

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

March 12, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-1706706, 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

Chie

Operator's Well No: 515939

Farm Name: COGAR, ARDEN & CAROL

API Well Number: 47-1706706

Permit Type: Horizontal 6A Well

Date Issued: 03/12/2015

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. <u>Failure to adhere to the specified permit</u> 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.

WW - 6B (9/13)^{*}

OPERATOR WELL NO. Well Pad Name:

OXF44

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: <u>EQT Production Com</u>	pany	306686	017	. 7	526
-		Operator ID	County	District	Quadrangle
2) Operator's Well Number:	515939		_Well Pad Nam	ne:	OXF44
3) Farm Name/Surface Owner :	Arden & Carol C	ogar	_Public Road A	ccess:	52/3
4) Elevation, current ground: 1,170.	0 Eleva	tion, proposed p	ost-construction	:1,170.	.0
5) Well Type: (a) Gas)ilUr	derground Store	ige		
Other					
(b) If Gas: Shallov	•	Deep			
Horizont	al•				Dew 3-2014
6) Existing Pad? Yes or No: Yes	• •				17-20
7) Proposed Target Formation(s), Depth(s				• •	
Target formation is Marcellus at a depth of	6579 with the antici	pated thickness to be	9 54 feet and antic	cipated target pres	sure of 2951 PSI
8) Proposed Total Vertical Depth:			6579		
9) Formation at Total Vertical Depth:			Marcellus		
10) Proposed Total Measured Depth:			10,647		
11) Proposed Horizontal Leg Length		· · · · · · · · · · · · · · · · · · ·	2.880		
12) Approximate Fresh Water Strata Depth	s:	4, 93, 130), 244, 285, 328,	596, 919, & 1	139
13) Method to Determine Fresh Water Dep	th:		By offset w		
14) Approximate Saltwater Depths:			1,821		
15) Approximate Coal Seam Depths:			None Reported		
16) Approximate Depth to Possible Void (c	oal mine, karst, othe	er):		None rep	orted
17)Does proposed well location contain co					0.100
adjacent to an active mine?	•	. •	s	_ No	
(a) If Yes, provide Mine Info: Name	:				
D (1	_				
Depth					
Deptr Seam					

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ww	-`6B
(3/13	3)

API NO. 47 - 017 - 00 70 0

OPERATOR WELL NO. 515939

Well Pad Name: OXF44

CASING AND TUBING PROGRAM

4701706706

18)							• • • • • •
TYPE	<u>Size</u> (in)	<u>New</u> or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill- up (Cu.Ft.)
Conductor	20	New	MC-50	81	40	40	38 C.T.S.
Fresh Water	13 3/8	New	MC-50	54	1,153	1,153	996 C.T.S.
Coal	-	-	_	_	_	_	
Intermediate	9 5/8	New	MC-50	40	3,031	3,031	1,197 C.T.S.
Production	5 1/2	New	P-110	20	10,647	10,647	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	[

TYPE	Size (in)	<u>Wellbore</u> <u>Diameter (in)</u>	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	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						
Liners_					-	

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 & Gas
JAN 0 6 2015

API NO.	<u>47</u>	٠	017	-	
OPERATO	R WE	LL NO.			 515939

1	W	ell	Pad	Nam	ıe:		
	•	-				A A	

OXF44 4701706706 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 down to an approximte depth of 5026'. 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 and max rate: Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated treating pressures are expected to average approximately 8500 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 200,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh. Average approximately 200,000 pounds of sand per stage. ±15.7 ac 21) Total area to be disturbed, including roads, stockpile area, pits, etc, (acres): ±6.2 ac 22) Area to be disturbed for well pad only, less access road (acres): 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 zone. Intermediate (Type 1 Cement): 0-3% Calcium Chloride. Salt is used in shallow, low temperature formations to speed the setting of cement slurries. 0.4% flake. Loss Circulation Material (LCM) is used to combat the loss of whole drilling fluid or cement slurry (not filtrate) to a thief zone. **Production:** Lead (Type 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. Surface: Circulate hole clean (Approximately 30-45 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 compressors back on and circulate hole clean. A constant rate of higher than expected cuttings volume likely indicates washouts that will not clean up. Intermediate: Circulate hole clean (Approximately 30-45 minutes) rotating & reciprocating one full joint until cuttings diminish at surface. When cuttings returning to surface diminish, continue to circulate an additional 5 minutes. If foam drilling, to enhance hole cleaning use a soap sweep or increase injection rate & foam concentration. Production: Pump marker sweep with nut plug to determine actual hole washout. Calculate a gauge holes bottoms up volume. Perform a cleanup cycle by pumping 3-5 bottoms up or until the shakers are clean. Check volume of cuttings coming across the shakers every 15 minutes.

^{*}Note: Attach additional sheets as needed.



December 10, 2014

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

Re: Casing plan on Wells (OXF44)

Dear Mr. Smith,

EQT is requesting the 13-3/8" surface casing be set at 1153' KB, below the Fresh Water zone. We will set the 9-5/8" intermediate string at 3031' KB, below the base of the Bayard formation. This casing plan is the same at the previous wells drilled by EQT on this pad.

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

Sincerely,

Vicki Roark

Permitting Supervisor

Enc.

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Office of Oil & Gas

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west virginia department of environmental protection

Office of Oil and Gas 601 57th Street, SE Charleston, WV 25304 (304) 926-0450 (304) 928-0452 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.

Inmes Pelerson

Environmental Resources Specialist / Permitting

Promoting a healthy environment.

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Office of Color & Gas

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west virginia department of environmental protection

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

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

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

REPORT OF THE OFFICE

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

FINDINGS OF FACT

- 1.) Nabors Completion & Production Services Co. proposes the following cement blend:
 - 2% Calcium Chloride (Accelerator)
 - 0.25 % Super Flake (Lost Circulation)
 - 94% Type "1" Cement
 - 5.20 % Water
- 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.

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 & Gas

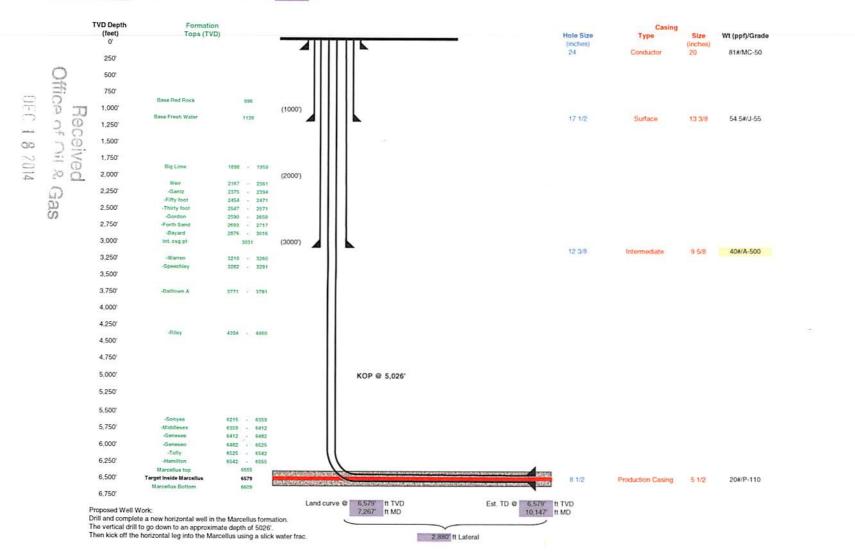
6,609' Onondaga

7,000' -

6,579° ft TVD

Oxford Azimuth 33S

Doddridge West Virgina Vertical Section 3213



WW-9 (5/13)

