

west virginia department of environmental protection

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

April 30, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-1706730, issued to EQT PRODUCTION COMPANY, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin

Chief

Operator's Well No: 516251

Farm Name: MORRIS, I. L.

API Well Number: 47-1706730

Permit Type: Horizontal 6A Well

Date Issued: 04/30/2015

API Number:	17-06730
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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 fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
 - 8. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
 - 9. Operator shall provide the Office of Oil & Gas notification of the date that drilling commenced on this well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov within 30 days of commencement of drilling.

(9/13)

4701706730

API NO.	47		U1 7	-	06730
OPERATO	R WE	LL NO			516251
Well Pac	l Nar	ne:			OXF153

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS W.VA. CODE §22-6A - WELL WORK PERMIT APPLICATION

1) Well Operator: EQT Product	ion Company	306686	017	7	526
		Operator ID	County	District	Quadrangle
2) Operator's Well Number:	516	251	Well Pad Nan	ne:	OXF153
3) Farm Name/Surface Owner : _	IL	Morris	Public Road A	Access:	19/11
4) Elevation, current ground:	1,141.0	Elevation, propose	d post-construction	n:1,141.0	
5) Well Type: (a) Gas	Oil	Underground S	orage		
Other					
(b) If Gas:	Shallow	Deep			
4	Horizontal				
6) Existing Pad? Yes or No:	yes				
-					
 Proposed Target Formation(s), 					
Target formation is Marcellus at a	depth of 6560 with	the anticipated thickness t	o be 58 feet and anti	cipated target pressu	re of 2951 PSI
8) Proposed Total Vertical Depth:			6560		
9) Formation at Total Vertical Dept	h:		Marcellus		
10) Proposed Total Measured Dep	th:		11762		
11) Proposed Horizontal Leg Leng	th		3,570		
12) Approximate Fresh Water Stra	ta Depths:		49, 44	2	
13) Method to Determine Fresh Wa	ater Depth:		By offset v		
14) Approximate Saltwater Depths:			1365, 1407, 1457		
15) Approximate Coal Seam Depth	s:		n/a		
16) Approximate Depth to Possible	Void (coal mine, ka	rst, other):	SWITTER	None repo	orted
17)Does proposed well location co					
adjacent to an active mine?			Yes	No	
(a) If Yes, provide Mine Info:	Name:				
	Dooth:				
	Seam:				
	Owner:				

Page 1 of 3
4-14-2015
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WW	_	6B
(3/13)	

API NO.	<u>47</u>		17	 06730
OPERATO	R WE	LL NO.		516251
Well Pag	d Nan	ne:		OXF153

CASING AND TUBING PROGRAM

18)

TYPE	Size	<u>New</u>	Grade	Weight per ft.	FOOTAGE: For	INTERVALS:	CEMENT:
	<u>(in)</u>	<u>or</u> Used		(lb/ft)	<u>Drilling (ft)</u>	Left in Well	Fill- up (Cu.Ft.)
Conductor	20	New	MC-50	81	40	(<u>ft)</u> 40	38 C.T.S.
Fresh Water	13 3/8	New	J-55	54.5	592	592	528 C.T.S.
Coal	<u>~</u>	-	=		_	<u>,</u>	_
Intermediate	9 5/8	New	A-500	40	2,967	2,967	1,172 C.T.S.
Production	5 1/2	New	P-110	20	11,762	11,762	See Note 1
Tubing	2 3/8		J-55	4.6			May not be run, if run will be set 100° less than TD
Liners							

DON

4-14-201

TYPE	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> (in)	Burst Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20	24	0.375	-	Construction	1.18
Fresh Water	13 3/8	17 1/2	0.38	2,730	* See Note 2	1.21
Coal						
Intermediate	9 5/8	12 3/8	0.395	3,950	* See Note 2	1.21
Production	5 1/2	8 1/2	0.361	12,640		1.27/1.86
Tubing				1		
Liners						

<u>Packers</u>

Kind:	N/A	
Sizes:	N/A	
Depths Set:	N/A	

Note 1: EQT plans to bring the TOC on the production casing cement job 1,000' above kick off point, which is at least 500' above the shallowest production zone, to avoid communication.

Note 2: Reference Variance 2014-17. (Attached)

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Office of Oil and Gas WV Dept. of Environmental Protection



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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

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.

Tamas Balansan

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

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MAR 1 9 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

WW - 6B	API NO. 47 - 17 - 067
(3/13)	OPERATOR WELL NO. 5162
	Well Pad Name: OXF
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. The vertical drill to go go an approximate	depth of 3707 then kick
off the horizontal leg into the Marcellus using a slick water frac.	
20) Describe fracturing/stimulating methods in detail, including anticipated max pressure a	
Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fracture freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including	
gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater"	· · · · · · · · · · · · · · · · · · ·
anticipated treating pressures are expected to average approximately 8500 psi, maximum anticipated treating rates approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barrels of water approximately 100 bpm.	
vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage.	
21) Total area to be disturbed, including roads, stockpile area, pits, etc, (acres):	11.5
22) Area to be disturbed for well pad only, less access road (acres):	11.3
23) Describe centralizer placement for each casing string.	
 Surface: Bow spring centralizers – One at the shoe and one spaced every 500'. Intermediate: Bow spring centralizers – One cent at the shoe and one spaced every 500'. 	
Production: One spaced every 1000' from KOP to Int csg shoe	
24) Describe all cement additives associated with each cement type. Surface (Type 1	Cement): 0-3% Calcium Chloride
Used to speed the setting of cement slurries.	
0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of the cement slurry to a thief Intermediate (Type 1 Cement) : 0-3% Calcium Chloride. Salt is used in shallow, low temperature formation	
slurries. 0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of whole drilling fluid	
to a thief zone.	
Production:	
Lead (Type 1 Cement): 0.2-0.7% Lignosulfonate (Retarder). Lengthens thickening time.	
0.3% CFR (dispersant). Makes cement easier to mix.	
Tail (Type H Cement): 0.25-0.40% Lignosulfonate (Retarder). Lengthens thickening time.	
0.2-0.3% CFR (dispersant). This is to make the cement easier to mix.	
60 % Calcuim Carbonate. Acid solubility.	
0.4-0.6% Halad (fluid loss). Reduces amount of water lost to formation.	
25) Proposed borehole conditioning procedures. <u>Surface: Circulate hole clean (Approximately 3</u>	0-45 minutes) rotating & reciprocating
one full joint until cuttings diminish at surface. When cuttings returning to surface diminish, continue	to circulate an additional 5
minutes. To ensure that there is no fill, short trip two stands with no circulation. If there is fill, bring c	ompressors back on
and circulate hole clean. A constant rate of higher than expected cuttings volume likely indicates wa	shouts that will not clean up.
Intermediate: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating one full joint un	til cuttings diminish at
surface. When cuttings returning to surface diminish, continue to circulate an additional 5 minutes.	f foam drilling, to enhance
hole cleaning use a soap sweep or increase injection rate & foam concentration.	Pageived
<u>Production</u> : Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes	
Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of	cuttings coming across APR 2 1 2015
the shakers every 15 minutes.	

