

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

Harold D. Ward, Cabinet Secretary www.dep.wv.gov

Monday, July 12, 2021 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359 SPRING, TX 773914954

#### Re: Permit approval for SWN A WTZ 1H 47-103-03421-00-00

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

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

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

. Mart James

Operator's Well Number: Farm Name: U.S. WELL NUMBER: Horizontal 6A Date Issued: 7/12/2021 SWN A WTZ 1H SWN PRODUCTION COMPAN 47-103-03421-00-00 New Drill

Promoting a healthy environment.

# **PERMIT CONDITIONS**

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

#### CONDITIONS

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

**API Number:** 

# **PERMIT CONDITIONS**

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.

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API NO. 47-OPERATOR WELL NO. SWN A WTZ 1H Well Pad Name: SWN A WTZ Pad

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				WEST VIRGINIA			• 0
DEPAR	<u>RTMENT O</u>			<u>L PROTECTION,</u> ERMIT APPLICAT		IL AND GA	45
						· · · · · · · · · · · · · · · · · · ·	
1) Well Operate	or: SWN F	Production C	o., LLC	494512924	103-Wetzel	7-Proctor	681-Wileyville
				Operator ID	County		
2) Operator's W	Vell Number	r: SWN A W	TZ 1H	Well Pad	Name: SWN	A WTZ Pa	d
3) Farm Name/	Surface Ow	ner: SWN Produ	uction Compa	Public Roa	d Access: Mad	cedonia Ric	lge Road
4) Elevation, cu	irrent groun	d: <u>1343'</u>	El	evation, proposed	post-constructi	on: <u>1343'</u>	
5) Well Type	• •	<u>x</u>	_ Oil	Unde	erground Storag	ge	
	Other						· · · · · · · · · · · · · · · · · · ·
	(b)If Gas	Shallow	x	Deep			
		Horizontal	<u>×</u>				
6) Existing Pad							
				ipated Thickness a			Associated Pressure- 4812
8) Proposed To	tal Vertical	Depth: 738	8'				
9) Formation at			Marcellus	8			
10) Proposed T	otal Measur	red Depth:	17,326'				
11) Proposed H	orizontal L	eg Length:	9375.27'			<u> </u>	
12) Approxima	te Fresh Wa	ater Strata De	pths:	307'			
13) Method to I	Determine F	Fresh Water D	Depths:	Salinity Calculations	from SWN A V	VTZ 3H logs	(API 47-103-03232)
14) Approxima	te Saltwater	Depths: 13	42' logs v	will be run for a sal	inity profile ana	lysis	
15) Approxima	te Coal Sear	m Depths: 1	246'		·		
16) Approxima	te Depth to	Possible Void	d (coal m	ine, karst, other):	None that we	are aware	of.
17) Does Propo directly overlyi				ms Yes	No	x	
(a) If Yes, pro	vide Mine I	Info: Name:					
		Depth	:				
		Seam:			125		<u>-</u>
		Owner	r:	RECEIVED Office of Oil and C	าา		
					<b>F</b> .		
				JUN V O WV Departme Environmental P	rotection		
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API NO. 47-

OPERATOR WELL NO. SWN A WTZ 1H Well Pad Name: SWN A WTZ Pad

WW-6B (04/15)

18)

#### CASING AND TUBING PROGRAM

TYPE	Size (in)	<u>New</u> <u>or</u> <u>Used</u>	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	126'	126'	CTS
Fresh Water	13 3/8"	New	H-40	48#	380'	380'	380 sx/CTS
Coal	See	Interm	Casing				
Intermediate	9 5/8"	New	J/K-55	36/40#	2888'	2888'	1011 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	17326'	17326'	Tail 2970ax/ 100 Inside Intermediate
Tubing							
Liners							

Buyon Hain 5-3-21

ТҮРЕ	Size (in)	<u>Wellbore</u> Diameter (in)	<u>Wall</u> <u>Thickness</u> (in)	<u>Burst Pressure</u> (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	<u>Cement</u> <u>Yield</u> (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.380	2730	633	Class A	1.20/30% Excess
Coal	See	Interm	Casing				
Intermediate	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/40% Excess
Production	5 1/2"	8 3/4"-8 1/2"	0.361	14360	10500	Class A	1.19/5% Excess
Tubing							
Liners							

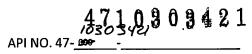
## PACKERS

Kind:		
Sizes:		
Depths Set:		
	BECEWED Gas	

Office of Oil and Gas

WV Department of Environmental Protection

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OPERATOR WELL NO. SWN A WTZ 1H Well Pad Name: SWN A WTZ Pad

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

Drill and stimulate any potential zones between and including the Benson to Marcellus. \*\*If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface or run external casing packer/cementing stage tool above void interval and perform 2 stage cementing operation dependent upon depth of void. Run casing not less than 20' below void nor more than 75' below void. (\*If freshwater is encountered deeper than anticipated it must be protected, set casing 50' below and cts.)

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

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. In some instances, additional toe prep may be performed by pumping additional water in the toe of the well prior to perforating and pumping Stage 1 to ensure that the toe guns/toe sleeves are fully open prior to pumping stage 1. The well is produced through surface facilities consisting of high pressure production unites, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 9000 lbs @ 100 barrels a minute.

23) Describe centralizer placement for each casing string:

All casing strings will be ran with a centralizer at a minimum of 1 per every 3 joints of casing.