Page 1	of	2	
API No. 47 017		- Ne 10 (0
Operator's Well No.		515939	1

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

Fluids/Cuttings Disposal & Reclamation Plan

Operator Name		roduction Comp	any	OP Code _	306686	
Watershed (HUC10)	Tributa	ry of Straight Fork		Quadrangle	Oxford 7.5	
Elevation	1170.0	County	Doddrid	·		
Do you anticipate usin Will a pit be used? You			to complete	e the proposed well	work? Yes x N	°
	escribe anticipate			flowback water &	residual solids	
	c liner be used in	=	X		so, what ml.?	<u></u>
	sposal Method Land A Undergi Reuse Off Site	For Treated Pit Woplication round Injection (at API Number	/astes: (UIC Pe		0014, 8462, 4037	DCN 2014
Will closed loop syste		Yes, The closed to	op system w	ill remove drill cutting	s from the drilling	
fluid. The drill cuttings a Drilling medium antic						
- The state of the	opated for this t	weii: Aii, ilesiiwa	iler, oii base	_	the top-hole sections of the wellbor	
					diate, and Pilot hole sections, water the curve and lateral.	based
If oil based	, what type? Sy	nthetic, petroleur	n, etc		and conversion lateral.	
Additives to be used in		_		linity Control, Lime, Chlo	ride Salts,Rate Filtration Cor	ntrol.
Deflocculant, Lubricant, De	tergent, Defoaming	, Walnut Shell, X-Cic	le, SOLTEX Te	erra. Of the listed chemi	cals the following are	
generally used when drilling	on air: lubricant, d	etergent, defoaming.	Water based	fluids use the following	chemicals: MILBAR.	
viscosifer, alkalinity control,	lime, chloride salts	, rate filtration contro	, deflocculant,	lubricant, detergent, de	foaming, walnut shell.	
x-cide, SOLTEX terra					9, 110,101,011011,	
Drill cuttings disposal	method? Leave	in pit, landfill, re	moved offsi	te, etc	Landfill	
		hat medium will be u	sed? (Cement	, Line, sawdust)	n/a	
- Landfill or of	ffsite name/permi	number?		See Attached	List	
I certify that I underst	and and agree to th	e terms and conditio	ns of the GEN	ERAL WATER POLLUT	ION PERMIT issued	
on August 1, 2005, by the O	ffice of Oil and Gas	of the West Virginia	Department of	Environmental Protection	on Lunderstand that the	
provisions of the permit are	entorceable by law.	Violations of any ter	m or condition	of the general permit an	d/or other applicable law	
or regulation can lead to enf						
application form and all attac	chments thereto and	that based on mui	and am tamilia	r with the information su	bmitted on this	
the information, I believe that	t the information is	true, accurate, and c	omplete. I am :	aware that there are sice	responsible for obtaining	Received
submitting false information,	including the possi	bility of fine or impris	onment.			fice of Oil & Ga
Company Official Ciam	.		1/1/2	1 1/1	O 11	
Company Official Signa Company Official (Type	ature					<u>JA</u> N 06 2015
Company Official Title				ctoria J. Roark g/Supervisor		
			r emittin	g/supervisor_		
Subscribed and sworn	before me this		day of	PELEMBER	, 20 <u>/</u> 4	
	B				Notary Public	
Mu aametastas suut	7	1.1.		Sminn	110000000000000000000000000000000000000	
My commission expires		7/24/2	<u> </u>		OFFICIAL STATE OF WES NOTARY B Nicholas L. Bu Rt. 1, B Liberty, WV My Commission Expir	T VIRGINIA MUBLIC MIRON MEDIC MIRON MEDIC MIRON MEDIC MIRON MEDIC MIRON MEDIC

Operator's Well No.

47-017-06706 470₅₁₅₉₃₉06706

Proposed Revegetatio	n Treatment: Acres	Disturbed	± 15.7	Prevegetation	рН _	6.5
Lime	To	ons/acre or to c	orrect to pH	6.5	100	
Fertilize type						
Fertilizer Amo	ount1/3	lbs/ac	re (500 lbs minimum)			
Mulch	2		Tons/acre			
		S	eed Mixtures			
Seed Type KY-31	emporary lbs/acre 40		Seed Type Orchard Grass	Permanent	lbs/acr	е
Alsike Clover	5		Alsike Clover		5	
Annual Rye	15					
Photocopied section of	involved 7.5' topog	raphic sheet.				
Plan Approved by:	19	1 0				
Plan Approved by: Comments:	sted + Mo	16/2 11	stail Ets	To we	D	2-17
Title: 011 + 0	505 106 A	of Face		3 224/		
	111110	0101	Date: _/2 - 23	-1-019		

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Office of Oil R Gas

JAN 06 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

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Office of Oil & Gas
DEC 1 8 2014

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 Where energy meets innovation."

