

#### 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

Thursday, April 23, 2020 WELL WORK PERMIT Horizontal 6A / Drilling Deeper

EQT PRODUCTION COMPANY 625 LIBERTY AVE., SUITE 1700

PITTSBURGH, PA 15222

Permit approval for 516232 Re: 47-017-06742-00-00

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: 516232

Farm Name: CATHY JEAN WETZEL, ET

U.S. WELL NUMBER: 47-017-06742-00-00

Horizontal 6A Drilling Deeper Date Issued: 4/23/2020

API NO. 47-417 0 1674 0 6 7 4 2 OPERATOR WELL NO. 516232 Well Pad Name: OXF43

#### 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	Southwest/Cove	Oxford
1) well operator	Operator ID	County	District	Quadrangle
2) Operator's Well Number: 516232	Well P	ad Name: OXF	43	
3) Farm Name/Surface Owner: Cathy Jean Wetzel	l, et. al. Public R	oad Access: Rt.	20	
4) Elevation, current ground: 1,229' (As-Built) E	levation, propose	d post-construct	tion: 1,229'	(As-Built)
5) Well Type (a) Gas X Oil Other	Ur	derground Stora	ige	
(b)If Gas Shallow X	Deep			
6) Existing Pad: Yes or No Yes	_			
7) Proposed Target Formation(s), Depth(s), Antio Marcellus, 6,647', 57', 2,951 psi	cipated Thicknes	s and Expected I	Pressure(s):	
8) Proposed Total Vertical Depth: 6,647'				
9) Formation at Total Vertical Depth: Marcellus	S			
10) Proposed Total Measured Depth: 20,116'				
11) Proposed Horizontal Leg Length: 13,017				
12) Approximate Fresh Water Strata Depths:	70', 221', 307',	382'		
13) Method to Determine Fresh Water Depths:	Offset wells: 017-0	1623, 017-03817	, 017-03831, (	017-03828, 017-03832
14) Approximate Saltwater Depths: None expec	cted - if encounter	ed will be below	945'	
15) Approximate Coal Seam Depths: 321'-322'				
16) Approximate Depth to Possible Void (coal m	ine, karst, other)	: N/A		
17) Does Proposed well location contain coal sea directly overlying or adjacent to an active mine?	Yes	N	o X	
(a) If Yes, provide Mine Info: Name:				
Depth:				
Seam:				RECEIVED Office of Oil and 0
Owner:				MAR 1 9 202

WV Department of Environmental Protection

DAR 3-19-200

WW-6B (04/15) OPERATOR WELL NO. 516232
Well Pad Name: OXF43

18)

### CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	26	New	A-500	85.6	40	40	49 ft^3 / CTS
Fresh Water	13 3/8	New	J-55	54.5	605	558	624 ft^3 / CTS
Coal							
Intermediate	9 5/8	New	P-110	40	5380	5330	1888 ft^3 / CTS
Production	5 1/2	New	P-110 CYHP	20	20116	20116	500° above intermediate casing
Tubing	2 3/8		J-55	4.7		May not be run, if run set 40' above top perf or 80° inclination.	
Liners							

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	26	30	.312	1050	18	Class A	1.18
Fresh Water	13 3/8	17 1/2	.38	2730	2184	Class A / Type 1	1.13 - 1.19
Coal							
Intermediate	9 5/8	12 3/8	.395	7900	3160	Class A / Type 1	1.13 - 1.19
Production	5 1/2	8 1/2	.361	14360	10112	Class A/H	1.04 - 2.098
Tubing	2 3/8	NA	.19	7700			
Liners							

#### **PACKERS**

Kind:		
Sizes:		
Depths Set:		

3-19-202

WW-6B (10/14)

API NO. 47- 017	- 06742	
OPERATOR W	VELL NO	5162

Well Pad Name: OXF43

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

Continue drilling and complete a horizontal well in the Marcellus Formation. The well has been drilled to an approximate depth of 5390'. EQT is proposing to continue operations by kicking off and drilling the 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 10,000 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 200,000-600,000 pounds of proppant per stage.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): N/A site built
- 22) Area to be disturbed for well pad only, less access road (acres): N/A site built
- 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

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

Conductor: Class A no additives

Surface: Calcium Chloride. Used to speed the setting of cement slurries

Intermediate: Calcium Chloride. Used to speed the setting of cement slurries.

Production: Calcium Carbonate, Fluid Loss, Extender, Dispersent, Viscosifier, Defoamer, POZ, Bonding Agent, Retarder, RECEIVED Office of Oil and Gas

25) Proposed borehole conditioning procedures:

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Surface: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminisher mental Protection surface.

Intermediate: Circulate hole clean while rotating & reciprocating the drill string until cuttings diminish at surface.

Production: Perform a cleanup cycle by pumping 3-8 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

Page 3 of 3

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

#### WEST VIRGINIA GEOLOGICAL PROGNOSIS

Horizontal Well OXF43H30

1229 GL (As-Built)

516238(OXF43H30)

179

211

411

451

532

716

829

1073 Base of Red Rock

**Drilling Objectives:** County:

Marcellus

Quad:

Doddridge Oxford

Elevation: Surface location **Landing Point** 

Northing: Northing: Northing:

1242 KB

241902.39 Easting: Easting: 241820.78

1633402.15

Toe location Recommended Azimuth

250051.23 0 Degrees

1629095.40 1625527.70

Recommended LP to TD:

TVD: 6647

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

Determined from OXF43 and OXF45 Pilot Hole Logs

Easting:

Formation	Top (TVD)	Base (TVD) Lithology	Comments	Top RR Base RR
Fresh Water Zone	1	382	FW @ 70,221,307,382,,	21
Waynesburg A	321	322 Coal	No past, present, or permitted mining.	123 1
Maxton	1084	1124 Sandstone	No SW present in shallow offset wells.	181 2
Big Lime	1960	2028 Limestone		266 4
Big Injun	2072	2104 Sandstone	Storage is NOT of concern at this location	361 4
Weir	2246	2372 Sandstone		462 5
Top Devonian	2446			561 7
Gantz	2446	2528 Silty Sand		706 8
Fifty foot	2528	2585 Silty Sand		956 10
Thirty foot	2626	2662 Silty Sand		
Gordon	2668	2717 Silty Sand		
Forth Sand	2768	2835 Silty Sand		
Bayard	2948	3019 Silty Sand		
Warren	3282	3348 Silty Sand		
Speechley	3348	3853 Silty Sand		
Balltown A	3853	4211 Silty Sand		
Riley	4451	4827 Silty Sand		
Benson	4827	4921 Silty Sand		
Alexander	5129	5222 Silty Sand	Base of Offset Well Perforations at 5207' TVD	
Int. csg pt	5272			
Elks	5222	6305 Gray Shales and Silts		
Sonyea	6305	6455 Gray shale		
Middlesex	6455	6445 Shale		
Genesee	6445	6554 with black shale		
Geneseo	6554	6596 Black Shale		N. C.
Tully	6596	6609 Limestone		N N
Hamilton	6609	6627 calcareous shales		- 1
Marcellus	6627	6683 Black Shale		
Purcell	6658	6661 Limestone		110
-Lateral Zone	6647		Start Lateral at 6647'	
Cherry Valley	6667	6670 Limestone		
Onondaga	6683	Limestone		

Target Thickness	57 feet	
Max Anticipated Rock Pressure	2951 PSI	

#### Comments:

Note that this is a TVD prog for a horizontal well (azimuth of 0 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

The estimated landing point TVD is 6647', 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.