Office of Oil and Gas
WV Dept. of Environmental Protection

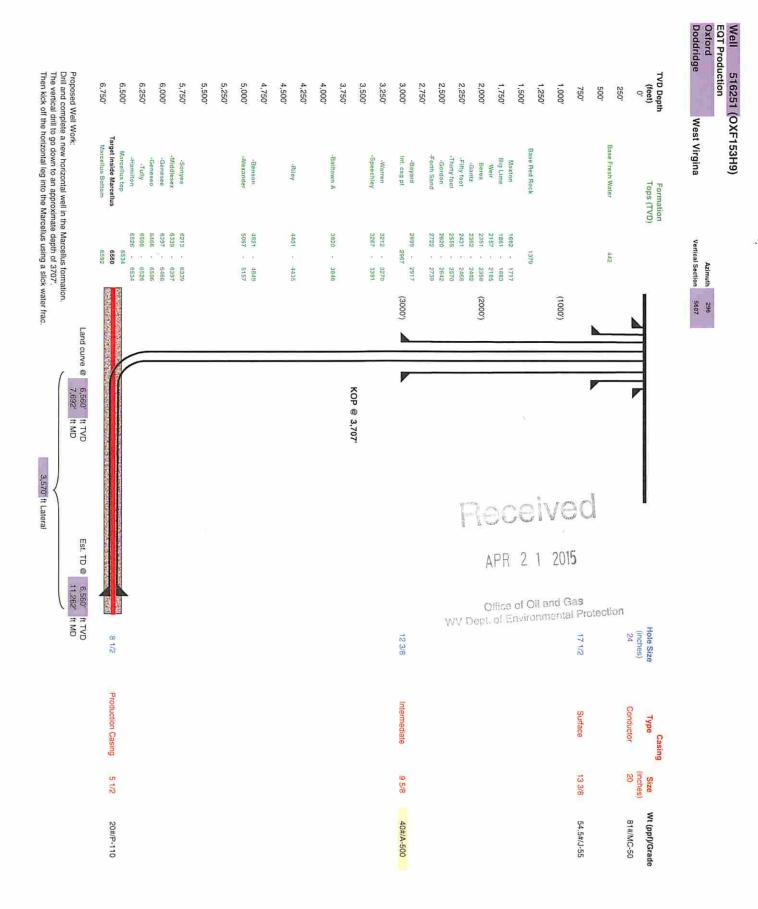
*Note: Attach additional sheets as needed.

Well Schematic **EQT Production** 017-06730

Well Name 516251 (OXF153H9) Elevation KB: Doddridge West Virgina County Target Prospect Azimuth Vertical Section Hole Size 24" - 20" Conductor at 40' Bit Size 17.5° 500' - 442' Fresh Water Base TOC @ Surface - 500 13 3/8", MC-50, 54,5# @ 592" ft MD Bit Size 12.375* - 1,000 1,000' -1,379' Base Red Rock 1,500' -— 1,500° 1,682' Maxton 1,861' Big Lime 2,000' -- 2,000 2,157' Weir 2,351' Berea 2,362' -Gantz 2,500' — 2,431' -Fifty foot 2,500° 2,555' -Thirty foot 2,620' -Gordon 2,722' -Forth Sand 2,899' -Bayard 3,000' - 2,967' Int. csg pt TOC @ Surface - 3,000 9 5/8*, MC-50, 40# @ 2,967 ft MD Bit Size 8.5* 3,212' -Warren 3,287' -Speechley 3.500' -- 3,500 3,820' -Balltown A 4,000' -— 4,000° KOP = 3,707 ft MD 10 Deg DLS 4,401' -Riley 4,500' — - 4,500 4,821' -Benson 5,000' — 5,067' -Alexander - 5,000 5,500' -- 5,500 6,000' — 6,213' -Sonyea 6,339' -Middlesex — 6,000° 6,397 -Genesee 6,466' -Geneseo 7,692' ft MD 6,506' -Tully 6,560' ft TVD 6,500' - 6,526' -Hamilton 6,534' -Marcellus — 6,500° 5 1/2", P-110, 20# 11,262 ft MD 6,592' Onondaga 6,560° ft TVD 7,000' -**-** 7,000°

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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

)	ORDER NO. 2014 - 17
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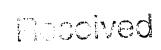
REPORT OF THE OFFICE

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.

Promoting a healthy environment.



MAR 1 9 2015

Office of Oil and Gas

CONCLUSIONS OF LAW

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

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

ORDER

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

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

IN THE NAME OF THE STATE OF WEST VIRGINIA

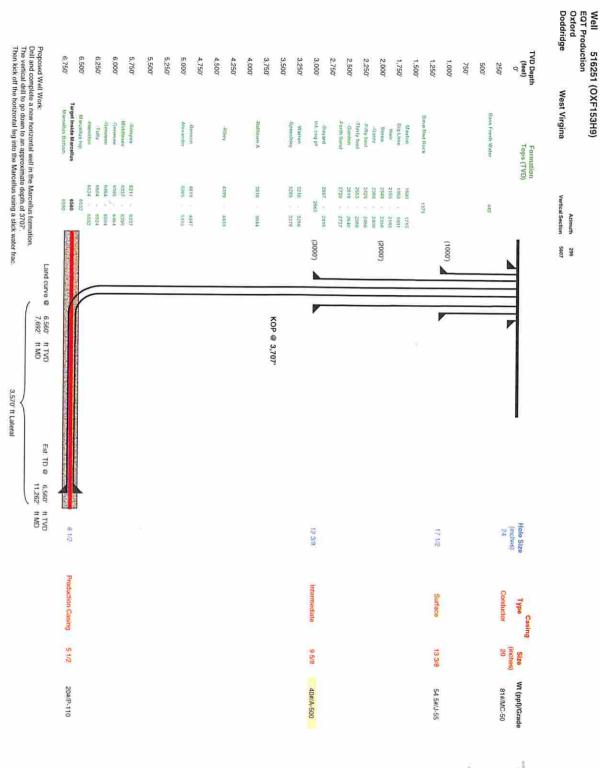
OFFICE OF OIL AND GAS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OF THE STATE OF WEST VIRGINIA

James Martin, Chief Office of Oil and Gas

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Office of Oil and Gas WV-Dupt. c. Environmental Protection

Well Schematic **EQT Production**

Well Name

516251 (OXF153H9)

4701706730

County State Doddridge West Virgina Target Prospect Azimuth Vertical Section 0 - 0' 4 D Hole Size 24" - 20" Conductor at 40" Bit Size 17.5* 500' - 442' Fresh Water Base - 500 1,000' -- 1,000 TOC @ Surface 13 3/8", MC-50, 54.5# @ 1,100' ft MD Bit Size 12.375" 1,379' Base Red Rock 1,500' -- 1,500 1,680' Maxton 1,859' Big Lime 2.000' -- 2,000 2,155' Weir 2,349' Berea 2,360' -Gantz 2,500' — 2,429' -Fifty foot 2,553' -Thirty foot 2,618' -Gordon 2,720 -Forth Sand 2,897' -Bayard 3,000' - 2,965' Int. csg pt TOC @ Surface - 3,000 9 5/8*, MC-50, 40# @ 2,965' ft MD Bit Size 8.5* 3,210' -Warren 3,285' -Speechley 3.500' -- 3,500 3,818' -Balltown A 4,000' -- 4,000 KOP = 3,707° ft MD 10 Deg DLS 4,399' -Riley 4,500' -- 4,500 4,819' -Benson 5,000' - 5,065' -Alexander - 5,000 5,500' --- 5,500 6,000' — 6,211' -Sonyea 6,337' -Middlesex - 6,000 6,395 -Genesee 6,464 -Geneseo Land @ 7,692' ft MD 6,504' -Tully 6,560' ft TVD 6.500' — 6,524' -Hamilton 6,532' -Marcellus - 6,500 5 1/2", P-110, 20# 11,262" ft MD 6,590' Onondaga 6,560' ft TVD 7,000' --- 7,000

Elevation KB:

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Office of Oil and Gas W/V Dept. of Environmental Protection WW-9 (5/13)