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

See Attachment \*\*\*

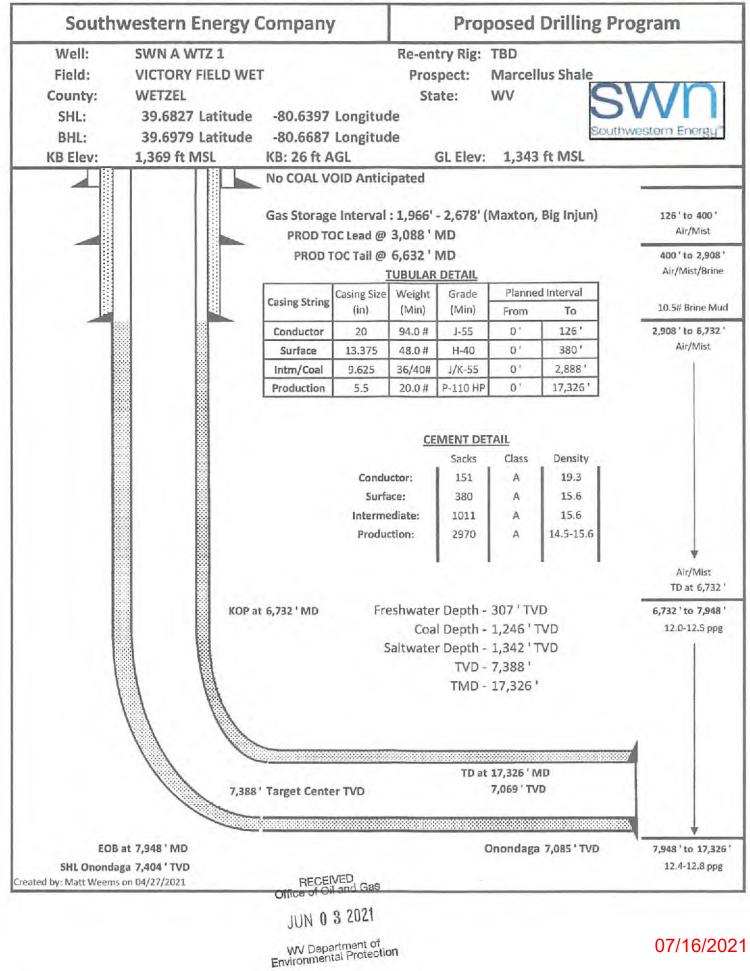
25) Proposed borehole conditioning procedures:

All boreholes will be conditioned with circulation and rotation for a minimum of one bottoms up and continuing until operator is satisfied with borehole conditions.



			CEMENT A	ADDITIVES		
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTIER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER)	$\ge$	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
up to 3%	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION	$\geq$	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
up to 3%	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
INTERMEDIATE	D047	FP 28L	$\succ$	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	E SEAL CJ600 LOST CIRC MATERIAL CELLOPHANE FLAKE		CELLOPHANE FLAKES	9005-81-6		
	CemNet	$>\!\!<$	$\ge$	LOST CIRC MATERIAL		PROPRIETARY
	SUGAR	SUGAR	CJ795	CMT RETARDER	SUCROSE	57-50-1
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
	$\sim$	> <	CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
	$\searrow$	SS-11W	CJ880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	D047	FP 28L	$\times$	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	$\times$	$\times$	CJX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
-	$\ge$	$\boldsymbol{\succ}$	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATIC AMIDE POLYMER	PROPRIETARY
PRODUCTION	D255	$\boldsymbol{\succ}$	$\ge$	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
	$\searrow$	$\sim$	CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
	$\geq$	FL-66	CJ501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
	>>	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
- D	D208	ASA-301	$\ge$	VISCOSIFIER/ANTI- SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETAR
	D198	R-3		CEMENT RETARDER	LIGNIN	8068-51-6
1.11	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1

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07/16/2021

WW-9 (4/16)

03421 API Number 47 - 103 -

Operator's Well No. SWN A WTZ 1H

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

#### FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name SWN Production Co., LLC	OP Code 494512924
Watershed (HUC 10) Upper Ohio South	Quadrangle Wileyville
Do you anticipate using more than 5,000 bbls of water to co	mplete the proposed well work? Yes 🗸 No
Will a pit be used? Yes No 🗸	
If so, please describe anticipated pit waste:	
Will a synthetic liner be used in the pit? Yes	No 🖌 If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	
Land Application	
the second se	mit Number_Various Approved Facilities)
Reuse (at API Number_At the next	
<ul> <li>Off Site Disposal (Supply form V Other (Explain recovery and solid)</li> </ul>	
Other (Explain recovery and solid	
Will closed loop system be used? If so, describe: Yes- See	Attachment 3A
Drilling medium anticipated for this well (vertical and horiz-	ontal)? Air, freshwater, oil based, etcAr drill to KOP, fuld drill with SOBM thom: KOP to TO
-If oil based, what type? Synthetic, petroleum, etc.	Synthetic Oil Base
Additives to be used in drilling medium?Attachment 3B	
Drill cuttings disposal method? Leave in pit, landfill, remov	red offsite, etc. landfill
-If left in pit and plan to solidify what medium will	be used? (cement, lime, sawdust)
	SWF- 1032, Short Creek SWF-1034, Carbon Limestone MSWL018/81, Wetzel County 1621
Permittee shall provide written notice to the Office of Oil an	d Gas of any load of drill cuttings or associated waste rejected at any ded 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 provisions of the permit are enforceable by law. Violation law or regulation can lead to enforcement action. I certify under penalty of law that I have persona application form and all attachments thereto and that, ba	nd conditions of the GENERAL WATER POLLUTION PERMIT issued Virginia Department of Environmental Protection. I understand that the s of any term or condition of the general permit and/or other applicable ally examined and am familiar with the information submitted on this ased on my inquiry of those individuals immediately responsible for is true, accurate, and complete. I am aware that there are significant sibility of fine or imprisonment. RECEIVED Office of Oil and Gas
Company Official (Typed Name) Brittany Woody	JUN 0 3 2021
Company Official Title Senior Regulatory Analyst	
	WV Department of Environmental Protection
Subscribed and sworn before me this 5 <sup>th</sup> day of	April , 20 21
Cul Cut	Notary Public REID CRI Notary Public Notary Public C





Operator's Well No. SWN A WTZ 1H

## SWN Production Co., LLC

posed Revegetation Trea	test min.2 Tons/acre or to			
Fertilizer type 10				
Fertilizer amount_	600/500	lbs/acre		
Mulch Hay/Stra	aw	Tons/acre		
		Seed Mixtures		
Т	emporary		Perma	nent
Seed Type	lbs/acre		Seed Type	lbs/acre
ttachment 3C				

#### Attach:

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

Photocopied section of involved 7.5' topographic sheet.

an Approved by: Buyan Haren		
mments:		
		RECEIVED Office of Oil and Gas
		IUN 0 3 2021
		WV Department of Environmental Prote
		Environmentar
le: Oil & Gas Inspector	Date: 5-3-2/	

#### Attachment 3A

#### **CLOSED LOOP SYSTEM**

The closed loop system is designed to eliminate the use of reserve pits by providing a higher level of solids control processing and using steel pits for capture of drill cuttings. The cuttings are then processed to achieve landfill requirements before hauling to approved landfills. The liquids are processed to recycle into the active mud system or to transfer to onsite temporary storage as needed.