RECON	MMENDI	ED CASI	NC PO	INTS

Fresh Water/Coal	CSG OD	13 3/8	CSG DEPTH:	532	150' below freshwater
Intermediate 1:	CSG OD	9 5/8	CSG DEPTH:	5272	50' below Alexander
Production:	CSG OD	5 1/2	CSG DEPTH: @ TD		



March 18, 2020

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

Re: Casing on 516232

Dear Mr. Brewer,

The 13-3/8" surface casing has been set at 558' KB, 176' below the deepest fresh water. The 9-5/8" intermediate string has been set at 5,330' KB, 108' below the base of the Alexander formation.

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

Sincerely,

John Zavatchan

Landman - Permitting

Enc.

Office of Oil and Gas

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WV Department of Environmental Protection



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

March 18, 2014

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

Re: Cement Variance Request

Dear Sir or Madam,

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

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

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

Sincerely

James Peterson

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

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

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

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

#### REPORT OF THE OFFICE

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

#### FINDINGS OF FACT

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

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#### CONCLUSIONS OF LAW

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

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

#### ORDER

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA

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

James Martin, Chief Office of Oil and Gas

Office of Oil and Gas

MAR 1 9 2020

WV Department of Environmental Protection

Commission number 1359 Member, Pennsylvania Association or deterio.

WW-9 (4/16)

API Number 47 -	017	- 06742	
Operator	's Well 1	No. 516232	

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

FLUIDS/ CUTTINGS	DISPOSAL & RECLAMATION PLAN
perator Name EQT Production Company	OP Code 306686
atershed (HUC 10) Middle Fork Hughes River	Quadrangle Oxford
o you anticipate using more than 5,000 bbls of water to overlap in the used? Yes No V	complete the proposed well work? 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 Waste	es:
Land Application	
	Permit Number 0014, 8462, 4037
Reuse (at API Number Various Off Site Disposal (Supply form	n WW-9 for disposal location)
Other (Explain	1 W W 2 for disposar focultorly
'ill closed loop system be used? If so, describe: Yes. The then pre	e closed loop system will remove drill cuttings from the drilling fluid. The drill cuttings are pared for transportation to an off-site disposal facility.
rilling medium anticipated for this well (vertical and hor	rizontal)? Air, freshwater, oil based, etc. See Attached
-If oil based, what type? Synthetic, petroleum, et	te. Synthetic Mud
dditives to be used in drilling medium? See Attached	
ill cuttings disposal method? Leave in pit, landfill, rem	loved offsite, etc. Landfill
-If left in pit and plan to solidify what medium w	rill be used? (cement, lime, sawdust)_N/A
-Landfill or offsite name/permit number? See At	tached List
ermittee shall provide written notice to the Office of Oil Vest Virginia solid waste facility. The notice shall be proved it was properly disposed.	and Gas of any load of drill cuttings or associated waste rejected at any vided within 24 hours of rejection and the permittee shall also disclose
n August I, 2005, by the Office of Oil and Gas of the Word rovisions of the permit are enforceable by law. Violation was or regulation can lead to enforcement action.  I certify under penalty of law that I have personal polication form and all attachments thereto and that,	
ompany Official (Typed Name) John Zavatchan	RECEIVED Office of Oil and G
ompany Official Title Project Specialist - Permitting	MAR 1 9 202
abscribed and sworn before me this day	of MVCh , 20 20 WV Department Environmental Pro
() c	Notary Public
My commission expires October 25,	Commonwealth of Pennsylvania - N. Olivia Pishioneri, Notary Pu Allegheny County

#### WW-9 Attachment

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

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

#### Additives to be used in drilling medium?

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

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	47017	06742
Operator's Wo	ell No. <u>516232</u>	
CE Prevegetation pH		_
Permai	nent	
Seed Type	lbs/acre	
d Grass	15	
Clover	5	
		_
gineered plans includ	ling this info have been dimensions (L x W), ar	nd area in
AD) of the pit, the	difference (E // // ), di	
		_
		_
		_
		OEWED
	Office of	CEIVED f Oil and Gas

		o additional disturbance Prevegetation pl	1
Lime 3	Tons/acre or to correc	t to pH 6.5	
Fertilizer type Gra	anular 10-20-20		
Fertilizer amount_	1/3	lbs/acre	
Mulch_2		_Tons/acre	
		Seed Mixtures	
т	emporary	Perma	ment
			lbs/acre
Seed Type KY-31	lbs/acre 40	Seed Type Orchard Grass	15
Alsike Clover	5	Alsike Clover	5
Annual Rye	15		
provided). If water from the acreage, of the land applicat	pit will be land applied, inc tion area olved 7.5' topographic sheet.	d application (unless engineered plans inclulude dimensions (L $\times$ W $\times$ D) of the pit, and	d dimensions (L x W), an
Maps(s) of road, location, p provided). If water from the acreage, of the land applicate Photocopied section of involved Plan Approved by:	pit will be land applied, incition area  lived 7.5' topographic sheet.	lude dimensions (L x W x D) of the pit, and	d dimensions (L x W), an
Maps(s) of road, location, p provided). If water from the acreage, of the land applicate Photocopied section of involved Plan Approved by:	pit will be land applied, incition area  lived 7.5' topographic sheet.	lude dimensions (L x W x D) of the pit, and	d dimensions (L x W), an
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Maps(s) of road, location, p provided). If water from the acreage, of the land applicate Photocopied section of involved Plan Approved by:	pit will be land applied, incition area  lived 7.5' topographic sheet.	lude dimensions (L x W x D) of the pit, and	d dimensions (L x W), and