Pa	ige	1	of	2
API No. 47	017			0
Operator's We	II No.			516251

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 (HUC10)	Chapman Run of South Fork Hughes River	Quadra	ngle	Oxford 7.5	
Elevation	1141.0 County Doddric	dge	District	Southwest	;
	more than 5,000 bbls of water to comple	te the pro	posed well wor	k? Yes <u>x</u> No	·
Will a pit be used ? Yes	···· ·				
If so please des	cribe anticipated pit waste:	flowba	ck water & resi		
Will a synthetic	liner be used in the pit? Yes X	No	If so,	what ml.?60	
	Reuse (at API Number Off Site Disposal (Supply form Other (Explain	WW-9 for	Various disposal locati)	
Will closed loop system	the used? Yes, The closed loop system then prepared for transportation to an off-sit	17 5 75 10		m the drilling	
	ipated for this well? Air, freshwater, oil bas		Air is used to drill the to	op-hole sections of the wellbore,	
			mud is used to drill the	curve and lateral.	Į.
If oil based,	what type? Synthetic, petroleum, etc				
Additives to be used in	drilling medium? MILBAR, Viscosifer, Al	kalinity Cont	rol, Lime, Chloride	Salts,Rate Filtration Control,	
Deflocculant, Lubricant, Det	ergent, Defoaming, Walnut Shell, X-Cide, SOLTEX	Terra. Of th	ne listed chemicals	the following are	•
generally used when drilling	on air: lubricant, detergent, defoaming. Water bas	ed fluids use	the following che	micals: MILBAR,	
viscosifer, alkalinity control,	ime, chloride salts, rate filtration control, defloccula	nt, lubricant,	detergent, defoar	ming, walnut shell,	•
x-cide, SOLTEX terra	_	•		3 55552000	
	method? Leave in pit, landfill, removed of			Landfill	
	nd plan to solidify what medium will be used? (Cemi			n/a	•
	fsite name/permit number?		ee Attached Lis		
on August 1, 2005, by the O	and and agree to the terms and conditions of the Gl fice of Oil and Gas of the West Virginia Departmen enforceable by law. Violations of any term or conditions programment action.	t of Environr	mental Protection.	I understand that the	ceived
	of law that I have personally examined and am fam				
	thments thereto and that, based on my inquiry of the t the information is true, accurate, and complete. I a			MAI	7 1 9 2015
	including the possibility of fine or imprisonment.	ani aware tri	at there are signific	/ / /	2012
,		/	1/	Office	of Oil and Gas
Company Official Signa		w		WV Dept. of S	For Oil and Gas Fivironmental Protecti
Company Official Title		Victoria J			•
Company Official Title	Feiiii	iting Supe	rivisor		•)
Subscribed and sworn	before me this day of	M	nch	, 20 /5	f) 5
Yanla	Jyr-			Notary Public	21110111111111112
My commission expires	8.24.22			OFFICIAL STATE OF WEST NOTARY P Pamela S EOT Produ PO Box : Bridgeport, W My Commission Expir	VIRGINIA BUBLEC Bykes Biction 280 W 26330

, v		Operato	r's Well No.	516251
Proposed Revegetation T	reatment: Acres Disturbed _	11.5	Prevegetation pH	5.9
Lime	3 Tons/acre or to	correct to pH	6.5	
Fertilize type	Granular 10-20-20			
Fertilizer Amoun	tlbs/a	cre (500 lbs minimum)		
Mulch	2	Tons/acre		
		Seed Mixtures		
	porary	0	Permanent	
Seed Type KY-31	lbs/acre 40	Seed Type Orchard Grass	lbs/a 15	cre
Alsike Clover	5	Alsike Clover	5	
Annual Rye	15			
Attach: Drawing(s) of road location	on,pit and proposed area for I	and application		
	volved 7.5' topographic sheet	15-16		
Plan Approved by:	Jangles Newlan			
		disturbed are	es instai	y ang
Mantein Es	ed + Mulch any	regulations		
			l	
Title: Oil + bas i	nspector	Date: <u>3-2:</u>	5-2015	
Field Reviewed? (/ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	es () No	