The closed loop system consists of several sets of a shale gas separator (often called a 'methana'), several banks of solids shakers, high speed centrifuges (1 or 2) used to process the fluid portion of the mud system to remove low gravity solids, low speed centrifuge used for barite recovery in high weight liquid drilling systems, a dewatering system (for air intervals and if freshwater mud systems are in use) used to further clean liquids by flocculation and additional mechanical separation, associated open top tanks for processing liquids and capturing solids for disposal, and transfer pumps to move fluids through the processes. There is an area adjacent to the cuttings tanks (Red Zone) where a track hole is utilized to recover the processed cuttings for loading into containers for hauloff. (See attached schematic of a generic closed loop system layout)

Below are discussions of the processes used when drilling the air interval or liquids interval.

#### AIR DRILLING INTERVALS

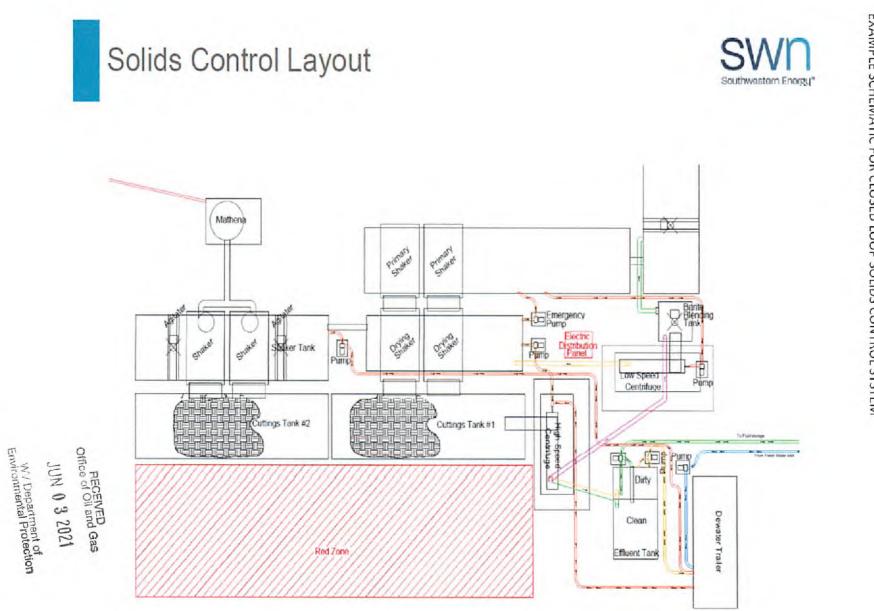
During air drilling operations, flow from the rig will pass down the flowline to the Shale Gas Separater (sometimes called a methane) where gas and liquids/solids are separated. Gas is sent to the flare scrubber tank and is flared at the flare stack. Solids and fluids pass across a shaker system to separate solids from liquids. Solids pass into the cuttings tanks where they are captured for drying and hauloff to an approved landfill site. Liquids fall into a shaker tank and are collected by a centrifugal pump to be processed by the high speed centrifuge to further separate liquids and solids. Solids are then dumped into the cuttings tank for drying and hauloff. Liquids are further processed to remove additional low gravity solids before being reused or transferred to onsite storage.

#### LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

When drilling is converted to liquids drilling, the shale gas separator and associated shaker tank are bypassed, and the liquids system is processed over the primary and drying shaker systems. Cuttings drop into the cuttings tank for additional processing. Any recoverable associated liquids attached to the cutting are recovered out the tank and processed through the low gravity (high speed) and barite recovery centrifuges (low speed) to further remove low gravity solids and to recover barite for reuse in the mud systems.

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07/16/2021



EXAMPLE SCHEMATIC FOR CLOSED LOOP SOLIDS CONTROL SYSTEM

# **Attachment 3B**

# **Drilling Mediums**

#### Surface/Coal(if present)/Freshwater Intervals:

Air

Freshwater (if needed based on conditions)

### Intermediate/Coal (if present):

Air

#### **Production Hole:**

Air

Synthetic Oil (Base Fluid for mud system)

Barite

**Calcium Chloride** 

Lime

**Organophilic Bentonite** 

Primary and Secondary Emulsifiers

Gilsonite

**Calcium Carbonate** 

Friction Reducers

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Attachment 3C

Southwestern Energy"	WVD Seed	ng Specification	Rt AW+*				
To Order Se NON-ORGANIC PROPERTIES	eed contact Lyndsi Eddy Flippo office 570-996-4271 cel	501-269-5451 lyndsi_eddy@swn.com (please allow 7 to 10 days f ORGANIC PROPERTIES	or delivery)				
Seed Mixture: ROW Mix	SWN Supplied	Seed Mixture: SWN Production Organic Mix	x SWN Supplied				
Orchardgrass Fimothy Annual Ryegrass Brown Top Millet Red Top Medium Red Clover White Clover Birdsfoot Trefoil Rough Bluegrass Apply @ 100lbs per acre	40% 15% 15% 5% 5% 5% All legumes are 5% rate 5% Apply @ 200lbs per acre Oct. 15th-April 15th PLUS	Organic Timothy Organic Red or White Clover OR Organic Perennial Ryegrass Organic Red or White Clover	50% 50% 50% Apply @ 200lbs per acre Oct. 15th- April 15th Pelletized Lime @ 2 Tons per Acre				
April 16th- Oct. 14th SOIL AMENDMENTS	50lbs per acre of Winter Wheat		WETLANDS (delineated as jurisdictional wetlands) Seed Mixture: Wetland Mix SWN Supplied				
2012 AIVIENDIVIENTS 10-20-20 Fertilizer Pelletized Lime	*Apply @ 500lbs per Acre Apply @ 2 Tons per Acre *unless otherwise dictated by soil test rest	VA Wild Ryegrass Annual Ryegrass	20% 20%				
Seeding Calculation Information: 1452' of 30' ROW/LOD is One Acre 871' of 50' ROW/LOD is One Acre 622' of 70' ROW/LOD is One Acre		Cosmos 'Sensation' Redtop Golden Tickseed Maryland Senna Showy Tickseed	10%         RECEIVED           5%         Office of Oil and           5%         JUN 0 3 20,           5%         France				
	, you should be using (2) 50lb bags of seed, (4) ime (2x seed in winter months + 50lb Winter	Fox Sedge Soft Rush Woolgrass Swamp Verbena	5% WV Department 2.5% Environmental Prote 2.5% 2.5% 2.5%				
	g CREP program participants require additional ese requirements with SWN supervision at the pecial seed delivery.	Apply @ 25lbs per acre April 16th- Oct. 14th NO FERTILIZER OR LIME INS	Apply @ 50lbs per acre Oct. 15th- April 15th IDE WETLAND LIMITS				