		EQTP	EQT Production Water Plan						
****		Offsite Dispo	Offsite Disposals for Unconventional Wells	al Wells	1	10	1	Chato	Dormit Mumbor
Facility Name	Address	Address 2	City	State	76197	Pnone 740,516,3586	County	State	3390
LWS ITUCKING INC.	P.O. Box 391		Williamstown		70TO	0010-01/	3000	5	2000
Broad Street Energy LLC	37 West Broad Street	Suite 1100	Columbus	동	43215	740-516-5381	Washingotn	동	8462
LAD Liquid Assets Disposal Inc.	226 Rankin Road		Washington	₹	15301	724-350-2760	Ohio	W	USEPA WV 0014
Triad Engran	DO Boy 430		Beno	<b>5</b>	45773	740-516-6021	Noble	동	4037
יומן בונו אל						740-374-2940			
Tri County Waste Water Management, Inc.	1487 Toms Run Road		Holbrook	A	15341	724-627-7178	Greene	PA	TC-1009
						/24-499-564/			
King Excavating Co. Advance Waste Services	101 River Park Drive		New Castle	A	16101		Lawrence	РА	PAR000029132
Waste Management - Meadowfill Landfill	Rt. 2, Box 68 Dawson Drive		Bridgeport	≩	16330	304-326-6027	Harrison	N/A	SWF-1032-98
Waste Management - Northwestern Landfill	512 E. Dry Road		Parkersburg	≩	26104	304-428-0602	Wood	W	SWF-1025 WV-0109400
APEX Landfill	11 County Road 78	PO Box 57	Amsterdam	동	43903	740-543-4389	Jefferson	ᆼ	06-08438
Advanced Disposal - Chestnut Valley Landfill	1184 McClellandtown Road		McClellandtown	<b>₹</b>	15458	724-437-7336 Fayette	Fayette	PA	100419
Westmoreland Sanitary Landfill	901 Tyrol Boulevard		Belle Vernon	ĕ.	15012	724-929-7694	724-929-7694 Westmoreland	PA	100277
Austin Master Services	801 North 1st Street		Martins Ferry	동	43935	740-609-3800	Belmont	용	2014-541
1	Pood make Now Athera		2.061.2	2	43007	740.042.1739	Harricon	5	2015-511
beimont solids Control	//303 Cautz-Ivew Attlets noau		Caulz	<u> </u>	)	25.00		5	
Diversified Resources	3111 Braun Rd.		Belpre	동	45714	740-401-0413 Washington	Washington	동	
Buckeye Brine	23986 Airport Road		Coshocton	동	43812	740-610-1512 724-591-4393	Coshocton	НО	34-031-27177 34-031-27178 34-031-27241
Central Environmental Services	28333 West Belpre Pike		Coolville	동	45723	304-488-0701	Athens	픙	
Nuverra - Nichols	10555 Veto Road		Belpre	동	45714	330-232-5041 Washington	Washington	동	34-119-2-8776
Nuverra - Goff	9350 East Pike Road		Norwich	동	43767	330-232-5041	Muskingum	НО	34-167-2-3862
Nuverra - Wolf	5480 State Route 5		Newton Falls	동	4444	330-232-5041	Trumbull	ᆼ	34-155-2-1893
Nuverra - Pander	5310 State Route 5		Newton Falls	동	44444	330-232-5041	Trumbull	동	34-155-2-3795
Nuverra - AnnaRock D-1	3549 Warner Road		Fowler	푱	44418	330-232-5041	Trumbull	ᆼ	34-155-2-2403
	En			Ц					
	W. Viro								

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MAR 19 2020

WV Department of Vironmental Protection

						740-374-2940			
٠		_	Reno	픙	45773	45773 412-443-4397		Н	
FQ Helen	199 Bowersock Road					740-236-2135 Washington	Washington		34-167-2-9577
						740-374-2940			
			Dexter City	픙	45727	412-443-4397		Н	34-121-24037
FQ Dexter	38505 Marietta Rd.					740-236-2135 Noble	Noble		34-121-24086
						740-374-2940			
	ı		Ellenboro	≩	26346	412-443-4397		W	
FQ Ritchie	122 Lonesome Pine Rd					740-236-2135 Ritchie	Ritchie		47-085-09721
						טאטנ אדנ טאד			34-105-2-3619
						740-574-2940		7	34-105-2-3652
			Portland	5_	45//0	412-443-4397		5	34-105-2-3637
FQ Mills	53610 TS Rd 706					740-236-2135	Meigs		34-105-2-3651
110 2000 2000 2000	745 North 3rd Chroat		Cambridge	용	43725	43725 614-477-1368	Cuprocov	동	Ohio Chiefs Order 25-019
בנום בווננו לווזכם - כנו	ייין ווייין אין אין אין אין אין אין אין אין אין						,		
Petta Enterprises - WV	38 Technology Dr.		Tridelphia	<b>^</b>	26059	740-255-5727 Ohio		WV	
Deep Rock Disposal	2341 OH-821	-	Marietta	ОН	45750	45750 304-629-0176 Washington		ОН	34-167-2-9766