47-017-06706

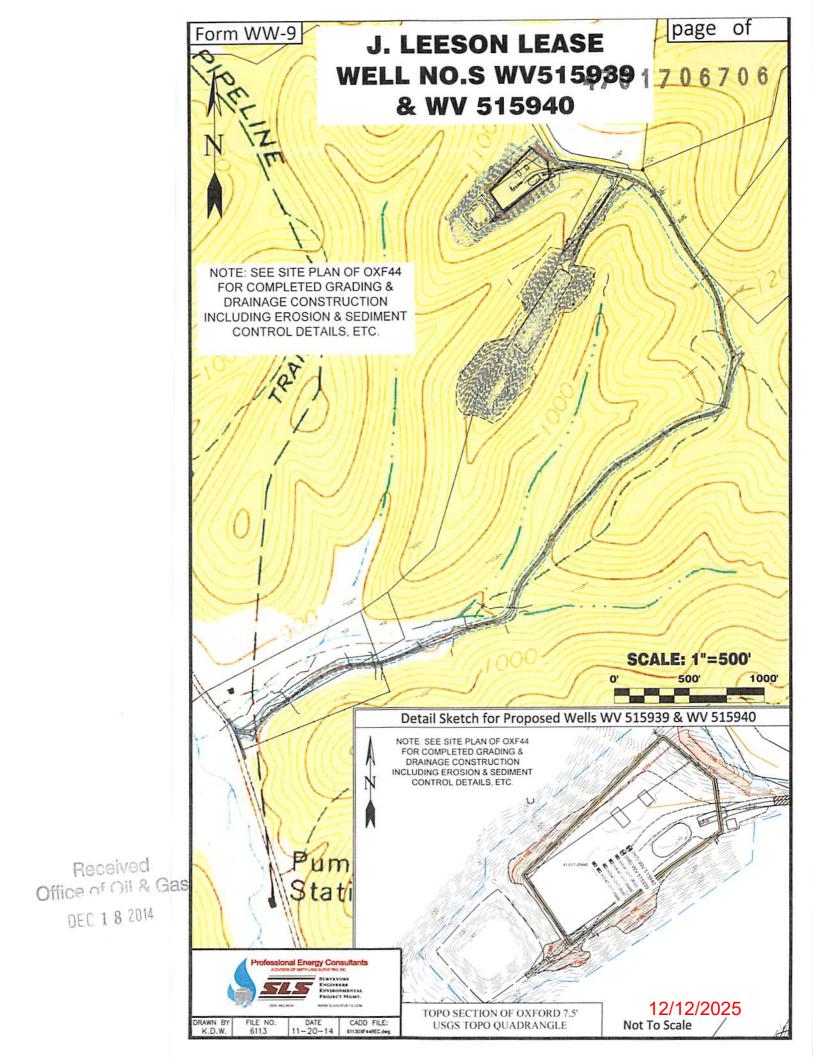
Site Specific Safety Plan

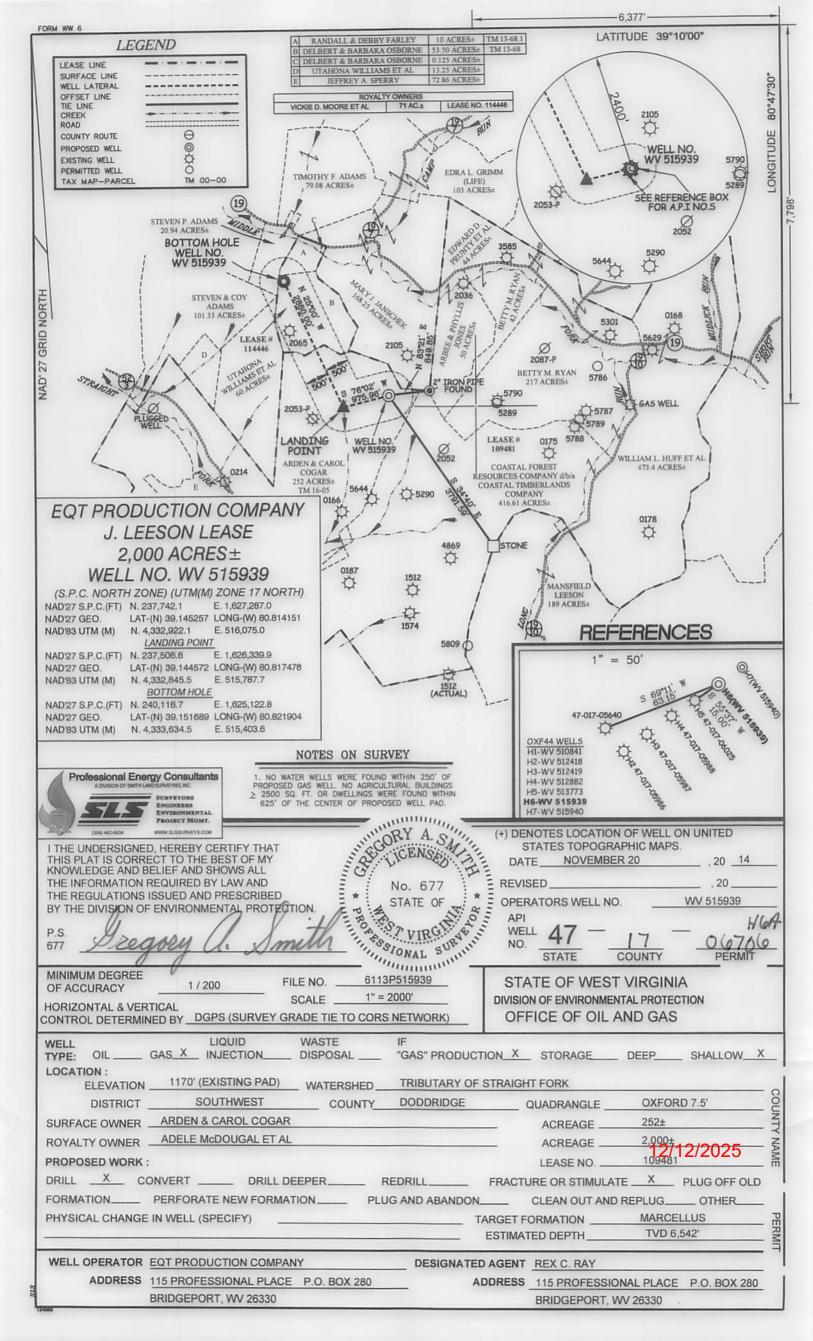
EQT OXF 44 Pad

West Union Doddridge County, WV

_515939515940	For Wells:
EQT Production De penithing Superiors Title 1-16-14 Date	Date Prepared: November 26, 2014 Dauglas Assult WV Oil and Gas Inspector Title 12-23-2014 Date
	Received

Office of Oil & Gas





Operator's Well No.

515939

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 I of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
			Min 1/8 pd	<u>-</u>
109481				
	Jackson Leeson, et al	The Philadelphia Co. of West Virginia		LB21/76
	The Philadelphia Co. of West Virginia	Pittsburgh & West Virginia Gas Co.		DB87/90
	Pittsburgh & West Virginia Gas Co.	Equitable Gas Company		DB121/303
	Equitable Gas Company	Equitrans, Inc.		LB154/475
	Equitrans, Inc.	Equitable Production-Eastern States, Inc	•	LB192/19
	Equitable Production-Eastern States, Inc.	Equitable Production Company		CB281/346
	Equitable Production Company	EQT Production Company		CB281/346
14446				
	F. M. Snider, et ux	The Philadelphia Co. of West Virginia		LB32/444
	The Philadelphia Co. of West Virginia	Pittsburgh & West Virginia Gas Co.		DB87/90
	Pittsburgh & West Virginia Gas Co.	Equitable Gas Co.		DB121/257
	Equitable Gas Co.	Equitrans, Inc.		LB155/557
	Equittrans, Inc.	Equitable Production-Eastern States		LB192/19
	Equitable Production-Eastern States, Inc.	Equitable Production Company		CB281/346
	Equitable Production Company	EQT Production Co.		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

Received
Office of Oil & Gas

DEC 1 8 2014

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:

Its: Permitting Supervisor

Page 1 of 1

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

ncc 1 & 2014

Date of No	tice Certification:		API No. 47 017 -	0
			Operator's Well No.	515939
			Well Pad Name:	OXF44
Notice has	been given:			
	the provisions in West Virginia Code §	22-6A, the Operator has provided t	he required parties with the N	otice Forms listed
	e tract of land as follows:	• • • • • • • • • • • • • • • • • • • •	• •	
State:	wv	UTM NAD 83 Easting:		516,075.00
County:	Doddridge	UTM NAD 83 Northing:		4,332,922.10
District:	Southwest	Public Road Access:		52/3
Quadrangle:	Oxford 7.5	Generally used farm name:	Ardo	en & Carol Cogar
Watershed:	Tributary of Straight Fork	_ ·		
requirement Virginia Cod of this article	surface owner notice of entry to survers of subsection (b), section sixteen of the \$ 22-6A-11(b), the applicant shall tere have been completed by the applicant	his article were waived in writing by nder proof of and certify to the secret.	the surface owner; and Pursuetary that the notice requirement	ant to West
	West Virginia Code § 22-6A, the Opera erator has properly served the required		e Certification	OG OFFICE USE ONLY
*PLEASE (CHECK ALL THAT APPLY			ECEIVED/NOT
□ NOTICE		OTICE NOT REQUIRED BECAU EISMIC ACTIVITY WAS COND	USE NO	EQUIRED
☐ NOTICE	E OF ENTRY FOR PLAT SURVEY	or ▼ NO PLAT SURVEY W	AS CONDUCTED FR	ECEIVED
NOTICE	E OF INTENT TO DRILL or F N	OTICE NOT REQUIRED BECA OTICE OF ENTRY FOR PLAT (AS CONDUCTED OR	5- Same 85-25	ECEIVED/NOT EQUIRED
		VRITTEN WAIVER BY SURFAC PLEASE ATTACH)	E OWNER	
		Received		
₩ NOTICE	E OF PLANNED OPERATION	Office of Oil & Gas	J. H	ECEIVED
₩ PUBLIC	CNOTICE	DEC 1 8 2014	24.7.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2	ECEIVED:
₩ NOTICE	E OF APPLICATION		Fie	FCEIVENE LE LE

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 person the return receipt card or other postal receipt for certified mailing.

WW-6AC (1/12)

20 122 12	-		-	E (E)	17.235
Certification	of	Notice	is	hereb	v aiven:

Well Operator:EQT Production CompanyAddress:P.O. Box 280By:Victoria J. RoarkBridgeport, WV 26330Its:Permitting SupervisorFacsimile:304-848-0040Telephone:304-848-0076Email:vroark@eqt.com



Subscribed and sworn before me this

day of DELEMBER.

Notary Public

My Commission Expires 7/27/2018

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.

Office of Oil & Gas DEC 1 8 2014

WW-6A	
(9-13)	

API NO.	47		017		0
OPERATO	R WEL	L NO.	575	_	515939
Well Pad	Nam	e:	-		OXF44

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

Notice Time Requirement: no Date of Notice:	otice shall be provided no later than the filing of 7 2014 Date Permit Application Fil	late of permit application 2014
Notice of:		
PERMIT FOR ANY WELL WORK	CERTIFICATE OF APPRO	
Delivery method pursuant t	o West Virginia Code § 22-6A-10(b)	
☐ PERSONAL	□ REGISTERED ☑ M	ETHOD OF DELIVERY THAT REQUIRES A
SERVICE		ECEIPT OR SIGNATURE CONFIRMATION
for the construction of a requires a receipt or sign plat to each of the follow the surface tract or tracts disturbance as described lessee, in the event the trecord of the surface tracconstruction, enlargeme water purveyor who is k which is used to provide work activity is to take p in the lands, the applican article one, chapter elever unless the lien holder is	in impoundment or pit as required by nature confirmation, copies of the applying persons: (1) The owners of records overlying the oil and gas leasehold but in the erosion and sediment control pract of land on which the well proposed or tracts overlying the oil and gas lead int, alteration, repair, removal or abandous to the applicant to have a water to water for consumption by humans of blace. (c)(1) If more than three tenants int may serve the documents required the en-a of this code. (2) Notwithstanding the landowner. W. Va. Code R. § 35-	and date of the application, the applicant for a permit for any well work or for a sthis article shall deliver, by personal service or by registered mail or by any dication, the erosion and sediment control plan required by section seven of any do of the surface of the tract on which the well is or is proposed to be located; being developed by the proposed well work, if the surface tract is to be used color submitted pursuant to subsection (c), section seven of this article; (3) The ed to be drilled is located [sic] is known to be underlain by one or more coal casehold being developed by the proposed well work, if the surface tract is to donment of any impoundment or pit as described in section nine of this well, spring or water supply source located within one thousand five a 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 apon 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 8-5.7.a requires, in part, that the operator shall also provide the Well Site abject to notice and water testing as provided in section 15 of this rule.
✓ Application Notice ✓ SURFACE OWNER Name: Address:	WSSP Notice E&S Plan Notice R(s) Arden E. Cogar 45 Bennett Ave Webster Springs, WV 26288	Well Plat Notice is hereby provided to: COAL OWNER OR LESSEE Name: Adele McDougal Address: 213 High Street Harrisville, WV 26362
	0	See attached for additional coal owners.
Name: Address:	0 0 0 0 RS(s) (Road and/or Other Disturbance	COAL OPERATOR Name: 0 Address: 0 0
Name:	Arden E. Cogar)0
Address:	45 Bennett Ave Webster Springs, WV 26288	SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s) Name: Betty M. Ryan
Name:	simmie and Eileen Burke	Address: 4153 Grove Summers Road,
Address:	2048 Straight Fork Rd West Union, WV 26456	West Union, WV 26456 See attached for additional water purveyors
See at	ttached for additional road owners	See attached for additional water purveyors
Name:	R(s) (Impoundments/Pits) Arden E. Cogar	OPERATOR OF ANY NATURAL GAS STORAGE FIELD 1 8 2014 Name: Address:
Address:	45 Bennett Ave Webster Springs, WV 26288	Address:
See attached for ac	Iditional pit/impoundment owners	*DI

