

#### west virginia department of environmental protection

Office of Oil and Gas 601 57<sup>th</sup> 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

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

Date Issued:

API Number:	

## PERMIT CONDITIONS

4710302791

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.

CONDIT	<b>FIONS</b>
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- 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 N	Jumber:		

## PERMIT CONDITIONS 47 10 30 2 7 9 1

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)



API NO. 47103	- 02791	
OPERATOR V	VELL NO. SMITH 7H	_
Well Pad Na	me: SMITH	

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Office of Oil and Gas

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

NOV 1 4 2017

WV Department of

							Environmental Flote
1) Well Operator:	EQT Pro	duction Co	ompany	306686	Wetzel	Magnolia	New Martinsville
				Operator ID	County	District	Quadrangle
2) Operator's We	ll Number:	SMITH 7H		Well Pad	Name: SMITI	H	
3) Farm Name/Su	ırface Owne	r: Smith, So	onny & Ch	arlotte Public Road	d Access: Wet	zel County	Route 22
4) Elevation, curr	ent ground:	1321	EI	evation, proposed j	oost-construction	on: 1321	
5) Well Type (a	a) Gas <u>x</u>		_ Oil	Unde	rground Storag	e	
C	Other						
(1	b)If Gas S	hallow	x	Deep			
	H	Iorizontal	X				Da . 1
6) Existing Pad: Y	Yes or No y	es					DAH 10-18-17
7) Proposed Targe	et Formation	(s), Depth	(s), Antic	ipated Thickness ar	nd Expected Pr	essure(s):	10-18-M
Marcellus, 6,73	6' , 50', 3,800	0 & 4,400 ps	sig		4		
8) Proposed Total	Vertical De	pth: 6,73	6'				
9) Formation at T	otal Vertical	Depth:	/larcellus				
10) Proposed Tota	al Measured	Depth: 1	0047'				
11) Proposed Hor	izontal Leg	Length: 2	2627				
12) Approximate	Fresh Water	Strata Dep	oths:	100			
13) Method to De	termine Fres	sh Water D	epths: [	epth of bit when water	r shows in the flov	vline or when	drilling soap is injected
14) Approximate	Saltwater Do	epths: <u>173</u>	_				
15) Approximate	Coal Seam I	Depths: 10	)17				
16) Approximate	Depth to Pos	ssible Void	l (coal mi	ne, karst, other): 1	lone Anticipat	ed	
17) Does Propose directly overlying				ns Yes	No	X	
(a) If Yes, provide	de Mine Info	: Name:					
		Depth:					
		Seam:					
		Owner	:				

API	NO.	47-	103	_	02791

OPERATOR WELL NO. SMITH 7H
Well Pad Name: SMITH

18)

#### **CASING AND TUBING PROGRAM**

ТҮРЕ	Size (in)	New or Used	<u>Grade</u>	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	LS	94.0	90'	90'	40- CTS
Fresh Water	13.375"	New	J55	54.5	1,316' KB- 1,301' GL	1,316' KB- 1,301' GL	1,202- CTS
Coal	13.375"	New	J55	54.5	1,316' KB- 1,301' GL	1,316' KB- 1,301' GL	1,202- CTS
Intermediate	9.625"	New	J55	36.0	2,548'	2,548'	655 Lead - 381 Tail CTS
Production	5.5"	New	P110	20.0	10,028	10,028	422 Lead - 2,118 Tail CTS
Tubing	2.375"	New	J55	4.7		6,100'	N/A
Liners	N/A						

DMH 10-18-17

ТҮРЕ	Size (in)	Wellbore Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (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	1.19
Coal	13.375"	17.5"	0.380"	2,730 psi	2160 psi	Class A	1.19
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							

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#### **PACKERS**

WV Department of Environmental Protection

Kind:		
Sizes:		
Depths Set:		

API NO. 47-103 - 02791	
OPERATOR WELL NO.	SMITH 7H
Well Pad Name: SMITH	

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

Drit 10-18-17

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. Average approximately 400,000 pounds of sand per stage.

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

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

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23) Describe centralizer placement for each casing string:

Surface casing had bow spring centralizers placed on joints 1, 4, 8, 12, 16, 20 and 24.

Intermediate casing had bow spring centralizers placed on joints 2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, and 59.

Production casing had rigid spiral centralizers placed on every fourth joint beginning with joint 1 to joint 172. Ran a total of 44 rigid spiral centralizers. Ran bow spring centralizers from joint 180 to joint 228 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 use Type 1 cement with 1.0% BWOC Calcium Chloride, 0.20% BWOC Anti foam, and 0.125lbs/sack Cello Flake.

Intermediate string will use Type 1 cement with 10.0% BWOC Sodium Chloride, 0.20% BWOC Anti foam, 0.15% BWOC Dispersant, 0.20% BWOC retarder, and 0.125lbs/sack Cello Flake.

Production string will use Type 1 cement with 0.50% BWOC Dispersant, 0.30% BWOC Fluid loss, 0.20% BWOC Anti foam, 0.50% BWOC retarder.

25) Proposed borehole conditioning procedures:

Fresh Water/Coal section will be done by circulating air through the drill string at TD for 30 to 90 minutes or until the well bore clears of cuttings.

Intermediate section will be done by circulating stiff foam through the drill string at TD for 30 to 120 minutes or until the well bore clears of cuttings.

Production section will be done by circulating drilling mud through the drill string at TD for 120 to 720 minutes until the shakers are clear

\*Note: Attach additional sheets as needed.

#### As Drilled Horizontal

Revision: 04/04/2014

Permit Number: 47-103-02863

Permit Issued: 4/1/2013 Ground Elevation: 1215'

Kelly Bushing: 18'

Rig: Saxon Rig #141 Spud Date: 6/2/2013 (Top Hole)

TD Date: 1/2/2014 Rig Release Date: 1/4/2014

5-1/2" 20.0# P-110 CDC @ 12.945' MD / 6.717' TVD

SLB cemented w/ 166 bbls FlexSEAL Lead & 410 bbls Class A Tail
Estimated Top of Cement @ ~1.313' (1150' inside 9-5/8")

State: West Virginia County: Wetzel District: Magnolia

Prospect: Mary

Location: Surface: Lat = 39.65103° N & Long = 80.78214° W / (N) 421,807' (E) 1,638,993' (State Plane WV North NAD 27, Grid North)

PBTD: 12,899' MD / 6,720' TVD TD: 12,946' MD / 6,717' TVD

HOLE WELLBORE **CASING & CEMENTING DATA** MW & HOLE HOLE DEPTHS SIZE DIAGRAM DIRECTIONAL DATA FLUID TYPE DEV. Pre-Set Conductor 83' KB (65' BGL) CONDUCTOR PIPE Vertical 20" x 3/8" wall L/S PE @ 83' (set in bedrock & grouted to surface) 17-1/2" Hole Air / Mist (Hammer) 1,263' TVD SURFACE CASING Vertical 13-3/8" 54.5# J-55 STC @ 1.232' MD/TVD Set through fresh water zones 12-1/4" Hole Set through coal zones Air / Dust (Insert Bit) Cemented to surface w/855 sks Class A + 1% CaCl + 1/8# flake tail. Circ. 18 bbsl to surface. 2.500' TVD INTERMEDIATE CASING Vertical 9-5/8" 36.0# J-55 LTC @ 2,460' MD/TVD Set through potential salt water zones Set below base of Big Injun Cemented to surface w/490 sks FlexSEAL lead & 310 sks Class A + 1% CaCl + 1/8# flake tall. Circ. 39 bbls to surface. Performed SLANT due to anti-collision concerns (with Nomac Rig #237) 8-7/8" Hole w/ Nudge to Top Hole TD Production Hole FE Plan: General Info: Air / Dust (Directional Mudlogging: From -KOP to TD Top Hole Rig: Nomac #237 (Spud to ~KOP) Hammer) Coring: None Horizontal Rig: Saxon #141 (-KOP to TD) Open Hole Wireline Logging: None No Pilot Hole (Weekley #1H serves as pilot hole) MWD/LWD: Directional/GR from ~KOP to TD 3D "Turnizontal" well Lateral Length = 5,168' (LP to PBTD) 10' Pup Joint @ 5,598' MD KOP @ 5,680' MD / 5,673' TVD ~170 8-3/4" Hole TUBING 2 3/8" 4.7# J-55 EUE (234 jts 7418') (LANDED AT 7440' KB) Ceramic disc. from Top Hole TD to LP XN NIPPLE 3.06 OD 1.875/1.791 ID LENGTH 1 FT (LANDED AT 7397' KB) (PDC Bit) X NIPPLE 3.06 OD 1.875 ID LENGTH .9FT (LANDED AT 6190' KB) PBTD @ 12,899' MD / 6,720' TVD 8-3/4" Hole in 93.3\* Lateral (PDC) TD @ 12,946' MD / 6,717' TVD Landing Point (LP) @ 7,731' MD / 6,802' TVD PRODUCTION CASING

89.2° angle

341.3° azimuth

#### STONE ENERGY - PROPOSED HORIZONTAL

Revision: 4-May-12

State: West Virginia County: Wetzel

District: Magnolla Prospect: Mary

Location: Surface: North = 4,388,542 East = 516,232 (UTM NAD 83) PBHL: North = 4,389,622 East = 515,828 (UTM NAD 83)

