

west virginia department of environmental protection

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

www.dep.wv.gov

WELL WORK PERMIT

Re: Permit approval for

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

Chief

03/16/2018

Operator's Well Number: Farm Name: U.S. WELL NUMBER:

Date Issued:

Promoting a healthy environment.

PERMIT CONDITIONS

API Number:

4710302905

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

CONDITIONS

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

API Number: 47 10 302905

PERMIT CONDITIONS

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

WW-6B (04/15)

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API NO. 47- 103	02905
OPERATOR WEL	LNO, SMITH 3H
Well Pad Name	: SMITH

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

I) Well Operator:	EQT Production Company	306686	Wetzel	Magnolia	New Martinsville
		Operator ID	County	District	Quadrangle
2) Operator's Well N	Jumber: SMITH 3H	Well Pac	I Name: SMIT	н	
3) Farm Name/Surfa	ce Owner: Smith, Sonny & Cl	narlotte Public Roa	d Access: We	zel County	Route 22
4) Elevation, current	ground: <u>1321</u> E	levation, proposed	post-constructi	on: <u>13</u> 21	
5) Well Type (a) C	Gas <u>×</u> Oil	Unde	erground Storag	ge	
Othe		······	····		
(b)If	f Gas Shallow X	Deep			
6) Existing Pad: Yes	Horizontal X				Den H
· •	· · · · · · · · · · · · · · · · · · ·	ningtod Thieleness	- 		10.7-0
	Formation(s), Depth(s), Antic 56', 2,500 & 3,000 psi	cipated i nickness a	na Expected P	ressure(s):	10.3.11
8) Proposed Total V	ertical Depth: 6,701'			<u> </u>	
9) Formation at Tota	I Vertical Depth: Marcellu	S		<u></u>	
10) Proposed Total N	Measured Depth: 10,782'				
11) Proposed Horizo	ontal Leg Length: 3,411'				
12) Approximate Fre	esh Water Strata Depths:	100			
13) Method to Deter	mine Fresh Water Depths:	Noticeable flow fr	om flowline or	when hav	ing to start soaping
14) Approximate Sa	Itwater Depths: 2,183				
15) Approximate Co	al Seam Depths: 1,018	<u></u>			
16) Approximate De	epth to Possible Void (coal m	ine, karst, other):	None Anticipa	ted	
17) Does Proposed v	well location contain coal sea	ams			
	adjacent to an active mine?		No	<u>X</u>	
(a) If Yes, provide	Mine Info: Name:				
	Depth:				
	Seam:				
	Owner:				Office of Oil and G
					OCT 11 2017
					MA/ Dependence of

WV Department of Environmental Protection Page 1 of 3

03/16/2018

WW-6B (04/15)

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API NO. 47- 103 - 02905 OPERATOR WELL NO. SMITH 3H Well Pad Name: SMITH

18)

CASING AND TUBING PROGRAM

TYPE	<u>Size</u> (in)	<u>New</u> or Used	<u>Grade</u>	<u>Weight per ft.</u> (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	20"	New	LS	94.1	90'	90'	40- CTS
Fresh Water	13.375"	New	J55	54.5	1,329'KB-1314'GL	1,329'KB-1314'GL	1,140- CTS
Coal	13.375"	New	J55	54.5	1,329'KB-1314'GL	1,329'KB-1314'GL	1,140- CTS
Intermediate	9.625"	New	J55	36.0	2571'	2571'	643Lead - 377Tail CTS
Production	5.5"	New	P110	20.0	10,762'	10,762'	422 Lead - 2341 Tail CTS
Tubing	2.375"	New	J55	4.7		6,500'	N/A
Liners	N/A						

ТҮРЕ	<u>Size (in)</u>	<u>Wellbore</u> Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	<u>Burst Pressure</u> (psi)	Anticipated Max. Internal Pressure (psi)	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Yield</u> (cu. ft./k)
Conductor	20"	24"	0.375"	N/A	17 psi	Type 1	1.18
Fresh Water	13.375"	17.5"	0.380"	2,730 psi	2160 psi	Class A	
Coal	13.375"	17.5"	0.380"	2,730 psi	2160 psi	Class A	
Intermediate	9.625"	12.25"	0.352"	3,520 psi	2814 psi	Class A	
Production	5.5"	8.75"	0.361"	12,360 psi	10112 psi	Class A	2.37 Lead - 1.20 Tail
Tubing	2.375"	N/A	0.190"	7,700 psi		N/A	N/A
Liners							

PACKERS

Kind:		
Sizes:		
Depths Set:		 Al ianten en e

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WW-6B (10/14)

API NO. 47- 103 - 02805 OPERATOR WELL NO. SMITH 3H Well Pad Name: SMITH

> 1)mH 10-7-17

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

Well has been drilled to TD, propose to perforate and fracture the Marcellus and turn in to production.

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

Hydraulic fracturing is completed in accordance with state regulations using water recycled from previously fractured wells and obtained from freshwater sources. This water is mixed with sand and a small percentage (less than 0.3%) of chemicals (including 15% Hydrochloric acid, gelling agent, gel breaker, friction reducer, biocide, and scale inhibitor), referred to in the industry as a "slickwater" completion. Maximum anticipated internal casing pressure is expected to be approximately 10000 psi, maximum anticipated treating rates are expected to average approximately 100 bpm. Stage lengths vary from 150 to 300 feet. Average approximately 350,000 barrels of water per stage. Sand sizes vary from 100 mesh to 20/40 mesh.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): no additional

22) Area to be disturbed for well pad only, less access road (acres): no additional

23) Describe centralizer placement for each casing string:

Surface casing had bow spring centralizers placed on joints 28 and 30. Intermediate casing had bow spring centralizers placed on joints 4, 8, 12, 16, 20, 24, 28, 32, 37, 41, 45, 49, 53 and 57. Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 188. Ran a total of 48 rigid spiral centralizers. Ran bow spring centralizers from joint 196 to joint 244 on every eighth joint. A total of 7 bow spring centralizers were run.

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

Fresh water/coal string will be cemented using a sturry of Class A cement with 0.10 (b/sx Cello flake, 0.20% BWOB Anti-foam, and 1.0% BWOB CaCl2. Intermediate string will be cemented using a lead and tail sturry; Lead is Class A cement with 0.20 gps accelerator, 0.07 gps dispersant, 0.10 gps Anti-Foam, 4.0% BWOB Expanding Agent, and 0.50% BWOB Gas Control Agent. Tail is Class A cement with 1.0% BWOB CaCl2, 0.1 lb/sx Cello-Flake, and 0.2% BWOB Anti Foam. Production string will be cemented using a Lead and Tail Slurry; Lead is Class A cement with 0.10 gps dispersant, 0.10 gps Anti-foam, 0.05 gps Retarder, 4.0% BWOB Expanding Agent, and 0.50% BWOB Gas Control Agent. Tail is Class A cement with 0.90% BWOB Dispersant, 0.30% BWOB Fluid loss, 0.20% BWOB Anti-Foam, and 0.60% BWOB Retarder.

25) Proposed borehole conditioning procedures:

Fresh Water/Coal section will be done by circulating air through the drill string at TD between 30 and 60 minutes or until the well bore is clean of cuttings.

Intermediate section will be done by circulating air and/or stiff foam through the drill string at TD between 30 and 120 minutes or until the well bore is clear of cuttings.