Office of Oil and Gas

MAR 1 9 2020

WV Department of Environmental Protection

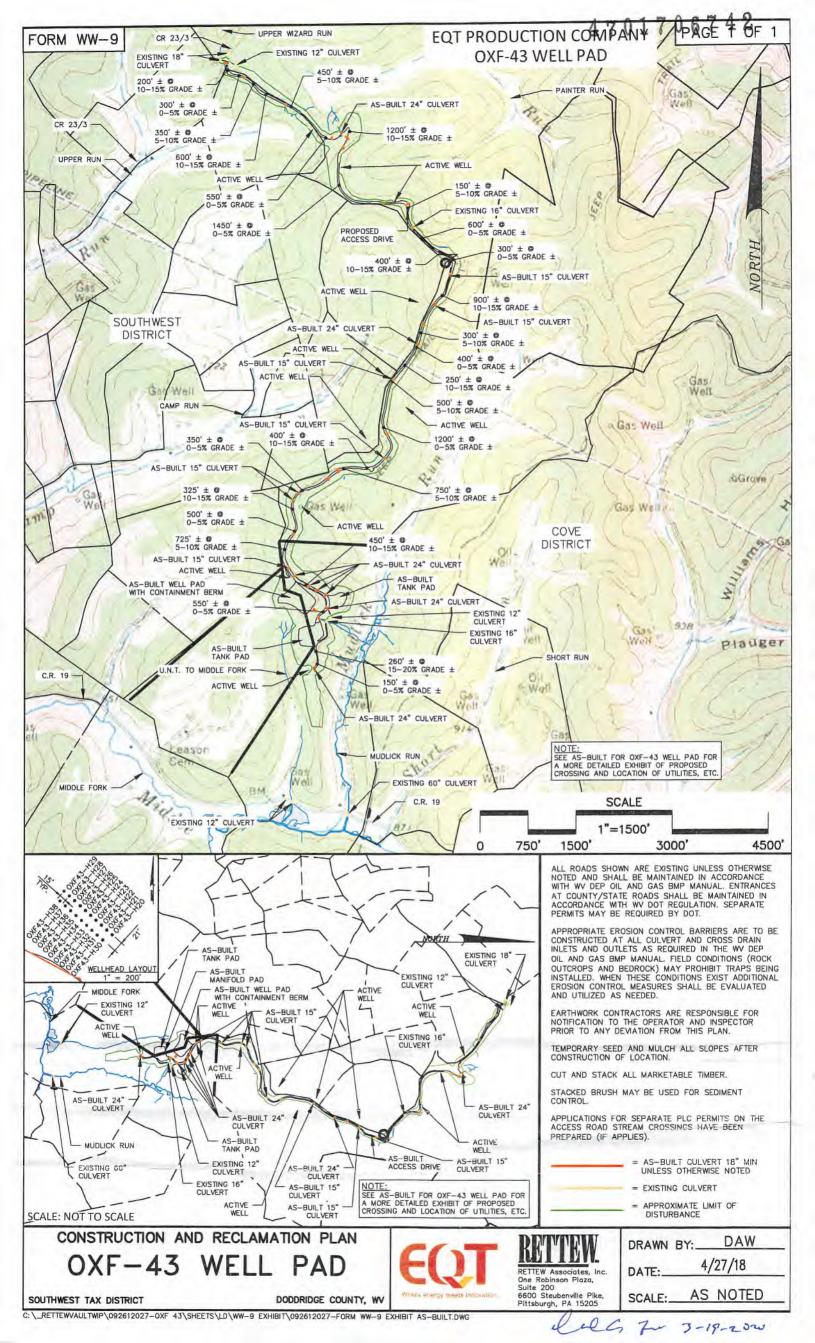


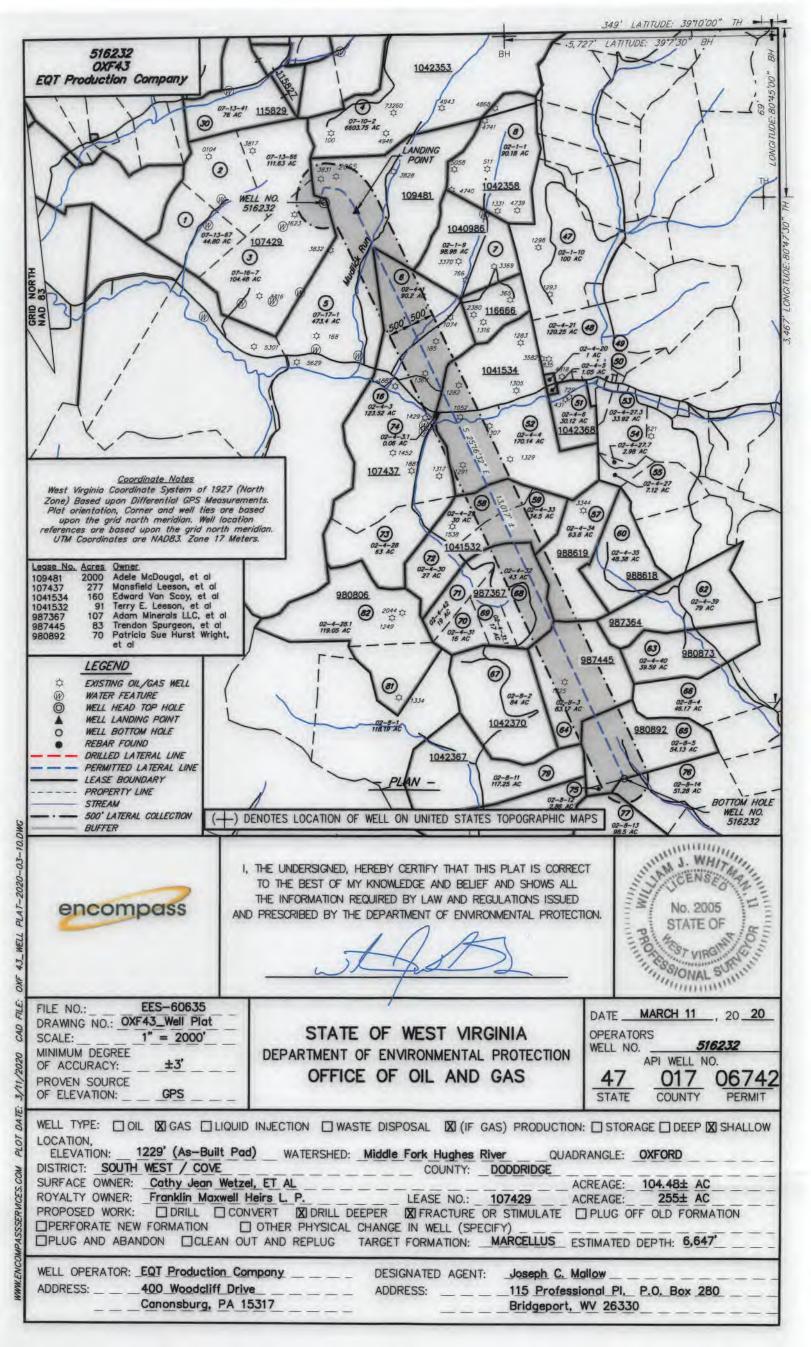
## Site Specific Safety and Environmental Plan

# EQT OXF43 Pad West Union Doddridge County, WV

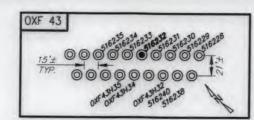
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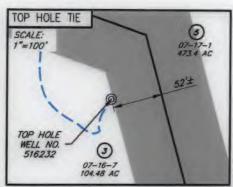
516228	516229	516230	516231	516232	516233	516234
516235	516238	516240	OXF43H32	OXF43H34	OXF43H35	-
11.	repared: Februa	ary 18, 2019	_	QQQJ.		
Pro JE	EX SPECIAL	ST - PERMIT	ance o		aspents-	Office of Oil and Gas
Date	112120			3-18-202	0	MAK 1 9 2020
Date			Da	ate		Environmental Protection

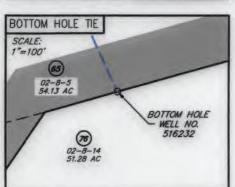




516232 OXF43 **EQT Production Company** 







NO.	SURFACE OWNER
3	CATHY JEAN WETZEL, ET AL
5	RANDY E. & WILLIAM LEE HUFF
6	WLMA LEE LEESON
52	JAMES H. & JENNIE FOSTER
58	TERRY E. LEESON
59	JANNETTE CONLEY
64	DONNA C. MATTHEWS
65	DAVID E. BOWYER
68	SLEETH TIMBER CORP

NO.	ADJACENT OWNER
2	EVELYN G. GREATHOUSE
16	MANSFIELD LEESON
57	JANNETTE CONLEY
74	ARMSTRONG TELEPHONE COMPANY NORTHERN DIVISION
75	DAVID E. BOWYER
76	DAVID E. BOWYER
77	BRUCE D. & GLADYS L. ROTH

#### 516232 - Well Point Coordinates

#### Top Hole Coordinates

N: 241,953.095 LAT: 39.157060 10 27 S.P.C. (Ft.) LONG: 80.792894 E: 517,908.9 E: 1,601,936.3 NAD 27 GEO NAD 83 UTM 17N (M) N 4,334,236.0 N 241,988.4 NAD 83 S.P.C. (Ft.)

#### Landing Point Coordinates

N: 241,776.230 LAT: 39.156601 NAD 27 S.P.C. (Ft.) E: 1,634,042.549 NAD 27 GEO NAD 83 UTM 17N (M) LONG: 80.790539 E: 518,112.5 E: 1,602,601.7 N 4,334,185.5 N 241,811.6 4D 83 S.P.C. (Ft.)

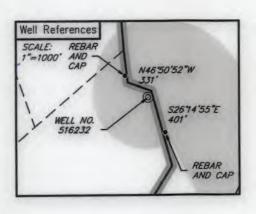
#### om Hole Coordinate

N: 230,005.030 LAT: 39.124502 N 4,330,627.7 N 230,040.6 E: 1,639,600.360 LONG: 80.770355 E: 519,865.5 E: 1,608,159.7 VAD 27 S.P.C. (Ft.) AD 27 GEO AD 83 UTM 17N (M) AD 83 S.P.C. (Ft.)



EXISTING OIL/GAS WELL WATER FEATURE WELL HEAD TOP HOLE WELL LANDING POINT WELL BOTTOM HOLE REBAR FOUND DRILLED LATERAL LINE LEASE BOUNDARY PROPERTY LINE

PERMITTED LATERAL LINE STREAM 500' LATERAL COLLECTION BUFFER







OXF

CAD

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 ENMRONMENTAL PROTECTION.