^{*}Please attach additional forms if necessary

WW6-A Additional road or other disturbance owners:

Coastal Forest Resources Co. P.O. Box 709 Buckhannon, WV 26201

Additional road or other pit/impoundment owners:

Coastal Forest Resources Co. P.O. Box 709 Buckhannon, WV 26201

Additional Coal Owners:

William Lee Huff 1108 W. County Rd. 130 Midland, TX 79706

The Randy E. Huff Descendants Trust B C/O Joy Huff, Trustee 826 Orange Ave Coronado, CA 92118

George D. McKain 4141 S Braeswood Blvd. apt 224 Houston, TX 77009

Patrick Dean Leggett 1625 Stonehenge Rd Charleston, WV 25314

Additional Water Purveyors:

Arden E & Carol L Cogar P.O. Drawer 272 Webster Springs, WV 26288

Costal Forest Resource Co. P.O. Box 709 Buckhannon, WV 26201

Arbee R & Phyllis A Jones (Surv) 109 River Run Road West Union, WV 26456

Office of Oil & Gas DEC 1 8 2014 WW-6A (8-13)

API NO. <u>47</u> - 017	-		0
OPERATOR WELL NO.			515939
Well Pad Name		OXF44	

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 any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

WW-6A (8-13) API NO. 47 - 017 - 0
OPERATOR WELL NO. 515939
Well Pad Name: OXF44

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

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

WW-6A (8-13)

API NO. 47 - 017 - 0

OPERATOR WELL NO. 515939

Well Pad Name: OXF44

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 nereby give	en by:			
Well Operator:	EQT Production Company	Address:	115 Professional Place P.O. Box 28	
Telephone:	304-848-0082		Bridgeport, WV 26330	
Email:	Vroark@eqt.com	Facsimile:	304-848-004	

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.

By: Victoria Roark

Permitting Supervisor

STATE OF WEST VIRGIN Substribed and worn before n

day of VEENBER

My Commission Expr

OFFICIAL SEAL

Office of Oil & Gas DEC 1 8 2014



Table 1 - Water Source Identification

EQT Well Pad Name:OXF44	Submittal Date:12/15/14
EQT Well Number: _515939, 515940_	
Survey / Engineering Company:Smith Sur	veying
Site Number:1 Distance from Gas W	Vell (feet):_/900
Surface Owner / Occupant:Utahona Willia	ms
Address:P.O. Box 43, Elkview, WV 25071	Phone #: _304-743-1933
Field Located Date: Own	ner home during survey (yes/no):Yes
Coordinates:	(decimal degrees - NAD 83)
Contact Attempts (Date): 1st: _12/12/14_ 2nd:	_12/15/14_ 3 rd : Date Door Hanger Left:
Comments:Tax map 16, parcel 3	_39.149168, -80.921834
Site Number:1 Distance from Gas W	
Surface Owner / Occupant:Claudia Willia	ims
Address: _307 Bucknell Rd. Venice, FL 3429	3 Phone #: _941-497-6247
Field Located Date: Owner h	nome during survey (yes/no): _no
Coordinates:	(decimal degrees – NAD 83)
Contact Attempts (Date): 1st: _12/12/14_ 2nd:	_12/15/14_ 3 rd : Date Door Hanger Left:
Comments: _Tax Map 16, parcel 3 *NOTE* F 39.149168, -80.921834	Rob Williams, Claudia's son, cars for parcel (941)412-4987
Site Number:2 Distance from Gas V	Vell (feet):_2500
Surface Owner / Occupant: _Mary Jo Jansch	ek
Address:5071 Grove Summer Rd, West U	Inion, WV 26456 Phone #: _304-349-5635
Field Located Date: Owner hom	e during survey (Yes/No):
Coordinates:	(decimal degrees – NAD 83)
Contact Attempts (Date): 1st: _12/12/14_ 2nd:	_12/15/14_ 3 rd : Date Door Hanger Left:
Comments:Tax map 13, Parcel 69	



Table 1 - Water Source Identification

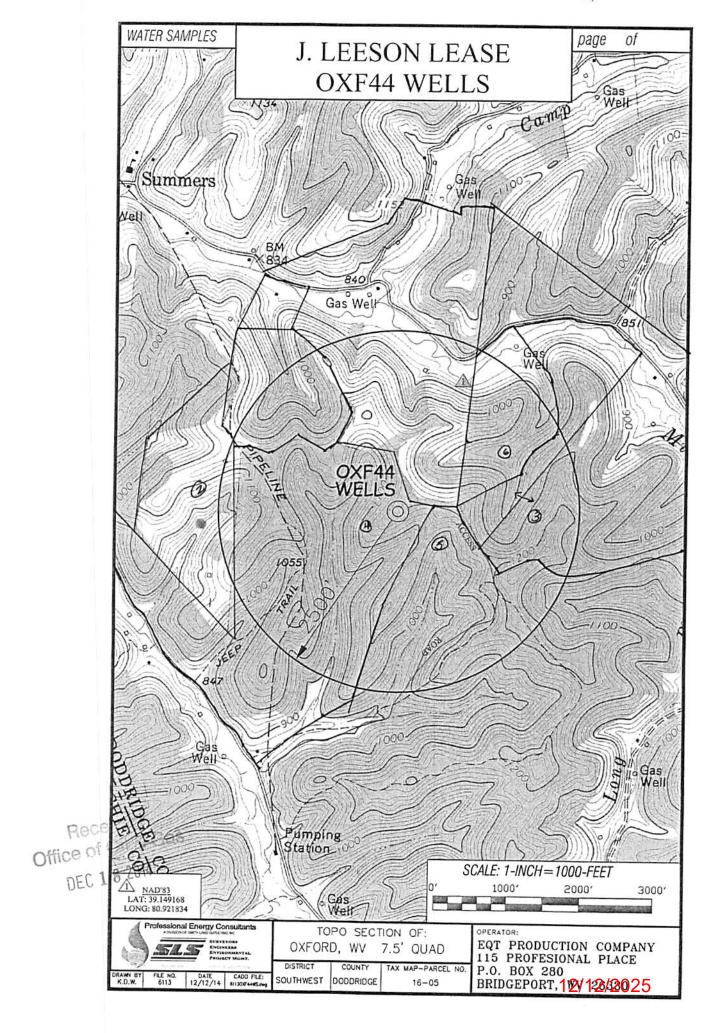
EQT Well Pad Name:OXF44	Submittal Date:12/15/14
EQT Well Number: _515939, 515940_	
Survey / Engineering Company:Smith Surveying	
Site Number: _3 Distance from Gas Well (feet):	
Surface Owner / Occupant:Betty M. Ryan	
Address: _4153 Grove Summers Rd., New Milton, WV 26411	1_ Phone #:
Field Located Date: Owner home during	g survey (yes/no):
Coordinates: (decimal de	egrees – NAD 83)
Contact Attempts (Date): 1 st : 2 nd : 3 rd :	Date Door Hanger Left:
Comments:certified mailed 12/1/14	
Site Number:4 Distance from Gas Well (feet):	
Surface Owner / Occupant: _Arden E & Carol L. Cogar	
Address: _P.O. Drawer 272, Webster Springs, WV 26288	Phone #:
Field Located Date: Owner home during sur	rvey (yes/no):
Coordinates: (decimal de	egrees – NAD 83)
Contact Attempts (Date): 1 st : 2 nd : 3 rd :	Date Door Hanger Left:
Comments:certified mailed 12/1/14refused same	ple 12/16/14
Site Number:5 Distance from Gas Well (feet):	
Surface Owner / Occupant: _Coastal Forest Resources, Co.	
Address:P.O. Box 709, Buckhannon, WV 26201	Phone #:
Field Located Date: Owner home during survey	(Yes/No):
Coordinates: (decimal de	egrees – NAD 83)
Contact Attempts (Date): 1 st : 2 nd : 3 rd :	Date Door Hanger Left:
Comments:certified mailed 12/1/14	
Received Office of Oil & Gas	