Rev.1/13/2020

API	Operator	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones Not Perforated
Unknown	Unknown		39.683414	80.640257			
103-01485	Perkins Oil & Gas, Inc PO Box 547, Pennsboro, WV 26415	Active	39.682609	80.640643			
103-00404	The Manufacturers Light and Heat Company	Plugged	39.684535	80.652068	1832	Maxon Sand	Pittsburgh Coal
103-03253	SWN Production Company	Active	39.682664	80.639579	25972	Marcellus	Tully Lime
103-03251	SWN Production Company	Active	39.682639	80.639593	25776	Marcellus	Tully Lime
103-03233	SWN Production Company	Active	39.682614	80.639608	21117	Marcellus	Tully Lime
103-03232	SWN Production Company	Active	39.682589	80.639622	18878	Marcellus	Tully Lime

Office of Oil and Gas JUN 0 3 2021 JUN Department of ion NN Departmental Protection

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# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN



SWN Production Company, LLC 1300 Fort Pierpont Drive, Suite 201 Morgantown, West Virginia 26508

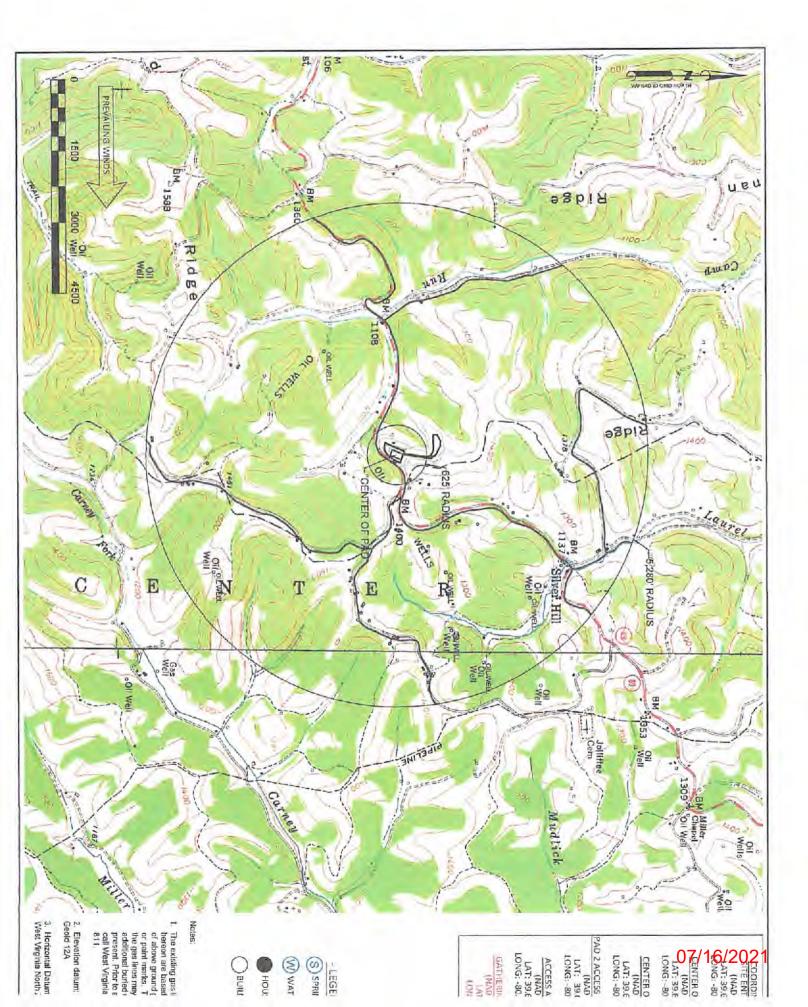
47-103-03421 API NO. 47-XXX-XXXX WELL NAME: SWN A WTZ 1H WILEYVILLE QUAD PROCTOR DISTRICT WETZEL COUNTY, WEST VIRGINIA By Ham 5-3-21

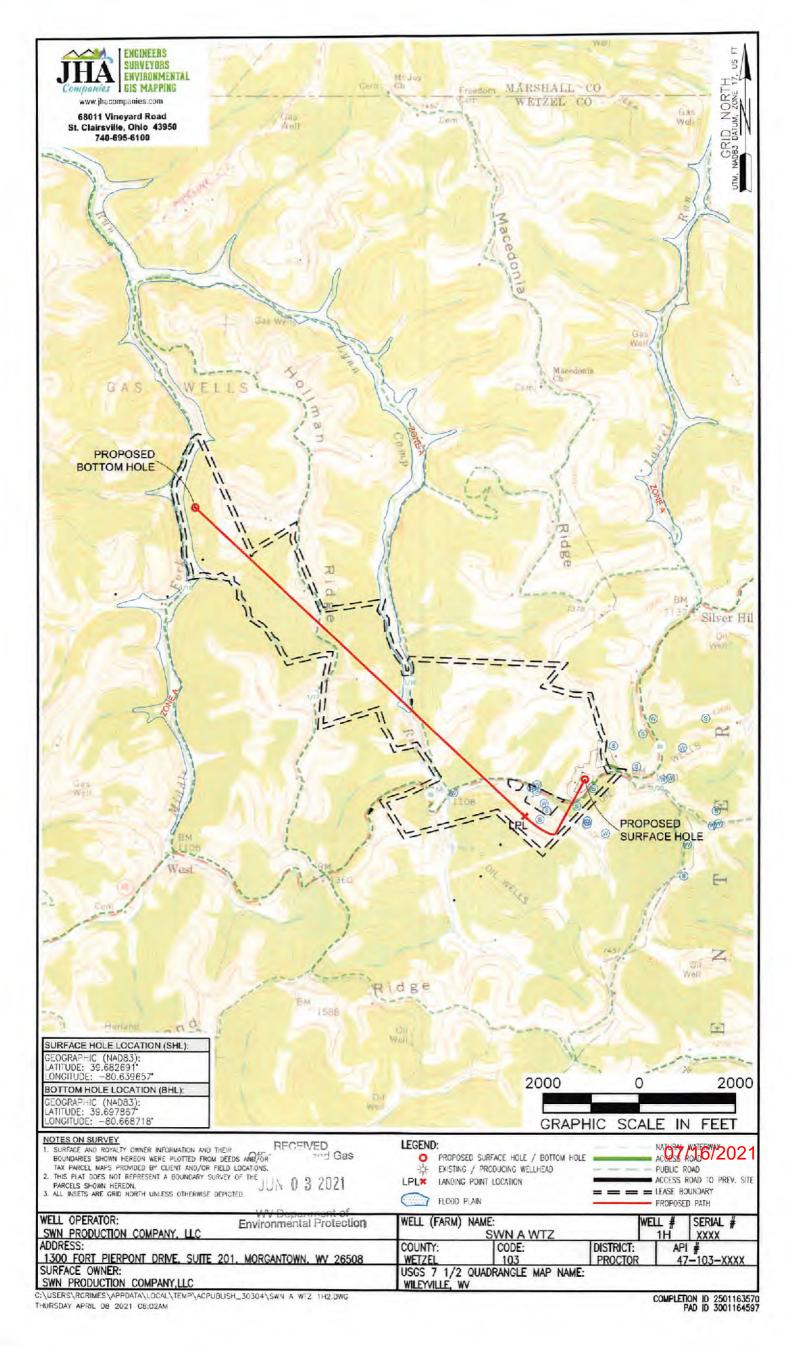
Submitted by:

Name: Brittany Woody	Date: <u>4/5/2021</u>	
Buttany Moody		
Title: Senior Regulatory Analyst	SWN Productio	n Co., LLC
Approved by:		
Name:	Date:	-b * 1 .
Title:		RECEIVED Office of Oil and Gas
Approved by:		JUN 0 3 2021
Name:	Date:	WV Department of Environmental Protection
Title:	_	

SWN PRODUCTION COMPANY, LLC - CONFIDENTIAL

07/16/2021







	WELLBORE TABLE FOR SURFACE/ROYALTY OW	Difference
TRACE	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCE
1	SWN PRODUCTION COMPANY LLC (5) RODNEY CALVERT, ET AL (B)	12-10-29
TBACT	SURFACE OWNER	TAX PARCE
2	CALVERT RODNEY A	12 10 29.5
3	CALVERT RODINEY A	12-10-29.3
4	HAESSLY LAND AND TIMBER LLC	12-10-33
5	SWN PRODUCTION COMPANY LLC	12-10-28
6	SWN PRODUCTION COMPANY LLC	12-10-27
7	RITCHEA ROBERT C & JAMES L	12-10-22
8	SWN PRODUCTION EDMPANY/LLC	12-10-14
9	RICHMOND CASSID: PAIGE	12-10-21
10	RICHMOND CASSIDI PAIGE	12-10-13
11	SHULUGA ANDREW D & ANDREA M	12-9-15

-	ADJOINING OWNERS TABLE	
WACT	SURFACE OWNER	TAX RABCE
4	SWN PRODUCTION COMPANY	12-10-29.2
8	YOHO NORMAT	1-7-40
C	HUTCHISON MARGARET A	12-15-9
0	OREVER JOSEPH C	12-15-8
E	HAESSLY LAND AND TIMBER LLC	12-15-6
F	HAESSLY LAND AND TIMBER LLC	12-15-5
G	HAESSLY HARDWOOD LUMBER CO	12-10-32
н	SWN PRODUCTION COMPANY LLC	12-10-26
1	HUGGINS JOSEPH DEAN	12-10-25
2	RITCHEA ROBERT C & JAMES I	12-10-24
K	RAESSLY HARDWOOD LUMBER CO	12-10-23
L	HAESSLY LAND AND TIMBER LLC	12-10-20
M	HUGGINS MICHAELA & PATRICK W	12-9-23
N	GOODARD WAYNE L	12-9-22
0	SHULUGA ANDREW D & ANDREA M	12-9-14
P	SHULUGA ANDREW D & ANDREA M	12-9-13
0	SHULUGA ANDREW D & ANDREA M	12-9-8
R	SHULUGA ANDREW D & ANDREA M	12-9-9
5	MASSARI MARK	12-4-38
T	SHULUGA ANDREW D & ANDREA M	12-10-1
U	SHULUGA ANDREW D & ANDREA M	12-10-9-1
V	MILLTREE PROPERTIES LLC	12-10-9
W	SWN PRODUCTION COMPANY LLC	12-10-10
X	SWN PRODUCTION COMPANY LLC	12-10-15
¥.	VOHO DARREN ETAL	12-10-16
Z	YOHO DARREN FLAL	12-10-18
AA	DURIG CORY & DAVID	1-7-2
AB	CALVERT BODNLY ETAI	12-10-29.1
AL	CAEVERT RODNEY A	12-10-29.4

				07/16/2021
REVISIONS:	COMPANY:	SWN Production Company, LLC	Pr	SWN <sup>A</sup> →V <sup>+</sup> <sup>®</sup>
	OPERATOR'S WELL #:		A WTZ H	DATE: 04-08-2021 API NO: 47-103-XXXXX DRAWN BY:R. GRIMES
	DISTRICT: PROCTOR	COUNTY: WETZEL	STATE: WV	SCALE: N/A DRAWING NO:2016-519 WELL LOCATION PLAT
				COMPLETION ID 2501163570

PAD ID 3001164597

WW-6A1 (5/13)

#### 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

See Exhibit

#### 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.

SWN Production Company, LLC.	
ROCK	
Senior Landman	
	Rock

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JUN 0 3 2021

WV Department of Environmental Protection Page 1 of

07/16/2021

#### **EXHIBIT "A"** Attached to and made a part of the State of West Virginia Oll and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator SWN A WTZ 1H Wetzel County, West Virginia

#	ТМР	LESSOR	LESSEE	ROYALTY	BK/PG
1	12-10-29	I Isaac L. Carney and Mary Carney, his wife	Hope Natural Gas Company	12.50%	18A/25
			Eagon and Robinson		39A/249
			Elva Robinson and Mary Ellen Davis		43A/440
			Andrew L. Henry, Charles E. Reed, and Harry R. Cronin, Jr.		44A/92
			Charles E. Reed and Kathryn C. Reed		51A/241
			Carl Perkins		55A/54
			Perkins Oil & Gas, Inc.		84A/9
			Stone Energy Corporation		126A/958
			Chesapeake Appalachia, L.L.C.		158A/564
			SWN Production Company, LLC		167A/9
2	12-10-29.5	Isaac L. Carney and Mary Carney, his wife	Hope Natural Gas Company	12.50%	18A/25
			Eagon and Robinson		39A/249
			Elva Robinson and Mary Ellen Davis		43A/440
			Andrew L. Henry, Charles E. Reed, and Harry R. Cronin, Jr.		44A/92
			Charles E. Reed and Kathryn C. Reed		51A/241
			Carl Perkins		55A/54
			Perkins Oil & Gas, Inc.		84A/9
			Stone Energy Corporation		126A/958
			Chesapeake Appalachia, L.L.C.		158A/564
			SWN Production Company, LLC		167A/9