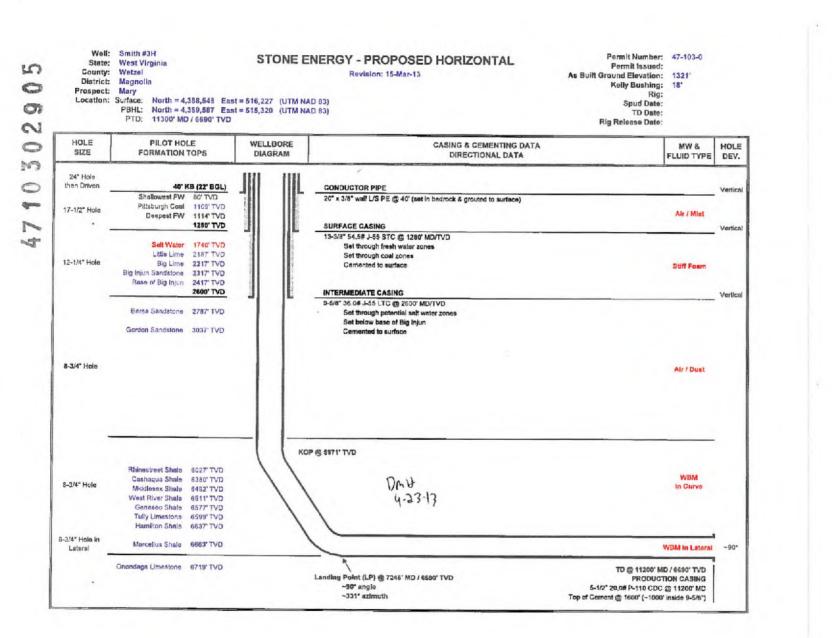
Production section will be done by circulating drilling fluid through the drill string at TD between 60 to 720 minutes until the shakers are clear of cuttings and drill string pulls free of bottom.

Office of Of and Gas

OCT 11 2017

*Note: Attach additional sheets as needed.

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Environmental Protection WW Department of

2017 SEP 9.5

Gas

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Well: State: County: District: Prospect: Location:	PBHL: (N) 420,26	471 1' (E) 1,630,82	014-0003T) () 3 () 2 9 () 29' State Plane WV 22' State Plane WV	Rig North NAD 27 Spud Date	: 7/31/2013 : 1321' : 15' : NOMAC Rig : 11/17/2013 : 11/24/2013	
HOLE SIZE	FORMATIC	DN	WELLBORE	CASING & CEMENTING DATA	MW & TYPE	HOLE DEV.
Pre-Set Conductor	90' K	B (75' BGL)		CONDUCTOR PIPE		Vert
17-1/2" Hole (Hammer) -	Shallowest FW Pittsburgh Coal Deepest FW	100' TVD 1018' TVD 1023' TVD 1329'		20" @ 90' (set in bedrock 9-5/8" TAM CAP Packer SURFACE CASING	@ 1194' MD/TVC Air / Mist	0.3*
12-1/4" Hole (Rock Bit)	RED BEDS Little Lime Salt Water Big Lime Big Injun	2163' TVD 2183' TVD 2193' TVD 2293' TVD		13-3/8" 54.5# J-55 STC @ Set through fresh w Do not set deeper t Cemented to surfac	ater and coal zor han ground eleva	nes
-	Base of Big Injun	2393' TVD 2571'		9-5/8" 36.0# J-55 LTC @ Set through potentia	2571' MD/TVD	0,4°
8-3/4" Hole Slant	Berea	2762' TVD		Set below base of E Cemented to surfac		
(Hammer)	Gordon	2983' TVD		Performed SLANT due to ant	I-COLLISION CONC	erns:
8-3/4" Hole to KOP (Hammer)						
		5765' TVD			Air / Dust	11.1°
	Rhinestreet Base	6360' TVD		OP HOLE TD @ 5808' MD / 576 (~247' above planned KOP)	RECE Office of C	EIVED
	Middlesex	6517' TVD				and (
	West River	6534' TVD 6731' TVD			SEP 2	5 2017
	Geneseo Shale Tully LS	6761' TVD				
	Hamilton Shale	6786' TVD		En	WV Depar Vironmonte	tment n
	Marcellus Shale	6821' TVD			vironmenta 03/	Elana
	Onondaga LS	6871' TVD			03/	0/2010

WR-35 Rev. 8/23/13

NOV. 0/25/15		
State of West Virgin Department of Environmental Protection Well Operator's Report of V	iia - Office of Oil and Gas Well Work	RECEIVED Office of Cil and C
API 47 - 103 02905 County Wetzel Quad New Martinsville Pad Name Smith Farm name Smith, Sonny and Charlotte Operator (as registered with the OOG) Stone Energy Corporation	Wy Envirc District Magnolia Field/Pool Name Mary Well Number #3H	V Department of montal Protectio
Address 1300 Fort Pierpont Dr Suite 201 City Morgantown	State	Zip
As Drilled location NAD 83/UTM Attach an as-drilled plat, profile v Top hole Northing 4,388,548 Landing Point of Curve Northing 4,388,694 Bottom Hole Northing 4,388,588	iew, and deviation survey Easting 516,227 Easting 515,832 Easting 515,322	
Elevation (ft) 1,321 GL Type of Well □New ■ Exist	ing Type of Report Inte	rim □Final
Permit Type Deviated Horizontal Horizontal 6A Ve	rtical Depth Type 🗆 D	Deep 📕 Shallow
		imulate
	-	
Well Type □ Brine Disposal □ CBM ■ Gas □ Oil □ Secondary Recover	y □ Solution Mining □ Storage	□ Other
Type of Completion Single Multiple Fluids Produced Brine	Gas ONGL Oil Oth	ner
Drilled with Cable Rotary		
Drilling Media Surface hole Air D Mud BFresh Water Interm	ediate hole ■ Air □ Mud ■ Fr	resh Water 🗆 Brine
Production hole Air Mud Fresh Water Brine		
Mud Type(s) and Additive(s)		
Saturated salt mud which includes Caustic Soda, Barite, Lime, New	w-Drill, Perma-Lose HT, Xan-P	lex D, X-Cide 102,
Soda Ash, and Sodium Chloride		
Duce permit issued Duce drining commenced	7/2013 Date drilling ceased ion activities ceased Not Yet Ce	
Verbal plugging (Y/N) N Date permission granted		
	2 u 0 ,	
Please note: Operator is required to submit a plugging application within 5 da	ays of verbal permission to plug	
Freshwater denth(s) ft 100 Open mine(s)	(V/Ni) denths N	.t
Freshwater depth(s) ft 100 Open mine(s)	(Y/N) depths	•

Freshwater depth(s) ft	100		Open mine(s) (Y/N) depths		
Salt water depth(s) ft	2,183		Void(s) encountered (Y/N) depths	N	
Coal depth(s) ft	1,018		Cavern(s) encountered (Y/N) depths	N	
Is coal being mined in area (Y/N)		N			

Reviewed by:

03/16/2018

Page 1 of ____

WR-35 Rev. 8/23/13

Intermediate 2 Intermediate 3 Production

Tubing

Lead-TunedSpacer3 Tail-VariCem

4710302905

Lead-2.37 Tail-1.21 Lead-422 Tail-2,341

Page <u>2</u> of ____

7.0

API 47-103 02905

Farm name Smith, Sonny and Charlotte

____Well number #3H

1,493 calculated

CASING	Hole	Ca	asing			Nev	w or	Grade		Basket		Did cement circulate (Y/ N)
STRINGS	Size	S	ize	D	epth	U	sed	wt/ft		Depth(s)	* Provide details below*
Conductor	24"		20"		90'	N	lew	LS - 1	94.1 ppf			N - GTS
Surface	17.5"	1	3.375"	1,329' Ki	3 - 1,314' GL	N	lew	J55 -	54.5 ppf	122'	\$ 203'	Y - CTS
Coal	17.5"	1	3.375"	1,329' KI	3 • 1,314' GL	N	lew	J55 -	54.5 ppf	122'	3 203'	Y - CTS
Intermediate 1	12.25"		9.625"	2,	571'	N	lew	J55	- 36 ppf			Y - CTS
Intermediate 2												
Intermediate 3							-					·····
Production	8.75"		5.5"	10	,762'	N	lew	P110	- 20 ppf			N - TOC @ 1,493' Calculate
Tubing				÷								
Packer type and	lepth set	TAM	CAP Inflatab	le Paci		194'	on the 9	.625" ca	sing string			.
		•										
Comment Details	Girculated 14 bb	s cement	to surface on 13	3.375" ca	sing string. Cit	rculate	ed 9 bbls co	ement to su	rface on the 9.	625" casir	ng string. C	irculated 25 bbls TunedSpacer to
suface on the 5.5"	casing string. TOC o	on 5.5" @	1,493' calculate	d.								
CEMENT DATA	Class/Typ of Cemen		Numbe of Sack	-	Slurry wt (ppg)			eld /sks)	Volume (f <u>1</u> _1)	;	Cemer Top (M	
Conductor	Type 1		34		15.6		1.	18	40		Surfac	ce 24.0
Surface	Class "A	1	950		15.6		1.	20	1,140		Surfa	ce 8.0
Coal	Class "A	"	950		15.6		1.	20	1,140		Surfa	ce 8.0
Intermediate 1	Lead-10% Salt Tail-	Class "A"	Lead-502 Ta	ail-317	Lead-15.6 Tail	15.6	Lead-1.28	Tail-1.19	Lead-643 Ta	il-377	Surfac	xe 12.0