Pleceived Office of Oil & Gas MAR 27 2015



Site Specific Safety Plan

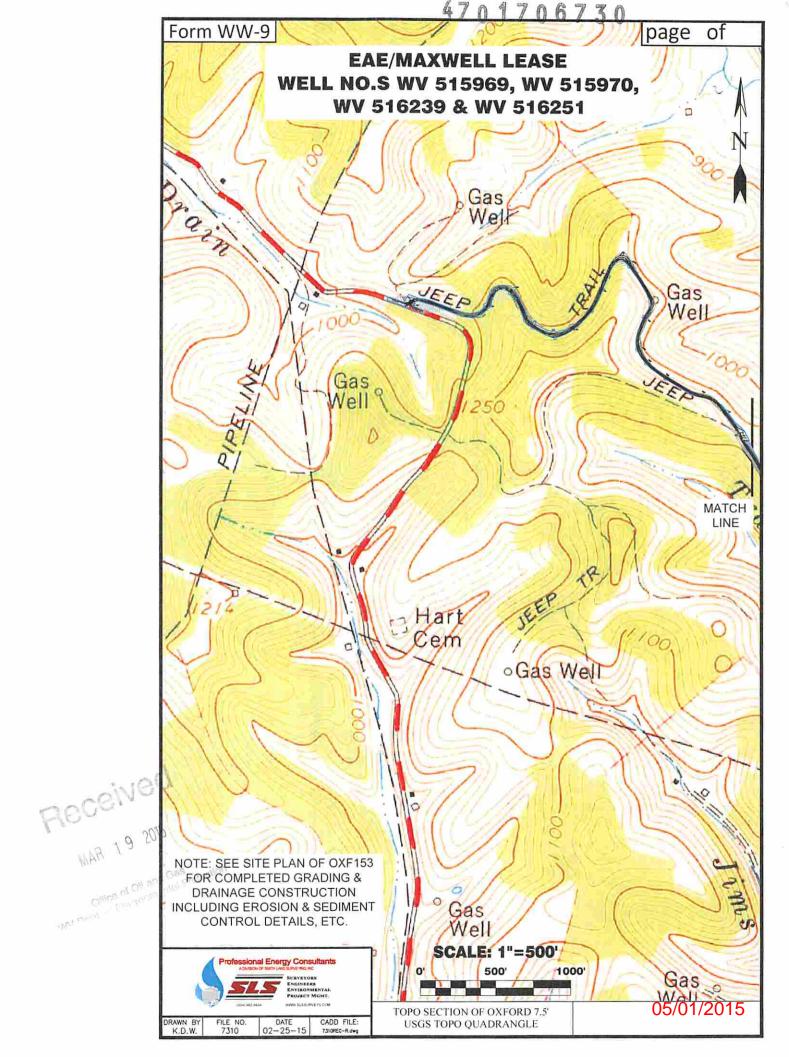
EQT OXF 153 Pad

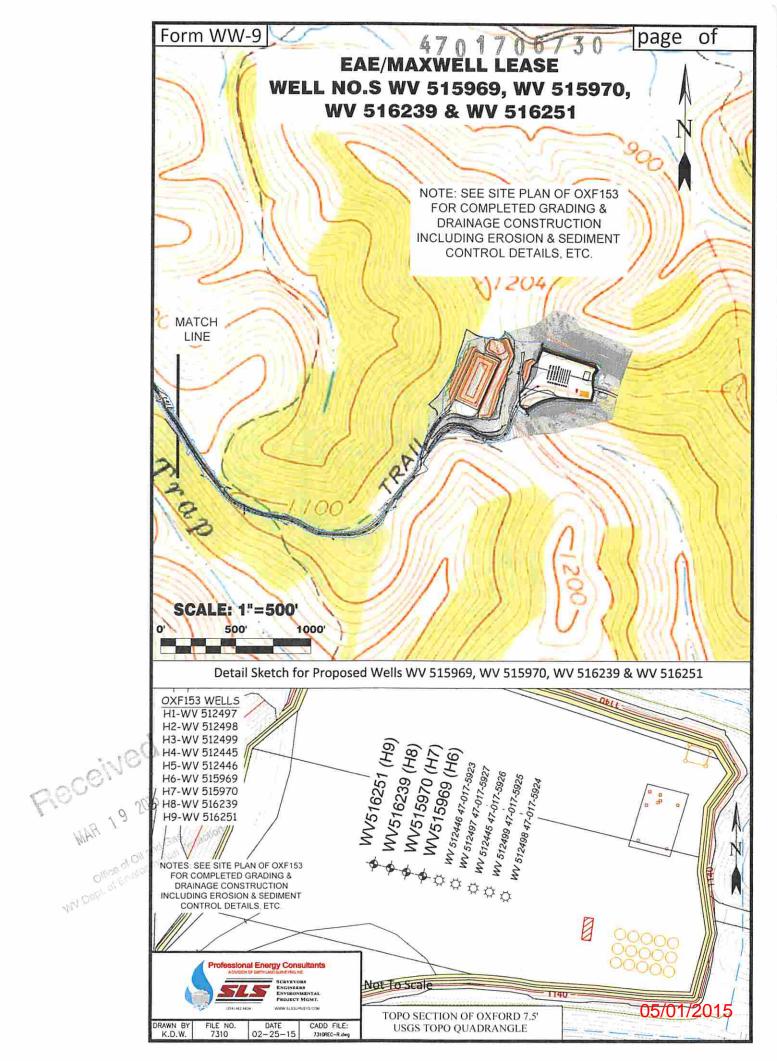
Oxford Doddridge County, WV

516239516251	For Well	ls: 	
EQT Production	Date Prepared:	October 23, 2014 Daylor A. WV Oil and Gas Inspe	enfo
Title penulting penul	50/	Title	
3 72-15 Date		3-25-2019 Date	
			Received

Office of Oil & Gas

MAR 27 2015





EQT Production Water plan Offsite disposals for Marcellus wells

CWS TRUCKING INC.

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

LAD LIQUID ASSETS DISPOSAL INC.

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

TRI COUNTY WASTE WATER MANAGEMENT, INC.

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

Waste Management - Meadowfill Landfill

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

Waste Management - Northwestern Landfill

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

BROAD STREET ENERGY LLC

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

TRIAD ENERGY

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

KING EXCAVATING CO.

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





A BOX 150, GLENVILLE, WV 26351

(304) 462-5634 . FAX 462-5666

WELL INFORMATION AND POTENTIAL WATER WELL SAMPLE DATA SHEET

OPERATO	R: <u>EQT</u> :	Production Con	<i>ipany</i>						
		NUMBER:		Well Pac	1				
			СОМ	MENT	<u>s</u>				
The initial f	ield and/or n	napping reviev	v of the area	0 ¢117FA11	ndina t	ha		n	
other purpos	es within 250	00' of the prop	osed well sit	te. (For l	ocation	ofeac	h site see	attached area	map.)
		INDIVIDU	AL CONT	ACTE	O OR I	ITON	FIED		
Site:	Spacing	0	wner/Occu	pant:	I.L. A	forris			
Address:	P.O. Box 39	7 Glenville, WV	26351				Ph:	(304)-462-5.	347
If No declined	it Date:	N/A Local	ed: <i>No</i> _	Date	Locat	ed:	NI/A C		
	Tax Map 10	Lei	ter/Notice Da	ele: 1st	N/A	2nd	N/A	Certified (3	(d) <i>N/A</i>
	Letter Of Re	efusal Signed 12	2/05/2014					·	
Site;2	Spacing	<u>815'</u> Ov	ner/Occup	ant:	FOT	roduc	lon annu		***
. 100.000.	I I J Projesio	nai riace Brido	ennet IVV 7/	K Z Z/I			Oh:	*****	92
	. 00.0. /2/6	UJIZUIA Locati	ed: <i>Yes</i>	Date	i oceta	d• [7/[]	5/2/11.1 C		C
	J WILL _	I en	ar/watica Dat	o ict	AII/A	A-4	11/4		
Comments:	egi produc	tion company is	not the land	l owner b	ut has r	equeste	d the cre	k be tested.	
	Lat: 39.1872 Long: 80.92	:/3							
Site: 3 Address:	Spacing	Ow	ner/Occup	ant:					
nuuless:							Ph:		
Field Contact If No. declined b	vale.	Locale	:d:	Date	Locate	d:	So	urce:	
If No, declined b Comments:	,	Lette	r/Notice Date	e: 1st		_ 2nd _		Certified (3rd)
Site:	Spacing _	Owr	er/Occupa	int:					
vaaress:									
ield Contact	Date:	Located	J:	Date L	ocated.		So	ırce:	
No, declined by comments:	WIIO	Letter	/Notice Date:	: 1st		2nd _		_Certified (3rd)	
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Office of Oil and Gas Man person Segment on Complete aco