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Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator SWN A WTZ 1H Wetzel County, West Virginia

3	12-10-29.3	Isaac L. Carney and Mary Carney, his wife	Hope Natural Gas Company	12.50%	18A/25
			Eagon and Robinson		39A/249
			Elva Robinson and Mary Ellen Davis		43A/440
			Andrew L. Henry, Charles E. Reed, and		44A/92
			Harry R. Cronin, Jr.		
			Charles E. Reed and Kathryn C. Reed		51A/241
			Carl Perkins		55A/54
			Perkins Oil & Gas, Inc.		84A/9
			Stone Energy Corporation		126A/958
			Chesapeake Appalachia, L.L.C.		158A/564
			SWN Production Company, LLC		167A/9
4	12-10-33	H. L. Calvert	J.H. Ferrell	12.50%	33A/272
			Frank W. Hineline and Bertha Hineline		34A/67
			Clyde Gillispie and Thelma Gillispie		34A/68
			Chester Lemon and Nella Lemon		34A/69
			W. L. Smith, Jr.		34A/67
			Winnie Miller		34A/32
			Orcal C. Baker		34A/39
			H. L. Calvert		35A/274
			J. W. Tobin		34A/74
			Mrs. Paul Stillings		36A/15
			Mrs. Paul Stillings		36A/14
			Mrs. Paul Stillings		37A/112
			Oliver Calvert		33A/488

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Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator SWN A WTZ 1H Wetzel County, West Virginia

E.R. Busch	35A/158
W. Frank Jones	34A/33
H.L. Calvert	35A/285
E.R. Busch	34A/70
W.H. Miller	35A/149
W.H. Miller	35A/187
W.H. Miller	35A/198
Wade H. Miller	36A/350
Paul V. Stillings	36A/429
Orval C. Baker and Paul Stillings	36A/431
Orval C. Baker	36A/483
Orval C. Baker and Paul V. Stillings	37A/54
Paul Stillings	37A/112
Orval C. Baker and Paul Stillings	37A/155
Paul Stillings	39A/107
G.F. Eagon and John H. Robinson	39A/115
Elva Robinson and Mary Ellen Davis	43A/440
Andrew L. Henry, Charles E. Reed and	44A/92
Harry R. Cronin, Jr.	
Charles E. Reed and Kathryn C. Reed	51A/241
Carl Perkins	55A/54
Perkins Oil & Gas Inc.	84A/9
Stone Energy Corporation	126A/958
Chesapeake Appalachia, L.L.C.	158A/564
SWN Production Company, LLC	157A/540

# JUN 0 3 2021

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Attached to and made a part of the State of West Virginia Oll and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator SWN A WTZ 1H Wetzel County, West Virginia

5	12-10-28	F. C. Emch and Thelma M. Emch, his wife; Jerald Yocum and Mildred Yocum, his wife; Iva M. Gray and Bud Gray, her	The Manufacturer's Light and Heat Company	12.50%	47A/48
		husband; Ocia Williams and Hobert Williams, her husband; Arlie	Columbia Gas Transmission Corporation		263/164
		Young and Virgil Young, her husband; Ica Harlan and Elmer	Chesapeake Appalachia, L.L.C.		90A/242
		Harlan, her husband	SWN Production Company, LLC		157A/540
6	12-10-27	Raymond D. Harlan and Alice Harlan, his wife	The Manufacturer's Light and Heat Company	12.50%	52A/269
			Columbia Gas Transmission Corporation		263/164
			Chesapeake Appalachia, L.L.C.		90A/242
			SWN Production Company, LLC		157A/540
		Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	15.00%	99A/498
			SWN Production Company, LLC		167A/9
7	12-10-22	James J. Postelwait, widower; William Postelwait, widower; Jane Calvert, widow; K. W. Calvert and Grace E. Calvert, his wife;	The Manufacturer's Light and Heat Company	12.50%	45A/255
		Dorothy Higgins Waryck and Arthur L. Waryck, her husband;	Columbia Gas Transmission Corporation		263/164
		Edan Carney and Carl Carney, her husband; Ella Postlethwait,	Chesapeake Appalachia, L.L.C.		90A/242
		widow	SWN Production Company, LLC		157A/540
		Shirl W. Higgins & Doris J. Higgins, husband and wife	SWN Production Company, LLC	18.00%	188A/119
		Delmas W. Higgins, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	188A/124

Attached to and made a part of the State of West Virginia Oll and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator SWN A WTZ 1H Wetzel County, West Virginia

		Betty L. Bryner, a married woman dealing in her sole and separate property	TH Exploration, LLC SWN Production Company, LLC	18.00%	200A/377 227A/42
		Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	15.00%	99A/498
8	12-10-14	Спезареаке Арранастиа, с.с.с.	SWN Production Company, LLC	10,0070	167A/9

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Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator SWN A WTZ 1H Wetzel County, West Virginia

10	12-10-13	Austin Miller and Artie Miller, his wife; and Lloyd Stewart, single	The Manufacturer's Light and Heat Company	12.50%	45A/472
			Columbia Gas Transmission Corporation		263/164
			Chesapeake Appalachia, L.L.C.		90A/242
			SWN Production Company, LLC		157A/540
11	12-9-15	Otis Simmons and Pearl Simmons, his wife; Harold Simmons and Roxie Simmons, his wife; Roxie Newman and Archie Newman,	The Manufacturer's Light and Heat Company	12.50%	39A/499
		her husband	Columbia Gas Transmission Corporation		263/164
			Chesapeake Appalachia, L.L.C.		90A/242
			SWN Production Company, LLC		157A/540

WV Department of Environmental Protection

Office of Oil and Gas JUN 0 3 2021



SWN Production Company, LLC 1300 Fort Pierpont Dr, Ste 201 Morgantown, WV 26508 Tel: 304 884 1810 Fax: 304 471 2497 www.swn.com

April 8, 2021

Mr. Charles Brewer WV DEP Office of Oil & Gas 601 57<sup>th</sup> St., SE Charleston, WV 25304

**RE:** SWN's proposed New Well: SWN A WTZ 1H in Wetzel County, West Virginia, Drilling under Hollman Ridge Road, Lynn Camp Road and Proctor Creek Road.

Dear Mr Brewer:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under Hollman Ridge Road, Lynn Camp Road and Proctor Creek Road. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Thank you.