DEC 1 8 2014



Table 1 - Water Source Identification

EQT Well Pad Name:OXF44	Submittal Date:12/15/14
EQT Well Number: _515939, 515940_	
Survey / Engineering Company:Smith Survey	ying
Site Number: _6 Distance from Gas Wel	I (feet):
Surface Owner / Occupant:Arbee R & Phyllis	A. Jones (Surv)
Address: _19 River Run Dr, West Union, WV 26	456 Phone #:
Field Located Date: Owner	home during survey (yes/no):
Coordinates:	_ (decimal degrees - NAD 83)
Contact Attempts (Date): 1 st : 2 nd :	3 rd : Date Door Hanger Left:
Comments:certified mail sent 12/1/14	
Site Number: Distance from Gas Wel	
Surface Owner / Occupant:	
Address:	Phone #:
Field Located Date: Owner hor	ne during survey (yes/no):
Coordinates:	_ (decimal degrees - NAD 83)
Contact Attempts (Date): 1 st : 2 nd :	3 rd : Date Door Hanger Left:
Comments:	
Site Number: Distance from Gas Well	II (feet):
Surface Owner / Occupant:	
Address:	Phone #:
Field Located Date: Owner home of	during survey (Yes/No):
Coordinates:	_ (decimal degrees - NAD 83)
Contact Attempts (Date): 1 st :2 nd :	3 rd : Date Door Hanger Left:
Comments:	



515939

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 Re Date of Notice:	(A)	e shall be provid 2/5/2014	ed at least TEN (10) Date Permit App	days prior to filing a polication Filed:	ermit application. 12/15/14		
Delivery metho	od pursuant to We	est Virginia Code	§ 22-6A-16(b)				
□ HAND □ DELIVER	Υ	CERTIFIE RECEIPT	ED MAIL RETUR REQUESTED	RN			
receipt request drilling a horizo of this subsecti subsection may	ed or hand delive intal well: Provide on as of the date t i be waived in writ	ry, give the surfa d, That notice gi he notice was p ling by the surfa	ice owner notice of wen pursuant to sub rovided to the surfa ce owner. The notic	osection (a), section ter ace owner: Provided, ho	n the surface owner' n of this article satisf owever, That the not ude the name, addre	s land for the purpose of ies the requirements tice requirements of this ess, telephone number,	
Notice is hereb	y provided to the	SURFACE OWN	ER(s): Arden E Cogar	Name:		Coastal Forest Resources Co	
Address:			45 Bennett Ave	Address:		P.O. Box 709	
riadi ess.		Webster	Springs WV 26288			Buckhannon, WV 26201	
the surface own	ner's land for the p	ourpose of drillin	ng a horizontal well WV	on the tract of land as	follows: Easting		516,075.00
County:	1		Doddridge	UTM NAD 83	Northing		4,332,922.10
District:	-		Southwest	Put	olic Road Access:		52/3
Quadrangle:			Oxford 7.5		used farm name:	Arde	n & Carol Cogar
Watershed:	Tributary of St	raight Fork					
This Notice Sha Pursuant to We facsimile numb related to horiz located at 601	et Virginia Code 8	22-6A-16(b), th mail address of t be obtained fro arleston, WV 25	is notice shall includ the operator and the m the Secretary, at 1304 (304-926-0450	de the name, address, t e operator's authorized the WV Department of) or by visiting www.de	elephone number, a I representative. Add Environmental Prot p.wv.gov/oil-and-ga	ditional information	Ned Gae
Notice is hereb						DEC	1. 0
Well Operator:	•	EQT Produ	ction Company	Authorized Represent	ative:		Victoria Roark
Address:	115 Pr		ce, P.O Box 280	Address:		115 Professional P	
·		Bridgep	ort, WV 26330				lgeport, WV 26330
Telephone:			304-848-0076	Telephone:			304-848-0076
Email:		vro	ark@eqt.com	Email:		<u>v</u>	roark@eqt.com
Facsimile:			304-848-0041	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 12/2025 DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

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	e: <u>1</u>	2/5/2014	Date Permit App	lication Filed:	12/15/14	
Delivery meth	od pursuant to W	est Virginia Co	ode § 22-6A-16(b)			
HAND DELIV	ERY	r C	CERTIFIED MAII RECEIPT REQU	L RETURN ESTED		
receipt reques drilling a horiz of this subsect subsection ma	ted or hand delive ontal well: Provide ion as of the date y be waived in wr	ry, give the su d, That notice the notice wa ting by the su	orface owner notice of its given pursuant to substantial substantial substantial surface owner. The notice	ts intent to enter upo section (a), section te ce owner: Provided, h e, if required, shall inc	a, an operator shall, by certic on the surface owner's land on of this article satisfies the nowever, That the notice rec clude the name, address, tel rator's authorized represen	for the purpose of requirements quirements of this ephone number,
	by provided to the					
Name: Address:	ş-		Jimmie & Eileen Burke 2048 Straight Fork Vest Union WV 26456	Name: Address:		
			notice is hereby given illing a horizontal well o		well operator has an intent follows:	to enter upon 516,075.00
County:			Doddridge	OTIVI NAD 83	Northing	4,332,922.10
District:	-		Southwest	Pu	iblic Road Access:	52/3
Quadrangle:	2		Oxford 7.5	Generally	used farm name:	Arden & Carol Cogar
Watershed:	Tributary of S	traight Fork				
facsimile num related to hor located at 601	est Virginia Code ber and electronic zontal drilling may 57th Street, SE, C	mail address	of the operator and the	operator's authorize	telephone number, and if a ed representative. Additiona of Environmental Protection ep.wv.gov/oil-and-gas/page	vailable, Il information headquarters, es/default aspx of Oil 8.
Notice is here	by given by:	EOT Pro	duction Company	A AL		Victoria Boarl
Well Operator: Address:	115 D		duction Company lace, P.O Box 280	Authorized Represen		Victoria Roark 15 Professional Place, P.O Box 280
Address:	113 P		geport, WV 26330	Address:	1.	Bridgeport, WV 26330
Telephone:		bridg	304-848-0076	Telephone:		304-848-0076
Email:		1	roark@eqt.com	Email:		vroark@eqt.com
Facsimile:			304-848-0041	Facsimile:		304-848-0041
			33 , 3 70 00 11	, acanime,		304-343-0041

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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

WW-6A5
(1/12)

Operator Well No.

515939

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

Notice Time Ro Date of Notice		tice shall be $17\ 2$	044	er than the filir Date Permit Ap	교통하다 살아 나타를 하는데 하다니다.	rmit applicatiofi.	DEC 1 8 20
Delivery meth	od pursuant to	West Virgini	a Code § 22-6A	A-16(c)			
	FIED MAIL RN RECEIPT	REQUESTE	HAI	ND LIVERY			
return receipt re the planned ope required to be p drilling of a hori: damages to the	equested or hand ration. The notice rovided by subse zontal well; and (i surface affected b	delivery, give e required by to ction (b), section B) A proposed by oil and gas o	the surface own his subsection sl on ten of this art surface use and operations to the	er whose land wi hall include: (1) A cicle to a surface of compensation ago e extent the dama	Il be used for to copy of this cowner whose treement contages are comp	ode section; (2) The land will be used in aining an offer of co ensable under artic	zontal well notice of e information conjunction with the
Notice is hereby	provided to the	SURFACE OW	NER(s)				
(at the address I	isted in the recor	ds of the sheri	ff at the time of	notice):			
Name:			Arden	E. Cogar Nan	ne:		Jimmie and Eileen Burke
Address:		/	45 Benr	nett Ave Add	ress:		2048 Straight Fork Rd
		V	ebster Springs, W	V 26288			West Union, WV 26456
					I on the tract	1	516,075.00 4,332,922.10
District:	8		Southwest	Public Road A			52/3
Quadrangle:			Oxford 7.5		ed farm name:)/ 	Arden & Carol Cogar
Watershed:	Tributary of St	raight Fork					
to be provided be horizontal well; surface affected information rela	st Virginia Code § by W. Va. Code § and (3) A propose by oil and gas op ited to horizontal ocated at 601 57tl	22-6A-10(b) to ed surface use erations to the drilling may b	a surface owne and compensati e extent the dam e obtained from	r whose land will on agreement co lages are comper the Secretary, at	be used in co ntaining an of sable under a the WV Depa	ection; (2) The info njunction with the fer of compensatio irticle six-b of this c rtment of Environn ing www.dep.wv.go	drilling of a n for damages to the hapter. Additional nental Protection
Well Operator:	EQT Production	n Company		Address:	115 Profe	essional Place, P.O.	Box 280
Telephone:	304-848-0082			 0	rt, WV 26330	***	
Email:	vroark@eqt	com		Facsimile		0040	

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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.