05/01/2015

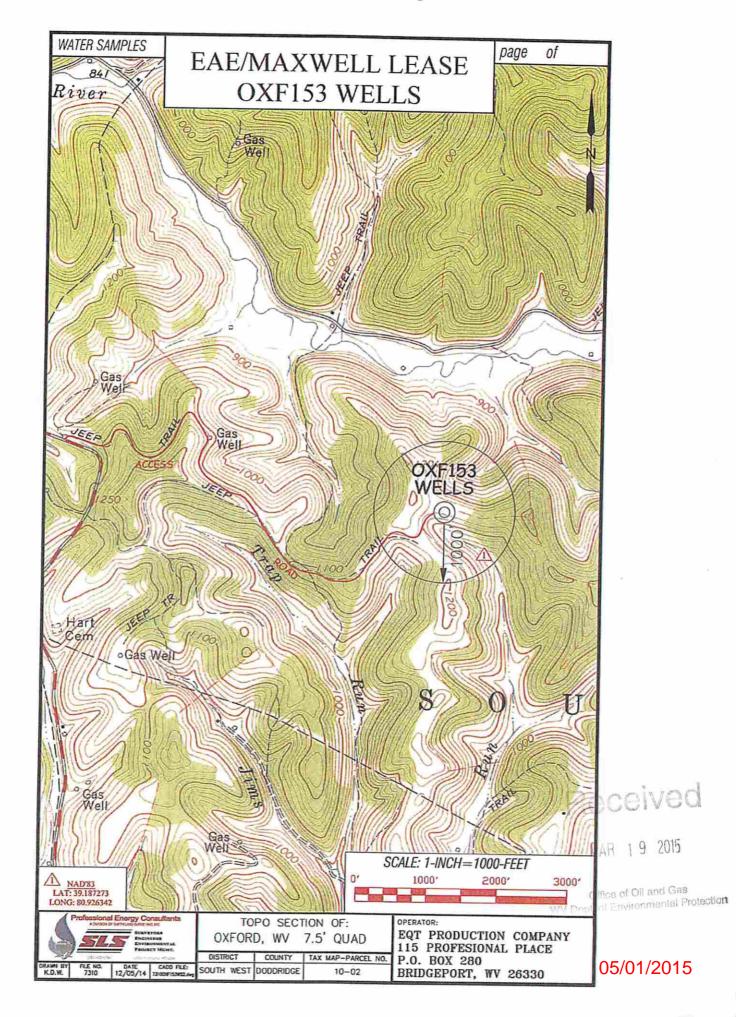


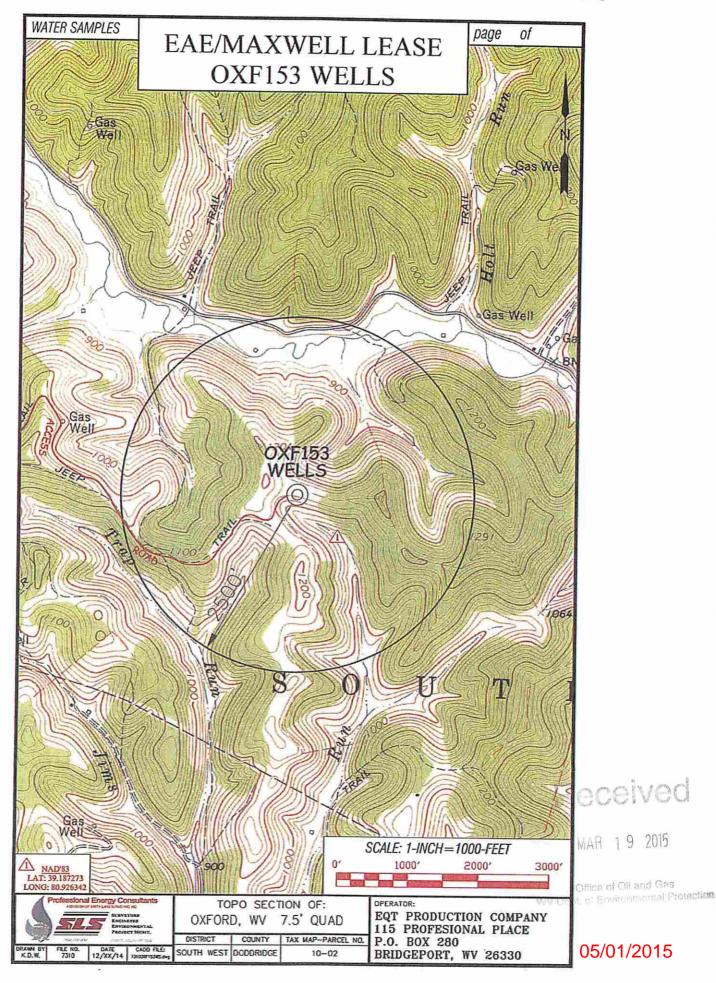
		MITH LAND SURVEYING, INC.	P.O. BOX 150, GLENVILLE, WV 263
			(304) 462-5634 • FAX 462-6656
То	Whom It May Concern:		
	Smith Land Surveying, Inc	c. of Glenville, WV has been contra	acted by:
	· · · · · · · · · · · · · · · · · · ·	EOT	
То	do some preliminary work for a	a proposed oil and gas well permit	application.
wai wei the	nection, Department of Oil and ter wells or other non-public wa il. The operator is testing within	State of West Virginia Division of Gas, operators are required to offer atter sources that fall within 1500 feet a 2500 feet of the well, if they are rell only help ensure the water quality landowner.	r water testing for et of the proposed
pou	able water source(s) sampled an	ne <u>2500</u> foot radius, you are entitled id analyzed at an independent lab. Ir home. This is done at no expense	Vous lab analysis
pou	ase notify Smith Land Surveying able water tested. Please have th nt and well number may be refe	g immediately if you are interested is letter with you at the time of con renced.	in having your stact so that the
Tha you	nk you for your cooperation in to earliest convenience. If you ha	this matter. I look forward to heari ave any questions, please feel free t	ng from you at to contact me at:
	th Land Surveying, Inc. Box 150	Date: 12/5/14	.
(304 (304	nville, WV 26351) 462-5634 (voice)) 462-5656 (fax) ail DMcKee@slssurveys.com	Left/sent by: <u>Daniel McKee</u> Well Number: <u>OXF-153</u> Tax Map / Parcel: 10/2	
*If you	ou do not have a water well or other no and address when you return this she	Doddridge County, WV South on-public water source, please make note of et.	<u>west District</u> of it and include your
hicase sign o	n the line below and return to th	er well/spring/or other non-public value above address. This will signify the second of the second o	that a samuels have be

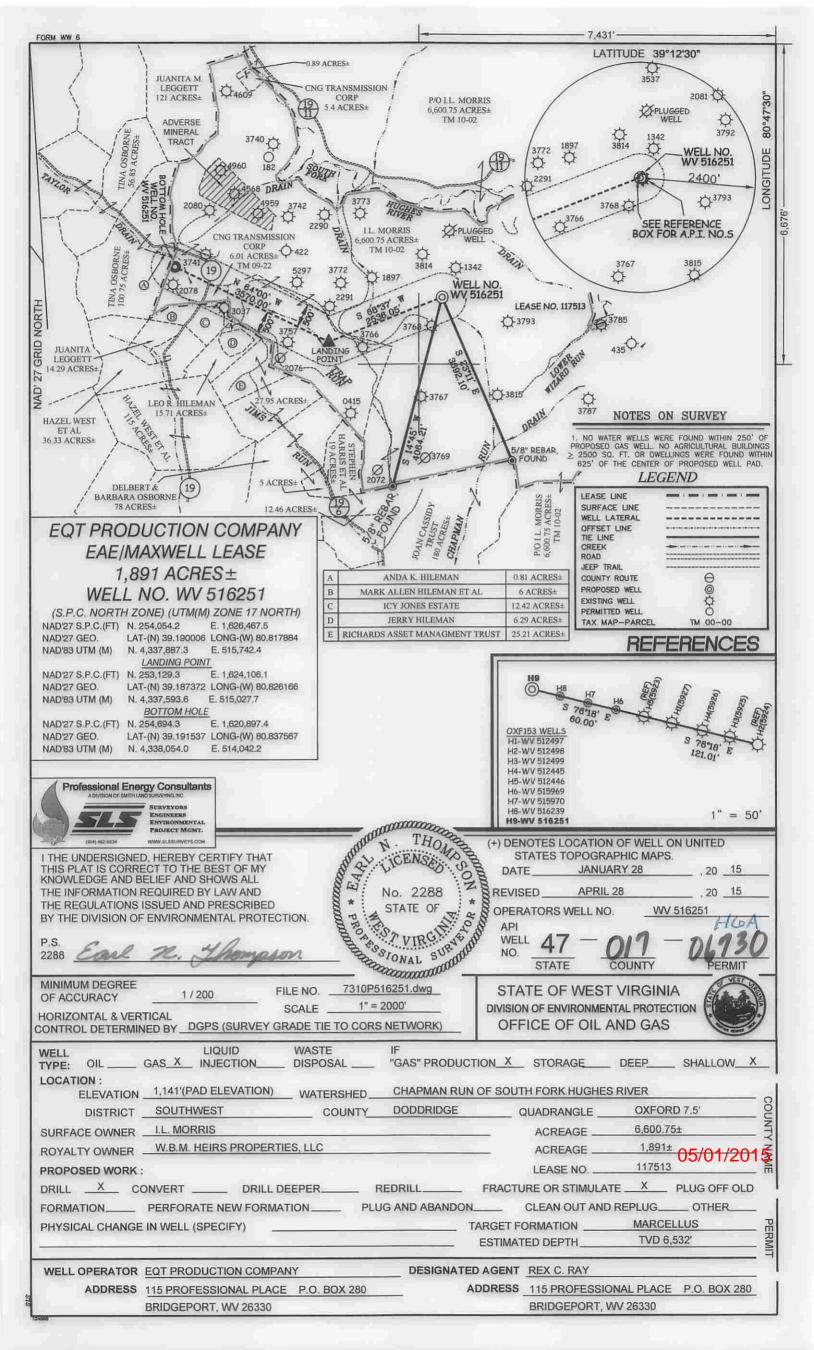
Received

MAR 1 9 2015

Office of Oil and Gas WV Dept. of Environmental Protection







WW-6A1 (5/13)

Operator's Well No.