Sincerely,

Bradley Wilson Senior Landman SWN Production Company, LLC

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JUN 0 3 2021

WV Department of Environmental Protection

The Right People doing the Right Things, wisely investing the cash fow from our underlying Assets with great Over 21

#### WW-6AC (1/12)

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

Date of Notice Certification:

### 3 03421

API No. 47- 009-Operator's Well No. SWN A WTZ 1H Well Pad Name: SWN A WTZ Pad

Notice has been given:

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

State:	West Virginia	UTM NAD 83 Eas	sting;	530900.72	
County:	103-Wetzel	UTMINAD 85 No	rthing:	4392602.00	
District:	Proctor	Public Road Access:		Macedonia Ridge Road	
Quadrangle:	Wileyville	Generally used farm	name:	SWN A	
Watershed:	Upper Ohio South				
		Generally used failin	interio.		_

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

Pursuant to West Virginia Code § 22-6A, the Op that the Operator has properly served the required *PLEASE CHECK ALL THAT APPLY	erator has attached proof to this Notice Certification d parties with the following:	OOG OFFICE USE ONLY
□ 1. NOTICE OF SEISMIC ACTIVITY or	NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	RECEIVED/
■ 2. NOTICE OF ENTRY FOR PLAT SURV	YEY oF D NO PLAT SURVEY WAS CONDUCTED	RECEIVED
3. NOTICE OF INTENT TO DRILL or	□ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	RECEIVED/ NOT REQUIRED
	WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
■ 4 NOTICE OF PLANNED OPERATION	DECENED	RECEIVED
■ 5. PUBLIC NOTICE	RECEIVED Office of Oil and Gas	C RECEIVED
6. NOTICE OF APPLICATION	JUN 0 3 2021 WV Department of Environmental Protection	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.

#### Certification of Notice is hereby given:

THEREFORE, I Brittany Woody \_\_\_\_\_\_, 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: By:	Brittany Woody	X 1000 (Address:	Jane Lew, WV 26378
Its:	Senior Regulatory Analyst R. HUU	Facsimile:	304-884-1690
Telephone:	304-884-1610	Email:	Brittany_Woody@swn.com
	MOTARYSFAL	Subscribed and swy	an before me this 5th day of April, 2021.

#### 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.

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# JUN 0 3 2021

WV Department of Environmental Protection

WW-6A		API NO. 47- 600
(9-13)		OPERATOR WELL NO. SWN A WTZ 1H
		Well Pad Name: SWN A WTZ Pad
		STATE OF WEST VIRGINIA
DI	EPARTMENT OF ENV	IRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
		NOTICE OF APPLICATION
Notice Time Requi	rement: notice shall be pro	vided no later than the filing date of permit application.
Date of Notice:	Date Permit Appli	cation Filed: (1)2.12
Notice of:	(	1.1
PERMIT FOR	ANY CERTI	FICATE OF APPROVAL FOR THE
WELL WORK	CONS	TRUCTION OF AN IMPOUNDMENT OR PIT
Delivery method pu	ursuant to West Virginia	Code § 22-6A-10(b)
PERSONAL	REGISTERED	METHOD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION
Durmant to W Vo C	ada \$ 22.64 10(b) no latar	then the filing data of the application, the applicant for a permit for any well work or fo

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

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

☑ SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: SWN Production Company, LLC	Name: CNX Gas Company, LLC Attn: Casey Saunders
Address: PO Box 672625	Address: 1000 Consol Energy Drive
Houston, TX 77267	Canonsburg, PA 15317
Name:	COAL OPERATOR
Address	Name:
	Address:
□ SURFACE OWNER(s) (Road and/or Other Disturbance)	
Name:	SURFACE OWNER OF WATER WELL
Address:	AND/OR WATER PURVEYOR(s)
	Name: See Attachment 13A
Name:	Address:
Address:	that when the second of the day of the second secon
	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)	Name: TC Energy Attn: Garrett Word
Name:	Address: Houston Office Bank of America 700 Louisiana St
Address:	Houston, TX 77002
RECEIVED Office of Oil and Gas	*Please attach additional forms if necessary
JUN 0 3 2021	

WV Department of Environmental Protection

07/16/2021

113 A 2/121

API NO. 47-006 OPERATOR WELL NO. SWN A WTZ 1H Well Pad Name: SWN A WTZ Pad

## G85 Office of

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that of the moder signed well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit of This Notice Shall Include: Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1)Grophes of the application; (2) the erosion and sediment control

plan required by section seven of this article; and (3) the well plat.

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

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

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

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oiland-gas/pages/default.aspx.

#### Well Location Restrictions

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



OPERATOR WELL NO. SWN A WTZ 1H Well Pad Name: SWN A WTZ Pad

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 RECEIVED Office of Oil and Gas

JUN 0 3 2021

WV Department of Environmental Protection

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

API NO. 47-009 0342 OPERATOR WELL NO. SWN AWTZ 1H Well Pad Name: SWN A WTZ Pad

#### Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have **THIRTY (30) DAYS** after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

#### **Comment Requirements**

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-

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

#### Permit Denial or Condition

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

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

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

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

RECEIVED Office of Oil and Gas

JUN 0 3 2021

WV Department of Environmental Protection RECEIVED

0 3 2021

W Demartment of Protection

API NO. 47-000	03421
OPERATOR WE	ELL NO. SWN A WTZ 1H
Well Pad Name:	SWN A WTZ Pad

Notice is hereby given by: Well Operator: SWN Production Co., L	Lo Inharty
Telephone: 304-884-1610	intally wood
Email: Brittany_Woody@swn.com	1 amin (

Address: P.	O. Box 1300	
Jane Lew, V	VV 26378	
Facsimile:	304-884-1690	

#### **Oil and Gas Privacy Notice:**

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

REID CROFT Notary Public Official Seal
State of West Virginia
y Comm. Expires Aug 21, 2024 w Lane Morgantown WV 26508

Subscribed and sworn before me this 5th day of April 2021 Notary Public

My Commission Expires 8/21/2024

Office of Oil and Gas

WV Department of Environmental Protection

OWNERNAME	ADDRESS	CITY/STATE/ZIP	WATERSOUCES
YEATER TERRY W & DORIS	HC 60 BOX 257	NEW MARTINSVILLE, WV 26155	1
YOHO NORMA F	828 GREENLAWN AVE NW	WARREN, OH 44483	2
YOCUM GARY G & LAVERNE F	HC 60 BOX 252	NEW MARTINSVILLE, WV 26155	4
BICKERSTAFF JACOB & ANNA	14383 PROCTOR CREEK RD	NEW MARTINSVILLE, WV 26155	1
CALVERT RODNEY A	13998 PROCTOR CREEK RD	NEW MARTINSVILLE, WV 26155	7