PTD: 11500' MD / 6710' TVD

Permit Number: 47-103-0

Permit Issued:

Ground Elevation: 1335' Kelly Bushing: 18'

Rig:

Spud Date: TD Date:

Rig Release Date:

HOLE	PILOT HOLE FORMATION TOPS	WELLBORE DIAGRAM		CASING & CEMENTING DATA DIRECTIONAL DATA		HOL
24" Hote then Driven	40' KB (22' BGL)	JII IIIL	CONDUCTOR PIPE			Venis
17-1/2" Hole	Pittsburgh Coal 1126' TVD 1265' TVD		20" x 3/8" well L/S PE @ 40" (set in bedrook & gr SURFACE CASING	routed to surface)	Air / Mist	Vertic
12-1/4" Hole	Little Lime 2251' TVD Big Lime 2261' TVD Big Injun Sandstone 2381' TVD Base of Big Injun 2800' TVD		13-3/8* 54.5# J-55 STC @ 1255* MD/TVD Set through fresh water zones Det through coal zones Cemented to surface INTERMEDIATE CASING		Stiff Foam	Venic
	Borea Sandstone 2001' TVD Gordon Sandstone 3051' TVD		9-5/8" 38 0# J-56 LTC @ 2809" MO/TVD Set through potential salt water zones Set below base of Big Injun Cernanted to surface	RECEIVED Office of Oil and Gas		Varie
8-3/4" Hole	O S			OCT 1 6 2017  Wy Demonstration of Environment of Environment and Projection	Alt / Dust	
S. H. W. C. S. A. V. C. S. A. V. C. S. A. V. C. S. C.	Rivnestreet Shale 6041' TVD Cashaqua Shale 6506' TVD West River Shale 6525' TVD Tuily Limestone Hamston Shale 651' TVD 6651' TVD 6651' TVD	— ( <del>ко</del>	P@6986' TVD		WBM In Curve	
Lateral	Marcellus Shale 9677 TVD	`			WBM in Lateral	-90-
	Onondaga Limestone 5733° TVD  Formation tops as per vertical pilot hole Curve & lateral tops will vary due to stre Directional plan based upon best estim	ictural changes	Landing Point (LP) @ 7260' MD / 6710' TVD -90' angle -331' azimuth	5-1/2" 20.0	型 (11500' MD / 6710' TVD PRODUCTION CASING W P-110 CDC (数 11500' MD 2 2100' (~500' inside 9-5/8')	

# STONE ENERGY - AS DRILLED TOP HOLE with SLANT 3 0 2 7 9 1

Revision: 24-Jun-14

Well: Smith #7H TOP HOLE (AFE# 2014-0007T) Permit Number: 47-103-02791 State: West Virginia Permit Issued: 10/12/2012 County: Wetzel Ground Elevation: 1321' District: Magnolia Kelly Bushing: 15'

Prospect: Mary Rig: NOMAC Rig #237

Location: Surface: (N) 420,250' (E) 1,630,847' State Plane WV North NAD 27 Spud Date: 12/12/2013 PBHL: (N) 420,580' (E) 1,630,966' State Plane WV North NAD 27 TD Date: 12/18/2013

PTD: 5804' MD / 5772' TVD Rig Release Date: 12/19/2013

HOLE SIZE	FORMATIO TOPS	ON	WELLBORE DIAGRAM	CASING & CEMENTING DATA	MW & TYPE	HOLE DEV.
Pre-Set Conductor	90' K	B (75' BGL)		CONDUCTOR PIPE		Ver
	Sec. 107 - 10 200	Section 2012		20" @ 90' (set in bedrock &	cemented)	
17-1/2" Hole	Shallowest FW	100' TVD				
(Hammer)	Pittsburgh Coal	1115' TVD		S SIDU TARE CAR Decker 6	AOOA! MD/T//D	
	Deepest FW	1120' TVD		9-5/8" TAM CAP Packer @		0.4
		1316'		SURFACE CASING	Air / Mist	. 0,4
				13-3/8" 54.5# J-55 STC @		00
	RED BEDS			Set through fresh wa Do not set deeper th		
	Salt Water	1740' TVD		Cemented to surface		lion
12-1/4" Hole	Little Lime	2163' TVD		Cemented to surface		
(Rock Bit)	Big Lime	2193' TVD				
	Big Injun	2293' TVD				
	Base of Big Injun	2393' TVD				
	base of big injure	2547		INTERMEDIATE CASING	Stiff Foam	0.8
-			1 1	9-5/8" 36.0# J-55 LTC @ 2	547' MD/TVD	
			1 1	Set through potentia	I salt water zone:	s
	Berea	2762' TVD	!!!	Set below base of B	ig Injun	
				Cemented to surface	9	
8-3/4" Hole			i i			
Nudge (Rock Bit)	Gordon	2983' TVD	1 1	Performed SLANT due to anti		erns:
(NOCK BIL)			1 !	- Ran GyroData gyro at 12-		
			1 1	- Drilled slant to top-hole T	D	
			i i			
			1 1			
			1 1			
			i i			
			1 1			
8-3/4" Hole			1 1			
to KOP						
(Hammer)			i i			
			i i			
			1 1		Air / Dust	11.5
1		5772' TVD	i i	OP HOLE TD @ 5804' MD / 577		-
	20.000	0000LTVD	1,	(~360' above planned KOP)	- 110	
	Rhinestreet Base	6360' TVD		(~300 above planned its)		
	Middlesex	6517' TVD				
	West River	6534' TVD				
	Geneseo Shale	6731' TVD			reived Cilland Gas	
	Tully LS	6761' TVD		On(Ca O)	COUNTY TOUR	
	Hamilton Shale	6786' TVD		DCT	6 2017	
		6821' TVD		201.	0 601	
	Marcellus Shale	0021110				

# State of West Virginia Department of Environmental Protection - Office of Oil and Gas Well Operator's Report of Well Work

API 47 - 103 - 02791 County W	/etzel	<sub>District</sub> Magnolia	
Quad New Martinsville Pad Name		Field/Pool Name Ma	ary
Farm name Smith, Sonny and Charlotte		Well Number #7H	
Operator (as registered with the OOG) Stone Energy	y Corporation		
Address 1300 Fort Pierpont Dr Suite 201 Ci		State WV	Zip 26508
As Drilled location NAD 83/UTM Attach an a Top hole Northing 4,388,9 As Drilled location NAD 83/UTM Attach an a Top hole Northing 4,388,9 As Drilled location Northing 4,388,9 As Drilled location NAD 83/UTM Attach an a Robbin Northing 4,388,9 As Drilled location NAD 83/UTM Attach an a Robbin Northing 4,388,9 As Drilled location NAD 83/UTM Attach an a Robbin Northing 4,388,9 As Drilled location NAD 83/UTM Attach an a Robbin Northing 4,388,9 As Drilled location NAD 83/UTM Attach an a Robbin Northing 4,388,9 As Drilled location NAD 83/UTM Northing 8,000 As Drilled location NAD 8,000 As Drilled loc	05	w, and deviation survey Easting 516,232 Easting 516,246 Easting 515,822	
Elevation (ft) 1,321 GL Type of	Well ■New □ Existin	g Type of Report	■Interim □Final
Permit Type   Deviated   Horizontal   I	Horizontal 6A 🛭 🗆 Vert	cal Depth Type	□ Deep ■ Shallow
Type of Operation   Convert   Deepen   Dril	l 🗆 Plug Back 🗅	Redrilling 🗆 Rework	<b>■</b> Stimulate
Well Type □ Brine Disposal □ CBM ■ Gas □ Oil	□ Secondary Recovery	□ Solution Mining □ Stor	age 🗆 Other
Type of Completion ■ Single □ Multiple Fluids  Drilled with □ Cable ■ Rotary	s Produced □ Brine c	oGas 🗆 NGL 🗖 Oil	□ Other
Drilling Media Surface hole ■ Air □ Mud ■Fr	esh Water Intermed	diate hole	B Fresh Water □ Brine
Production hole ■ Air ■ Mud □ Fresh Water	□ Brine		
Mud Type(s) and Additive(s) Saturated salt mud which includes Caustic Soc	da, Barite, Lime, New	Drill, Perma-Lose HT, X	an-Plex D, X-Cide 102,
Soda Ash, and Sodium Chloride			
Date completion activities began Not Yet Comple	g commenced 12/12 eted Date completio	n activities ceased Not Y	
Please note: Operator is required to submit a plugging	application within 5 day	s of verbal permission to plu	g
Freshwater depth(s) ft100	Open mine(s) (Y	//N) depths	N
Salt water depth(s) ft 1,733	Void(s) encount	ered (Y/N) depths	N
Coal depth(s) ft 1,017	Cavern(s) encou	ntered (Y/N) depths	N
Is coal being mined in area (Y/N) N	<del>_</del> _		
	CTR - S	n Dicas	Reviewed by:
	00T 13	2817	