Drillers TD (ft) 10,782 MD / 6,701 TV	D		Loggers TD (ft) NA					
Deepest formation penetrated M	arcellus Shale							
Plug back procedure								
Kick off depth (ft) 6,060 MD / 6,013	TVD							
Check all wireline logs run	□ caliper □ neutron	□ density □ resistivity	 deviated/directional gamma ray 	 induction temperature 	⊐sonic			
Well cored 🗆 Yes 🛔 No	Conventio	nal Sidewa	all Were cu	ittings collected	∎ Yes □ No			
DESCRIBE THE CENTRALIZ	tralizers placed on joints 4,	8, 12, 16, 20, 24, 28, 32, 37,	41, 45, 49, 53 and 57.					
Production casing had rigid spiral centralizers pla		nt beginning with joint 1	to joint 188. Ran a total of 48 rigid spira	al centralizers. Ran bow s	bring centralizers from joint 196 to joint 244			
on every eighth joint. A total of 7 bow spring cer	itralizers were run.				DEcen			
WAS WELL COMPLETED AS	SHOT HOLE	🗆 Yes 🔳 N	No DETAILS		RECEIVED Office of Oil and Gas			
WAS WELL COMPLETED OP	EN HOLE?	□Yes ■ No	DETAILS		SEP 2 5 2017 WV Department of			
WERE TRACERS USED DY	es 🖹 No	TYPE OF TR	ACER(S) USED	E	invironmental Protection			

Lead-178 Tail-1,935 Lead- 14.5 Tail-15.2

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API 47- 103 _ 02905

Farm name_Smith, Sonny and Charlotte

___Well number____#3H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
					<u></u>			
								BECEIVED
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			· · · · · · · · · · · · · · · · · · ·					

Please insert additional pages as applicable.

SEP 25 2017

WV Department of Environmental P6/2018

WR-35 Rev. 8/23/13

API 47- 103	_ 02905	Farm 1	name Smith, S	Sonny and	Charlotte	Well	number <u>#</u>	3H	
PRODUCING	FORMATION	S)	DEPTHS						
Not Yet Comple				TVD		MD			
	· · · · · · · · · · · · · · · · · · ·			_110 _					
Please insert ad	ditional pages a	s applicable.							
GAS TEST	🗆 Build up 🛛 🗆	Drawdown	Open Flow	C	DIL TEST	Flow c	Pump		
SHUT-IN PRES	SSURE Surfa	ace	_psi Botto	m Hole	psi	DURA	TION OF	TES	T hrs
OPEN FLOW	Gas mcfj	Oil pdb	NGL	_ bpd			fEASURI nated □		
LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN F					D QUANTITYAND NE, OIL, GAS, H₂S, ETC)
Dec Attached Obert	0		0						
See Attached Sheet									
	<u> </u>								
Please insert ad	ditional pages a	s applicable							
	. •	••	Drilling (borizon	tal)					
Drilling Contrac Address 2034 M					s / The Woodland	s State	PA / TX	Zip	25312 / 77381
								P .	
Logging Compa Address 124 Vis			City	Charleroi / W	/eston	State	PA / WV	Żin	15022 / 26452
			0.0					P .	
Cementing Con Address 1178 US	B HWY 33 East	arger	City	Weston		State	w	Zip	26452
Stimulating Cor	npany								
Address			City			State		Zip	
Please insert ad	ditional pages a	s applicable.							RECEIVED
Completed by	Brian Bell				Telephone	304-225	-1633		Office of Cil and Gas
Signature		·	Title _C	ompletions En			Date		SEP 2 5 2017
Submittal of Hy	draulic Fracturi	ing Chemical D	Disclosure Infor	mation	Attach copy o	fFRACF	OCUS R	egist	rv
					······································				WV Department ∩ Environ <mark>Mehte/2018</mark>

47 10 302905

EQT Production

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Hydraulic Fracturing Monitoring Plan

Pad ID: Smith

Wetzel County, WV

9/19/17

Page 1 of 2

Purpose

47 10 302905

The purpose of this pad-specific Hydraulic Fracturing Monitoring Plan is to identify and notify conventional well operators near EQT hydraulic fracturing in Wetzel County, WV prior to hydraulic fracturing at the following EQT wells on Smith pad: Smith 1H, Smith 3H

Due to the requirements under 35CSR8 5.11, the permittee is required to review the area surrounding the proposed well pad so as to identify and evaluate potential conduits for unintended fracture propagation. A report is required to be submitted along with a well work permit application.

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

1. Communications with Well Operators

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

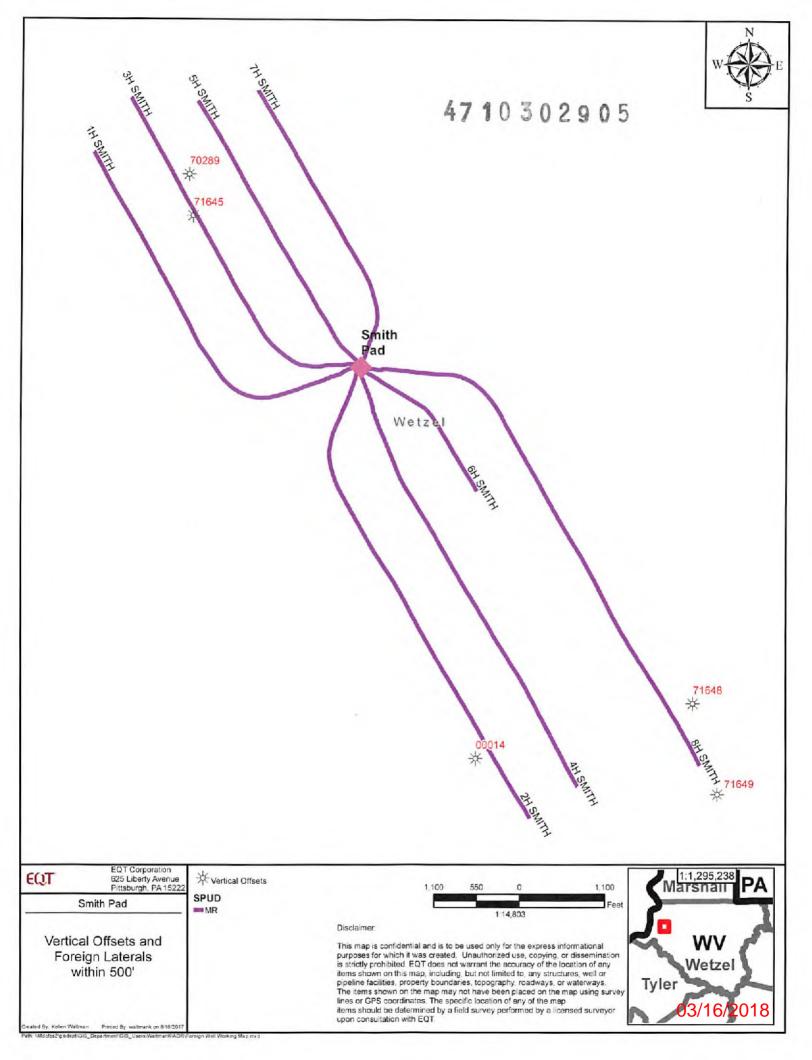
EQT will notify these operators of the hydraulic fracturing schedule for these wells, and coordinate with them throughout the fracturing process.