DEC 18 2014

DEC 18 2014

12/12/2025

WW-6A5	
(1/12)	

Operator Well No.

515939

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

Notice Time R Date of Notice	Requirement: notice s e:	hall be provided no late	er than the filing Date Permit Appl	date of permit applicat ication Filed:	ionDEC 1 8 2014
Delivery meth	nod pursuant to West	Virginia Code § 22-6A	-16(c)		
	TFIED MAIL IRN RECEIPT REQU	UESTED HAN	ND IVERY		
return receipt r the planned op- required to be p drilling of a hori damages to the	equested or hand delive eration. The notice requi provided by subsection (izontal well; and (3) A pr surface affected by oil a	ry, give the surface owne ired by this subsection sh b), section ten of this arti oposed surface use and c and gas operations to the	er whose land will be all include: (1) A conclude to a surface owe compensation agreement the damage.	opy of this code section; (2 mer whose land will be us ement containing an offer es are compensable under	a horizontal well notice of 2) The information ed in conjunction with the
Notice is hereb	y provided to the SURFA	ACE OWNER(s)			
(at the address	listed in the records of t	he sheriff at the time of r	notice):		
Name:		Coastal Forest Resource	ces Co. Name:		
Address:		P.O. B	Nox 709 Addre	ss:	
		Buckhannon, WV	26201		
				rsigned well operator has on the tract of land as follo Easting: Northing:	
District:		Southwest	Public Road Acc	ess:	52/3
Quadrangle:		Oxford 7.5	Generally used	farm name:	Arden & Carol Cogar
Watershed:	Tributary of Straight	Fork			
to be provided horizontal well; surface affected information rela	est Virginia Code § 22-6A by W. Va. Code § 22-6A- and (3) A proposed surf d by oil and gas operation ated to horizontal drilling ocated at 601 57th Stree	-10(b) to a surface owner face use and compensations to the extent the dama g may be obtained from the	whose land will be on agreement conta ages are compensa the Secretary, at the		the drilling of a Received issation for damages to the this chapter. Additional Ce of Oil & ironmental Protection
Well Operator:					
Telephone:	EQT Production Com	pany	Address:	115 Professional Place,	P.O. Box 280
Email:	EQT Production Com 304-848-0082 vroark@eqt.com	pany	Address: Bridgeport, Facsimile:		P.O. Box 280

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WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Earl Ray Tomblin Governor

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

December 8, 2014

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 OXF 44 Pad Site, Doddridge County

515939 OXF44H6

515940 OXF44H7

Dear Mr. Martin,

This well site will be accessed from Permit # 04-2014-1228 issued to EQT Production Company for access to the State Road. The well site is located off of Doddridge County Route 52/3 SLS.

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

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer

Tary K. Clayton

Central Office O&G Coordinator

Cc: Nick Bumgardner

EQT Production Company

CH, OM, D-4,

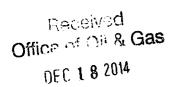
File

Received Office of Oil & Gas

DEC 1 8 2014

Anticipated Frac Additives Chemical Names and CAS numbers

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



PROJECT INFORMATION

PROJECT NAME: EQT OXF 44

TAX PARCEL: SOUTHWEST DISTRICT, DODDRIDGE COUNTY, WV TAX MAP 16

SURFACE OWNERS COASTAL FOREST RESOURCES SOUTHWEST DISTRICT DODDRIDGE COUNTY WAY TAX MAP 16 PARCEL 8.5
TOTAL PROPERTY AREA: 1.57 +/- ACRES
TOTAL DISTURBANCE AREA: 0.97 +/- ACRES

TAX MAP 16 PARCEL 8.3 TOTAL PROPERTY AREA: 1.51 */- ACRES TOTAL DISTURBANCE AREA: 0.55 */- ACRES

TAX MAP 16 PARCEL 6.1 TOTAL PROPERTY AREA: 42.00 +/- ACRES TOTAL DISTURBANCE AREA: 0.20 +/- ACRES

TAX MAP 16 PARCEL 8.2 TOTAL PROPERTY AREA: 418.81 +/- ACRES TOTAL DISTURBANCE AREA: 7.27 +/- ACRES

JIMMIE BURKE SOUTHWEST DISTRICT DODDRIDGE COUNTY, WV TAX MAP 15 PARCEL 8.1 TOTAL PROPERTY AREA: 9 88 44 ACRES TOTAL DISTURBANCE AREA: 0.04 +/- ACRES

ARDEN & CAROL COGAR SOUTHWEST DISTRICT DODDRINGS COUNTY, WY
TAX MAP 16 PARCEL 65
TOTAL PROPERTY AREA: 252.00 %- ACRES
TOTAL DISTURBANCE AREA: 6.57 %- ACRES

OIL AND GAS ROYALTY OWNER: ADELE MODOUGAL, ET AL (2000 +/- ACRES) SOUTHWEST DISTRICT DODDRIDGE COUNTY, WV

THE EQT OXF 44 SITE ENTRANCE IS LOCATED 2.0 MI +/- NORTHWEST OF THE JUNCTION OF CR 52/3 AND CR 52/3, THE WELL PAD IS LOCATED 3.2 MILES +/- NORTH OF THE SAME JUNCTION.

LOCATION COORDINATES

EQT OXF 44 WELL PAD CENTER LATITUDE: 39.145367 LONGITUDE: 80.814023 (NAD 83) EQT CXF 44 ASSOCIATED FLOWBACK PIT CENTER LATITUDE: 39.144800 LONGITUDE: 80.814907 (NAD 83) EQT OXF 44 ACCESS ROAD AT CR 52/3 LATITUDE: 39.135368 LONGITUDE; 80.820458 (NAD 83)

GENERAL DESCRIPTION

THE WELL PAD. ACCESS ROAD, ASSOCIATED FLOWBACK PIT, AND ASSOCIATED IMPOUNDMENT ARE BEING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLUS SHALE GAS WELLS.

SITE DISTURBANCE COMPUTATIONS

WELL PAD AREA = 6.2 */- ACRES ACCESS ROAD = 9.5 */- ACRES TOTAL SITE DISTURBANCE AREA = 15.7 */- ACRES

ENTRANCE PERMIT

EQT PRODUCTION COMPANY WILL OBTAIN AN ENCROACHMENT PERMIT (FORM MAL100) EROL THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MISS UTILITY STATEMENT

MISS UTILITY OF WEST VIRGINIA WAS NOTED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN; TICKET #1433991057, IN ADDITION, MISS UTILITY WILL BE CONTACTED PRIOR TO START OF THE PROJECT.

ENVIRONMENTAL NOTES

A WETLAND DELINGATION WAS PERFORMED BY POTESTA & ASSOCIATES ON 4W2011, 9/20014, 9/17/2014, AND 11/20/2014 TO REVIEW THE SITE FOR WATERS AND WETLANDS THAT ARE MOST INSECTIVELY WITHIN THE REQULATORY PURPOW OF THE US. A MAY CORPS OF ENORNEES (URACE) ANDOR THE WEST VISIONAL DEPARTMENT OF ENVIRONMENTAL PROTECTION, WOVED, THE DECEMBER 8TH, 2014 REPORT FOR ON 64 PERPARED BY POTESTA ASSOCIATES, INC., SUMMARCES THE REBULTS OF THE PELD DELINEATION OF THE REPORT DESIGNATION OF THE PROPERTY OF THE PROPERTY OF THE PROPERTY OF THE PERPARED BY THE REPORT DESIGNATION OF THE PROPERTY OF THE PROPERTY OF THE PERPARED BY THE REPORT DESIGNATION OF THE PERPARED BY THE PROPERTY OF THE PERPARED BY THE REPORT DESIGNATION OF THE PERPARED BY THE PERP THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE USACE OR THE WYDER. IT IS STRONGLY RECOMMENDED THAT THE AFORMENTIONED OSACE OF THE WINDS, IT IS 3 TRONGLY NECOMMENDED THAT THE AFORMENTIONED AGENCIES BE COMMUTED ON THE FFORT TO GAIN WRITTEN CONFINANTON OF THE DELINEATION DESCRIBED BY THIS REPORT PRIOR TO ENGAGING CONSTRUCTION ON THE PROPERTY DESCRIBED HEREIN. THE DEVELOPER SHALL DISTANT HE APPROPRIATE PROMITS FROM THE FEDERAL ANDOR STATE REGULATIONY AGENCIES PRIOR TO ANY PROPOSED BURGETS TO WATERS OF THE U.S. INCLUDING WETLAND FILLS AND STREAM