## 4710302791

WR-35 Rev. 8/23/13 Page 2 of \_\_\_

API 47- 103	02791	Fa	rm name_	Smith, Sonr	ny and	Charlott	eWel	l num	nber_#7F	i	
CASING STRINGS	Hole Size	Casing Size	1	) Depth	New or Used	Grade wt/ft		Baske Depth	et	Did cei	ment circulate (Y/N)
Conductor	24"	20"	1	90'	New		- 94 ppf	<del>Верш</del>	1(3)	FIOV	ide details below* N - GTS
Surface	17.5"	13.375	1,316 K	B - 1,301' GL	New		54.5 ppf	120'	& 201'		Y-CTS
Coal	17.5"	13.375'	1,316 K	B - 1,301' GL	New		54.5 ppf		& 201'		Y-CTS
Intermediate 1	12.25"	9.625"	2	.548'	New		- 36 ppf		u 201		Y-CTS
Intermediate 2						<del>                                     </del>	ос рр.				1-013
Intermediate 3						1					
Production	8.75"	5.5"	10	),028'	New	P110	) - 20 ppf			N - TO	C @ 1,643' Calculated
Tubing		· · · ·								11. 10	O ( 1,5 TO Calculated
Packer type and d	epth set	TAM CAP In	flatable Pac	ker set on the	9.625" (	asing Strir	ng @ 1,021'.				
Comment Details surface on the 5.5° c	Circulated 30 bbls casing string. TOC on Class/Type	5.5" calculates		sing string. Circul	ated 20 bb	's cement to s	urface on the 9.6	2 <b>5"</b> cas	sing string. Di		vilate any cement to the
DATA Conductor	of Cement	0	f Sacks	wt (ppg)	(	ft <sup>3</sup> /sks)	(ft. <sup>1</sup> )		Top (MI		(hrs)
Surface	Type 1		34	15.6	-	1.18	40		Surfac	e	24.0
Coal	Class "A"		1,010	15.6		1.19	1,202	-	Surfac		8.0
Intermediate 1	Class "A"		1,010	15.6		1.19	1,202		Surfac		8.0
Intermediate 2	Lead-10% Salt Tail-Cl	ass 'A' Lead-5	12 Tail-320	Lead-15.4 Tail 15	6 Lead-1	.28 Tail-1.19	Lead-655 Tail-	381	Surfac	е	12.0
Intermediate 3			······································					+			
Production	1 - 4 7 - 40 0 7 - 1		70 T-11 4 700	1	01140	07.7-14.00			4 640 0-1-		
Tubing	Lead-TunedSpacer3 Tail-\	VanCem Lead-1	78 Tail-1,765	Lead- 14.5 Tail-15	2 Lead-2	.37 Tail-1.20	Lead-422 Tail-2	.118	1,643 Calc	ulated	7.0
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Drillers TD (ft	) 10,047 MD / 6,736	TVD		L	oggers ?	TD (ft) N/A	١	_			
Deepest forma	tion penetrated	Marcellus Shal	•	P	ug back	to (ft)					
Plug back pro	cedure										
Kick off depth Check all wire	(ft) 6,167 MD / 6,12	□ cal	per d	•	■ devia	ted/directi na ray		nducti	ion rature	□soni	C
Well cored	Yes 🖪 No	Con	ventional	Sidewall		W	ere cuttings	colle	ected •	Yes c	No No
points 1, 4, 8, 12, 16, 20 a Production casing had	HE CENTRAL nd 24. Intermediate casing d rigid spiral centralizer: A total of 7 bow spring	had bow spring centr s placed on every	slærs placed on joi fourth joint begin	nts 2, 5, 8, 11, 14, 17, 2	0, 23, 26, 29,	32, 35, 38, 41, 44,	47, 50, 53, 56 and 59	9.			ntralizers placed on
	COMPLETED COMPLETED		<u> </u>	Yes A No		ETAILS					
WERE TRAC	ERS USED C	Yes 🖪 1	No TY	PE OF TRAG							
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y " A Dig - 100 En . Dig - 100 WR-35 Rev. 8/23/13

API 4	7- 103 - 02791	Farm nar	ne_Smith, Sonn	y and Charlotte	Well number_#7H
		•	PERFORATI	ON RECORD	
Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
		· · · · · · · · · · · · · · · · · · ·			
					·
		<u> </u>			
					Office Grand Cons.
Please	nsert additional page	es as applicable.			OCT 1 6 2017
		STIM	ULATION INFOI	RMATION PER S	TAGE End of the conflict confidence of the confi

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>					<u>.</u>			
			· · · · · · · · · · · · · · · · · · ·					
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Please insert additional pages as applicable.

## 4710302791

WR-35 Rev. 8/23/13								Page 4 of	
API 47- 103	_ 02791	Far	m name Smith,	Sonny and C	Charlotte	Well 1	number_#	7H	
PRODUCING I	FORMATION		DEPTHS						
Not Yet Comple	ted			TVD _		MD		Dagen of	
								PEOTEM Office of Suit	ind G
		<del></del>						CCT 162	2017
lease insert ad	ditional pages	as applicable	<del></del>					Viji (17. ser sebe) En 18. ser sinten in	va.' c Glor
SAS TEST	□ Build up	□ Drawdown	□ Open Flow	Ol	IL TEST □ F	low 🗆	: Pump		
HUT-IN PRES							•	ΓEST hrs	
OPEN FLOW	Gas	Oil cfpd	NGL	W	/ater	GAS M	IEASURE	ED BY	
THOLOGY/	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN F	TOP T DEPTH IN FT MD	BOTTOM DEPTH IN FT MD				CORD QUANTITYAND BRINE, OIL, GAS, H <sub>2</sub> S, ETC)	
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lease insert add	litional nages	as annlicable		<u> </u>					
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ddress 2034 Ma					The Woodlands	State	PA/TX	Zip 25312 / 77381	
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ementing Com ddress 1178 US		beigei	City	Weston		State	w ;	Zip 26452	
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ddress			City			_ State	;	Zip	
lease insert add	ditional pages	as applicable	•						
Completed by	Greg Zofchak				Telephone				
Signature	Un 21	u	Title _	Orilling Engineer			Date 2/14/	17	

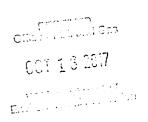
#### **EQT Production**

**Hydraulic Fracturing Monitoring Plan** 

Pad ID: Smith

**Wetzel County, WV** 

10/10/17



#### **Purpose**

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: 7H

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.

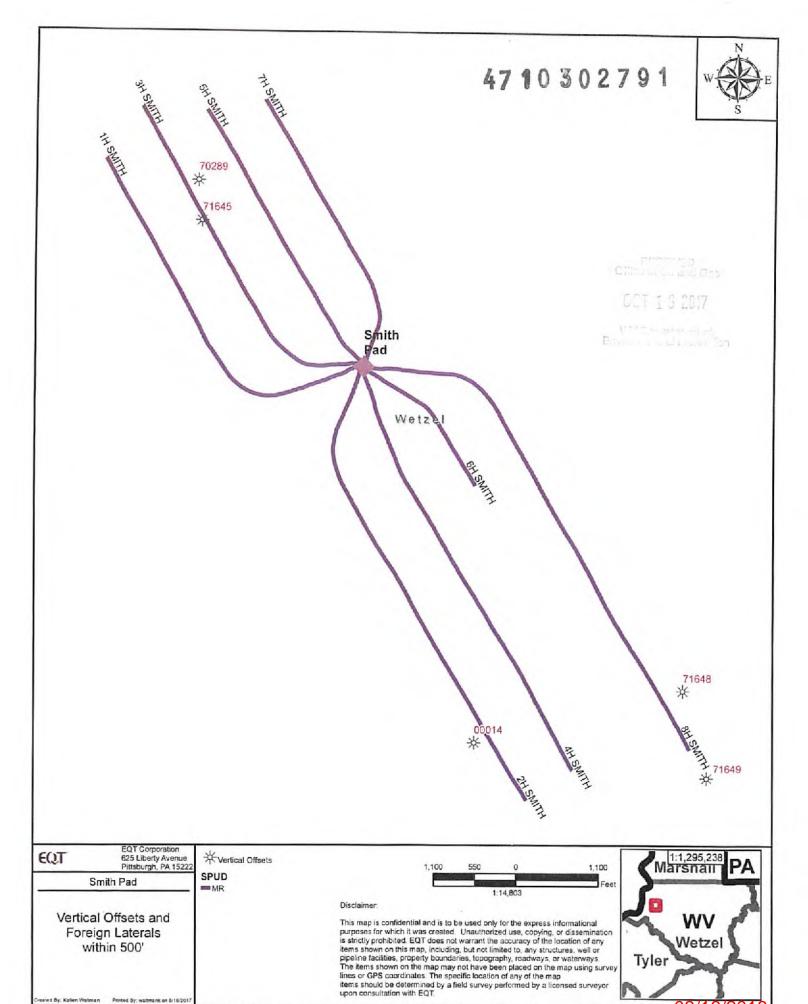
EQT will recommend to these operators at a minimum to:

- 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.