EQT will recommend to these operators at a minimum to:

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

2. Reporting

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



47103716480000	47103716490000	47103716450000	0	47103702890000	
47103716480000 8/13/1925 UNKNOWN	UNKNOWN	UNKNOWN	12/1/1929 LEATHERWOOD INCORPORATED	UNKNOWN	Completion D Current Operator
888 GF	•	0	790 GR	•	Elevation Elevation Refi Final Statu: Lat
ÿR	SR	ÿ	¥	GR	Elevation Re
D&A-OG	UNKWN	UNKWN	D&A	PSEUDO	f: Final Statu:
39.634591	39.631398	39.651717	39.632704	39.653169	Lat
D&A-OG 39.634591 -80.795796	-80.794669	39.651717 -80.818692	-80.80574;	-80.81888	Long
	U	2	2 10/17/1929	8	Permit Date
7/14/1925			11/1/1929		SPUD Date
6/29/1925 7/14/1925 HAMPSHIRE			39.632704 -80.805742 10/17/1929 11/1/1929 BIG INJUN /SD/		Permit Date SPUD Date TD Formation N: Total Depth Permit
2842 71648	0 71649	0 71645	1926 00014	0 70289	al Depth Permit

•

ww-9 4710302905	
(4/16) API Number 47 - 103 - 02905	
Operator's Well No. SMITH 3H STATE OF WEST VIRGINIA	-
DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS	
FLUIDS! CUTTINGS DISPOSAL & RECLAMATION PLAN	
Operator Name_EQT Production Company OP Code _ 306686	
Watershed (HUC 10) Tributary of of Doolin Run Quadrangle New Martinsville	
Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes <u>V</u> No <u>Will a pit be used?</u> Yes <u>No V</u>	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes No If so, what ml.?	
Proposed Disposal Method For Treated Pit Wastes:	
Land Application Underground Injection (UIC Permit Number_0014, 8462, 4037) Reuse (at API Number_Various) Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain	
Will closed loop system be used? If so, describe:	Dell
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etcn/a	- 1)1414
-If oil based, what type? Synthetic, petroleum, etc. 1/2	_ 10.3-h
Additives to be used in drilling medium?	-
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etcn/a	•
-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A	
-Landfill or offsite name/permit number?	-
Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at a West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclowhere it was properly disposed.	ny se
I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection Lunderstand t	issued

on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature	
Company Official (Typed Name) Victoria J. Roark	
Company Official Title_Regional Land Supervisor	
Subscribed and sworn before me this 2 day of September, 2017	RECEIVED Office of Oil and Gas
<u>Relucca & Wanstreet</u> Notary Public My commission expires 4-7-2020	OCT 11 2017
My commission expires $4 - 1 - 20 = 0$	1

WV Department of Environment

Alsike Clover

Form	W	W	-9
------	---	---	----

EQT Production Company Proposed Revegetation Treatment: Acres Disturbed no additional Prevegetation pH Lime 3 Tons/acre or to correct to pH 6.5 Fertilizer type Granular 10-20-20 Fertilizer amount 1/3 lbs/acre Mulch 2 Tons/acre Seed Mixtures Temporary Permanent Seed Type lbs/acre Seed Type lbs/acre **KY-31** 40 **Orchard Grass** 15 Alsike Clover 5

Attach:

Annual Rye

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

Photocopied section of involved 7.5' topographic sheet.

15

Plan Approved by:	and a second
Comments:	
Title: <u>Dil + G <s inspech<="" u=""> Field Reviewed? <u>()</u> Yes () No</s></u>	
Field Reviewed? () Yes () No	RECEIVED Office of Oil and Gas
	OCT 11 2017

Operator's Well No. SMITH 3H

5

WV Department of Environmental Protection 03/16/2018 WW-9 Rev. 1/12

4-23-17

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

CONSTRUCTION AND RECLAMATION PLAN AND SITE REGISTRATION APPLICATION FORM GENERAL PERMIT FOR OIL AND GAS PIT WASTE DISCHARGE

Operator Name	STONE E	ENERGY CORPO	RATION	OP Code	494490923
Watershed	Tributary of Do	olin Run	Quadrangle	New	Martinsville
Elevation	1,335'	County	Wetzel	District	Magnolia
Description of anti-	cipated Pit Waste:	Ther	e will not be a waste pit	constructed on th	nis well site
Do you anticipate i	using more than 5,000	bbls of water to c	complete the proposed v	vell work? Yes	✓ No
Will a synthetic lin	er be used in the pit?	N/A	If so, what mil.?	N/A	
Proposed Disposal –	Method For Treated P Land Applicat	ion	ermit Number Hunter D	lisposal 2D0859721.	34-121-24037, 34-121-24086)
			ick will be stored in tanks ar		
	Off Site Dispo	sal (Supply form	WW-9 for disposal loc	ation)	
	Other (Explain				

Additives to be used? _ See Attached WW-9 Addendum

Will closed loop system be used ? Both Top Hole and Horizontal drilling rigs will incorporate the use of a closed loop system

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. Approved and permitted of site landfill

-If left in pit and plan to solidify what medium will be used? Cement, lime, N/A

-Landfill or offsite name/permit number? Wetzel County Sanitary Landfill (SWF-1021/WV0109185)

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

-- 1 -- /1

Company Official Signature Company Official (Typed Name)	Timothy P. McGregor	
Company Official Title	Land Coordinator	
Subscribed and sworn before me this 172	day of <u>April</u> , 20 <u>13</u>	-
Danielle & Anoder	Notary Public Office of	CEIVED Oil and Gas
My commission expires <u>5 8 202</u> ,	OFFICIAL SEAL NOTARY PUBLIC STATE OF WEST VIRGINIA DANIELLE L SNODERLY RR2 Box 24BA, Fairmont, WV 26554 My Commission Expires May 18, 2021	5 2017

WW-9 Rev. 1/12

API No. 47	103	-02905
Operator's Well	No	SMITH #3H

Property Bou	indary	Diversion			
Road	=======	= = Spring	\bigcirc		
Existing Fen	°° ———————————————————————————————————	X	Ŭ		
Planned Fen	/ / / / / / / / / / / / / / /	/ Drain Pipe w/ size in inches			
Stream	<u>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~</u>				
Open Ditch	- 	Waterway			
Rock	ප ්දුදුදු	Cross Drain			
A l-at	†	Artificial Filter Strip XXXXXXXXX			
North	N	Pit: Cut Walls			
Buildings		Pit: Compacted Fill Walls	With the second		
Water Wells Drill Sites	$\textcircled{\textbf{S}}$	Area for Land Application of Pit Waste			
Proposed Revegetation	Treatment: Acres Disturbed	14.22 Prevegetation p	ын		
Lime	2.0 Tons/acre or to correct	to pH 6.5			
Eastilizan (10.	20-20 or equivalent) 500 - 750				
· · · ·	• • •	IDS/ACTE (500 IDS minimum)			
Mulch 0.50 to 0.75 TPA + Straw Tons/acre					
		Seed Mixtures			
	Area I	Δ	rea 11		
Seed Type	lbs/acre	Seed Type	lbs/acre		
Marcellus Mix	100.0	Marcellus Mix	100.0		
White or Ladino Cl	over 10.0	White or Ladino Clove	r 10.0		
Orchard Grass	40.0	Orchard Grass	40.0		
Winter Rye	50.0	Winter Rye	50.0		
Attach: Drawing(s) of road, loc	ation, pit and proposed area for land	d application.			
Photocopied section of	involved 7.5' topographic sheet.				
Plan Approved by:	Vn/				
Comments:		<u>_</u>			
•		•	_ A		

			<u>Received</u> Gas Office of Oil & Gas
Title: <u>011 + (6 c</u>	s Insachul	Date: 4-23-12	
Field Reviewed?	() Yes	() No	Office of Cii and Gas SEP 2 5 2017
			WV Department of Environmental Protection 03/16/2019 Ctic



WW-9 ADDENDUM

Drilling Medium Anticipated for This well

- Vertical section of well bore, down to KOP, will be drilled on air and/or a combination of air and drilling soap.
- From KOP through the curve section and horizontal section of well bore will be drilled on a brine-water based mud system.