GEOTECHNICAL NOTES

A SUBSURFACE INVESTIGATION HAS NOT BEEN PERFORMED AS OF 11/14/14. THE ENGINEER AND SURVEYOR ARE NOT RESPONSIBLE FOR UNFORSEEN SUBSURFACE IRREGULARIES CAUSING ADDITIONAL CONSTRUCTION MEASURES REQUIRED BEYOND THOSE STANDARD PRACTICES SHOWN ON THIS PLAN AS A RESULT OF ANY OTHER GEOTECHNICAL COMPLICATIONS ENCOUNTERED DURING CONSTRUCTION

EQT OXF 44 SITE PLAN MODIFICATION BETTY M. RYAN SOUTHWEST DISTRICT DODDRIDGE COUNTY, WY TAX MAP 16 PARCEL 6 TOTAL PROPERTY AREA: 217.00 +/- ACRES TOTAL DISTURBANCE AREA: 9.05 +/- ACRES

EQT PRODUCTION COMPANY (PROPOSED WELL NO. WV515939 (H6) AND WV515940 (H7))

SITUATE ON THE WATERS OF UNNAMED TRIBUTARIES TO STRAIGHT FORK IN SOUTHWEST DISTRICT, DODDRIDGE COUNTY, WV



OXFORD QUADRANGLE WEST VIRGINIA 7.5 MINUTE SERIES

RESTRICTIONS NOTES

- INCOLUNION OF IES

 INTEREA ARE INTERMITENTEPHEMERAL PERENNAL STREAMS, LAXES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE PROJECT LOD. THESE ARE WETLANDS WITHIN 100 FEET OF THE LOD.

 ITHEREA ARE NO ANTURALLY PROJUCIONED TROUS TERMANS WITHIN 300 FEET OF THE PAD AND LOD.

 3. THERE ARE NO GROUNDWATER WITHING OR PUBLIC WATER SUPPLY FACILITIES WITHIN 1000 FEET OF THE PAD AND LOD.

 4. THEREA ARE NO GROUNDWATER WITHING THE STREAMS WITHIN 300 FEET OF THE WELLS BEING ONLINE. STANTED AND SWITHIN LAND SURVEYING ARE NOT RESPONSIBLE FOR ANY EXISTING WATER WELL OR DIVISIONED STREAMS WITHIN 300 FEET OF THE WELLS BEING ONLINE. STANTED AND SWITHING WATER WELL OR DIVISIONED STREAMS WITHIN 300 FEET OF THE WELLS BEING ONLINE. STANTED AND SWITHING WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WATER WATER WATER WATER WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WELL OR DIVISIONED STREAMS WITHING SOCIETY OF THE WATER WA
- S. THERE ARE NO OCCUPIED DWELLING STRUCTURES WITHIN 625 FEET OF THE CENTER OF THE PAD.

 8. THERE ARE NO AGRICULTURAL BUILDINGS LARGER THAN 2,500 SQUARE FEET WITHIN 625 FEET OF THE CENTER OF THE

MISS Utility of West Virginia 1-800-245-4848 1-805-245-4848
West Virginia State Law
(Section XV, Chapter 24-C)
Regules that you cell two
business days before you dig in
the state of West Virginia,
(ITS THE LAW):



API # 1706706 API # 1706707

LIST OF DRAWINGS			
SHEET NO.	DESCRIPTION		
1	TITLE SHEET		
2	GENERAL NOTES		
3	OVERALL PLAN SHEET INDEX		
4-9	ACCESS ROAD AND WELL SITE LAYOUT		
10-12	WELL PAD AND EXISTING FLOWBACK PIT SECTIONS		
13-15	ACCESS ROAD PROFILES AND TYPICAL SECTIONS		
16-20	ACCESS ROAD SECTIONS		
21-25	RECLAMATION PLAN		
26-29	CONSTRUCTION DETAILS		
30	CONSTRUCTION QUANTITIES		

	LEG	END	Den variable
EX. HOEX CONTOUR EX. HOEX CONTOUR EX. BOUNDAY UNE EX. EDGE OF ROAD PAYEMENT EX. APPROVED LIMIT OF DISTURBANCE EX. GUARDRAIL EX. FENCELINE EX. GUARDRAIL EX. FENCELINE EX. CATE EX. WATER EX.	E	FROP PROP. PICEX CONTOUR PROP. CUT LINE PROP. PICE CONTOUR PROP. CUT LINE PROP. PILL LINE PROP. PILL LINE PROP. CONTOUR PROP. CONTOUR PROP. WELL HEAD PROP. CONTOURNETTAL ASSESSMENT AREA OF DELINEATION PROP. WELL HEAD PROP. COLVERT PROP. PROP. CONTOUNTET PROTECT PROP. PROP. PROP. COMPOST FILTERSOCK PROP. PROCK CONSTRUCTION ENTRANCE X-SECTION GRID INDEX X-SECTION GRID INDEX X-SECTION GRID INDEX	- 1550 - C - F - C - C - C - C - C - C - C - C
EX, GASLINE EX, GASLINE RW EX, WATERLINE	***	PROP, ROCK CONSTRUCTION ENTRANCE X-SECTION GRID INDEX	