No. 2005 STATE OF STA STATE OF

EES-60635 DRAWING NO .: OXF43\_Well Plat = 2000 SCALE: MINIMUM DEGREE ±3' OF ACCURACY: PROVEN SOURCE GPS OF ELEVATION:

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

MARCH 11 , 20 20 DATE\_ **OPERATORS** 516232 WELL NO. API WELL NO. 017 06742 PERMIT

COUNTY

STATE

WELL TYPE: ☐ OIL IN GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL IN (IF GAS) PRODUCTION: ☐ STORAGE ☐ DEEP IN SHALLOW

LOCATION QUADRANGLE: OXFORD 1229' (As-Built Pad) WATERSHED: Middle Fork Hughes River **ELEVATION:** COUNTY: DODDRIDGE

DISTRICT: SOUTH WEST / COVE SURFACE OWNER: Cathy Jean Wetzel, ET AL ACREAGE: 104.48± AC ACREAGE: 255± AC

LEASE NO.: 107429 ACREAGE: 255± AC 

☐ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION ROYALTY OWNER: Franklin Maxwell Heirs L. P. PROPOSED WORK: DRILL CONVERT D DRILL DEEPER PERFORATE NEW FORMATION OTHER PHYSICAL CHANGE IN WELL (SPECIFY)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,647' □PLUG AND ABANDON □CLEAN OUT AND REPLUG

WELL OPERATOR: EQT Production Company DESIGNATED AGENT: Joseph C. Mallow 115 Professional Pl. P.O. Box 280 400 Woodcliff Drive Bridgeport, WV 26330 Canonsburg, PA 15317

Operator's Well No. 516232

#### 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
Nu	mber	

Grantor, Lessor, etc.

Grantee, Lessee, etc.

Royalty

Book/Page

See Attached

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

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

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

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

Well Operator: EQT Production Company

By:

John Zavatchan

Its:

Project Specialist - Permitting

Operator's Well No.

516232

		- p		
			0	XF43H24
Lease No.	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
	Franklin Maxwell Heirs L.P. (current royalty		**	
<u>107429</u>	owner)			
	W. Brent Maxwell, et al (original lessor)	Fisher Oil Co.		LB23/337
	Fisher Oil Co.	The Philadelphia Company of N	_	LB32/120
	The Philadelphia Company of West Virginia	Pittsburgh & West Virginia Gas	: Company	DB87/90
	Pittsburgh & West Virginia Gas Co.	Equitable Gas Company		DB121/303
	Equitable Gas Company	Equitrans, Inc.		LB154/475
	Equitrans, Inc.	Equitrans, L.P.		DB329/645
	Equitrans, L.P.	Equitable Production-Eastern S		LB 192/19
	Equitable Production-Eastern States, Inc.	Equitable Production Company	1	CB281/346
	Equitable Production Company	EQT Production Company		CB281/346
109481	Adele McDougal, et al (current royalty owner)		**	
	Jackson Leeson, et al (original lessor)	The Philadelphia Co. of West V	/irginia	LB21/76
	The Philadelphia Co. of West Virginia	Pittsburgh & West Virginia Gas	•	DB87/90
	Pittsburgh & West Virginia Gas Co.	Equitable Gas Company		DB121/303
	Equitable Gas Company	Equitrans, Inc.		LB154/475
	Equitrans, Inc.	Equitrans, L.P.		DB329/645
	Equitrans, L.P.	Equitable Production-Eastern S	States, Inc.	LB 192/19
	Equitable Production-Eastern States, Inc.	Equitable Production Company	·	CB281/346
	Equitable Production Company	EQT Production Company		CB281/346
<u>107437</u>	Mansfield Leeson, et al (current royalty owner)		**	
	F. L. Lodge (original lessor)	Fisher Oil Co.		LB22/277
	Fisher Oil Co.	The Philadelphia Oil Co.		LB24/64
	The Philadelphia Oil Co.	Pittsburgh and West Virginia Ga	as Company	DB87/90
	Pittsburgh and West Virginia Gas Company	Equitable Gas Co.	as company	DB07/90 DB121/303
	Equitable Gas Co.	Equitrans, Inc.		LB154/475
	Equittrans, Inc.	Equitable Production-Eastern S	itatos Inc	LB192/19
	Equitable Production-Eastern States, Inc.	Equitable Production Company		CB281/346
	Equitable Production Company	EQT Production Co.		CB281/346
<u>1041534</u>	Edward Van Scoy, et al (current royalty owner)		**	
1041334	Thurman Spurgeon and Nannie Spurgeon (original less	r Hone Natural Gas Company		LB 35/375
	Hope Natural Gas Company	Consolidated Gas Supply Corpo	pration	DB 143/345
	Consolidated Gas Supply Corporation	Consolidated Gas Transmission		
	Condolidated Gas Transmission Corporation	CNG Development Company al	•	LB 135/583
	CNG Producing Company	Dominion Exploration & Product	• , ,	LB 139/41 INC 234/1203
	Dominion Exploration & Production Inc.	Dominion Transmission, Inc.	don inc.	LB 244/528
	Dominion Transmission, Inc.	CONSOL Energy Holdings LLC	VVI	LB 244/326 LB 245/1
	CONSOL Energy Holdings LLC XVI/CONSOL Gas Com		AVI	DB 292/469
	CNX Gas Company LLC	Noble Energy, Inc.		LB 260/39
	CNX Gas Company LLC & Noble Energy, Inc.	Antero Resources Corporation		LB 400/565
	Antero Resources Corporation	EQT Production Company	RECEIVED Office of Oil and Gas	LB 486/476
1041532	Terry E. Leeson, et al (current royalty owner)		MAR 1 9 2020	
	Joshua Adams and Satah E. Adams (original lessor)	J. W. Stuck		LB 28/172
	J. W. Stuck	Hope Natural Gas Company	WV Department of Environmental Protection	LB 28/1/2 LB 26/186

	Hope Natural Gas Company Consolidated Gas Supply Corporation et al. Consolidated Gas Transmission Corporation CNG Transmission Corporation Dominion Transmission, Inc. CONSOL Energy Holidngs LLC XVI/CONSOL Gas Co. CNX Gas Company LLC	Consolidated Gas Supply Corporation Conolidated Gas Transmission Corporation CNG Transmission Corporation Dominion Transmission, Inc. CONSOL Energy Holidngs LLC XVI CNX Gas Company LLC Noble Energy Inc.		DB 143/345 LB 135/583 DB 332/563 DB 332/570 LB 245/1 DB 292/469 LB 260/39
	CNX Gas Company and Noble Energy, Inc. Antero Resources Corporation	Antero Resource Corporation EQT Production Company		LB 400/565 LB 486/476
<u>987367</u>	Adam Minerals LLC, et al (current royalty owner) Alice M. Brummage	EQT Production Company	**	LB 253/603
<u>987445</u>	Trendon Spurgeon, et al (current royalty owners) Trendon Spurgeon Antero Resources Corporation	Antero Resources Corporation EQT Production Copmpany	**	LB 417/91 LB 486/476
<u>980982</u>	Patricia Sue Hurst Wright, et al (current royalty owner) Patricia Sue Hurst Wright	EQT Production Company	**	LB 393/634

<sup>\*\*</sup> Per West Virginia Code Section 22-6-8.