Atachment 4-1

	Completion D Current Operator	Elevation	Elevation Re	fi Final Statu:	Lat	Long	Permit Date	SPUD Date	TO Formation NaT	otal Depth Permit
47103702890000			GR	PSEUDO	39.653169	-80.81888				0 70289
47103000140000	CENTILLITY COD INCORPORATED	790	) GR	D&A	39.632704	-80.805742	10/17/1929	11/1/1929	BIG INJUN /SD/	1926 00014
47103716450000			GR	UNKWN	39.651717	-80.818692				0 71645
47103716490000			GR	UNKWN	39.631398	-80.794669				0 71649
47103716480000	8/13/1925 UNKNOWN	888	GR GR	D&A-OG	39.634591	-80.795796	6/29/1925	7/14/1925	HAMPSHIRE	2842 71648

4710302791

WW-9 (4/16)

API Number 47 - 103	- 02791
Operator's Well No	SMITH 7H

# 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 comple	ete the proposed well work? Yes V No	
Will a pit be used? Yes No V		
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:	Da Da	nH
Land Application	/0	2-18-17
Underground Injection (UIC Permit Reuse (at API Number Various	Number_0014, 8462, 4037	
Off Site Disposal (Supply form WW-	-9 for disposal location)	
Will closed loop system be used? If so, describe:  Yes, The closed loop prepared for transport.	oop system will remove drill cuttings from the drilling fluid. The drill cuttings are then portation to an off-site disposal facility.	
Drilling medium anticipated for this well (vertical and horizontal	l)? Air, freshwater, oil based, etc. See Attached RECE	IVED
-If oil based, what type? Synthetic, petroleum, etc. Syn	nthetic Mud	
Additives to be used in drilling medium? See Attached	NOV 1	4 2017
Drill cuttings disposal method? Leave in pit, landfill, removed of	offsite, etc. Landfill WV Depa	irtment of tal Protecti
-If left in pit and plan to solidify what medium will be u		
-Landfill or offsite name/permit number? See Attached	List	
Permittee shall provide written notice to the Office of Oil and Ga West Virginia solid waste facility. The notice shall be provided where it was properly disposed.	as of any load of drill cuttings or associated waste rejected at any within 24 hours of rejection and the permittee shall also disclose	
on August 1, 2005, by the Office of Oil and Gas of the West Virgorovisions of the permit are enforceable by law. Violations of law or regulation can lead to enforcement action.  I certify under penalty of law that I have personally application form and all attachments thereto and that, based	onditions of the GENERAL WATER POLLUTION PERMIT isseginia Department of Environmental Protection. I understand that any term or condition of the general permit and/or other application examined and am familiar with the information submitted on on pay inquiry of those individuals immediately responsible use accurate, and complete. I am aware that there are significantly of fine or imprisonment.	t the able this for
Company Official Signature		
Company Official (Typed Name) Victoria J. Roark		
Company Official Title Regional Land Supervisor		
	ctober, 2017	
Allellad livenstreet	Notary Public	~~~
My commission expires 4-7-2020	NOTARY STATE OF WE	ll stal Public est virginia

Form WW-9

Proposed Revegetation Trea	tment: Acres Disturbed N	o additional Prevegetation pl		
	Tons/acre or to correc			
Fertilizer type Gra				
Fertilizer amount_1	/3	lbs/acre		
Mulch_2		_Tons/acre		
		Seed Mixtures		
Te	emporary	Perma	nent	
Seed Type	lbs/acre	Seed Type	lbs/acre	
KY-31	40	Orchard Grass	15	
Alsike Clover	5	Alsike Clover	5	
Annual Rye	15			
Attach: Maps(s) of road, location, pi provided). If water from the acreage, of the land applicati	t and proposed area for land pit will be land applied, inc ion area,	d application (unless engineered plans include dimensions (L x W x D) of the pit, and	ding this info have be dimensions (L x W),	en and area in RECEIVED Office of Oil and Gas
	pit will be land applied, incion area.	clude dimensions (L x W x D) of the pit, and	ding this info have be dimensions (L x W),	office of Oil and Gas
Maps(s) of road, location, pi provided). If water from the acreage, of the land applicati	pit will be land applied, incion area.  ved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have be dimensions (L x W),	office of Oil and Gas
Maps(s) of road, location, pi provided). If water from the acreage, of the land application of involved section of involved Plan Approved by:	pit will be land applied, incion area.  ved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have bed dimensions (L x W),	and area in RECEIVED Office of Oil and Gas
Maps(s) of road, location, pi provided). If water from the acreage, of the land application of involved section of involved Plan Approved by:	pit will be land applied, incion area.  ved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have beel dimensions (L x W),	office of Oil and Gas
Maps(s) of road, location, pi provided). If water from the acreage, of the land application of involved section of involved Plan Approved by:	pit will be land applied, incion area.  ved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have bed dimensions (L x W),	office of Oil and Gas
Maps(s) of road, location, pi provided). If water from the acreage, of the land application of involved section of involved Plan Approved by:	pit will be land applied, incion area.  ved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have be dimensions (L x W),	office of Oil and Gas
Maps(s) of road, location, pi provided). If water from the acreage, of the land application of involved section of involved Plan Approved by:	pit will be land applied, incion area.  ved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have be dimensions (L x W),	office of Oil and Gas
Maps(s) of road, location, pi provided). If water from the acreage, of the land application of involved section of involved Plan Approved by:	pit will be land applied, incion area.  ved 7.5' topographic sheet.	clude dimensions (L x W x D) of the pit, and	ding this info have bed dimensions (L x W),	office of Oil and Gas

00:13:22.7

## 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 ENERGY CO	RPORATION	OP Code	494490923
Watershed	Tributary of Doolin Run	Quadrangle _	Naw	Martinsville
Elevation	1,335' County_	Wetzel	District	Magnolia
Description of antici	pated Pit Waste: No pit will be con	structed on this well pad		
Do you anticipate us	ing more than 5,000 bbls of wate	r to complete the proposed	well work? Yes	√ No
	be used in the pit? N/A			***************************************
Proposed Disposal N	fethod For Treated Pit Wastes: Land Application Underground Injection (UB Reuse (at API Number Off Site Disposal (Supply Other (Explain	IIC Permit Number 9385, Onic Flow back will be collected form WW-9 for disposal loc	o Oil Gathering, 34670 S I and used for stimuta	late Route 7, Newport, OH 45768, tion at other pad sites
If oil based.  Additives to be used'  Will closed loop syst  Drill cuttings disposa  If left in pi	cipated for this well? Air, freshv , what type? Synthetic, petroleur ? See WW-9 Adendum em be used ? Yes al method? Leave in pit, landfill, t and plan to solidify what medius offsite name/permit number? We	removed offsite, etc. Approm will be used? Cement, lir	ved and permitted off	sile landfill
on August 1, 2005, be provisions of the per or regulation can least I certify un application form and the information, I be submitting false information.	y the Office of Oil and Gas of the mit are enforceable by law. Viol it to enforcement action. It is determined to the mit are all attachments thereto and that, elieve that the information is trumation, including the possibility	ne West Virginia Department ations of any term or conditions personally examined and a based on my inquiry of tho te, accurate, and complete. of fine or imprisonment.	it of Environmenta ion of the general im familiar with t se individuals imn	ER POLLUTION PERMIT issue al Protection. I understand that the permit and/or other applicable lath the information submitted on the nediately responsible for obtaining there are significant penalties for
Company Official Si	gnature	10/11/19		
Company Official (T	yped Name)	Tim McGr	egor	
	tle			
Subscribed and swor	n before me this 21st	day of 417ay	, 20 12	
	A. Smeduly 105 17 Jay 18, 202		Notary Pu	

03/16/2018

Property Boundary	v 🛕 🛕		Diseasing	
Road	======	•	Diversion Spring	
Existing Fence	xx		Wet Spot	)
Planned Fence		··	Drain Pipe	0
Stream	~~~~~	~~/~	w/ size in inches	-(12)
Open Ditch			Waterway	$\rightleftharpoons$
Rock	දේල්දීම්	•	Cross Drain	
Nonh	<u>†</u>		Artificial Filter Strip	***************************************
Buildings	N		Pit: Cut Walls	
Water Wells			Pit: Compacted Fill Walls	American Comments
Drill Sites	<b>⊗</b> ⊕		Area for Land Application of Pit Wasto	
Proposed Revegetation Trea	atment: Acres Disturbed	14.5	22 Prevegetation pl	1
Lime 3.0	Tons/acre or to co	orrect to pH	6.5	
Fertilizer (10-20-2	0 or equivalent)5	00 lbs/acre	(500 lbs minimum)	
Mulch	2 to 3	Tons/acre	·	
		Seed M	extures	
A Seed Type	rea l lbs/acre		Are Seed Type	ea II lbs/acre
••			••	
Tall Fescue	40		Tall Fescue	40
Annual Rye	10		Annual Rye	10
Ladino Clover	5		Ladino Clover	5
Birdsfoot Trefoil	10		Birdsfoot Trefoil	10
Attach: Drawing(s) of road, location Photocopied section of invo		••	on.	
Drawing(s) of road, location	lved 7.5' topographic sh	••	on.	- Wall
Drawing(s) of road, location Photocopied section of invo	lved 7.5' topographic sh	••	on.	
Drawing(s) of road, location Photocopied section of invo	lved 7.5' topographic sh	••	on.	
Drawing(s) of road, location	lved 7.5' topographic sh	••	on.	
Drawing(s) of road, location Photocopied section of invo	ived 7.5' topographic sh	ect.	on.  Date: 5-2272	