Additives to be Used While Drilling

- Common additives when air drilling: KCl (CAS No. 1302-78-9 & 14808-60-7), soda ash (CAS No. 497-19-8), shale stabilizer (CAS No 67-48-1 & 7732-1835), drilling soap (CAS No. 111-76-2), air hammer/motor lubricant.
- Common water based additives for mud drilling: NaCl (CAS No. 7647-14-5), KCl (CAS No. 7447-40-7), barite (CAS No. 13462-86-7 & 14808-60-7), starch (CAS No. 9005-25-8), PAC (CAS No. 9004-32-4), xanthum gum (CAS No. 11138-66-2), PHPA (CAS No. 64742-47-8), polysaccharide (CAS No. 11138-66-2), sulfonated asphaltic material (CAS No. 269-212-0 & 238-878-4), aluminum silicate (CAS No. 37287-16-4), gilsonite (CAS No. 12002-43-6), graphite (CAS No.14808-60-7 & 7782-42-5), shale stabilizer (CAS No. 67-48-1 & 7732-18-5), fluid loss control polymers (CAS No. 9004-34-6), viscosity control polymers (CAS No. 11138-66-2 & 107-22-2), soda ash (CAS No. 9004-34-6), viscosity control polymers (CAS No. 11138-66-2 & 107-22-2), soda ash (CAS No. 497-19-8), sodium bicarbonate (CAS No. 144-55-8), NaOH (CAS No. 1310-73-2, 7647-14-5, & 7732-18-5), lime (CAS No. 1305-62-0), gypsum (CAS No.778-18-9), citric acid (CAS No. 77-92-9), biocide (CAS No. 52-51-7 or 7732-18-5 + 67-56-1 + 141-43-5), CaCO₃ (CAS No. 471-34-1), cellulose fibers (CAS No. 14808-60-7), nut plug (CAS No. 9004-34-6 & 14808-60-7), cross-linking polymers (CAS No. 107-22-2 & 1138-66-2), other LCMs, surfactants (CAS No. 64-17-5), ROP enhancer/lubricant (CAS No. 8002-13-9), beads, corrosion inhibitor (CAS No. 7732-18-5), aluminum stearate (CAS No. 300-92-5), defoamer (CAS No. 246-771-9).

MSDS are available upon request.

Dm17 4-23-17

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SFF X 5 2017

Page 1/nent of Environmen 03/16/2018

WW-9 Addendum

10302905



WW-9 ADDENDUM

Drill Cuttings Disposal Method

Closed loop drilling system will be incorporated. No waste pits will be constructed. All • drill cuttings are put through a drier system and hauled to and disposed of at approved and permitted landfills.

Landfills or Offsite Names and Permit Numbers

Wetzel County Sanitary Landfill Rt. 1, Box 156A New Martinsville, WV 26155 SWF-1021 / WV01909185

Brooke County Sanitary Landfill Colliers, WV 26035 SWF-1013 / WV0109029

Dmlt 4-23-13

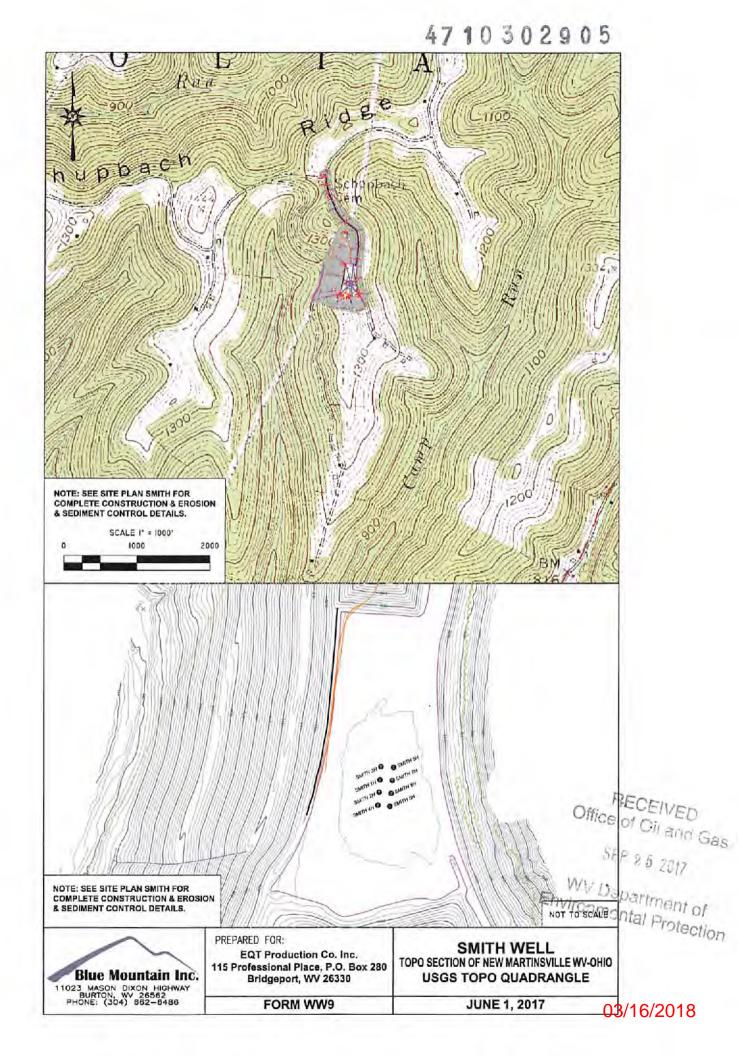
Chice of Che Che

RECEIVED Office of Oil and Gas

SEP 2 5 2017

WV Department of Environmagt21 Protection 03/16/2018

WW-9 Addendum

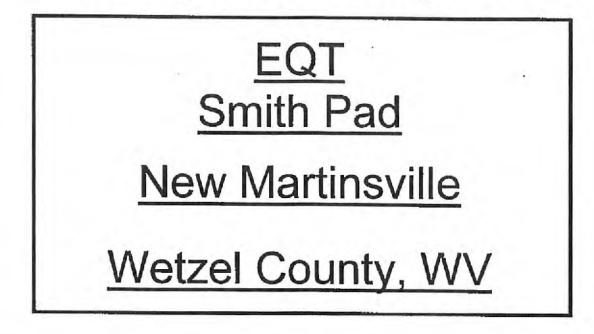


4710302905



Where energy meets innovation."

Site Specific Safety Plan



m. H.BH

For Wells:

Date Prepared: June/19, 2017 Production Up Title Date

WV Oil and Gas Inspector

Oil the Input

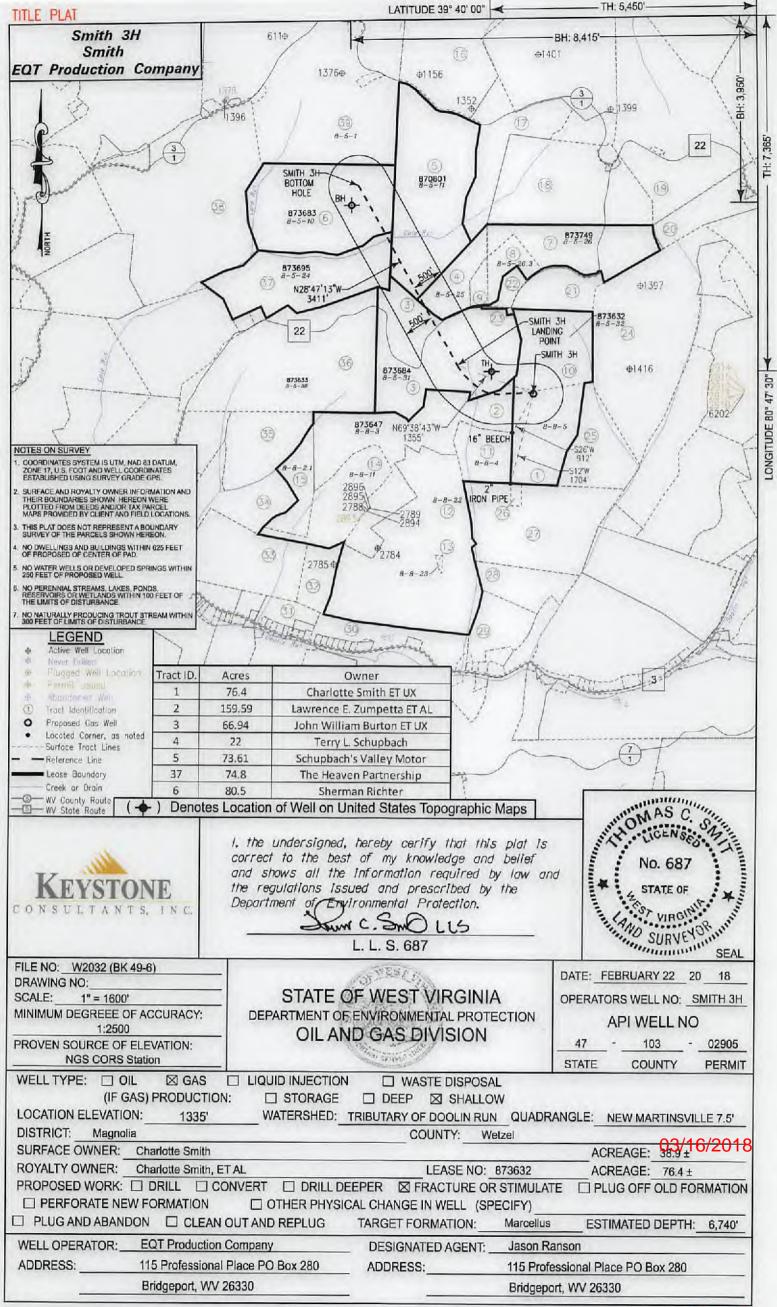
10-7-

Date

RECEIVED Office of Oil and Gas

OC: 11 2017

WV Department of Environmental Protection 03/16/2018



Smith 3H Smith EQT Production Company		
Tract ID. Tax Map No. Parcel No. County District 1 8 5 Wetzel Magnolii 2 8 3 Wetzel Magnolii 3 5 31 Wetzel Magnolii 4 5 25 Wetzel Magnolii 5 5 11 Wetzel Magnolii 6 5 10 Wetzel Magnolii 7 5 26 Wetzel Magnolii 8 5 25.1 Wetzel Magnolii 9 5 25.1 Wetzel Magnolii 10 5 32 Wetzel Magnolii 11 8 4 Wetzel Magnolii 12 8 22 Wetzel Magnolii 13 8 23 Wetzel Magnolii 14 8 11 Wetzel Magnolii 15 8 2.1 Wetzel Ma	Lawrence E. Zumpetta ET AL 72.86 John William Burton 66.56 Stone Energy Corporation 17.64 Ronald L. Schupbach 89.45 Herman L. & Sherman Richter 80.66 Stone Energy Corporation 39.95 Stone Energy Corporation 39.95 Stone Energy Corporation 4.19 Charlotte Smith 37.5 Lawrence E. Zumpetta ET AL 10.75 Lawrence E. Zumpetta ET AL 107.5 Lawrence E. Zumpetta ET AL 107.5 Lawrence E. Zumpetta ET AL 18.15 Ronald L Schupbach 90.33 Melvin E. & Wilda G. Schupbach 36.87 Ronald L & Monette Schupbach 68.49 Sharon L Bearce 108.64 Sharon L Bearce 3.93 Schupbach Cemetery 0.27 Franklin Ray Blake 17.73 Stone Energy Corporation 3.93 Schupbach Cemetery 0.27 Franklin Ray Blake 108.47 Kocher Albert HRS 33.01 Ralph Oscar & Jonee Kay Smith 1.23	Notes: SMITH 3H 1" = 2000' 1" = 2000'
27 8 12 Wetzel Magnoli 28 8 24 Wetzel Magnoli 29 8 54.1 Wetzel Magnoli 30 8 62 Wetzel Magnoli 31 8 38.2 Wetzel Magnoli 32 8 21 Wetzel Magnoli 33 8 20 Wetzel Magnoli 34 8 10 Wetzel Magnoli 35 8 2 Wetzel Magnoli 36 5 30 Wetzel Magnoli 37 5 24 Wetzel Magnoli 38 5 8 Wetzel Magnoli 39 5 1 Wetzel Magnoli	a Gary W. & Linda J. Durig 18.32 b Gary W. & Linda J. Durig 22.47 a Gary W. & Linda J. Durig 57.15 a George R. Mullett 8.28 a Michael L. Mullett 12.25 a Billy Darrell Morris 54.66 a Myron H. Helmick 35.57 a J W Schamp EST 37.54 Wayne A. & Virginia L. Schupbach 93.83 a Heaven Partnership 53.59 a George E. & Beth Ann Heinzman 141.4	NAD 27 N: 420,742.460 E: 1,629,558,280 NAD 27 Lat 39.647734 Long: 480,815592 NAD 83 UTM N: 4,388,685,222 E: 515,837,040 <u>SMITH 3H As-Built Bottom Hole coordinates are</u> NAD 27 N: 423,731.640 E: 1,627,915,770 NAD 27 Lat 39.655874 Long: -80,821581 NAD 83 UTM N: 4,389,587.529 E: 515,321,460 West Virginia Coordinates system of 1927 (North Zone) based upon Differential GPS Measurements Plat orientation, Corner and well ties are based upon the grid north meridian Well location references are based upon the grid north meridian. UTM coordinates are NAD83, Zone 17, Meters.
Active Well Location Proposed Gas Well Located Corner, as noted Surface Tract Lines Reference Line Lease Boundary Creek or Drain WV County Route WV State Route	SMITH 1H O O SMITH 7H SMITH 2H O O SMITH 8H SMITH 4H O O SMITH 6H	15" Hemlock • • Wood Stake 1" = 200' • CENS•
KEYSTONE ONSULTANTS INC.	I. the undersigned, hereby certify correct to the best of my knowled and shows all the information re the regulations issued and prescu Department of Environmental Prot	edge and belief quired by law and ribed by the ection.
FILE NO: <u>W2032 (BK 49-6)</u> DRAWING NO: SCALE: <u>1" = 1000'</u> MINIMUM DEGREE OF ACCURACY: 1:2500 PROVEN SOURCE OF ELEVATION: NGS CORS Station	STATE OF WEST VI DEPARTMENT OF ENVIRONMENT OIL AND GAS DIV	AL PROTECTION API WELL NO ISION 47 - 103 - 02905 STATE COUNTY PERMI
WELL TYPE: OIL GAS (IF GAS) PRODUCTI LOCATION ELEVATION: 1,335' DISTRICT: Magnolia SURFACE OWNER: Charlotte Smith ROYALTY OWNER: Charlotte Smith, PROPOSED WORK: DRILL PERFORATE NEW FORMATION PLUG AND ABANDON CLEA	ET AL LE, CONVERT DRILL DEEPER SFRAC	SHALLOW LLIN RUN QUADRANGLE: NEW MARTINSVILLE 7.5' TY: Wetzel ACREAGE: 03/16/2018 38.9 ± ASE NO: 873632 ACREAGE: 76.4 ± CTURE OR STIMULATE DPLUG OFF OLD FORMATION VELL (SPECIFY)
WELL OPERATOR: EQT Production ADDRESS: 115 Profession Bridgeport, W	al Place PO Box 280 ADDRESS:	AGENT: Jason Ranson 115 Professional Place PO Box 280 Bridgeport, WV 26330

WW-6A1 (5/13) Operator's Well No. SMITH 3H

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

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

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Various	Stone Energy Corp.	EQT Production Company	**	183A/305

** Per West Virginia Code Section 22-5-8

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

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

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

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

Well Operator:	EQT Production Company
By:	Victoria J Roark
Its:	Regional Land Supervisor

Page 1 of

03/16/2018

Operator's Well No.