516251

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 –

- 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
117513		Min 1/8 pd		
	William Brent Maxwell, et al	Pittsburgh & West Virginia Gas (Co.	LB37/48
	Pittsburgh & West Virginia Gas Co.	Equitable Gas Co.		DB216/457
	Equitable Gas Company	Equitrans, Inc.		DB468/325
	Equitrans, Inc.	Equitable Production-Eastern St	ates, Inc.	DB639/599
	Equitable Production-Eastern States, Inc.	Equitable Production Company		CB281/346
	Equitable Production Company	EQT Production Company		CB281/346

Upon information and belief, Operator's lease and/or other real property rights permit it to conduct drilling operations for the subject well in the location shown on the plat, including under any public roads that the well lateral crosses.

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

MAR 1 9 2015

Office of Oil and Gas
WV Dept. of Environmental Protection

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: EQ

EQT Production Company

By:

Its: Permitting Supervisor

Page 1 of 1

Notice has been given:

Date of Notice Certification:

4701706730

Operator's Well No.

Well Pad Name:

API No. 47

Well Pad Name:

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

Pursuant to the provisions in West Virginia Code	§ 22-6A, the Operator has provided the required parties w	ith the Notice Forms listed
below for the tract of land as follows:		
State: WV	UTM NAD 83 Easting:	515,742.40
County: Doddridge	UTM NAD 83 Northing:	4,337,887.30
District: Southwest	Public Road Access:	19/11
Quadrangle: Oxford 7.5	Generally used farm name:	I L Morris
Watershed: Chapman Run of South Fork Hu	ghes River	
prescribed by the secretary, shall be verified and it has provided the owners of the surface describe information required by subsections (b) and (c), so figuring the surface owner notice of entry to survequirements of subsection (b), section sixteen of	ery permit application filed under this section shall be on a shall contain the following information: (14) A certification ed in subdivisions (1), (2) and (4), subsection (b), section ection sixteen of this article; (ii) that the requirement was ey pursuant to subsection (a), section ten of this article six this article were waived in writing by the surface owner; and ender proof of and certify to the secretary that the notice rant.	from the operator that (i) ten of this article, the deemed satisfied as a result x-a; or (iii) the notice and Pursuant to West
that the Operator has properly served the required	erator has attached proof to this Notice Certification d parties with the following:	OOG OFFICE USE ONLY
*PLEASE CHECK ALL THAT APPLY		DECEMEDATO
☐ NOTICE OF SEISMIC ACTIVITY or ↑	NOTICE NOT REQUIRED BECAUSE NO BEISMIC ACTIVITY WAS CONDUCTED	RECEIVED/NOT REQUIRED
NOTICE OF ENTRY FOR PLAT SURVE	Y or ▼ NO PLAT SURVEY WAS CONDUCTED	☐ RECEIVED
NOTICE OF INTENT TO DRILL or	NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OR	RECEIVED/NOT REQUIRED
	WRITTEN WAIVER BY SURFACE OWNER PLEASE ATTACH)	
NOTICE OF PLANNED OPERATION	Received MAR 1 9 2015	☐ RECEIVED
▼ PUBLIC NOTICE	MAR 10	☐ RECEIVED
NOTICE OF APPLICATION	1 9 2015	RECEIVED
	Wy Dept. of Environment Gas	
Required Attachments:	Wy Dept. of Environmental Protection	

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.

05/01/2015 the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

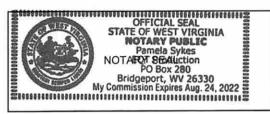
THEREFORE, I _______, have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered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

 Well Operator:
 EQT Production Company
 Address:
 P.O. Box 280

 By:
 Victoria J. Roark
 Bridgeport, WV 26330

 Its:
 Permitting Supervisor
 Facsimile:
 304-848-0040

 Telephone:
 304-848-0076
 Email:
 vroark@eqt.com



My Commission Expires 8.24.23

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.

Received

MAR 1 9 2015

WV Dept. of Environmental Protection

WW-6A (9-13) 4701706730

API NO. 47 - 017 - 0

OPERATOR WELL NO. 516251

Well Pad Name: OXF153

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 Notice: MAR 17 2015 Date Permit Application Filed	te of permit application. I: MA <u>R 1 7 2015</u>
Notice of:	
PERMIT FOR ANY WELL WORK CONSTRUCTION OF AN IM	
Delivery method pursuant to West Virginia Code § 22-6A-10(b)	
	THOD OF DELIVERY THAT REQUIRES A CEIPT OR SIGNATURE CONFIRMATION
for the construction of an impoundment or pit as required by the requires a receipt or signature confirmation, copies of the applicable plat to each of the following persons: (1) The owners of record the surface tract or tracts overlying the oil and gas leasehold be disturbance as described in the erosion and sediment control platessee, in the event the tract of land on which the well proposed record of the surface tract or tracts overlying the oil and gas lead construction, enlargement, alteration, repair, removal or abandowater purveyor who is known to the applicant to have a water which is used to provide water for consumption by humans or own work activity is to take place. (c)(1) If more than three tenants in the lands, the applicant may serve the documents required uparticle one, chapter eleven-a of this code. (2) Notwithstanding and the lien holder is the landowner. W. Va. Code R. § 35-8-	date of the application, the applicant for a permit for any well work or for a is article shall deliver, by personal service or by registered mail or by any cation, the erosion and sediment control plan required by section seven of of the surface of the tract on which the well is or is proposed to be located; ing developed by the proposed well work, if the surface tract is to be used an submitted pursuant to subsection (c), section seven of this article; (3) The I to be drilled is located [sic] is known to be underlain by one or more coal sehold being developed by the proposed well work, if the surface tract is to onment of any impoundment or pit as described in section nine of this well, spring or water supply source located within one thousand five domestic animals; and (6) The operator of any natural gas storage field in common or other co-owners of interests described in subsection (b) of soon the person described in the records of the sheriff required to be any provision of this article to the contrary, notice to a lien holder is not -5.7.a requires, in part, that the operator shall also provide the Well Site opject 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:
144110.	COAL OWNER OR LESSEE Name: Address: P.O. Box 397
P.O. Box 397 Glenville WV 26351	Glenville WV 26351
Name: 0 Address: 0 0 0	See attached for additional coal owners.
SURFACE OWNERS(s) (Road and/or Other Disturbance) Name: I L (Ike) Morris Address: C/O Steve Holloway P.O. Box 397 Glenville WV 26351	SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s) Name: I L (Ike) Morris
Name: MAH 1 9 2015 0 Address: 0	Address: P.O. Box 397 Glenville WV 26351 0
SURFACE OWNER(s) (Impoundments/Pits) Name: Address: C/O Steve Holloway P.O. Box 397	OPERATOR OF ANY NATURAL GAS STORAGE FIELD Name: Address:
Glenville WV 26351	*Please attach additional forms if necessary

WW6-A

Additional Coal Owners:

WBM Heirs Properties P.O. Box 2395 Buckhannon WV 26201

L E Sawyer Jr PO Box 584 Midland Tx 79702



MAR 19 2015

Office of Oil and Gas

WW-6A (8-13)

	47	A	1	7	0	6	7	3	0	
API NO.	<u>47</u>	017		• _	•					0
OPERAT	OR WELL	NO.							510	5251
Well Pad	Name:		_			OXI	7153			

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.

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 an explora 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, 2013 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 he secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the fiems



WW-6A (8-13)

API NO. 47 -OPERATOR WELL NO. Well Pad Name:

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

Pieceived

MAR 19 2015

Such persons may request, at the time of submitting window of the NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENTAND Gas NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENTAND Gas 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 - 0

OPERATOR WELL NO. 516251

Well Pad Name: OXF153

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.



Notice is hereby given by:

Well Operator:	EQT Production Company	Address:	115 Professional Place P.O. Box 280
Telephone:	304-848-0082		Bridgeport, WV 26330
Email:	Vroark@eqt.com	Facsimile:	304-848-0041

Oil and Gas Privacy Notice:

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

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, 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.

