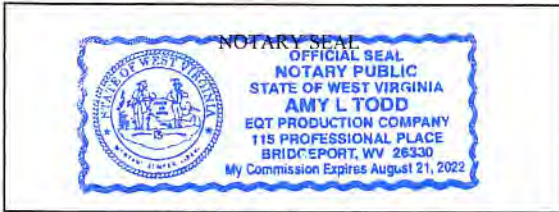
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication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

MAR 11 2019

Certification of Notice is hereby given:

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

Well Operator:	<u>EQT Production Company</u>	Address:	<u>2400 Ansys Drive, Suite 200</u>
By:	<u>John Zavatchan</u>		<u>Canonsburg, PA 15317</u>
Its:	<u>Landman - Permitting</u>	Facsimile:	<u>724-745-2418</u>
Telephone:	<u>724-746-9073</u>	Email:	<u>jzavatchan@eqt.com</u>



Subscribed and sworn before me this 8 day of March, 2019.
Amy L. Todd Notary Public
 My Commission Expires 8/21/2022

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

**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: 03/08/2019 **Date Permit Application Filed:** 03/08/2019

Notice of:

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

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

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

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

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

SURFACE OWNER(s)

Name: See Attached
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: See Attached
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: See Attached
Address: _____

COAL OWNER OR LESSEE

Name: See Attached
Address: _____

COAL OPERATOR

Name: _____
Address: _____

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: See Attached
Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
Address: _____

*Please attach additional forms if necessary **RECEIVED
Office of Oil and Gas**

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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.

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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

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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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.**

WV Department of
Environmental Protection

Time Limits and Methods for Filing Comments.

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

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

Comment Requirements

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

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

Permit Denial or Condition

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

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

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

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

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WW-6A
(8-13)

4701706885

API NO. 47- _____ - _____
OPERATOR WELL NO. OXF43164 **04/19/2019**
Well Pad Name: OXF43

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 724-746-9073

Email: jzavatchan@eqt.com



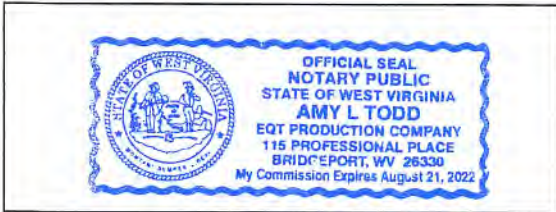
Address: 2400 Ansys Drive, Suite 200

Canonsburg, PA 15317

Facsimile: 724 745 2418

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.



Subscribed and sworn before me this 8 day of March, 2019.

Amy L. Todd Notary Public

My Commission Expires 8/21/2022

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Surface Owners:

CATHY JEAN WETZEL, ET AL /
322 ZACKS RUN ROAD
MOUNT CLARE ,WV 26408

RANDY E. HUFF DECEDENT'S TRUST B /
826 ORANGE AVENUE
CORONADO , CA 92118

WILLIAM LEE HUFF /
826 ORANGE AVENUE
CORONADO , CA 92118

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

CATHY JEAN WETZEL, ET AL /
322 ZACKS RUN ROAD
MOUNT CLARE ,WV 26408

RANDY E. HUFF DECEDENT'S TRUST B /
826 ORANGE AVENUE
CORONADO , CA 92118

WILLIAM LEE HUFF /
826 ORANGE AVENUE
CORONADO , CA 92118

I.L. MORRIS /
PO BOX 397
GLENVILLE, WV

MATHEW H. COPELAND
1500 HAYSTACK LANE
WEST UNION,WV 26456

SANDRA MATHENY ARMENTROUT AND WILLIAM A. ARMENTROUT /
851 MACE ST.
ELKVIEW, WV 25071

Janice S. McCormack /
1903 CAMP RUN ROAD
WEST UNION, WV 26456

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04/19/2019

Coal Owner

Adele McDougal
213 W. High Street
Harrisville WV 26362

William Lee Huff c/o Joye E Huff
826 Orange Ave.
Coronado CA 92118

Master Mineral Holdings II LP
P.O.Box 10886
Midland TX 79702

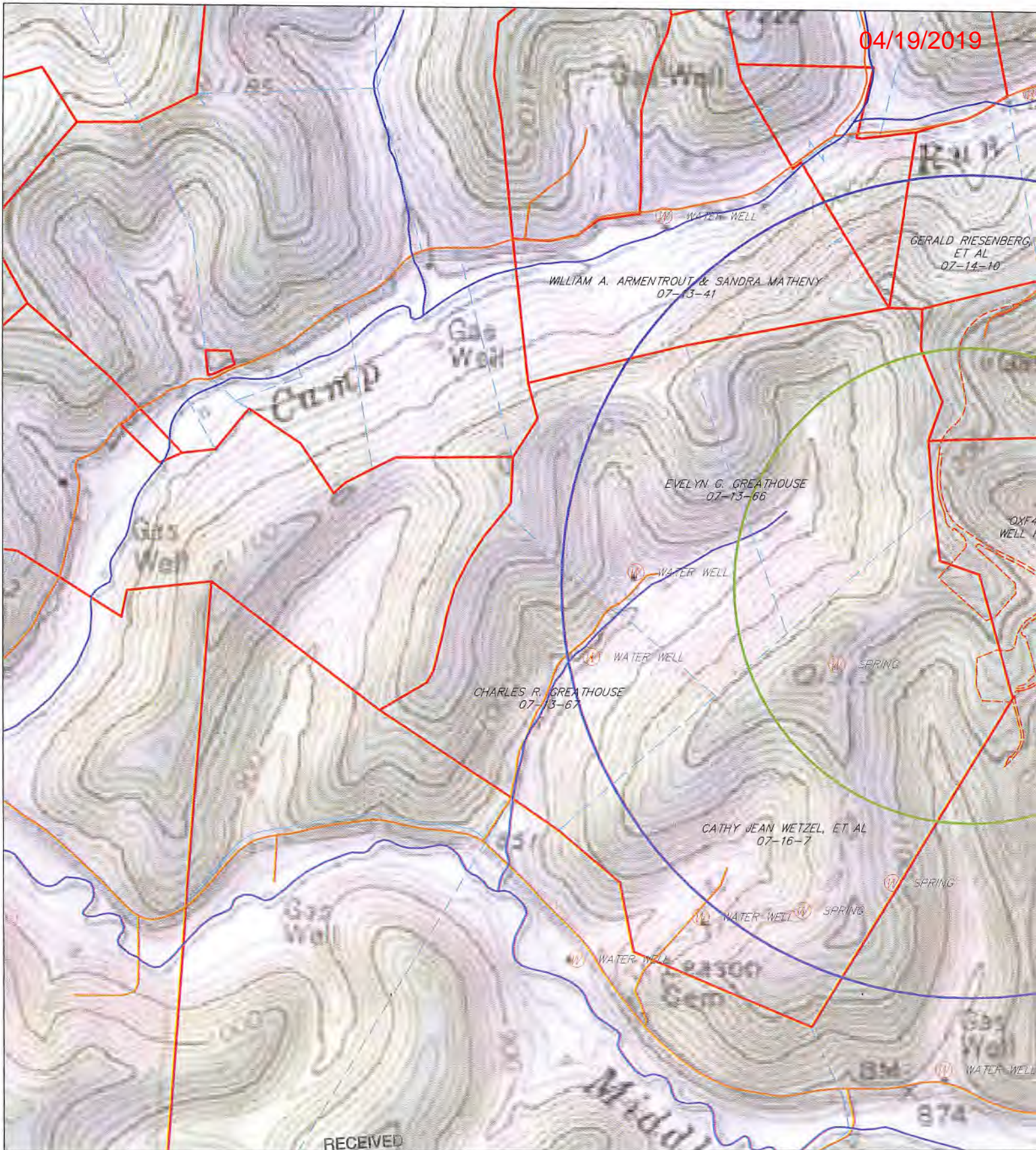
Lois L McKain
4141 S. Braeswood Blvd. Apt 224
Houston TX 77009

Katherine Foster Leggett
1625 Stonehenge Rd
Charleston WV 25314

Franklin Maxwell Heirs Ltd Partnership #1
P.O.Box 2395
Buchannon WV 26201

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04/19/2019



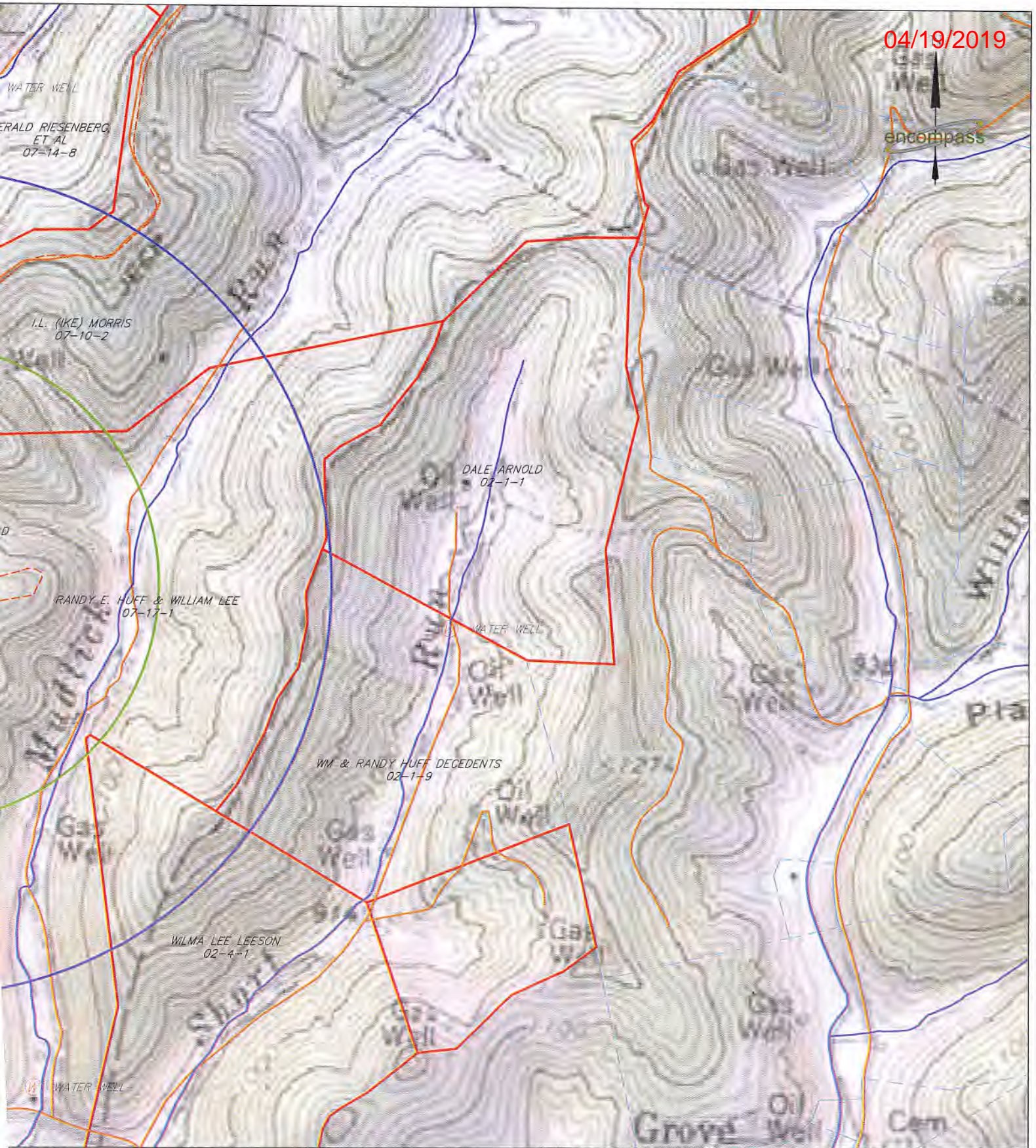
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04/19/2019