WW-6A1 (1/12)

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)

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- (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	
8-5-11	Schupbach Valley Motors	Stone Energy Corp	1/8	112A/390	
8-5-10	Sherman Richter	Stone Energy Corp	1/8	122A/832	
8-5-10	Herman L Richter	Stone Energy Corp	1/8	122A/834	
8-5-10	Piney Holdings	Stone Energy Corp	1/8	122A/818	
8-5-10	Betty Lou Goff	Stone Energy Cor	1/8	3/198	
8-5-10	Robin M. King	Stone Energy Corp	1/8	124A/943	

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

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

Well Operator: STONE ENERGY CORPORATION By: **RECEIVEDIts:** Land Coordinator Office of Oil and Gas MAR 1 3 2018 WV Department of Environmental Protection

WW-6A1 (Attachment)

Operator's Well Number:

Smith 3H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Map/Parcel
Robin M. King	Stone Energy Corporation	1/8	124A/943	8-5-10 /
Kim Allan Vance	Stone Energy Corporation	1/8	124A/945	8-5-10
Sandra Lee Wright	Stone Energy Corporation	1/8	124A/947	8-5-10
Michael Lee Greathouse	Stone Energy Corporation	1/8	124A/949	8-5-10
Clifford Bruce Kauff	Stone Energy Corporation	1/8	124A/951	8-5-10
Lana Jean Frame	Stone Energy Corporation	1/8	124A/953	8-5-10
Henry K. Bivens	Stone Energy Corporation	1/8	124A/520	8-5-10
Mariann Cutlip	Stone Energy Corporation	1/8	124A/518	8-5-10
Edward C. Cody	Stone Energy Corporation	1/8	124A/516	8-5-10
Kathyryn L. Brown	Stone Energy Corporation	1/8	125A/388	8-5-10
Betty H. Bohoney	Stone Energy Corporation	1/8	125A/390	8-5-10
Curtis Eugene Joy,Jr.	Stone Energy Corporation	1/8	125A/392	8-5-10
Jeanette Ann Hafley	Stone Energy Corporation	1/8	125A/394	8-5-10
Eric Lane Allan	Stone Energy Corporation	1/8	126A/331	8-5-10
Leah E. Chapman Trust	Stone Energy Corporation	1/8	126A/714	8-5-10
Gordon Taiclet	Stone Energy Corporation	1/8	126A/717	8-5-10
Gary Melvin Hafely	Stone Energy Corporation	1/8	126A/712	8-5-10
Carol A. Domingo	Stone Energy Corporation	1/8	125A/855	8-5-10
Elizabeth F. Fitchet	Stone Energy Corporation	1/8	126A/333	8-5-10
Hafely Heirs, LLC	Stone Energy Corporation	1/8	126A/730	8-5-10
Lois Poort, et ux	Stone Energy Corporation	1/8	126A/732	8-5-10
Betty June Hafley Miller, et vir	Stone Energy Corporation	1/8	127/215	8-5-10
John William Burton	Stone Energy Corporation	1/8	114A/713	8-5-31
Lyman B. Waterman, Jr.	Stone Energy Corporation	1/8	131A/696	8-5-31
Sherrell Lee Lallathin	Stone Energy Corporation	1/8	137A/332	8-5-31
Mary Martha Young	Stone Energy Corporation	1/8	39/105	8-5-31
Lisa Hoyt	Stone Energy Corporation	1/8	39/105	8-5-31
Joseph M. Young	Stone Energy Corporation	1/8	39/105	8-5-31
Lois J Hornbrook	Stone Energy Corporation	1/8	39/105	8-5-31
Terry L. Schupbach	Stone Energy Corporation	1/8	39/105	8-5-31
Paul Nieratko Jr	Stone Energy Corporation	1/8	39/105	8-5-31
Charles Menkel	Stone Energy Corporation	1/8	39/105	8-5-31
James Young	Stone Energy Corporation	1/8	39/105	8-5-31
Charles L. McGowen, Jr., et ux	Stone Energy Corporation	1/8	88A/305	8-8-3
Lawrence E. Zumpetta, et ux	Stone Energy Corporation	1/8	88A/309	8-8-3
John C. Bober, III, et ux	Stone Energy Corporation	1/8	88A/313	8-8-3
David T. Griffith	Stone Energy Corporation	1/8	88A/317	8-8-3
Jay H. Renner	Stone Energy Corporation	1/8	89A/93	8-8-3
B&R Construction	Stone Energy Corporation	1/8	112A/416	8-8-3

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that

I am the person who signed the Notice and Application for the Applicant, and that -

(1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

Title Land Coordinator

(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: RECEIVED



Office of Oil and Gawell Operator Stone Energy Corporation

MAR 1 3 2018

WV Department of Environmental Protection

10302905

WW-6A1 (Attachment)

Operator's Well Number: Smith 3H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6, Section 8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page	Map/Parcel
Lynn Ann McCray	Stone Energy Corporation	1/8	129A/620	8-8-3
Sonny Smith	Stone Energy Corporation	1/8	111A/982	8-8-5
The Heaven Partnership	Stone Energy Corporation	1/8	116A/948	8-5-24
Karen Miller	Stone Energy Corporation	1/8	129A/228	8-5-25
Gary C. Kirkhart	Stone Energy Corporation	1/8	129A/225	8-5-25
Ronald Kirkhart	Stone Energy Corporation	1/8	214/429	8-5-25
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I am the person who signed the Notice (1) the tract of land is the same tract accompanying plat, and described in (2) the parties and recordation data (verification on page 1 of this Notice and A ce and Application for the Applicant, and the described in this Application, partly or who the Construction and Reclamation Plan; if recorded) for lease(s) or other continuin produce or market the oil or gas are as foll nor Stone Energy Corporation	nat - bliy depicted in g contract(s) by	pose and say that the which the	Office Preceived
MAR 1 3 2018	B Coordinator	w		• ·
V Department of				•
ronmental Protection				03

03/16/2018



September 13, 2017

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

Re: Smith 3H Magnolia District, Wetzel County

Dear Mr. Martin,

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

Sincerely 1/1l

Vicki Roark Permitting Supervisor-WV

WW-6AC (1/12)

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE CERTIFICATION</u>

Date of Notice Certification: 9/21/17

API No. 47- 103	_ 02905
Operator's Well No.	SMITH 3H
Well Pad Name: SM	ИГН

Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	wv	UTM NAD 83 Easting:	516226.57
County:	Wetzel	Northing:	4388548.06
District:	Magnolia	Public Road Access:	Wetzel County Route 22
Quadrangle:	New Martinsville	Generally used farm name:	Smith, Sonny & Charlotte
Watershed:	Tributary of of Doolin Run		

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

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

Required Attachments:

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

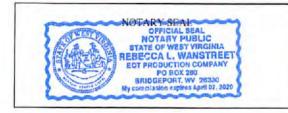
WW-6AC (1/12)

4710302905

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 phrough personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

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



Subscribed and sworn before me this 21 day of September 20	17.
Relicca LWanstreed Notary Put	lic
My Commission Expires 4-7-2020	_

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 <u>depprivacyofficer@wv.gov</u>.

WW-6A	
(9-13)	

API NO. 47-	103 _	0290	5	
OPERATOR		NO.	SMITH 3H	
Well Pad Nar	ne: SMI	TH		_

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE OF APPLICATION</u>

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

Date of Notice: 9/21/17 Date Permit Application Filed.9	21	17
Notice of:		

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

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

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

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

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

SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: See Attached	Name: see attached
Address:	Address:
Name:	COAL OPERATOR
Address:	Name:
	Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)	
Name: See Attached	□ SURFACE OWNER OF WATER WELL
Address:	AND/OR WATER PURVEYOR(s)
	Name:
Name:	Address:
Address:	
	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name: See Attached	Address:
Address:	
	*Please attach additional forms if necessary

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 <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

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

OPERATOR WELL NO. SMITH 3H Well Pad Name: SMITH

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.