OFFICIAL SEAL
STATE OF WEST VIRGINIA
NOTARY PUBLIC
Pamela Sykes
EQT Production
PO Box 280
Bridgeport, WV 26330
My Commission Expires Aug. 24, 2022

By: Victoria Roark

My Commission Expir

Its: Permitting Supervisor

Subscribed and sworn before n

Raceived
MAR 19 2015

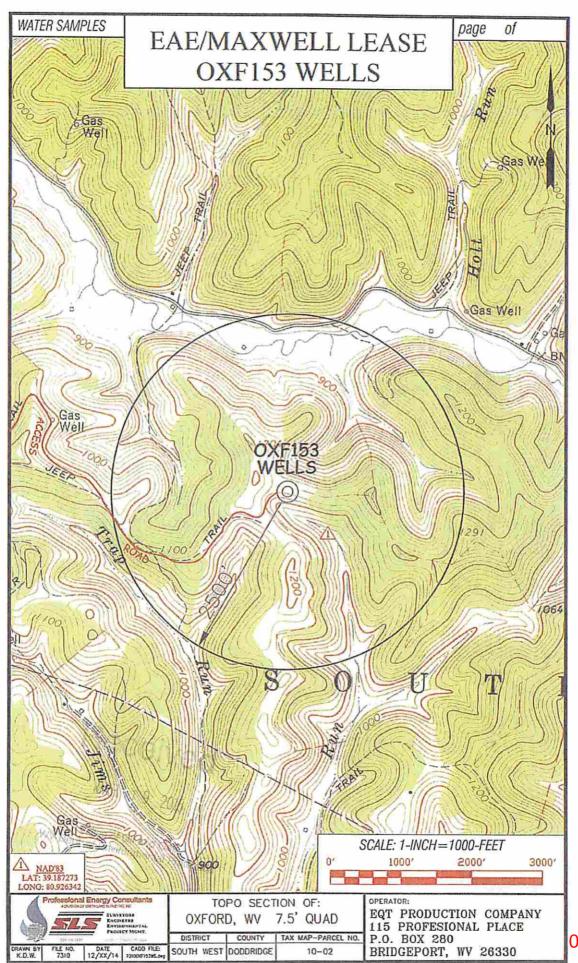
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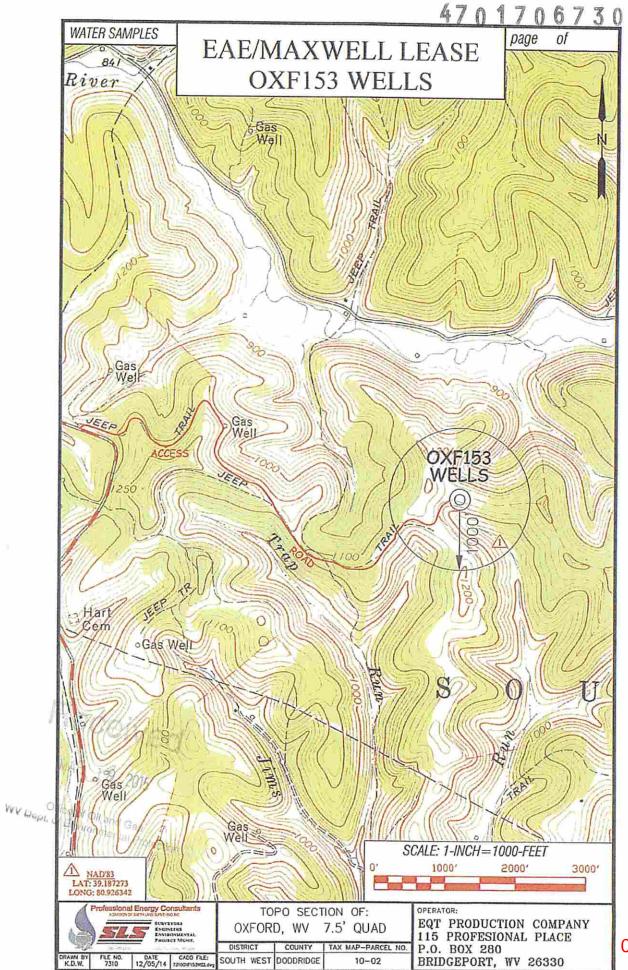
day of // lanch , 2015 Notary Public

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516251

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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	: 1/30/2015	Date Permit Ap	plication Filed:	2/9/15		
Delivery meth	od pursuant to West Virginia Code	§ 22-6A-16(b)				
HAND DELIVER	RY CERTIFIE RECEIPT	D MAIL RETU	RN			
receipt reques drilling a horize of this subsect subsection ma	. Va. Code § 22-6A-16(b), at least te ted or hand delivery, give the surfac ontal well: Provided, That notice giv ion as of the date the notice was pr y be waived in writing by the surfac e, facsimile number and electronic r	ce owner notice of yen pursuant to sul ovided to the surfa e owner. The notic	fits intent to er bsection (a), se ace owner: Pro ce, if required,	iter upon the surface owner's ction ten of this article satisfie vided, however, That the notic shall include the name, addres	and for the purpose of s the requirements e requirements of this s, telephone number,	
	by provided to the SURFACE OWNE	:R(s): I L (Ike) Morris	Name:		0	
Name: Address:	<u> </u>	O Steve Holloway	Address:		0	
Auul ess.		P.O. Box 397	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0	
	Glenv	ille WV 26351		· · · · · · · · · · · · · · · · · · ·	<u> </u>	
the surface ow State:	est Virginia Code § 22-6A-16(b), no ner's land for the purpose of drillin	g a horizontal well WV	on the tract of	land as follows:		515,742.40
County:		Doddridge	O / IN IN	Northing	4,	,337,887.30
District:		Southwest		Public Road Access:		19/11
Quadrangle:		Oxford 7.5	G	enerally used farm name:		I L Morris
Watershed:	Chapman Run of South Fork I	Hughes River				
facsimile num	all Include: lest Virginia Code § 22-6A-16(b), thi ber and electronic mail address of t izontal drilling may be obtained fron 57th Street, SE, Charleston, WV 25	he operator and th n the Secretary, at	ne operator's au t the WV Depar	ithorized representative. Addi tment of Environmental Prote	ctional information ction headquarters,	
Notice is here	by given by:					Victoria Roarl
Well Operator:		ction Company	Authorized Address:	Received	115 Professional Plac	
Address:	115 Professional Plac	ort, WV 26330	Address: -			eport, WV 2633
	Priaget	304-848-0076	Telephone:	MAD 10 core		304-848-007
Telephone:	Vro	ark@eqt.com	Email:	MAH 1 9 2015	vro	oark@eqt.com
Email:	<u>VIO</u>	304-848-0041	Facsimile:			304-848-004:
Facsimile:			*	Office of Oil and Gas		

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 05/01/2015 DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

WV Dept. of Environmental Protection

WW-6A5 (1/12) Operator Well No.