WATER FEATURE (AS NOTED)

1,500' BUFFER

2,600' BUFFER

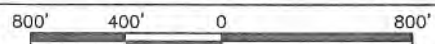
PARCEL

-  ROAD
-  EDGE OF WATER
-  LEASE LINE
-  ACCESS ROAD / PAD

SCALE: 1" = 800'	DRAWN BY: VER	
DATE: 1/29/2019	REV DATE:	JOB NO.: 60635

EQT PRODUCTION COMPANY OXF43 PAD

RESIDENTIAL WATER SUPPLY MAP
SOUTHWEST TAX DISTRICT, DOODRIDGE COUNTY, WV



REV 1
SHEET: 1 OF 1



Table 1 – Water Source Identification

EQT Well Pad Name: OXF 43 Submittal Date: _____

EQT Well Number: _____

Survey / Engineering Company: RETTEW Associates, Inc.

Site Number: 07-16-7 Distance from Gas Well (feet): 1583'

Surface Owner / Occupant: Cathy Jean Wetzel, ET AL

322 Zacks Run Road, RT 2 Box 317,
Address: Mount Claire, WV 26408 Phone #: _____

Field Located Date: 4/20/17 Owner home during survey (yes/no): _____

Coordinates: 39.155761, 80.79576216 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Spring, no update from October 2018 visit

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

Site Number: 07-16-7 Distance from Gas Well (feet): 2237'

Surface Owner / Occupant: Cathy Jean Wetzel, ET AL

322 Zacks Run Road, RT 2 Box 317,
Address: Mount Claire, WV 26408 Phone #: _____

Field Located Date: 4/20/17 Owner home during survey (yes/no): _____

Coordinates: 39.15199707, 80.79445984 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Door Hanger Left: _____

Comments: Spring, no update from October 2018 visit

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

Site Number: 07-16-7 Distance from Gas Well (feet): 2567'

Surface Owner / Occupant: Cathy Jean Wetzel, ET AL

322 Zacks Run Road, RT 2 Box 317,
Address: Mount Claire, WV 26408 Phone #: _____

Field Located Date: 4/20/17 Owner home during survey (Yes/No): _____

Coordinates: 39.15149523, 80.7964674 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Spring, no update from October 2018 visit

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

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Environmental Protection



Table 1 – Water Source Identification

EQT Well Pad Name: OXF43 Submittal Date: _____

EQT Well Number: _____

Survey / Engineering Company: RETTEW

Site Number: 07-16-7 Distance from Gas Well (feet): 2872'

Surface Owner / Occupant: Cathy Jean Wetzel, ET AL

Address: 322 Zacks Run Road, RT 2 Box 317, Mount Claire, WV 26408 Phone #: _____

Field Located Date: 4/20/17 Owner home during survey (yes/no): _____

Coordinates: 39.15136349, 80.79874149 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Well, no update from October 2018 visit

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

Site Number: 07-13-67 Distance from Gas Well (feet): 2616'

Surface Owner / Occupant: Charles R. Greathouse

Address: 71 Alum Fork Road, Camden, WV 26338 Phone #: _____

Field Located Date: 10/23/18 Owner home during survey (yes/no): _____

Coordinates: 39.15583001, 80.8012587 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Door Hanger Left: _____

Comments: Well

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

Site Number: 07-13-66 Distance from Gas Well (feet): 2321'