API NO. 47-103 - 02905 OPERATOR WELL NO. SMITH 3H Well Pad Name: SMITH

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-

<u>Permits/Pages/default.aspx</u> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

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

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

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

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

WW-6A (8-13)

API NO. 47- 103	- 02905
OPERATOR WE	LL NO. SMITH 3H
Well Pad Name:	SMITH

Notice is hereby given by:

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

	•	
Address: 17	15 Professional Place PO Box 280	
Bridgeport W	/ 26330	
Facsimile:	304-848-0041	

Oil and Gas Privacy Notice:

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

1



Subscribed and sworn before me this <u>2</u> day of <u>September 2017</u>. <u>Ruleca</u> <u>Lubar streed</u> Notary Public My Commission Expires <u>4-7-2020</u>

4710302905

 \checkmark

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

Charlotte Smith 440 Farm Road New Martinsville WV 26155

		47	10302905	
Topo Quad: N	EW MARTINSVILLE, WV - OHIO 7.5'	Scale:	1" = 1000'	
County:	WETZEL	Date:	29 JUNE 2017	
District:	MAGNOLIA	Project No:	0492-17	
Water	SMITH WELL P	URVEY	OR MAP	Торо
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	Run			
900		AB O	Gut	X
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upba	sn lle	5-31.4	K CX V	
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		*		13348
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SCALE: 1 0' 1000'	INCH = 1000 FEET 2000' 3000'	17/2	1 Still Cleve Idea	ater Well stern/Spri
				ream
SURVEYING AND MAPPING SERVICES PI		tion Co. I	nc –	
Blue Mount	ain Inc. 115 Professional F	Place, P.O. Box	280	$\mathbf{\hat{J}}$
11023 MASON DIXON BURTON, WV 26 PHONE: (304) 662	-6486 Bridgeport	, WV 26330		02/16/2

WW-6A4 (1/12)

4710302905

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE OF INTENT TO DRILL</u>

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: 09/12/2017 Date Permit Application Filed: 09/22/2017

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

HAND CERTIFIED MAIL DELIVERY RETURN RECEIPT REQUESTED

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*, That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided*, *however*. That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Notice is hereby provided to the SURFACE OWNER(s):

Name: Charlotte Smith	Name:
Address: 440 Farm Road	Address:
New Martinsville, WV 26155	

Notice is hereby given:

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

State:	wv	UTM NAD 83	Easting:	516226.57	
County:	Wetzel	UTMINAD 83 N	Northing:	4388548.06	
District:	Magnolia	Public Road Acces	s:	Wetzel County Route 22	
Quadrangle:	New Martinsville	Generally used far	m name:	Smith, Sonny & Charlotte	
Watershed:	Tributary of of Doolin Run				

This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(b), this notice shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Notice is hereby given by:

Well Operator:	EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place PO Box 280	Address:	115 Professional Place PO Box 280
Bridgeport WV 2633	30	Bridgeport VVV 26330	
Telephone:	304-848-0076	Telephone:	304-848-0076
Email:	vroark@eqt.com	Email:	vroark@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 DEP's Chief Privacy Officer at <u>depprivacyofficer@wv.gov</u>.

Charlotte Smith 440 Farm Road New Martinsville WV 26155

4710302905

03/16/2018

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4710302905

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF INTENT TO DRILL

WAIVER

Pursuant to W. Va. Code § 22-6A-16(b), at least ten days prior to filing a permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner notice of its intent to enter upon the surface owner's land for the purpose of drilling a horizontal well: *Provided*. That notice given pursuant to subsection (a), section ten of this article satisfies the requirements of this subsection as of the date the notice was provided to the surface owner: *Provided, however*, That the notice requirements of this subsection may be waived in writing by the surface owner. The notice, if required, shall include the name, address, telephone number, and if available, facsimile number and electronic mail address of the operator and the operator's authorized representative.

Surface Owner Waiver:

I, <u>Charlotto Smith</u>, hereby state that I have read the notice provisions listed above and hereby waive the notice requirements under West Virginia Code § 22-6A-16(b) for the tract of land as follows:

State:	W		Easting:	516226 57
County:	Wetzel	UTM NAD 83	Northing:	4388548 06
District:	Magnolia	Public Road Ace		Wetzel County Route 22
Quadrangle:	New Martinsville	Generally used f		Smith, Sonny & Charlotte
Watershed:	Tributary of of Doclin Run			
Name: Charlot		Signature:	Charl	pt. 2017
Address: 440 I			1 0	
New Martinsville,	WV 26155	Date:	14 20	pt. 2017
0 1 10	- .			V

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WW-6A5 (1/12)

4710302905

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS <u>NOTICE OF PLANNED OPERATION</u>

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

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

CERTIFIED MAIL	HAND
RETURN RECEIPT REOUESTED	DELIVERY

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

Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice)	12
Namer See Attached	Name*

Name: See Adacted	iname.	
Address:	Address:	_

Notice is hereby given:

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

State:	w	UTM NAD 83 Eastin	g: 516226.57	
County:	Wetzel	North	ng: 4388548.06	
District:	Magnolia	Public Road Access:	Wetzel County Route 22	
Quadrangle:	New Martinsville	Generally used farm nar	ne: Smith, Sonny & Charlotte	-
Watershed-	Tributary of of Doolin Run			

This Notice Shall Include:

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

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

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

1

Charlotte Smith 440 Farm Road New Martinsville WV 26155

4710302905

03/16/2018



4710302905

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

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

Jim Justice Governor

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

July 26, 2017

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 Smith Pad, Wetzel County 47-103-02905 F

Smith 1HSmith 2HSmith 3HSmith 4HSmith 5HSmith 6HSmith 8H

Dear Mr. Martin,

This well site will be accessed from an encroachment permit 06-2013-0010 to be transferred EQT Production Company for access to the State Road for a well site located off of Wetzel County Route 22 SLS. This permit must be approved by the DOH before construction is begun.

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,

Tang K. Classton

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

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

Anticipated Frac Additives Chemical Names and CAS numbers

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4710302905

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

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Dm 17 10-7-17

> RECEIVED Office of Oil and Gas

> > GCT 11 2017

WV Department of Environmental Protection 03/16/2018



LOCATION MAP

SITE LOCATION

THE FROLECT IS LOCATED AT 59.650510. -80.812201 (NAD83 WVN) THE COORDINATES ARE REFERENCED FROM THE FAD ENTRANCE AND CAN BE LOCATED BY TANING BOLONI RIGGE ROAD ONE MILE FAST FROM THE MARTINSVILLE TURN LEFT ONTO SCHUMBACH BODGE AND TRAVEL APPROXIMATELY 2.6 MILES AND THE PAD ENTRANCE WILL DO IN THE ROAT

FLOODPLAIN NOTE

15

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302

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THE PROPOSED LIMITS OF DISTURBANCE FOR THIS PROJECT ARE NOT LOCATED IN A FLOOD ZONE, PER THE FLOOD INSURANCE RATE MAP (FIRM) NUMBER 54051C0225E.

WVDEP OOG ACCEPTED AS-BUILT

SHEET INDEX		
PG	DRAWING NAME	
1	COVER SHEET	
2	GENERAL DETAILS #1	
3	GENERAL DETAILS #2	
1.	EXISTING SITE PLAN	
5	OVERALL SITE FLAN	
6	OVERALL PROPOSED SITE PLAN W/ ORTHO	
7	DETAIL SITE PLAN #1	
8	PROFILES	
9	CONSTRUCTION DETAILS	



SMITH WELL SITE

ENTRANCE OF SITE

NAD 83 - LAT: N 39.650510°; LONG: W 80.812201° NAD 27 - LAT: N 39.650432°; LONG: W 80.812381° UTM (NAD83) - N: 4388985.269; E: 516111.897

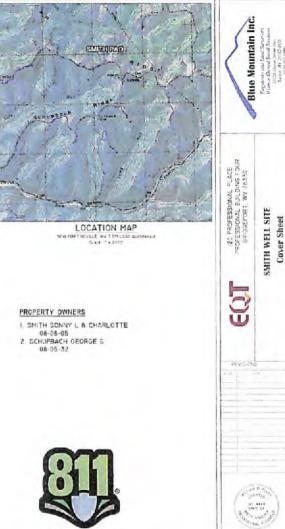
CENTER OF WELL PAD LOCATION

NAD 83 - LAT: N 39.646617°; LONG: W 80.810879° NAD 27 - LAT: N 39.646539°; LONG: W 80.811059° UTM (NAD83) - N: 4388553.447; E: 516226.226

> MAGNOLIA DISTRICT WETZEL COUNTY, WEST VIRGINIA DATE: JUNE I, 2017



NOTE: DRAWING WAS CREATED ON 22X34 PAPER. HX17 DRAWINGS ARE HALF SCALE. REFER TO SCALE BAR FOR PROPER SCALING



Westwer Tall

CHERRIC BY LINE

2028 10.01000

10.00

STALL IS UNDER

THE NUMBER OF COMPANY

SHEET NO. 1



WV Department of Environmental Protection

> Know what's below. Call before you dig.