OPERATOR

EQT PRODUCTION COMPANY OPERATOR ID: 306686 P.O. BOX 280 BRIDGEPORT, WV 28630

ENGINEER

STANTEC CONSULTING, INC. 111 ELKINS STREET FAIRMONT, WV 28554 PHONE: (304) 367-940

SURVEYOR

SMITH LAND SURVEYING, INC. 12 VANHORN DRIVE PO BOX 150 GLENVILLE, WV 26351 PHONE: (304) 462-563Stantec



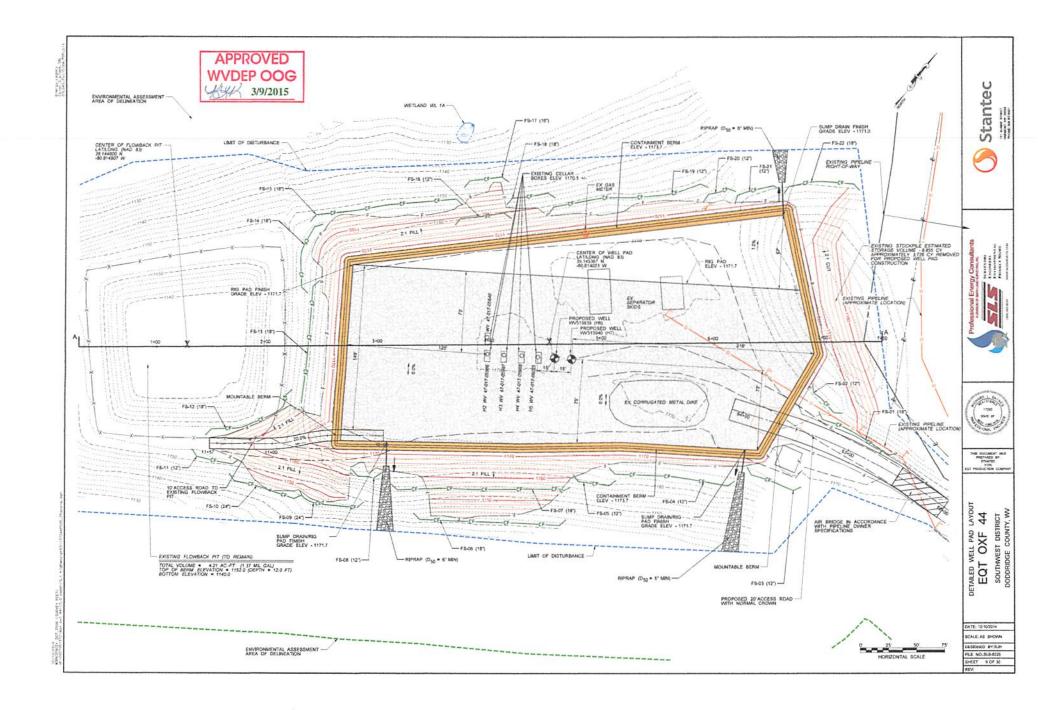




44 OXF EQT

DATE: 12/10/2014 SCALE, AS SHOWN DESIGNED BY:RJH FILE NO./51.5-6226 SHEET 1 0F 30

Electronic version of these plans may be viewed at: O:\OIL GAS\SAY FILES\REVIEWS



TOTAL DISTURBANCE AREA 0.05 +/- ACRES

TOTAL PROPERTY AREA: 42.00 +/- ACRES
TOTAL DISTURBANCE AREA: 0.20 +/- ACRES

TAX MAP 16 PARCEL 6 TOTAL PROPERTY AREA, 217.00 4/ ACRES

TAX MAP 16 PARCEL 8.3 TOTAL PROPERTY AREA: 3.51 +/- ACRES TOTAL DISTURBANCE AREA: 0.55 +/- ACRES

TAX MAP 16 PARCEL 8.2 TOTAL PROPERTY AREA: 416.61 +/- ACRES TOTAL DISTURBANCE AREA: 7.27 +/- ACRES JIMME BURKE SOUTHWEST DISTRICT DODORDGE COUNTY, WV TAX MAP 16 PARCEL 8.1 TOTAL PROPERTY AREA 9 58 +1- ACRES TOTAL DISTURBANCE AREA 0.04 +1 ACRES

ARDEN & CARCL COGAR SOUTHWEST DISTRICT DODDRIDGE COUNTY, WV TAX MAP 16 PARCEL 05
TOTAL PROPERTY AREA 252 00 +/- ACRES
TOTAL DISTURBANCE AREA 6 57 +/- ACRES

OIL AND GAS ROYALTY OWNER ADELE MCDOUGAL, ET AL (2000 +/- ACRES) SOUTHWEST DISTRICT DODDRIDGE COUNTY, WY

THE EQT DISF 44 SITE ENTRANCE IS LOCATED 2 0 MI +- NORTHWEST OF THE JUNCTION OF CR \$3/3 AND CR \$2/3 THE WELL PAD IS LOCATED 3.2 MLES +- NORTH OF THE SAME JUNCTION

LOCATION COORDINATES

EQT CKF 44 WELL PAD CENTER LATITUDE: 39.145367 LONGITUDE: 80.814023 (NAD 83) EQT CXF 44 ASSOCIATED FLOWBACK PIT CENTER LATITUDE 39 144800 LONGITUDE 80 814907 INAD 831 EQT CKF 44 ACCESS ROAD AT CR 52/3 LATITUDE: 39 135368 LONGITUDE: 80 820458 (NAD 83)

GENERAL DESCRIPTION

THE WELL PAD, ACCESS ROAD, ASSOCIATED FLOWBACK PIT, AND ASSOCIATED INPOLIMENT AND EBING CONSTRUCTED TO AID IN THE DEVELOPMENT OF INDIVIDUAL MARCELLIS SHALE GAS WELLS.

SITE DISTURBANCE COMPUTATIONS

WELL PAD AREA + 6.2 +/- ACRES ACCESS ROAD + 9.5 +/- ACRES TOTAL SITE DISTURBANCE AREA + 15.7 +/- ACRES

ENTRANCE PERMIT

EQT PRODUCTION COMPANY WILL OBTAIN AN ENCROACHMENT PERMIT (FORM MM-109) FRO THE WEST VIRIGINA DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MISS UTILITY STATEMENT

MISS UTELTY OF WEST VIRGINA WAS NOTED FOR THE LOCATING OF UTILITIES PRIOR TO THIS PROJECT DESIGN, TICKET \$143391057. IN ADDITION, MISS UTILITY WILL BE CONTACTED PRIOR TO START OF THE PROJECT

ENVIRONMENTAL NOTES

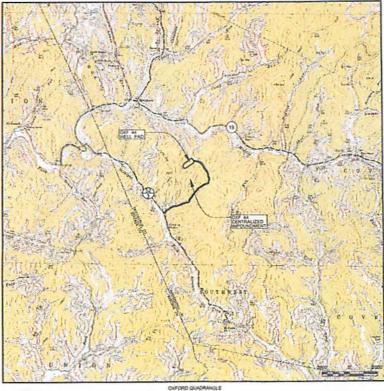
A WETLAND DELINEATION WAS PERFORMED BY POTESTA & ASSOCIATES ON 4442011, 9/2/2014, 8/17/2014, AMD 11/2/2/2014 TO REVIEW THE STIFE FOR WASTERS AND WETLANDS THAT ARE MOST LIKELY WITHIN THE REGULATORY PURVIEW OF THE U.S. ARMY CORPS OF ENGINEERS (USACE) AND/OR THE WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (WODE). THE DECEMBER STH, 2014 REPORT FOR OUT 44 PREPARED BY POTESTA & ASSOCIATIES, INC., SUMMARIZES THE RESULTS OF THE FIELD DELIMEATION. THE REPORT DOES NOT, IN ANY WAY, REPRESENT A JURISDICTIONAL DETERMINATION OF THE LANDWARD LIMITS OF WATERS AND WETLANDS WHICH MAY BE REGULATED BY THE THE LAGRANDILIMITE OF WATERS AND WELLANDS WHICH MAY BE REGULATED BY THE AGENCY OF THE RESPONSITION BY A REPORT TO CAN WRITTEN DOOR PRANTON OF THE DELARATION DESCRIPTION OF THE DELARATION DESCRIPTION OF THE DELARATION DESCRIPTION OF THE DELARATION DESCRIPTION OF THE PROPERTY DESCRIPTION OF THE DESCRIPTION SHALL DETAIL THE APPROPRIATE PROMITS FROM THE PERMITS FRO

GEOTECHNICAL NOTES

A SUBSURFACE INVESTIGATION HAS NOT BEEN PERFORMED AS OF 11/14/14. THE ENGINEER AND SURVEYOR ARE NOT RESPONSIBLE FOR UNFORSEEN SUBSURFACE IRREGULARITIES CAUSING ADDITIONAL WORK OR ADDITIONAL CONSTRUCTION MEASURES REQUIRED BEYOND THOSE STANDARD PRACTICES SHOWN ON THIS PLAN AS A RESULT OF ANY OTHER GEOTECHNICAL COMPLICATIONS ENCOUNTERED DURING CONSTRUCTION

EQT OXF 44 SITE PLAN MODIFICATION EQT PRODUCTION COMPANY (PROPOSED WELL NO. WV515939 (H6) AND WV515940 (H7))

SITUATE ON THE WATERS OF UNNAMED TRIBUTARIES TO STRAIGHT FORK IN SOUTHWEST DISTRICT, DODDRIDGE COUNTY. WV



OXFORD QUADRANGLE WEST VIRGINA 7.5 MINUTE SERIES

RESTRICTIONS NOTES

* THERE ARE INTERNATIFIED HENERAL RESENVALS STREAMS LAKES PONDS OR RESERVOIRS WITHIN 100 FEET OF THE

1. THERE ARE INTERNATION EPIPEMERAL PERSONAL STREAMS, LAKER, POINCS, OR RESERVORS WITHIN 100 FEET OF THE PROJECT LOSS. THERE ARE INSTITUTIONS WITHIN 100 FEET OF THE OFFEET OF THE PAID AND LOSS.

2. THERE ARE IN ON MININALLY PRODUCING TROUT STREAMS WITHIN 300 FEET OF THE PAID AND LOSS.

3. THERE ARE IN ON MININE STREAMS WITHIN 100 FEET OF THE PAID AND LOSS. THE PAID AND LO

MISS Utility of West Virginia 1-800-245-4948 1-800-245-4948 West Virginie State Ltiw (Section XIV, Chapter 24-C) Requires that you call two business days before you dig the state of West Virginia. IT'S THE LAW!

LIST OF DRAWINGS SHEET NO. TITLE SHEET GENERAL NOTES **DVERALL PLAN SHEET INDEX** ACCESS BOAD AND WELL SITE LAYOUT 4-9 WELL PAD AND EXISTIN 10-12 FLOWBACK PIT SECTIONS ACCESS ROAD PROFILES AND 13-15 TYPICAL SECTIONS ACCESS ROAD SECTIONS 16-20 RECLAMATION PLAN 21-25 CONSTRUCTION DETAILS 26-29 CONSTRUCTION QUANTITIES 30

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SURVEYOR

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Stante



47-017-00706





44 SOUTHWEST DISTRICT DODDRIDGE COUNTY, W OXF EQT

SHEE

SCALE AS SHOWN DESIGNED BY AM PILE NO. BLR-8236 \$HEET 1 OF 30