#### WW-9 ADDENDUM

#### **Drill Cuttings Disposal Method**

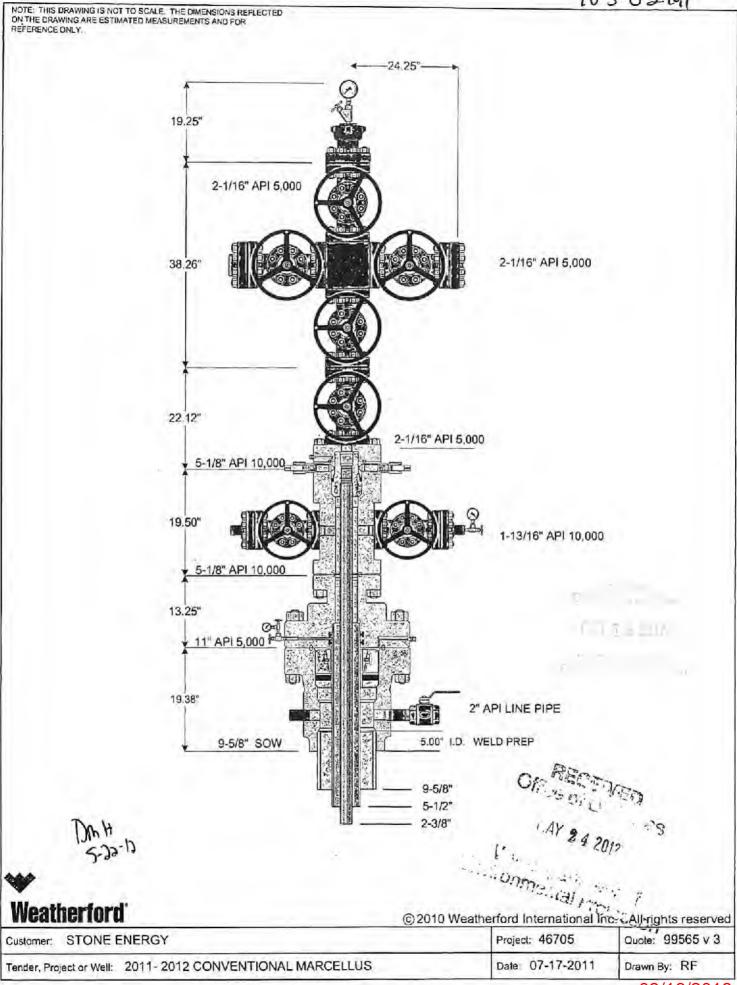
Closed loop drilling system will be incorporated. No waste pits will be constructed. All
drill cuttings are put through a drier system and hauled to and disposed of at approved
and permitted landfills.

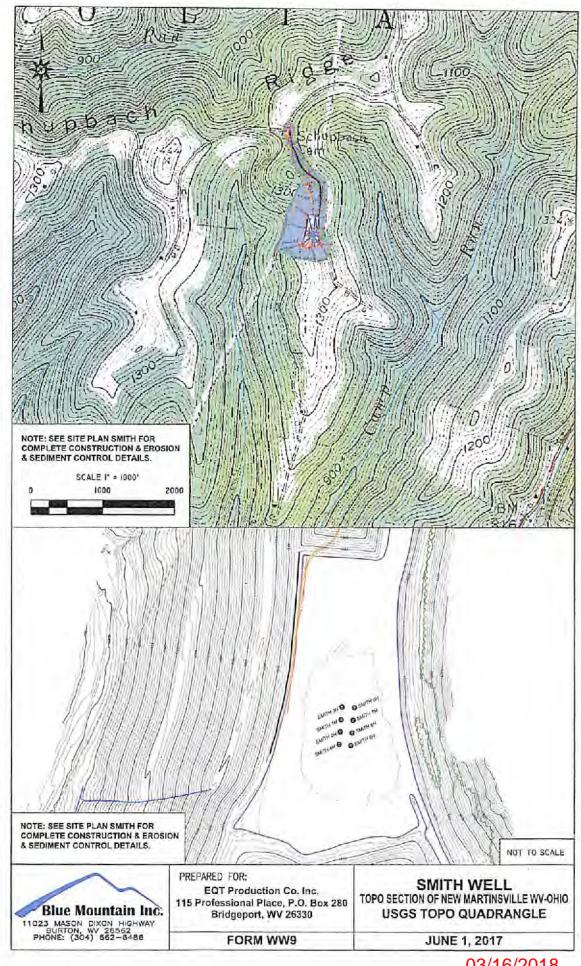
#### **Landfills or Offsite Names and Permit Numbers**

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







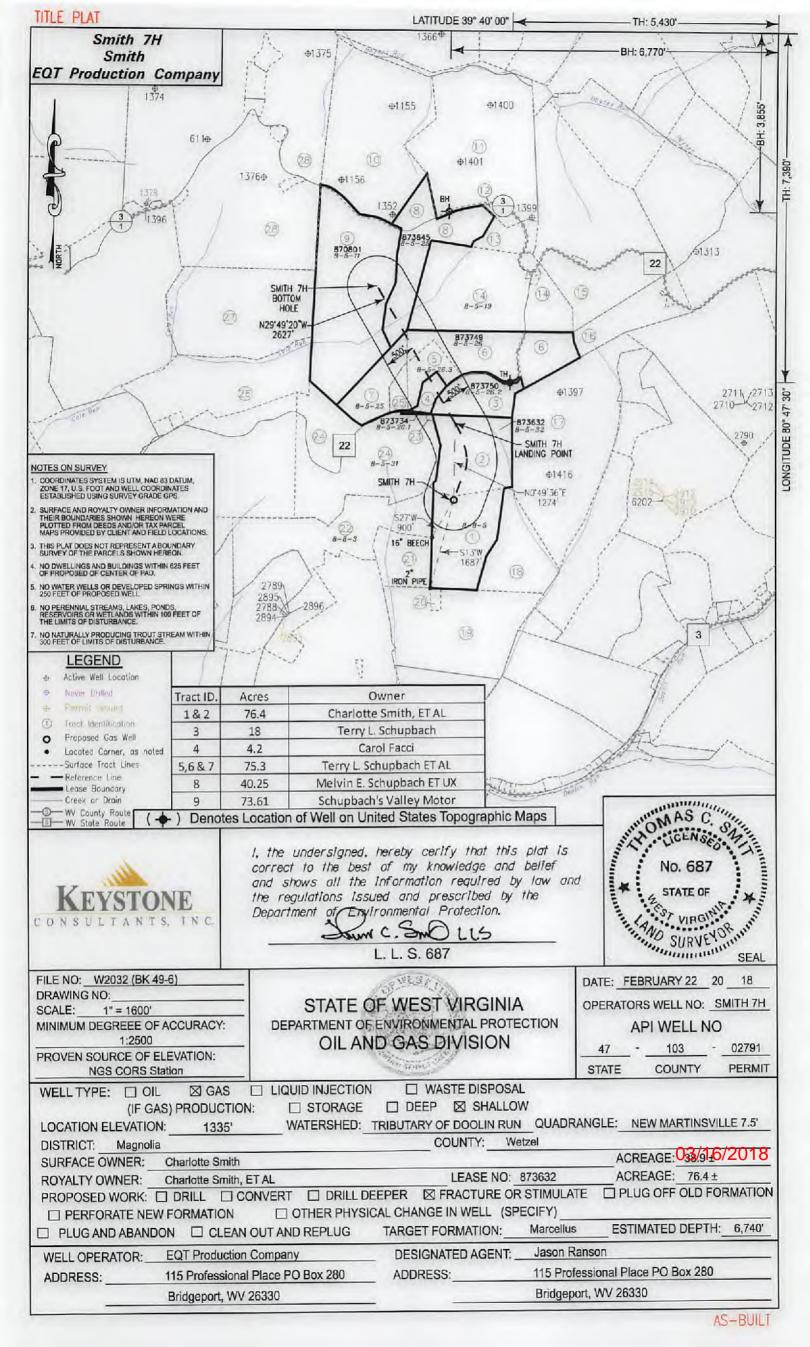




# Site Specific Safety Plan

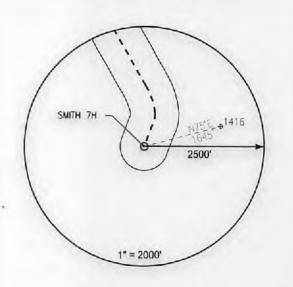
# EQT Smith Pad New Martinsville Wetzel County, WV

Smith 7H	For Wells:		
			RECEIVED Office of Oil and Gas
Date Prepared: June 19, 2017		1.	WV Department of Environmental Protection
Acquinal Sand Supervisor		WV Oil and Gas Inspector  Oil +GIS Inspektor  Title	
Date /0/10/17		10-18-17 Date	