Surface Owner / Occupant: Evelyn G. Greathouse

Address: 147 Torrey Dr, Buckhannon, WV 26201 Phone #: _____

Field Located Date: 10/23/18 Owner home during survey (Yes/No): _____

Coordinates: 39.15729159, 80.80024123 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Well

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

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Table 1 – Water Source Identification

EQT Well Pad Name: OXF43 Submittal Date: _____

EQT Well Number: _____

Survey / Engineering Company: RETTEW

Site Number: 07-13-41 Distance from Gas Well (feet): 3179'

Surface Owner / Occupant: William A. Armentrout & Sandra Matheny

Address: 815 Mace St, Elk View, WV 25071 Phone #: _____

Field Located Date: 04/21/17 Owner home during survey (yes/no): _____

Coordinates: 39.16348426, 80.79976642 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Well, no update from October 2018 visit

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

Site Number: 07-14-8 Distance from Gas Well (feet): 3288'

Surface Owner / Occupant: Gerald Riesenber, ET AL

Address: 290 Ogden Road, OH 45177 Phone #: _____

Field Located Date: 04/21/17 Owner home during survey (yes/no): _____

Coordinates: 39.16572147, 80.79158604 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Door Hanger Left: _____

Comments: Well, update - October 2018 - landowner response indicated parcel uninhabited and no wells

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

Site Number: 02-1-9 Distance from Gas Well (feet): 3498'

Surface Owner / Occupant: Wm & Randy Huff Decedents

Address: 826 Orange Ave, Coronado, CA 92118 Phone #: _____

Field Located Date: 10/23/18 Owner home during survey (Yes/No): _____

Coordinates: 39.15651686, 80.78094585 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Well

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



Table 1 – Water Source Identification

EQT Well Pad Name: OXF43 Submittal Date: _____

EQT Well Number: _____

Survey / Engineering Company: RETTEW

Site Number: 07-17-1 Distance from Gas Well (feet): 3371'

Surface Owner / Occupant: Randy E. Huff & William Lee

Address: 826 Orange Ave., Coronado, CA 92118 Phone #: _____

Field Located Date: 10/23/18 Owner home during survey (yes/no): _____

Coordinates: 39.14843745, 80.79014573 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Well

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

Site Number: 07-17-1 Distance from Gas Well (feet): 3177'

Surface Owner / Occupant: Randy E. Huff & William Lee

Address: 826 Orange Ave., Coronado, CA 92118 Phone #: _____

Field Located Date: 10/23/18 Owner home during survey (yes/no): _____

Coordinates: 39.14876464, 80.79325539 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Door Hanger Left: _____

Comments: Well

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

Site Number: 07-16-6 Distance from Gas Well (feet): 3538'

Surface Owner / Occupant: Betty M. Ryan

Address: 4153 Grove Summers Rd, New Milton, WV 26411 Phone #: _____

Field Located Date: 10/23/18 Owner home during survey (Yes/No): _____

Coordinates: 39.15060189, 80.80151208 (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: Well

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

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WV Department of
Environmental Protection



Table 1 – Water Source Identification

EQT Well Pad Name: OXF43 Submittal Date: _____

EQT Well Number: _____

Survey / Engineering Company: RETTEW

Site Number: 07-14-10 Distance from Gas Well (feet): _____

Surface Owner / Occupant: Gerald Riesenberg, ET AL

Address: 290 Ogden Road, OH 45177 Phone #: _____

Field Located Date: _____ Owner home during survey (yes/no): _____

Coordinates: Unconfirmed (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: No features within 2600' buffer

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

Site Number: 07-10-2 Distance from Gas Well (feet): _____

Surface Owner / Occupant: I L (Ike) Morris

Address: Glenville, WV 26351 Phone #: _____

Field Located Date: _____ Owner home during survey (yes/no): _____

Coordinates: Unconfirmed (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Door Hanger Left: _____

Comments: No features within 2600' buffer

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

Site Number: 02-1-1 Distance from Gas Well (feet): _____

Surface Owner / Occupant: Dale Arnold, ET AL

Address: 4825 Roop Rd, Mount Airy, MD 21771 Phone #: _____

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

Coordinates: Unconfirmed (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: No features within 2600' buffer

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



Table 1 – Water Source Identification

EQT Well Pad Name: OXF43 Submittal Date: _____

EQT Well Number: _____

Survey / Engineering Company: RETTEW

Site Number: 02-4-1 Distance from Gas Well (feet): _____

Surface Owner / Occupant: Wilma Lee Leeson

Address: 2687 Millview Dr, Columbus, OH 43207 Phone #: _____

Field Located Date: _____ Owner home during survey (yes/no): _____

Coordinates: Unconfirmed (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: No features within 2600' buffer

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

Site Number: _____ Distance from Gas Well (feet): _____

Surface Owner / Occupant: _____

Address: _____ Phone #: _____

Field Located Date: _____ Owner home during survey (yes/no): _____

Coordinates: _____ (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Door Hanger Left: _____

Comments: _____

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

Site Number: _____ Distance from Gas Well (feet): _____

Surface Owner / Occupant: _____

Address: _____ Phone #: _____

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

Coordinates: _____ (decimal degrees – NAD 83)