4 7 0 1 7 0 6 EQT Production Company 400 Woodcliff Drive Canonsburg, PA 15317 www.eqt.com

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

March 19, 2020

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

Re: 516232 Gas Well Permit Number 47-017-06742 Southwest District, Doddridge County

Dear Mr. Brewer,

EQT Production Company is applying for a drill deeper 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

\_ 06742

**API No. 47-** 017

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

	•			Well No. 51623	32
		We	ell Pad N	ame: OXF43	
Notice has be	een given:				
	provisions in West Virginia Code §	22-6A, the Operator has provide	ed the req	uired parties v	vith the Notice Forms listed
	ract of land as follows:	_	. •		
	West Virginia		sting:	517908.9	
	Doddridge	<del></del>	orthing:	4334236.0	
	South West/Cove	Public Road Access: Generally used farm		Rt. 20 Cathy Jean Wetze	ol et al
4 mmm. m. 18. 2 .	Oxford Middle Fork Hughes River	Generally used farm	name:	Catrly Jean Wetze	a, et. ai.
watersned:	Wildele Fork Hugiles River	<del></del>			
prescribed by t it has provided information red of giving the s requirements of Virginia Code	Vest Virginia Code § 22-6A-7(b), of the secretary, shall be verified and she did the owners of the surface describ quired by subsections (b) and (c), sec surface owner notice of entry to surfor subsection (b), section sixteen of § 22-6A-11(b), the applicant shall to have been completed by the applicant	all contain the following informated in subdivisions (1), (2) and extion sixteen of this article; (ii) the vey pursuant to subsection (a), this article were waived in writing proof of and certify to the section (a).	ation: (14), subs nat the received the section to iting by	<ol> <li>A certificatinection (b), see quirement was en of this artithe surface over the contraction.</li> </ol>	on from the operator that (i) ction ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice wner; and Pursuant to West
	Vest Virginia Code § 22-6A, the Ope ator has properly served the required		Notice C	ertification	OOG OFFICE USE
*PLEASE CHEC	CK ALL THAT APPLY				ONLY
☐ 1. NOT	ICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED SEISMIC ACTIVITY WAS CO			RECEIVED/ NOT REQUIRED
☐ 2. NOT	ICE OF ENTRY FOR PLAT SURV	EY or 🖪 NO PLAT SURVEY	WAS CO	ONDUCTED	☐ RECEIVED
■ 3. NOT	ICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRED NOTICE OF ENTRY FOR PLAWAS CONDUCTED or			☐ RECEIVED/ NOT REQUIRED
		☐ WRITTEN WAIVER BY (PLEASE ATTACH)	SURFA	CE OWNER	
■ 4. NOT	TICE OF PLANNED OPERATION				☐ RECEIVED
■ 5. PUB	LIC NOTICE				☐ RECEIVED
■ 6. NOT	ICE OF APPLICATION				☐ RECEIVED

#### **Required Attachments:**

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

By:

Its:

#### 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: EQT Production Company

John Zavatchan

Project Specialist - Permitting

Telephone: 724-746-9073

Address: 400 Woodcliff Drive

Canonsburg, PA 15317

Facsimile: 724-743-4681

jzavatchan@eqt.com

NOTARY SEAL

Commonwealth of Pennsylvania - Notary Seal Olivia Pishioneri, Notary Public Allegheny County My commission expires October 25, 2023 Commission number 1359968

Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this

Notary Public

My Commission Expires

Email:

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 <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>.

Office of Oil and Gas
MAR 1 9 2020

WW Department of Environmental Protection

WW-6A (9-13)

API NO. 47-017 4 706 2 1 7 0 6 7 4 2

OPERATOR WELL NO. 516232

Well Pad Name: OXF43

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

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

Date of Notice: 12/19/2019 Date Permit Application Filed: 12/19/2019 Notice of: PERMIT FOR ANY ☐ CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) ☐ REGISTERED ✓ METHOD OF DELIVERY THAT REQUIRES A ☐ PERSONAL **SERVICE** MAIL 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: ☑ COAL OWNER OR LESSEE ☑ SURFACE OWNER(s) Name: See Attached List Name: See Attached List Address: Address: ☐ COAL OPERATOR Name: Name: Address: Address: ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) SURFACE OWNER OF WATER WELL Name: See Attached List AND/OR WATER PURVEYOR(s) Address: Name: See Attached List Name: Address: Address: **TOPERATOR OF ANY NATURAL GAS STORAGE FIELD** SURFACE OWNER(s) (Impoundments or Pits) Name: Name: See Attached List Address: Address: \*Please attach additional forms if necessary

#### **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

I.L. MORRIS PO BOX 397 GLENVILLE, WV

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

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

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

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

WILLIAM LEE HUFF 826 ORANGE AVENUE CORONADO, CA 92118

Office of Oil and Gas

MAR 1 9 2020

WV Department of Environmental Protection

Adele McDougal 213 W. High Street Harrisville WV 26362

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

Katherine Foster Leggett 1625 Stonehenge Rd Charleston WV 25314

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

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

William Lee Huff c/o Joye E Huff 826 Orange Ave. Coronado CA 92118 WW-6A (8-13) API NO. 47- 017 - 06742

OPERATOR WELL NO. 516232

Well Pad Name: OXF43

Notice is hereby given:

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

#### This Notice Shall Include:

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

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

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

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

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

#### 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 frequence Office of Oil and Gas WW-6A (8-13)

API NO. 47-017 \_\_\_-06742

OPERATOR WELL NO. 516232

Well Pad Name: OXF43

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

#### **Water Well Testing:**

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

#### Water Testing Laboratories:

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

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

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

#### **Written Comment:**

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

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

Office of Oil and Gas
MAR 1 9 2020

(304) 926-0450

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

WW-6A (8-13) API NO. 47- 017 - 06742 OPERATOR WELL NO. 516232

Well Pad Name: OXF43

#### 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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> 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.

WW-6A (8-13)

API NO. 47- 017 - 06742

OPERATOR WELL NO. 516232

Well Pad Name: OXF43

Notice is hereby given by:

Well Operator: EQT Production Company

Telephone: 724-746-9073 Email: jzavatchan@eqt.com Address: 400 Woodcliff Drive

Canonsburg, PA 15317

Facsimile: 724-743-4681

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.

Commonwealth of Pennsylvania - Notary Seal Olivia Pishioneri, Notary Public Allegheny County My commission expires October 25, 2023

Commission number 1359968

Member, Pennsylvania Association of Notaries

Subscribed and sworn before me this 18th day of March 2000

Notary Public

My Commission Expires

2023

WW-6A4 (1/12) Operator Well No. 516232

# 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 Date of Notic			least TEN (10) days prior to filing a nit Application Filed: 12/19/2019	permit application.
Delivery met	hod pursuant to	West Virginia Code § 23	2-6A-16(b)	
☐ HAND		ERTIFIED MAIL		
DELIVE		RETURN RECEIPT REQ	UESTED	
receipt reques drilling a hori of this subsec subsection ma	sted or hand delived izontal well: Pro- tion as of the date as be waived in we	ery, give the surface own vided, That notice given a the notice was provided riting by the surface own	er notice of its intent to enter upon the pursuant to subsection (a), section to to the surface owner: <i>Provided</i> , how	an operator shall, by certified mail return ne surface owner's land for the purpose of en of this article satisfies the requirements vever. That the notice requirements of this ude the name, address, telephone number, or's authorized representative.
		to the SURFACE OW		
Name: See Atta	ched List			
Address:			Address:	
State: County: District:	West Virginia  Doddridge  Southwest / Cove		rizontal well on the tract of land as for Easting:  UTM NAD 83 Northing: Public Road Access:	517908.93 4334235.97 Rt. 20
Quadrangle:	Oxford		Generally used farm name:	Cathy Jean Wetzel, et. al.
Pursuant to V facsimile nur related to hor	nber and electror	ode § 22-6A-16(b), this raic mail address of the one	perator and the operator's authorize Secretary, at the WV Department of	ress, telephone number, and if available, ed representative. Additional information of Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.
	reby given by:	Caller	Authorized Representative:	Later Terretain
Address:	400 Woodcliff Driv		Address:	John Zavatchan 400 Woodcliff Drive
rudicss.	Canonsburg, PA		Addiess.	Canonsburg, PA 15317
Telephone:	724-746-9073	10017	Telephone:	724-746-9073
Email:		om	Email:	
Facsimile:	jzavatchan@eqt.c	UIII	Facsimile:	jzavatchan@eqt.com
i acsimile.	724-743-4681		r acsimire.	724-743-4681