#### Smith 7H Smith EQT Production Company

Tract ID.	Tax Map No.	Parcel No.	County	District	Surface Tract Owner	Acres
1	- 8	5	Wetzel	Magnolia	Charlotte Smith	38.9
2	5	32	Wetzel	Magnolia	Charlotte Smith	37.5
3	5	26.2	Wetzel	Magnolia	Franklin Ray Blake	17.73
4	5	26.1	Wetzel	Magnolia	Stone Energy Corporation	3.93
5	5	26.3	Wetzel	Magnolla	Stone Energy Corporation	10.95
6	5	26	Wetzel	Magnolia	Stone Energy Corporation	39.95
7	5	25	Wetzel	Magnolia	Stone Energy Corporation	17.64
8	5	12	Wetzel	Magnolia	Melvin E. & Wilda G. Schupbach	35.87
9	5	11	Wetzel	Magnolia	Ronald L. Schupbach	89.45
10	5	1.1	Wetzel	Magnolia	Ronald L. Schupbach	90.33
11	5	2	Wetzel	Magnolia	David E. & Jeanie L. Schupbach	95.43
12	5	N/A	Wetzel	Magnolia	N/A	2.52
13	5	13	Wetzel	Magnolia	Ronald L. & Monette Schupbach	9.48
14	5	19	Wetzel	Magnolla	Ronald L. & Monette Schupbach	68.49
15	5	15	Wetzel	Magnolia	Sharon L. Bearce	108,64
16	5	22	Wetzel	Magnolia	Sharon L. Bearce	37.5
17	5	33	Wetzel	Magnolia	Franklin Ray Blake	108,47
18	8	6	Wetzel	Magnolia	Kocher Albert HRS	33.01
19	8	12	Wetzel	Magnolia	David L. & Ralph O. Smith	58.15
20	8	12.1	Wetzel	Magnolia	Raiph Oscar & Jonee Kay Smith	1.23
21	8	4	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	15.28
22	8	3	Wetzel	Magnolia	Lawrence E. Zumpetta ET AL	72.86
23	5	31.1	Wetzel	Magnolia	Schupbach Cemetery	0.27
24	5	31	Wetzel	Magnolia	John William Burton	66.56
25	5	25.1	Wetzel	Magnolia	Stone Energy Corporation	4.19
26	5	24		Magnolia	Heaven Partnership	53.59
27	5	10	Wetzel	Magnolla	Herman L. & Sherman Richter	80.66
28	5	1	Wetzel	Magnolia	Mark Edwin Scheibelhood	327.66



Notes: SMITH 7H As-Built coordinates are
NAD 27 N: 420,250.003 E: 1,630,847.000
NAD 27 Lat: 39.646434 Long: -80.810990 NAD 83 UTM N: 4,388,541.757 E: 516,232.160

SMITH 7H As-Built Landing Point coordinates are NAD 27 N: 421,524.243 E: 1,630,865,340 NAD 27 Lat: 39,649932 Long: -80,810991 NAD 83 UTM N: 4.388.930.058 E: 516.231.279

SMITH 7H As-Built Bottom Hole coordinates are NAD 27 N: 423,803.793 E: 1,629,558.590 NAD 27 Lat: 39.656138 Long: -80.815750 NAD 83 UTM N: 4,389,617.882 E: 515,821.593

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

UTM coordinates are NAD83, Zone 17, Meters

#### LEGEND

- Active Well Location
- Proposed Gas Well
  - Located Corner, as noted Surface Tract Lines
- Reference Line Lease Boundary

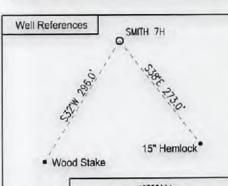
Creek or Drain WV County Route WV State Route SMITH PAD

SMITH 3H O O SMITH 5H

SMITH 1H O O SMITH 7H

SMITH 2H O O SMITH 8H

SMITH 4H O O SMITH 6H



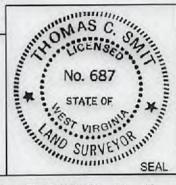
1" = 200'

Bridgeport, WV 26330



I, the undersigned, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

Sum C. Smo LLS L. L. S. 687



FILE NO: W2032 (BK 49-6) DRAWING NO: SCALE: 1" = 1000" MINIMUM DEGREE OF ACCURACY: 1:2500 PROVEN SOURCE OF ELEVATION:

Bridgeport, WV 26330

WARE! STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OIL AND GAS DIVISION

DATE: FEBRUARY 22 20 18 OPERATORS WELL NO: SMITH 7H API WELL NO 103 02791 STATE COUNTY PERMIT

NGS CONS State	UII			OIAIL	OODITTI TETINI
WELL TYPE: ☐ OIL	☐ GAS ☐ PRODUCTION:	LIQUID INJECTION  STORAGE	☐ WASTE DISPOSAL☐ DEEP ☒ SHALLOW		
LOCATION ELEVATION:	1,335'	WATERSHED:	TRIBUTARY OF DOLLIN RUN	QUADRANGLE:	NEW MARTINSVILLE 7.5'
DISTRICT: Magnolia	0 - 1 - 1 - 0 - 14		COUNTY: Web		CREAGE:03/16/2018

SURFACE OWNER: Charlotte Smith

ACREAGE: 76.4 ± LEASE NO: 873632 Charlotte Smith, ET AL ROYALTY OWNER: PROPOSED WORK: ☐ DRILL ☐ CONVERT ☐ DRILL DEEPER ☐ FRACTURE OR STIMULATE ☐ PLUG OFF OLD FORMATION

☐ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) ☐ PERFORATE NEW FORMATION

ESTIMATED DEPTH: 6,740' □ PLUG AND ABANDON □ CLEAN OUT AND REPLUG TARGET FORMATION: Marcellus

Jason Ranson **EQT Production Company** DESIGNATED AGENT: WELL OPERATOR:\_ 115 Professional Place PO Box 280 115 Professional Place PO Box 280 ADDRESS: ADDRESS:

WW-6A	İ
(5/13)	

Operator's Well No. SMITH 7H
------------------------------

#### 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	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 RECEIVED Gas Office of Oil and Gas

Page 1 of 3 FFB 2 8 2018

Enwurmental Protection

03/16/2018

	6A1 Lease Addendum		ຜົ	Smith 7H
Parcel Number	Grantor, Lessor, ect.	Grantee, Lessee, ect.	Royalty	Royalty Book/Page
8-8-05, 8-5-32	Sonny Smith et ux (Charlotte Smith)	Stone Energy Corporation	1/8th	111A/982
8-5-26.2	Terry Schupabch	Stone Energy Corporation	1/8th	126A/347
8-5-26.1	Carol Facci	Stone Energy Corporation	1/8th	120A/543
8-5-26, 8-5-26.1, 8-5-26.3	Terry Schupabch	Stone Energy Corporation	1/8th	120A/545
8-5-12	Melvin Schupbach	Stone Energy Corporation	1/8th	88/226
8-5-26.1	Nina Winters	Stone Energy Corporation	1/8th	120A/549
8-5-26.1	Linda Wren	Stone Energy Corporation	1/8th	120A/547
8-5-25	Terry Schupabch	Stone Energy Corporation	1/8th	338/69
8-5-11, 13, 14, 19, 20, 21	Schumpach's Valley Motor Company	Stone Energy Corporation	1/8th	112A/390

RECEIVED Office of Oil and Gas MAR 1 3 2018

WV Department of Environmental Protection

WW-6A1	
(1/12)	

Operator's Well No. \_\_\_

SMITH 7H

103-02791

#### 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, 1 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:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
Terry Schupbach	Stone Energy Corporation	1/8	126A/347
Carol Facci	Stone Energy Corporation	1/8	120A/543
Terry Schupbach	Stone Energy Corporation	1/8	120A/545
Nina Winters	Stone Energy Corporation	1/8	120A/549
Linda Wren	Stone Energy Corporation	1/8	120A/547
Terry Schupabch	Stone Energy Corporation	1/8	338/69

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

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- 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:	STONE ENERGY CORPORATION
By:	11 may
Its:	Land Coordinator

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-		3 44	C11 64	uinv	E8 .

Smith 7H

# 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
Schupbach's Valley Motor Company	Stone Energy Corporation	1/8	112A/390
Meivin Schupbach	Stone Energy Corporation	1/8	88/226
Sonny Smith et ux	Stone Energy Corporation	1/8	111A/982
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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:

Well Operator	Stone Energy Corporation	
Ву	Tman	
Title	Land Coordinator	



June 12, 2017

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

Re: Smith well pad, well numbers SMITH 2H, SMITH 4H, SMITH 5H, SMITH 6H, SMITH 7H 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,

Vicki Roark

Permitting Supervisor-WV

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

Date of Notice Certification: 10/14/2017			API No. 47- 103	_ 02791	
			Operator's Well No	SMITH 7H	
			Well Pad Name: 8	MITH	
Notice has	been given:		-	Tage 124 - 2 100	
	he provisions in West Virginia Code	§ 22-6A, the Operator has prov	ided the required par	ties with the Notice Forms listed	
below for the	tract of land as follows:				
State:	WV	UTM NAD 83	Easting: 516232.16		
County:	Wetzel Magnolia	UTM NAD 63	Northing: 4388541.7	4388541.75 Wetzel County Route 22 Smith, Sonny & Charlotte	
District:		Public Road Acce	ess: Wetzel Co		
Quadrangle:	New Martinsville	Generally used fa	rm name: Smith, Soi		
Watershed:					
	e § 22-6A-11(b), the applicant shall have been completed by the applican		ne secretary that the r	otice requirements of section ten	
	West Virginia Code § 22-6A, the Operator has properly served the require		nis Notice Certification		
*PLEASE CHECK ALL THAT APPLY				OOG OFFICE USE ONLY	
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIR SEISMIC ACTIVITY WAS		☐ RECEIVED/ NOT REQUIRED	
☐ 2. NO	TICE OF ENTRY FOR PLAT SURY	VEY of  NO PLAT SURVI	EY WAS CONDUCT	ED RECEIVED	
■ 3. NO	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIR	ED BECAUSE	□ RECEIVED/	

NOTICE OF ENTRY FOR PLAT SURVEY

☐ WRITTEN WAIVER BY SURFACE OWNER

WAS CONDUCTED or

(PLEASE ATTACH)

## 4. NOTICE OF PLANNED OPERATION

■ 5. PUBLIC NOTICE

■ 6. NOTICE OF APPLICATION

RECEIVED

■ RECEIVED

NOT REQUIRED

RECEIVED

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)

Certification of Notice is hereby given:

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

 Well Operator:
 EQT Production Company
 Address:
 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@egt.com

NOTARNOSCIALAL
NOTARN

Subscribed and sworn before me this 10 day of October 2017.