Contact Attempts (Date): 1st: _____ 2nd: _____ Date Door Hanger Left: _____

Comments: _____

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

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: 02/12/2019 **Date Permit Application Filed:** 3/8/19

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 List Name: _____
Address: _____ Address: _____

Notice is hereby given:

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

State:	<u>West Virginia</u>	UTM NAD 83 Easting:	<u>517,903.0</u>
County:	<u>Doddridge</u>	Northing:	<u>4,334,232.6</u>
District:	<u>Southwest / Cove</u>	Public Road Access:	<u>Rt. 20</u>
Quadrangle:	<u>Oxford</u>	Generally used farm name:	<u>Cathy Jean Wetzel, et. al.</u>
Watershed:	<u>Middle Fork Hughes River</u>		

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 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:	<u>EQT Production Company</u>	Authorized Representative:	<u>John Zavatchan</u>
Address:	<u>2400 Ansys Drive, Suite 200</u> <u>Canonsburg, PA 15317</u>	Address:	<u>2400 Ansys Drive, Suite 200</u> <u>Canonsburg, PA 15317</u>
Telephone:	<u>7224-746-9073</u>	Telephone:	<u>724-746-9073</u>
Email:	<u>jzavatchan@eqt.com</u>	Email:	<u>jzavatchan@eqt.com</u>
Facsimile:	<u>724-745-2418</u>	Facsimile:	<u>724-745-2418</u>

Oil and Gas Privacy Notice:

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

MAR 11 2019

Surface Owners:

4701706885
04/19/2019

CATHY JEAN WETZEL, ET AL ✓
322 ZACKS RUN ROAD
MOUNT CLARE , WV 26408

RANDY E. HUFF DECEDENT'S TRUST B ✓
826 ORANGE AVENUE
CORONADO , CA 92118

WILLIAM LEE HUFF ✓
826 ORANGE AVENUE
CORONADO , CA 92118

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Environmental Protection

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

CATHY JEAN WETZEL, ET AL
322 ZACKS RUN ROAD
MOUNT CLARE ,WV 26408

RANDY E. HUFF DECEDENT'S TRUST B
826 ORANGE AVENUE
CORONADO , CA 92118

WILLIAM LEE HUFF
826 ORANGE AVENUE
CORONADO , CA 92118

I.L. MORRIS
PO BOX 397
GLENVILLE, WV

MATHEW H. COPELAND
1500 HAYSTACK LANE
WEST UNION,WV 26456

SANDRA MATHENY ARMENTROUT AND WILLIAM A. ARMENTROUT
851 MACE ST.
ELKVIEW, WV 25071

Janice S. McCormack
1903 CAMP RUN ROAD
WEST UNION, WV 26456

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Office of Oil and Gas
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WV Department of
Environmental Protection

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: 03/08/2019 **Date Permit Application Filed:** 03/08/2019

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

- CERTIFIED MAIL HAND
RETURN RECEIPT REQUESTED DELIVERY

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

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

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

Notice is hereby given:

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>517,903.0</u>
County: <u>Doddridge</u>		Northing: <u>4,334,232.6</u>
District: <u>Southwest / Cove</u>	Public Road Access: <u>Rt. 20</u>	
Quadrangle: <u>Oxford</u>	Generally used farm name: <u>Cathy Jean Wetzel, et. al.</u>	
Watershed: <u>Middle Fork Hughes River</u>		

This Notice Shall Include:

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

Well Operator: <u>EQT Production Company</u>	Address: <u>2400 Ansys Drive, Suite 200</u>
Telephone: <u>724-746-9073</u>	<u>Canonsburg, PA 15317</u>
Email: <u>jzavatchan@eqt.com</u>	Facsimile: <u>724-745-2418</u>

Oil and Gas Privacy Notice:

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

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WV Department of
Environmental Protection

Surface Owners:

CATHY JEAN WETZEL, ET AL
322 ZACKS RUN ROAD
MOUNT CLARE , WV 26408

RANDY E. HUFF DECEDENT'S TRUST B
826 ORANGE AVENUE
CORONADO , CA 92118

WILLIAM LEE HUFF
826 ORANGE AVENUE
CORONADO , CA 92118

4701706885
04/19/2019

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Office of Oil and Gas

MAR 11 2019

WV Department of
Environmental Protection

4701706885 04/19/2019

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

CATHY JEAN WETZEL, ET AL
322 ZACKS RUN ROAD
MOUNT CLARE , WV 26408

RANDY E. HUFF DECEDENT'S TRUST B
826 ORANGE AVENUE
CORONADO , CA 92118

WILLIAM LEE HUFF
826 ORANGE AVENUE
CORONADO , CA 92118

I.L. MORRIS
PO BOX 397
GLENVILLE, WV

MATHEW H. COPELAND
1500 HAYSTACK LANE
WEST UNION, WV 26456

SANDRA MATHENY ARMENTROUT AND WILLIAM A. ARMENTROUT
851 MACE ST.
ELKVIEW, WV 25071

Janice S. McCormack
1903 CAMP RUN ROAD
WEST UNION, WV 26456

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WV Department of
Environmental Protection



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division of Highways

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

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

November 13, 2018

Jill M. Newman
 Deputy Commissioner

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

Subject: DOH Permit for the OXF43 Well Site, Doddridge County

OXF43H20	OXF43H21	OXF43H22
OXF43H24	OXF43H28	OXF43H29
OXF43H32	OXF43H34	OXF43H35
OXF43H36	OXF43H37	

Dear Mr. Martin,

This well site will be accessed from Permit # 04-2015-0394 has been issued to EQT Production Company for access to the State Road for a well pad located off of County Rt. 23/3 SLS in Doddridge County.