#### Oil and Gas Privacy Notice:

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

#### **Surface Owners:**

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, AŞT, or other disturbance):

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

I.L. MORRIS PO BOX 397 GLENVILLE, WV

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

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

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

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

WILLIAM LEE HUFF 826 ORANGE AVENUE CORONADO, CA 92118 WW-6A5 (1/12) Operator Well No. 516232

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

Date of Notic	Date F	ermit Application Filed: 12/19/2019	
Delivery met	hod pursuant to West Virginia	Code § 22-6A-16(c)	
■ CERTI	FIED MAIL	☐ HAND	
	RN RECEIPT REQUESTED	DELIVERY	
return receipt the planned of required to be drilling of a damages to the (d) The notice of notice.	requested or hand delivery, give operation. The notice required be provided by subsection (b), section horizontal well; and (3) A propose surface affected by oil and gas are required by this section shall be by provided to the SURFACE is listed in the records of the sheri	the surface owner whose land will be by this subsection shall include: (1) ion ten of this article to a surface owner sed surface use and compensation a operations to the extent the damages e given to the surface owner at the a OWNER(s)	mit application, an operator shall, by certified mail be used for the drilling of a horizontal well notice of A copy of this code section; (2) The information oner whose land will be used in conjunction with the agreement containing an offer of compensation for a re compensable under article six-b of this chapter. Industrial distribution is the time of the sheriff at the time.
		_	
Pursuant to V operation on State: County:	Vest Virginia Code § 22-6A-16(c) the surface owner's land for the p West Virginia Doddridge	ourpose of drilling a horizontal well UTM NAD 83	asting: 517908.9  Forthing: 4334236.0
operation on State: County: District:	Vest Virginia Code § 22-6A-16(c) the surface owner's land for the p West Virginia Doddridge South West/Cove	ourpose of drilling a horizontal well  UTM NAD 83  Public Road Access	on the tract of land as follows: asting: 517908.9 forthing: 4334236.0 S: RL 20
Pursuant to V operation on State: County:	Vest Virginia Code § 22-6A-16(c) the surface owner's land for the p West Virginia Doddridge	ourpose of drilling a horizontal well UTM NAD 83	on the tract of land as follows: asting: 517908.9 forthing: 4334236.0 S: RL 20
Pursuant to V operation on State: County: District: Quadrangle: Watershed:  This Notice: Pursuant to V to be provide horizontal we surface affect information of the state of	Vest Virginia Code § 22-6A-16(c) the surface owner's land for the p  West Virginia  Doddridge  South West/Cove  Oxford  Middle Fork Hughes River  Shall Include: Vest Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(c) ell; and (3) A proposed surface us ted by oil and gas operations to related to horizontal drilling may located at 601 57th Street, SE,	Durpose of drilling a horizontal well  UTM NAD 83  Public Road Access Generally used farm  In this notice shall include: (1)A copuse and compensation agreement control the extent the damages are compensation be obtained from the Secretary, at	on the tract of land as follows: asting: 517908.9  Jorthing: 4334236.0  St. Rt. 20  Cathy Jean Wetzel, et. al.  Dy of this code section; (2) The information required will be used in conjunction with the drilling of a taining an offer of compensation for damages to the sable under article six-b of this chapter. Additional to the WV Department of Environmental Protection
Pursuant to V operation on State: County: District: Quadrangle: Watershed:  This Notice: Pursuant to V to be provide horizontal we surface affect information the headquarters, gas/pages/det	Vest Virginia Code § 22-6A-16(c) the surface owner's land for the p  West Virginia  Doddridge  South West/Cove  Oxford  Middle Fork Hughes River  Shall Include: Vest Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(c) ell; and (3) A proposed surface us ted by oil and gas operations to related to horizontal drilling may located at 601 57 <sup>th</sup> Street, SE, fault.aspx.	purpose of drilling a horizontal well  UTM NAD 83  Public Road Access Generally used farm  ), this notice shall include: (1)A cop b) to a surface owner whose land se and compensation agreement cont the extent the damages are compensation the Secretary, at Charleston, WV 25304 (304-9)	on the tract of land as follows: asting:  asting:  517908.9  Jorthing:  Rt. 20  Cathy Jean Wetzel, et. al.  Dy of this code section; (2) The information required will be used in conjunction with the drilling of a taining an offer of compensation for damages to the sable under article six-b of this chapter. Additional the WV Department of Environmental Protection 226-0450) or by visiting www.dep.wv.gov/oil-and-
Pursuant to Voperation on State: County: District: Quadrangle: Watershed:  This Notice: Pursuant to Voto be provide horizontal was surface affect information in headquarters, gas/pages/def	Vest Virginia Code § 22-6A-16(c) the surface owner's land for the p  West Virginia  Doddridge  South West/Cove  Oxford  Middle Fork Hughes River  Shall Include: Vest Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(c) ell; and (3) A proposed surface us ted by oil and gas operations to related to horizontal drilling may located at 601 57th Street, SE, fault.aspx.  DT: EQT Production Company	Durpose of drilling a horizontal well UTM NAD 83 Public Road Access Generally used farm  1), this notice shall include: (1)A copus to a surface owner whose land are and compensation agreement contribute extent the damages are compensation be obtained from the Secretary, at Charleston, WV 25304 (304-9)  Address: 400 We	on the tract of land as follows: asting: 517908.9  Jorthing: 4334236.0  St. Rt. 20  Cathy Jean Welzel, et al.  Dy of this code section; (2) The information required will be used in conjunction with the drilling of a taining an offer of compensation for damages to the sable under article six-b of this chapter. Additional to the WV Department of Environmental Protection (226-0450) or by visiting www.dep.wv.gov/oil-and-poddliff Drive
Pursuant to V operation on State: County: District: Quadrangle: Watershed:  This Notice: Pursuant to V to be provide horizontal we surface affect information to headquarters, gas/pages/det	Vest Virginia Code § 22-6A-16(c) the surface owner's land for the p  West Virginia  Doddridge  South West/Cove  Oxford  Middle Fork Hughes River  Shall Include: Vest Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10(c) ell; and (3) A proposed surface us ted by oil and gas operations to related to horizontal drilling may located at 601 57 <sup>th</sup> Street, SE, fault.aspx.	Durpose of drilling a horizontal well UTM NAD 83 Public Road Access Generally used farm  1), this notice shall include: (1)A copus to a surface owner whose land are and compensation agreement contribute extent the damages are compensation be obtained from the Secretary, at Charleston, WV 25304 (304-9)  Address: 400 We	on the tract of land as follows: asting: 517908.9  forthing: 4334236.0  St. Rt. 20  Cathy Jean Wetzel, et. al.  Dy of this code section; (2) The information required will be used in conjunction with the drilling of a taining an offer of compensation for damages to the sable under article six-b of this chapter. Additional to the WV Department of Environmental Protection (226-0450) or by visiting www.dep.wv.gov/oil-and-boddliff Drive sburg, PA 15317

#### 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 <a href="mailto:depprivacyofficer@wv.gov">depprivacyofficer@wv.gov</a>.