Publication Subscribed Motory Publication Subscribed and Sworn before me this 10 day of October 2017.

My Commission Expires

#### Oil and Gas Privacy Notice:

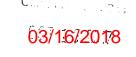
The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory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

WW-6A (9-13)

API NO. 47- 103 - 02791	1
OPERATOR WELL NO.	SMITH 7H
Well Pad Name: SMITH	

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

Notice Time Requirement: notice shall be provided no later that	n the filing date of permit application.
Date of Notice: 10/14/2017 Date Permit Application Filed: 10/14 Notice of:	/2017
PERMIT FOR ANY WELL WORK CONSTRUCTION OF A	ROVAL FOR THE AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10	(b)
	OD OF DELIVERY THAT REQUIRES A PT OR SIGNATURE CONFIRMATION
the surface of the tract on which the well is or is proposed to be local and gas leasehold being developed by the proposed well work, if described in the erosion and sediment control plan submitted pursual operator or lessee, in the event the tract of land on which the well promore coal seams; (4) The owners of record of the surface tract or trackwell work, if the surface tract is to be used for the placement, construction of the surface tract is to be used for the placement, construction on the placement of this article; (5) A mave a water well, spring or water supply source located within one to provide water for consumption by humans or domestic animals; and proposed well work activity is to take place. (c)(1) If more than three subsection (b) of this section hold interests in the lands, the applicant records of the sheriff required to be maintained pursuant to section exprovision of this article to the contrary, notice to a lien holder is not a section of the section to the contrary, notice to a lien holder is not a section of the section of the section to the contrary, notice to a lien holder is not a section of the section of the section to the contrary, notice to a lien holder is not a section of the section o	r signature confirmation, copies of the application, the erosion and ne well plat to each of the following persons: (1) The owners of record of ted; (2) The owners of record of the surface tract or tracts overlying the the surface tract is to be used for roads or other land disturbance as not to subsection (c), section seven of this article; (3) The coal owner, apposed to be drilled is located [sic] is known to be underlain by one or cots overlying the oil and gas leasehold being developed by the proposed action, enlargement, alteration, repair, removal or abandonment of any my surface owner or water purveyor who is known to the applicant to thousand five hundred feet of the center of the well pad which is used to (6) The operator of any natural gas storage field within which the elemants in common or other co-owners of interests described in the and serve the documents required upon the person described in the light, article one, chapter eleven-a of this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. ovide the Well Site Safety Plan ("WSSP") to the surface owner and any
☑ Application Notice ☑ WSSP Notice ☑ E&S Plan Notice	☑ Well Plat Notice is hereby provided to:
	☑ COAL OWNER OR LESSEE
Name: See Attached Address:	Name: See Attached Address:
	71441655.
	COAL OPERATOR
Address:	Name:
SURFACE OWNER(s) (Road and/or Other Disturbance)	Address:
	□ SURFACE OWNER OF WATER WELL
Address:	AND/OR WATER PURVEYOR(s)
	Name:
Name:	Address:
Address:	
CLIDEACE OWNER(s) (Innovention of Pias)	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)  Name: See Attached	Name:
	Address:
Address:	*Please attach additional forms if necessary
	₹



WW-6A (8-13) CON 1 3 2017

API NO. 47- 103 - 02791

OPERATOR WELL NO. SMITH 7H

Well Pad Name: SMITH

Notice is hereby given:

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

#### This Notice Shall Include:

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

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

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

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

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

#### **Well Location Restrictions**

Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

WW-6A (8-13)

API NO. 47- 103 - 02791

OPERATOR WELL NO. SMITH 7H

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:

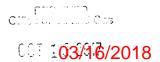
W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there 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 57<sup>th</sup> 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- 103 - 02791

OPERATOR WELL NO. SMITH 7H

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

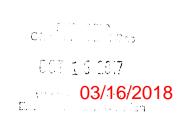
# **Permit Denial or Condition**

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

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

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

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



WW-6A (8-13)

- 02791 API NO. 47- 103

OPERATOR WELL NO. SMITH 7H

Well Pad Name: SMITH

Notice is hereby given by:

Well Operator: EQT Production Company

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

Address: 115 Professional Place PO Box 280

Bridgeport WV 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 depprivacyofficer@wv.gov.

REBECCA L. WANSTREET

Subscribed and sworn before me this 10 day of OCtober 2017.

My Commission Expires

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

Charlotte Smith 440 Farm Road New Martinsville WV 26155 4710302791

cm: 72702722 om 007 1 6 2877

The second second

Topo Quad: NEW MARTINSVILLE, WV - OHIO 7.5' 1" = 1000' Scale: WETZEL 29 JUNE 2017 County: Date: **MAGNOLIA** District: Project No: 0492-17 Water H WELL PURVEYOR MAP Торо Run 900 200 LEGEND Water Well SCALE: 1 INCH = 1000 FEET 1000 2000' 3000 Cistern/Spring Stream SURVEYING AND MAPPING SERVICES PERFORMED BY EQT Production Co. Inc. 115 Professional Place, P.O. Box 280 Blue Mountain Inc. 11023 MASON DIXON HIGHWAY BURTON, WV 25562 PHONE: (304) 662-6486 Bridgeport, WV 26330

# 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 Tim Date of Not	e Requirement: Notice shall be provided tice: 09/27/2017 Date Pe	at least TEN (10) days prior to filing a ermit Application Filed: 10/07/2017	permit application.
Delivery m	ethod pursuant to West Virginia Code §	22-6A-16(b)	CCT 13 287
☐ HAND	CERTIFIED MAIL		2 5 2 5 2 5 7
DELIV		QUESTED	Marine and the second of the s
receipt requidrilling a ho of this subse subsection n and if availa	W. Va. Code § 22-6A-16(b), at least ten dested or hand delivery, give the surface own prizontal well: <i>Provided</i> , That notice give ection as of the date the notice was provided may be waived in writing by the surface own ble, facsimile number and electronic mail tereby provided to the SURFACE OF	when notice of its intent to enter upon to pursuant to subsection (a), section to the surface owner: <i>Provided, however</i> . The notice, if required, shall included address of the operator and the operator	he surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this lude the name, address, telephone number,
Name: Charlo		Name:	
Address: 440		Address:	
New Martinsvill	le WV 26155		
the surface o State: County:	West Virginia Code § 22-6A-16(b), notice owner's land for the purpose of drilling a h	orizontal well on the tract of land as for the control of land as for the c	
District: Quadrangle:	Magnolia  New Martinsville	Public Road Access: Generally used farm name:	Smith, Sonny & Charlotte
Quadrangle. Watershed:	Tributary of of Doolin Run	Generally used faith hame.	Onder, Soliny & Charlotte
Pursuant to facsimile nu related to he	we Shall Include: West Virginia Code § 22-6A-16(b), this amber and electronic mail address of the orizontal drilling may be obtained from the 157th Street, SE, Charleston, WV 25304	operator and the operator's authorized secretary, at the WV Department of	ed representative. Additional information of Environmental Protection headquarters,
Notice is h	ereby given by:		
Well Operat	tor: EQT Production Company	Authorized Representative:	Victoria Roark
Address:	115 Professional Place PO Box 280	Address:	115 Professional Place PO Box 280
Bridgeport WV	26330	Bridgeport WV 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