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

Very Truly Yours,

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

Cc: Nick Bumgardner
 EQT Production Company
 CH, OM, D-4
 File

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WV Department of
 Environmental Protection

Anticipated Frac Additives
Chemical Names and CAS numbers

4701706885
04/19/2019

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

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Environmental Protection

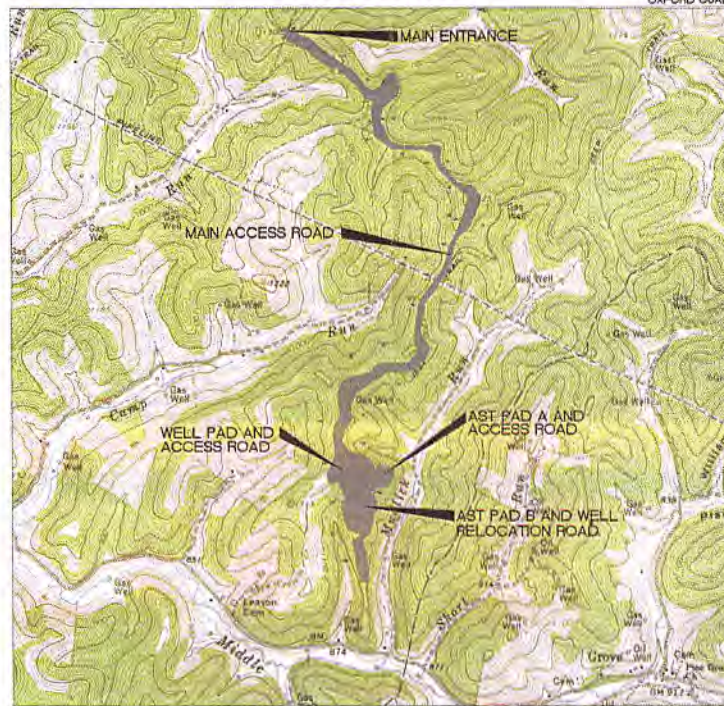
OXF43 AS-BUILT SITE PLAN EQT PRODUCTION COMPANY

PERMITTED WELLS: API# 47-017-06739, 47-017-06740, 47-017-06741, 47-017-06742,
47-017-06743, 47-017-06744, 47-017-06745, 47-017-06746, 47-017-06747, 47-017-06748
AND 47-017-06749

PROPOSED WELL NUMBERS: OXF43H28, OXF43H29, OXFH33, OXF43H34, OXF43H35,
OXF43H36, OXF43H37, AND OXF43H38

**SITUATE ON WATERS OF MIDDLE FORK OF THE SOUTH FORK OF HUGHES RIVER IN
SOUTHWEST DISTRICT, DODDRIDGE COUNTY, WEST VIRGINIA**

LOCATION MAP



LIST OF DRAWINGS

- 1 - COVER SHEET
- 2 - INDEX SHEET
- 3 - OXF43 ACCESS ROAD
- 4 - OXF43 ACCESS ROAD
- 5 - OXF43 ACCESS ROAD
- 6 - OXF43 ACCESS ROAD
- 7 - OXF43 ACCESS ROAD
- 8 - OXF43 ACCESS ROAD
- 9 - OXF43 ACCESS ROAD, WELL PAD AND ACCESS ROAD AND PAD 'A' AND ACCESS ROAD
- 10 - OXF43 WELL PAD AND ACCESS ROAD, PAD 'B' AND ACCESS ROAD AND PAD 'B' AND WELL RELOCATION ROAD
- 11 - OXF43 PAD 'B' AND WELL RELOCATION ROAD
- 12 - MAIN ROAD PROFILE
- 13 - MAIN ROAD PROFILE
- 14 - MAIN ROAD PROFILE
- 15 - MAIN ROAD PROFILE AND PAD ACCESS ROAD PROFILE
- 16 - PAD ACCESS ROAD PROFILE AND WELL RELOCATION ROAD PROFILE

LDD by property owner

Property Name	Parcel #	LDG (Acres)	Volume (Acres)
Alpine (L. H. Shively's Farm 8 acres pad)	735-1	24.54	31.1
Antoniolo Farm (Tony and)	735-2	6.12	7.8
Alpine (L. H. Shively's Farm 8 acres pad)	735-3	21.08	26.3
Deborah Marlow Jr.	735-4	2.71	3.4
Total Area		73.45	92.6

LDD by mineral area

Parcel #	LDG (Acres)	Volume (Acres)
Main Access Road (3.0 acres)	10-0	12.7
PK Access Road (0.3 acres)	10-1	1.2
Gas Pad (0.3 acres)	10-2	3.7
Well Pad (0.3 acres)	10-3	3.7
Gas Pad (0.3 acres)	10-4	3.7
Well Pad (0.3 acres)	10-5	3.7
Gas Pad (0.3 acres)	10-6	3.7
Well Pad (0.3 acres)	10-7	3.7
Total Area	17.8	69.0