516251

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

Notice To Date of	Fime Requirement: notice shall be provided no late Notice: MAR 17 2015 D	er than the filing date Pate Permit Applicat	e of permit application Filed:	AR 172	2015
Deliver	method pursuant to West Virginia Code § 22-6A-	-16(c)			
-	CERTIFIED MAIL HAN RETURN RECEIPT REQUESTED DEL	ID IVERY			
return re the plant required drilling of damages	to W. Va. Code § 22-6A-16(c), no later than the date for ceipt requested or hand delivery, give the surface owner and operation. The notice required by this subsection should be provided by subsection (b), section ten of this artifulation of the surface use and control to the surface affected by oil and gas operations to the otices required by this section shall be given to the surface.	r whose land will be us all include: (1) A copy of cle to a surface owner ompensation agreeme extent the damages ar	sed for the drilling of a of this code section; (2 whose land will be use ont containing an offer te compensable under	horizontal we) The informa ed in conjunct of compensa article six-b o	ell notice of ition ion with the tion for if this chapter.
Notice is	hereby provided to the SURFACE OWNER(s)				
(at the a	ddress listed in the records of the sheriff at the time of n	otice):			
Name:	I L (Ike)	Morris Name: _			0
Address:	C/O Steve Ho	lloway Address:			0
	P.O. B	ox 397			0
	Glenville WV	26351			
	hereby given:				
	to West Virginia Code § 22-6A-16(c), notice is hereby gi				lanned
operatio	n on the surface owner's land for the purpose of drilling	a horizontal well on th	e tract of land as follo	ws:	
State:	WV	UTM NAD 83	Easting:		515,742.400000
County:	Doddridge		Northing:		4,337,887.300000
District:	Southwest	Public Road Access:			19/11
Quadran	gle: Oxford 7.5	Generally used farn	n name:		I L Morris
Watersh					
This Not	ice Shall Include:				
Pursuan	to West Virginia Code § 22-6A-16(c), this notice shall in-	clude: (1)A copy of this	s code section; (2) The	information r	required
to be pro	ovided by W. Va. Code § 22-6A-10(b) to a surface owner	whose land will be use	ed in conjunction with	the drilling of	fa
horizont	al well; and (3) A proposed surface use and compensatio	n agreement containir	ng an offer of compens	sation for dam	nages to the
surface a	ffected by oil and gas operations to the extent the dama	ages are compensable	under article six-b of t	his chapter. A	dditional

Oil and Gas Privacy Notice:

EQT Production Company

304-848-0082

vroark@eqt.com

pages/default.aspx.

Well Operator:

Telephone:

Email:

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.

Address:

Facsimile:

Bridgeport, WV 26330

304-848-0040

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/

MAR 19 2015

115 Professional Place, P.O. Box 280



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

March 12, 2015

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 OXF153 Well Site, Doddridge County

515969 OXF153H6 515970 OXF153H7 516239 OXF153H8 516251 OXF153H9

Dear Mr. Martin,

Earl Ray Tomblin

Governor

This well site will be accessed from Permit # 04-2015-0149 which has been applied for by EQT Production Company for access to the State Road for a well pad located off of County Rt. 19 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.

Dary K. Clayton

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

EQT Production Company

CH, OM, D-4

File

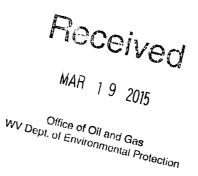
Received

MAR 1 9 2015

Office of Oil and Gas WV Dept. of Environmental Protection

4701706730 Anticipated Frac Additives Chemical Names and CAS numbers

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



NTRANCE PERMIT

NVIRONMENTAL NOTES

OR EGT OXF 153 PRE

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ISS UTILITY STATEMENT

ODUCTION COMPARY WILL DETAIN AM ENCROACHMENT FERMIT (FORM MA-16) FROM 51 VARIEND DEFAUTURENT OF TRANSPORTATION DIVISION OF HIGHRAYS, PRIOR TO NICEMENT OF CONSTRUCTION ACTIVITIES

TRITY OF WEST VIRGINIA WAS NOTED FOR THE LOCATING OF UTIDITES PRICE TO ROJECT DESIGN, TICKET #435693616, IN ADDITION, MISS UTILITY WILL BE CONTACTED TO START OF THE PROJECT:

SITE DISTURBANCE COMPUTATIONS

PADIFLOWBACK PIT AREA = 11 0 + ACRES
SERCAD = 6.7 + ACRES
SITE DISTURBANCE AREA = 18.6 + ACRES

EQT

OXF 153

MODIFICATION SITE PLAN

& Gas

PROJECT INFORMATION
PROJECT NAME: EGT OXF 153 FACE OWNERS YEST DISTRICT, DODDRIDGE COUNTY

IL AND CAS ROYALTY DWAER
WILL AND CAS ROYALTY DWAER
WILL HERRS PROPERTIES LLC (1,891% ACRES)
SOUTHWEST DISTRICT
DODDROGGE COUNTY, WY

SITE LOCATION

THE EQT OUR ISS SITE ENTRANCE IS LOCATED 2 IF MI 1-1-NORTH OF THE LINKTION OF CR 19 AND CR 52. THE WELL PAD IS LOCATED 4 I MILES 1-1-NORTH OF THE SAME JUNCTION. OCATION COORDINATES

EST ON ISANCI, FAD CENTER

(ARTIUDE 39 1910 S. LOVATUDE 80 81754 (JAA) 8.)

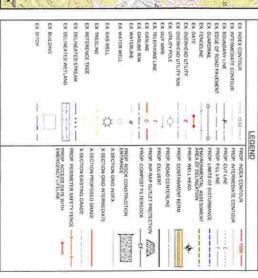
EGT ONF ISS ASSOCIATED FLOWBLOCK PIT CENTER

(ARTIUDE 39 1900 F. LONGTUDE 80 81910 (NAD 81)

EGT ONF ISS ACCISES 8100 A 17 C Ft p.

(ARTIUDE 39 1924 A. LONGTUDE 80 83641 (NAD 81) SENERAL DESCRIPTION

SITUATE ON THE WATERS OF UNNAMED TRIBUTARIES TO SOUTH FORK HUGHES RIVER; TRAP RUN, AND CHAPMAN RUN IN SOUTHWEST DISTRICT, DODDRIDGE COUNTY, WV EQT PRODUCTION COMPANY (PROPOSED WELL NO. WV515969 (H6), WV515970 (H7), WV516239 (H8), AND WV516251 (H9)))





ACCESS ROAD AND WELL SITE LAYOUT

WELL PAD SECTIONS

CVERALL PLAN SHEET INDEX

MAR 27 2015

TITLE SHEET



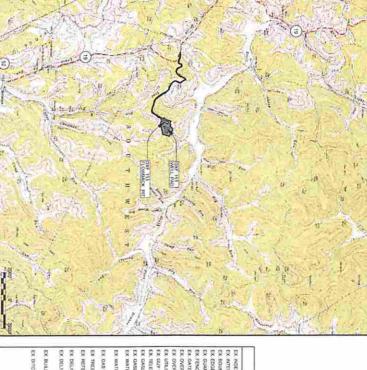


CONSTRUCTION QUANTITIES

ACCESS ROAD SECTIONS AND TYPICAL SECTION CONSTRUCTION DETAILS

ACCESS ROAD PROFILES RECLAMATION PLAN





WISS Unity of West Vigoria

1-600-24-4-640

West Vigoria Stata Law
Section XV. Uponia Stata Law
Section XV. Uponia Stata Law
Section XV. Uponia Stata Law
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Pre-stata of West Vigoria

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RESTRICTIONS NOTES

WITHOU YOU FEET OF THE

WEST VIRGINIA

E ARE NO ION

JPES WITHIN 825 FEET OF THE CENTER OF THE PAD. MS WITHIN 300 FEET OF THE PAD AND LOD.
TER SUPPR, Y FACTLITES WITHIN 300 FEET OF THE PAD AND LOD
VELCHED SPRINGS WITHIN 320 FEET OF THE PAD AND LOD
NOT HESPONSBILE FOR ANY EXISTING WATER WELL OR. GEOTECHNICAL NOTES

EGT FRODUCTION COMP OPERATOR ID: 306666 P O. BOX 250 ERIDGEPCHT, WV 26630 PHCINE: (304) 345-3818 OPERATOR

ENGINEER

SMITH (AND SURVEYMO, 12 VANHORN DRIVE PO BOX 153 GLENVILLE, WV 20351 PHONE (304) 462-5634 SURVEYOR

OXF 153 MODIFICATION SOUTHWEST DISTRICT DODDRIDGE COUNTY, WV