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

Charlotte Smith 440 Farm Road New Martinsville WV 26155



RECEIVED
Office of Oil and Gas

OCT 1 7 2017

# 4710302791

Operator Well No. SMITH 7H

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

Date of Noti	Requirement: notice shall be proce: 10/14/2017 Date l	Permit Application Filed: 10/14/2017	
Delivery me	thod pursuant to West Virginia	a Code § 22-6A-16(c)	
■ CERT	FIED MAIL	☐ HAND	
2 2200	RN RECEIPT REQUESTED	DELIVERY	
			pplication, an operator shall, by certified mail
return receip the planned required to b drilling of a damages to t (d) The notic of notice.	t requested or hand delivery, give operation. The notice required e provided by subsection (b), sec horizontal well; and (3) A prop he surface affected by oil and gas	by this subsection shall include: (1) A continuous continuous article to a surface owner continuous	ed for the drilling of a horizontal well notice of opy of this code section; (2) The information whose land will be used in conjunction with the ment containing an offer of compensation for compensable under article six-b of this chapter, as listed in the records of the sheriff at the time
A Comment of the Comment		Name:	
Name: Charlott			
Address: 440		Address:	
Address: 440 New Martinsville	Farm Road WV 26155	Address:	
Address: 440 New Martinsville  Notice is her Pursuant to V operation on State:	Fam Road  WV 26155  reby given:  Vest Virginia Code § 22-6A-16(c	Address:  c), notice is hereby given that the undersige purpose of drilling a horizontal well on the UTM NAD 83  Easting Northi	e tract of land as follows: g: 516232.16
Address: 440 New Martinsville  Notice is her Pursuant to V operation on State: County: District:	Fam Road WV 26155  Teby given: West Virginia Code § 22-6A-16(c) the surface owner's land for the WV	c), notice is hereby given that the undersig purpose of drilling a horizontal well on the	e tract of land as follows: g: 516232.16
Address: 440 New Martinsville  Notice is her Pursuant to Voperation on State: County: District: Quadrangle:	Fam Road  WV 26155  Teby given:  Vest Virginia Code § 22-6A-16(c) the surface owner's land for the  WV  Wetzel	c), notice is hereby given that the undersig purpose of drilling a horizontal well on th Eastin UTM NAD 83	e tract of land as follows: g: 516232.16 ng: 4388541.76 Wetzel County Route 22
Address: 440 New Martinsville  Notice is her Pursuant to V operation on State: County: District:	Fam Road  WV 26155  Teby given:  Vest Virginia Code § 22-6A-16(c) the surface owner's land for the  WV  Wetzel  Magnolia	c), notice is hereby given that the undersign purpose of drilling a horizontal well on the UTM NAD 83 Northing Public Road Access:	e tract of land as follows: g: 516232.16 ng: 4388541.76 Wetzel County Route 22
Address: 440 New Martinsville  Notice is her Pursuant to Voperation on State: County: District: Quadrangle: Watershed:  This Notice Pursuant to Voto be provide horizontal we surface affectinformation:	Farm Road WV 26155  Teby given: Vest Virginia Code § 22-6A-16(c) the surface owner's land for the WW Wetzel Magnolia New Martinsville Tributary of of Doolin Run  Shall Include: West Virginia Code § 22-6A-16(c) ed by W. Va. Code § 22-6A-10 ell; and (3) A proposed surface u ted by oil and gas operations to related to horizontal drilling may located at 601 57th Street, SE	c), notice is hereby given that the undersige purpose of drilling a horizontal well on the UTM NAD 83 Easting Northing Public Road Access:  Generally used farm nan and Co, this notice shall include: (1)A copy of D(b) to a surface owner whose land will use and compensation agreement containing the extent the damages are compensable by be obtained from the Secretary, at the	e tract of land as follows: g: 516232.16 ng: 4388541.76 Wetzel County Route 22
Address: 440 New Martinsville Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed:  This Notice Pursuant to V to be provide morizontal we surface affect information in neadquarters gas/pages/de	Fam Road WV 26155  Teby given: Vest Virginia Code § 22-6A-16(con the surface owner's land for the WV Wetzel Magnolia New Martinsville Tributary of of Doolin Run  Shall Include: Vest Virginia Code § 22-6A-16(cond by W. Va. Code § 22-6A-10 (cond by W. Va.	c), notice is hereby given that the undersige purpose of drilling a horizontal well on the Easting Northic Public Road Access:  Generally used farm nance), this notice shall include: (1)A copy of D(b) to a surface owner whose land will use and compensation agreement containing the extent the damages are compensable by be obtained from the Secretary, at the E., Charleston, WV 25304 (304-926-0-	this code section; (2) The information required be used in conjunction with the drilling of a g an offer of compensation for damages to the under article six-b of this chapter. Additional WV Department of Environmental Protection 450) or by visiting www.dep.wv.gov/oil-and-
Address: 440 New Martinsville  Notice is her Pursuant to V operation on State: County: District: Quadrangle: Watershed:  This Notice Pursuant to V to be provide thorizontal wesurface affect information in the adquarters	Fam Road WV 26155  Teby given: Vest Virginia Code § 22-6A-16(con the surface owner's land for the WV Wetzel Magnolia New Martinsville Tributary of of Doolin Run  Shall Include: Vest Virginia Code § 22-6A-16(cond by W. Va. Code § 22-6A-10 (cond by W. Va.	c), notice is hereby given that the undersige purpose of drilling a horizontal well on the Easting Northic Public Road Access:  Generally used farm nance), this notice shall include: (1)A copy of D(b) to a surface owner whose land will use and compensation agreement containing the extent the damages are compensable by be obtained from the Secretary, at the E., Charleston, WV 25304 (304-926-0-	this code section; (2) The information required be used in conjunction with the drilling of a g an offer of compensation for damages to the under article six-b of this chapter. Additional WV Department of Environmental Protection 450) or by visiting www.dep.wv.gov/oil-and-mal Place PO Box 280

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Charlotte Smith 440 Farm Road New Martinsville WV 26155







# WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

# Division of Highways

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

July 26, 2017

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

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

Subject: DOH Permit for the Smith Pad, Wetzel County

Smith 1H Smith 3H

Smith 5H

Smith 6H

Smith 7 H

Smith 8H

47-103-02791

Dear Mr. Martin,

Jim Justice

Governor

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,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Cc: Nick Bumgardner

**EQT Production Company** 

CH, OM, D-6

File

47-10302791

# Anticipated Frac Additives Chemical Names and CAS numbers

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

Dat 10-18-17

> RECEIVED Office of Oil and Gas

NOV 1 4 2017

WV Department of Environmental Protection



LOCATION MAP STALE IT . 2003

#### SITE LOCATION

THE PROJECT IS LOCATED AT 59 650510. -80.812201 (NAD85 WVN). THE COORDINATES ARE REFERENCED FROM THE FAD ENTRANCE AND CAN BE LOCATED BY TAKING DOOLIN RIDGE ROAD ONE MILE EAST FROM NEW MARTINSVILLE. TURN LEFT ONTO SCHUPBACH RIDGE AND TRAVEL APPROXIMATELY 2.4 MILES AND THE PAD ENTRANCE WILL BE ON THE RIGHT

#### FLOODPLAIN NOTE

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

# WVDEP OOG ACCEPTED AS-BUILT VAI 9/13/2017

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

# EQT

# **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

# Blue Mountain Inc.

Engineers and Land Surveyors Woman Owned Small Business 10125 Mason Dixon Hwy. Burton, WV 26562-9656 (304) 662-6486

NOTE: DRAWING WAS CREATED ON 22X34 PAPER. IIXI7 DRAWINGS ARE HALF SCALE. REFER TO SCALE BAR FOR PROPER SCALING.



LOCATION MAP

#### PROPERTY OWNERS

- L SMITH SCNNY L 8 CHARLOTTE 08-08-05
- 2. SCHUPBACH GEORGE S 08-05-32

Dait 10-18-17

Know what's below. Call before you dig.



PROFESSIONAL ESSIONAL BUILD RIDGEPORT, WV 2

SMITH WELL SITE



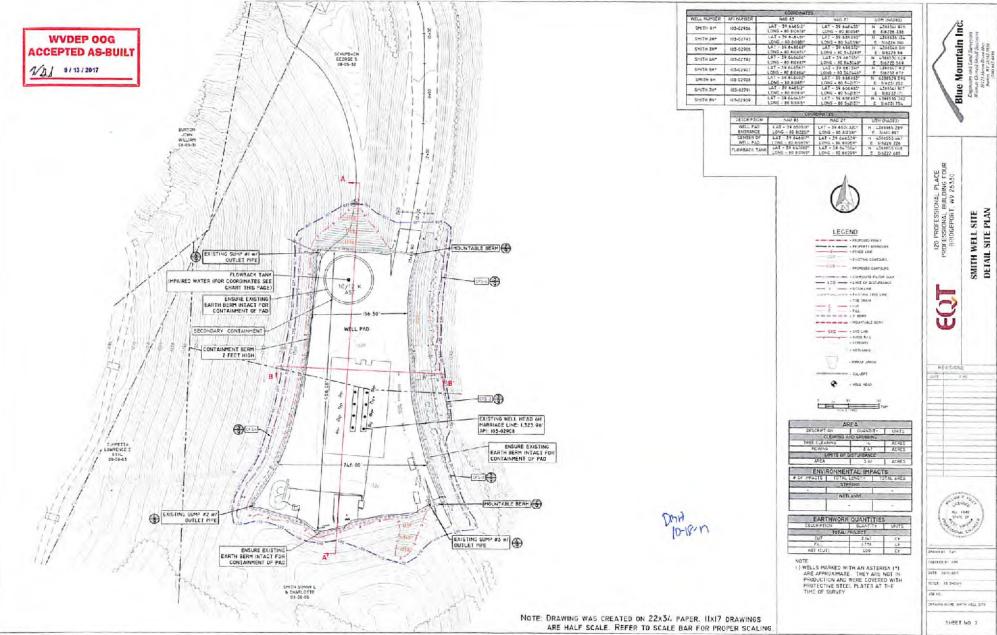
REVISIONS



STALL OF BRIDE THE ALBERT PICK SHILL STE

SHEET NO

17/0302791



NOV 1 4 2017
WV Department of Environmental Protection

47.10362791