LEGEND

- PROPERTY LINES
- LIMITS OF DISTURBANCE
- EX ROAD EDGE BY GRAVEL/DIRT
- EX ROAD CENTERLINE
- EX DRIVELINE
- EX CURBLINE
- EX GASLINE
- RIG FOOTPRINT
- EDGE OF GRAVEL PAD
- EDGE OF BERM
- ORANGE CONSTRUCTION FENCE
- 18" COMPOST FILTER SOCK
- 18" COMPOST FILTER SOCK
- 34" COMPOST FILTER SOCK
- TOP BERM
- GRAVEL
- RIP RAP
- ROCK CONSTRUCTION ENTRANCE
- ORIGINAL GROUND & CONTOUR
- AS-BUILT & CONTOUR
- AS-BUILT WELL LOCATIONS
- PROPOSED WELL LOCATIONS
- ADJACENT WELL LOCATIONS
- MATCHLINE
- EX FENCELINE
- EX GATE
- EX STRUCTURE
- EX FUELING MANDIR
- EX OVERHEAD UTILITY
- EX POWER POLE
- EX DIRT MUD
- EX GASLINE

PROJECT INFORMATION

PROJECT NAME: OXF43 AS-BUILT

SURFACE OWNERS:

BARVEY TRUST DECEDENTS TRUST B ET AL
LOT 7
APN 03-17-4
D.B. 247 PG. 296

WHEEL, CATHERINE JEAN ET AL
APN 03-16-7
D.B. 277 PG. 165

GRAETHOUSE, CHARLES R & EVELYN G
APN 03-16-8
D.B. 302 PG. 340

MORRIS, L L
APN 03-16-2
D.B. 230 PG. 307

COPELAND, MATTHEW H
APN 03-16-1
D.B. 357 PG. 6

OIL AND GAS ROYALTY OWNER:

FRANKLIN MAXWELL HERSEL P
DISTRICTS: SOUTHWEST / CENTE
DODDRIDGE COUNTY, WV
TOTAL PROPERTY AREA: 2554 ACRES

LOCATION COORDINATES

OXF43 SITE ENTRANCE
LATITUDE: 39 39322 LONGITUDE: -80 71000 (NAD 83)
NORTHING: 4306793.7 EASTING: 497229.7 (NAD 83 METERS)

OXF43 CENTER OF WELL PAD
LATITUDE: 39 19776 LONGITUDE: -80 71900 (NAD 83)
NORTHING: 4338210.2 EASTING: 497507.4 (NAD 83 METERS)

SITE DISTURBANCE COMPUTATIONS

MAIN ACCESS ROAD = 29.962 ACRES
WELL PAD AND ACCESS ROAD = 11.18 ACRES
PAD 'A' AND ACCESS ROAD = 4.574 ACRES
PAD 'B' AND WELL RELOCATION ROAD = 6.905 ACRES

GENERAL DESCRIPTION

THE OXF 43 PAD AND AS-BUILT ARE BEING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS

**WVDEP OOG
ACCEPTED AS-BUILT**

1 / 29 / 2019

SURVEY DATE

THE CERTIFICATION OF THIS DRAWING APPLIES ONLY TO THE TOPOGRAPHIC MAPPING AS OBTAINED FROM THE FIELD DATA OBTAINED AT THE TIME OF THE FIELD SURVEY ON 11/01/18, 11/02/18, 11/03/18, 11/04/18, 11/05/18, 11/06/18, 11/07/18, 11/08/18, 11/09/18, 11/10/18, 11/11/18, 11/12/18, 11/13/18, 11/14/18, 11/15/18, 11/16/18, 11/17/18, 11/18/18, 11/19/18, 11/20/18, 11/21/18, 11/22/18, 11/23/18, 11/24/18, 11/25/18, 11/26/18, 11/27/18, 11/28/18, 11/29/18, 11/30/18, 12/01/18, 12/02/18, 12/03/18, 12/04/18, 12/05/18, 12/06/18, 12/07/18, 12/08/18, 12/09/18, 12/10/18, 12/11/18, 12/12/18, 12/13/18, 12/14/18, 12/15/18, 12/16/18, 12/17/18, 12/18/18, 12/19/18, 12/20/18, 12/21/18, 12/22/18, 12/23/18, 12/24/18, 12/25/18, 12/26/18, 12/27/18, 12/28/18, 12/29/18, 12/30/18, 12/31/18.