#### **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

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

WILLIAM LEE HUFF 826 ORANGE AVENUE CORONADO, CA 92118

Office of Oil and Gas
MAR 1 9 2020

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

November 7, 2019

Byrd E. White, III Secretary of Transportation/ Commissioner of Highways

Jimmy Wriston, P. E.
Deputy Secretary/
Deputy Commissioner

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

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

OXF43H20	OXF43H21	OXF43H22	OXF43H23	OXF43H24
OXF43H25	OXF43H26	OXF43H27	OXF43H28	OXF43H29
OXF43H30	OXF43H31	OXF43H32	OXF43H33	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 County Rt. 23/3 SLS in Doddridge County.

This operator is in compliance with §22-6A-20 of the WV Code. 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 October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.
Regional Maintenance Engineer

Central Office O&G Coordinator

Cc: John Zavatchan

**EQT Production Company** 

CH, OM, D-4

File

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

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



#### PROJECT INFORMATION

PROJECT NAME: 8452 OXF 43 ASBUILT

SURFACE OWNERS: RANDY E HUFF DECEDENTS TRUST B, ET. AL LOT 4 APPR-117-1 D.B. 247 PG. 296

WETZEL, CATHY JEAN, ET. AL.

GREATHOUSE, CHARLES R. & EYELYN G. APN 07-13-66 D.B. 322 PG. 340

MORRIS, I. L. APN 07-10-2 D.B. 230 PG. 307

#### OIL AND GAS ROYALTY OWNER:

DISTRICTS(S): SOUTHWEST / COVE DODDRIDGE COUNTY, WV TOTAL PROPERTY AREA: 2564 ACRES

#### LOCATION COCRDINATES

DX=43 SITE ENTRANCE LATITUDE: 39.180202 LONGITUDE: -80,797044 (NAD 83) NORTHING: 4,336,793.7 EASTING: 617,629.7 (UTM NAD 83 METERS)

#### SITE DISTURBANCE COMPUTATIONS

#### GENERAL DESCRIPTION

THE DXF 43 PAD AND AST PADS ARE BRING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS.



#### SURVEY NOTE

1. THE CENTIFICATION OF THIS DRAWING APPLIES ONLY TO THE TOPOGRAPHIC MAPPING AS GENERAL TO THE TOPOGRAPHIC MAPPING AS GENERAL TO FROM THE FIELD DATA OFFILMED AT THE TIME OF THE FIELD SURVEY ON 151-151, 17-26-15, 172-15, 17

1-800 240-4848
West Virginia State Law
(Section XIV: Chapter 24-C)
Requires that you call two business days before you dig in the state
of West Virginia.
IT'S THE LAW!

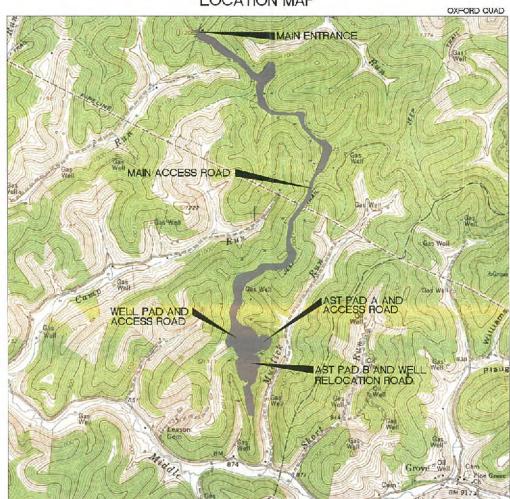
## **OXF43 AS-BUILT SITE PLAN EQT PRODUCTION COMPANY**

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 - DOVER SHEET

2 - INDEX SHEET

3 - OXF-43 ACCESS ROAD 4 - OXF-43 ACCESS ROAD

6 UXF 43 ACCESS ROAD

7 CXF-43 ACCESS ROAD

9 - CXT-43 ACCESS ROAD, WELL PAD AND ACCESS ROAD AND FAD "A" AND ACCESS ROAD,

10 - DXF-43 WELL PAD AND ACCESS ROAD, PAD "A" AND ACCESS ROAD AND PAD "B" AND WELL RELOCATION ROAD.

11 - DXF-43 PAD "B" AND WELL RELOCATION ROAD.

12 - MAIN BOAD PROFILE

13 - MAIN ROAD PROFILE

14 - MAIN RCAD PROFILE

15 - MAIN ROAD PROFILE AND PAD ACCESS ROAD PROFILE

16 - PAD ACCESS ROAD PROFILE AND WELL RELOCATION ROAD PROFILE

Property Cwner	Parcel #	LOD (Acres)	Wooded Area (Acres)
Randy E. Huff Decodonis: Trus; B (owns half)	7-17-1	23.58	21.3
William Lee Huff (owns half)	3-13-1	23.30	21.3
Wetzel, Cathy Jean; ET Al.	7-16-7	8 12	7.8
Morris, I.L.	7-10-2	41 66	34.7
Copeland, Mathew H.	7-10-1	4.33	3.7
Total Area		77.67	97.5

Description	LOD (Acres)	Wooded Area (Acces)
Main Access Road, Sta. 0+00 to 134+44 27	45.99	38.4
Pit Access Road Sta. 0+00 to 15-50	5.05	4.8
Existing Well Road Relocation 8+00 to 4+69, 16+69 to 24+27	3.32	2.9
Well Pad	8.34	7.7
Tork Pad ∧	3.27	3.2
Tank Pad B	4.47	3.5
Waste and Spoil	7.23	7.0
Total Area	77.67	67.5

LEGEND	
PROPERTY LINES	
LIMITS OF DISTURBANCE	
EX. ROAD EDGE OF GRAVEL/DIRT	
EX. ROAD CENTERLINE	
EX. DITCHLINE	-
EX. CULVERT	
EX. GASLINE	
RIG FOOTPRINT	-
EDGE OF GRAVEL PAD	-
EDGE OF BERM	
CRANGE CONSTRUCTION FENCE	- 10 -
12" COMPOST FILTER SOCK	
18" COMPOST FILTER SOCK	
24" COMPOST FILTER SOCK	
TCP BERM	11/1/11/11
GRAVEL	2120
RIP RAP	270,000
ROCK CONSTRUCTION ENTRANCE	
ORIGINAL GROUND 2' CONTCURS	==:
AS BUILT 2' CONTOURS	==:
AS-BUILT WELL LOCATIONS	180
PROPOSED WELL LOCATIONS	
ADJACENT WELL LOCATIONS	0
MATCHLINE	_
EX. FENCELINE EX. GATE	1
EX. STEJCTURE	
EX. PIPELINE MARKER	1
EX OVERHEAD UTILITY EX POWER POLE	6
EX GUY WIRE	-1
EX. CASLINE	







OXF43 AS-BUILT SITE PLAN DOCUMENT WAS PREPARED BY AND & BRENGY DEVELOPMENT R. EQT PRODUCTION COMPANY

물감호 DATE: 10/03/2017 SCALE: 1'= 1000' DESIGNED BY: T.W. FILE NO 8452 SHEET 1 OF 16 95 FIT 12 GSF 47 Amount Site Port 34-38-38-