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THE LAW



WV Department of Environmental Protection

DATE: 10/28/2018
BY: [Signature]
SCALE: 1"=1000'
DESIGNED BY: T.V.
FILE NO: OXF43
SHEET: 1 OF 10
NO. OF SHEETS: 10

EQT

SLS

Lead & Energy Development
1000 West Virginia Turnpike, Suite 200
Martinsburg, WV 26151

OXF43
AS-BUILT SITE PLAN

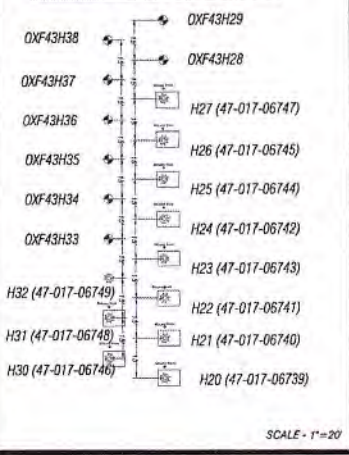
DATE: 10/28/2018
BY: [Signature]
SCALE: 1"=1000'
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FILE NO: OXF43
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NO. OF SHEETS: 10

July 2019
6/14/18

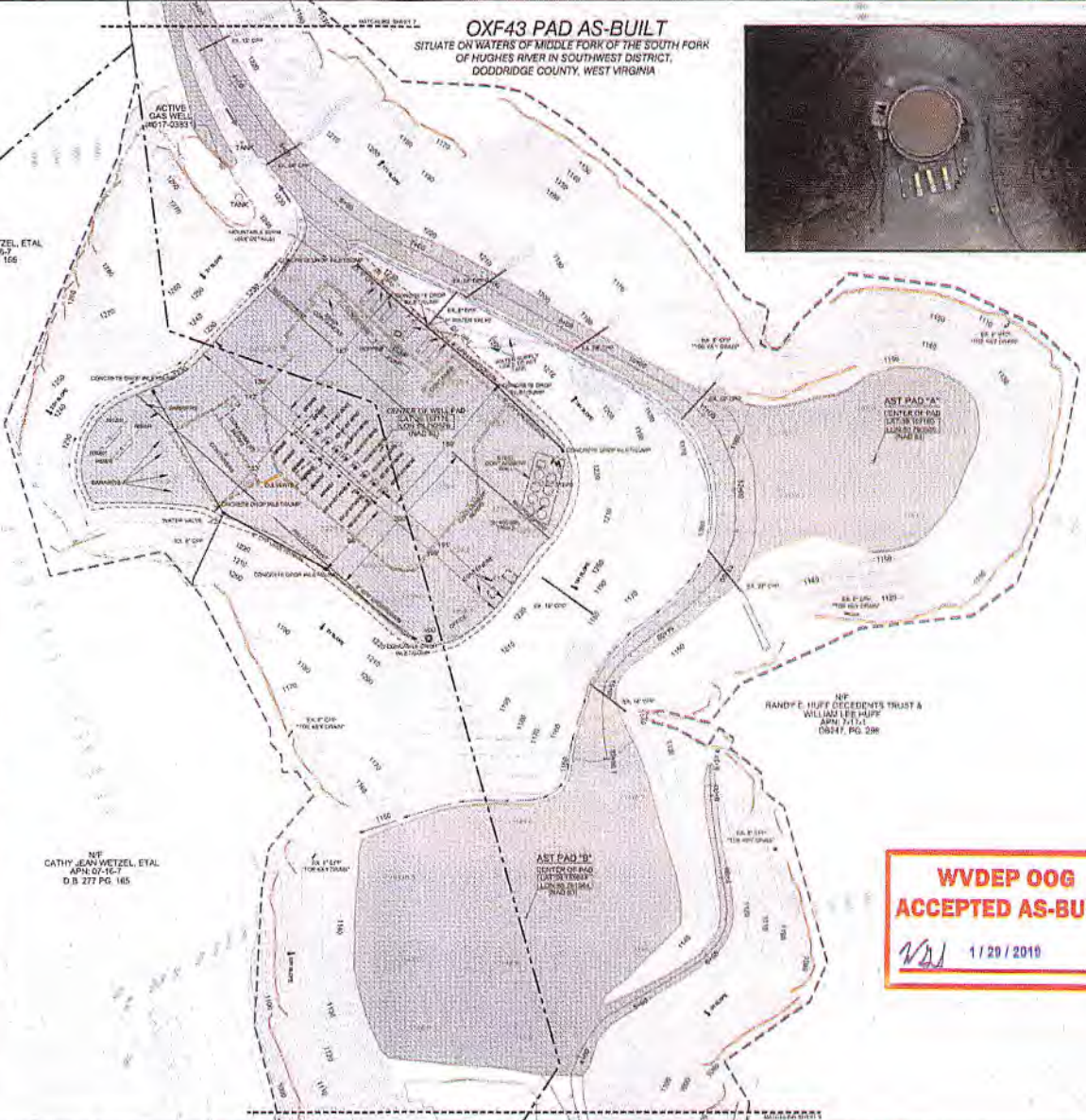
GRID NORTH AND SURVEYED ELEVATIONS SHOWN HEREON WERE ESTABLISHED BY DGPS SURVEY GRADE.



WELL ELEVATION DETAIL



OXF43 PAD AS-BUILT
SITUATE ON WATERS OF MIDDLE FORK OF THE SOUTH FORK OF HUGHES RIVER IN SOUTHWEST DISTRICT, DODDRIDGE COUNTY, WEST VIRGINIA



**WVDEP OOG
ACCEPTED AS-BUILT**
1/20/2010

DATE	DESCRIPTION

EQT
Environmental Quality Technology

SLS
Land & Energy Development

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