RECEIVED Office of Oil and Gas

JUN 0 3 2021

WV Department of Environmental Protection

Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE	(45) days prior to
entry	

Date of Notice: 3/2/2	D21 Dat	te of Planned Entr	y: 3/9/20214

Delivery method pursuant to West Virginia Code § 22-6A-10a

	PERSONAL	11	REGISTERED	METHOD OF DELIVERY THAT REQUIRES A	
-	SERVICE		MAIL	 RECEIPT OR SIGNATURE CONFIRMATION	

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

#### Notice is hereby provided to:

SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: SWN Production Company, LLC	Name: CNX Gas Company, LLC Attn: Casey Saunders
Address: PO Box 672625	Address: 1000 Consol Energy Drive
Houston, TX 77267	Canonsburg, PA 15317
Name:	
Address:	MINERAL OWNER(s)
	Name: Franklin Thomas Barrett
Name:	Address: 595 W. New York Ave
Address:	Sebring, OH 44672
	*please attach additional forms if necessary

#### Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

WV	Approx. Latitude & Longitude:	39.684757, -80.640554
Wetzel	Public Road Access:	Macedonia Ridge
Proctor	Watershed:	Upper Ohio South
Wileyville	Generally used farm name:	SWN A WTZ Pad
	Wetzel Proctor	Wetzel         Public Road Access:           Proctor         Watershed:

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

### Notice is hereby given by:

Well Operator:	SWN PRODUCTION COMPANY, LLC	Address:	1300 Fort Pierpont Dr., Suite 201	
Telephone:	304-884-1610		Morgantown, WV 26508	
Email:	brittany_woody@swn.com	Facsimile:		

## Oil and Gas Privacy Notice:

entry		vided at least SEVEN (7) days but no more the	an FORTY-FIVE (45) days prior to		
Date of Noti	ce: 3/2/2021 Date of Pla	nned Entry: <u>3/9/2021</u>			
Delivery me	hod pursuant to West Virginia C	ode § 22-6A-10a			
D PERSO	NAL 🔲 REGISTERED	☐ METHOD OF DELIVERY THAT R	EQUIRES A		
SERVIC	E MAIL	RECEIPT OR SIGNATURE CONFIL	RMATION		
but no more t beneath such owner of min and Sediment Secretary, wh enable the sur	han forty-five days prior to such en tract that has filed a declaration pu erals underlying such tract in the co Control Manual and the statutes an	s required pursuant to this article. Such notice try to: (1) The surface owner of such tract; (2) rsuant to section thirty-six, article six, chapter to ounty tax records. The notice shall include a st ad rules related to oil and gas exploration and p information, including the address for a web p he secretary.	to any owner or lessee of coal seams twenty-two of this code; and (3) any atement that copies of the state Erosion production may be obtained from the		
SURFAC	CE OWNER(s)	COAL OWNER OR LE	SSEE		
Name:		Name:	Name:		
Address:		Address:	COAL OWNER OR LESSEE  Name: Address: MINERAL OWNER(s) Name: Nancy G Metheny Address: 3948 N. Park Ave Warren, OH 44481 "please attach additional forms if necessary		
		-			
Name: Address:		MINERAL OWNER(s)	13° 0° 0.3°		
Address:		Name: Nancy G Metheny	01 14 580		
Name:			2°		
			100		
		"please attach additional forms if no	ccessary 45		
		notice is hereby given that the undersigned wel	I operator is planning entry to conduct		
State:	wv	Approx. Latitude & Longitude:	39.684757, -80.640554		
County:	Wetzel	Public Road Access:	Macedonia Ridge		
District:	Protor		Upper Ohio South		
Quadrangle:	Wileyville	Generally used farm name:	SWN A WTZ Pad		
may be obtain	ed from the Secretary, at the WV I	I Manual and the statutes and rules related to o Department of Environmental Protection headq of such documents or additional information r	uarters, located at 601 57th Street, SE,		

obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

# Notice is hereby given by:

Well Operator:	SWN PRODUCTION COMPANY, LLC	Address:	PO BOX 1300	
Telephone:	304-884-1610	1	JANE LEW, WV 26378	
Email:	dee_southall@swn.com or brittany_woody@swn.com	Facsimile:		

## Oil and Gas Privacy Notice:

Notice Time entry Date of Noti			vided at least SEVEN (7) days but no more that	an FORTY-FI	VE (45) da	ys prior to	
Delivery me	thod pursuant	to West Virginia C	ode § 22-6A-10a				
D PERSO		REGISTERED	METHOD OF DELIVERY THAT R RECEIPT OR SIGNATURE CONFIL				
Pursuant to V on to the surf but no more beneath such owner of mir and Sedimen Secretary, wi	Vest Virginia Co face tract to cond than forty-five d tract that has fil terals underlying t Control Manua hich statement sl	duct any plat survey: ays prior to such en- led a declaration pur g such tract in the co al and the statutes an	Prior to filing a permit application, the operators s required pursuant to this article. Such notice try to: (1) The surface owner of such tract; (2) suant to section thirty-six, article six, chapter unty tax records. The notice shall include a su d rules related to oil and gas exploration and p information, including the address for a web p	or shall provide shall be provid to any owner of twenty-two of t tatement that co production may	led at least : or lessee of this code; a opies of the be obtained	seven days coal seams nd (3) any state Erosion d from the	
Notice is her	eby provided to	D:			REC	EIVED	
SURFACE OWNER(s)			COAL OWNER OR LI	SSFE	Office of (	m and Gas	
					JUN 0	3 2021	
			WV Degradment of Environmental Protection				
Name:					Environmen	tal Frotection	
Address:			MINERAL OWNER(s)				
Name:			Name: Sharon Zeppernick				
and the second sec			Address: 626 W. Virginia Avenue	Address: 626 W. Virginia Avenue			
Address.			Sebring, OH 44672 *please attach additional forms if ne	0000000			
Notice is he Pursuant to W a plat survey State:		de § 22-6A-10(a), n nd as follows:	otice is hereby given that the undersigned we Approx. Latitude & Longitude:			y to conduct	
County:	Wetzel		Public Road Access:	Macedonia Ridge	11 T		
District:	Proclor		W	Upper Ohio South			
Quadrangle:	Wileyville		Generally used farm name:	SWN A WTZ Pad			
may be obtain Charleston, W	red from the Sec VV 25304 (304-	retary, at the WV D 926-0450). Copies	Manual and the statutes and rules related to o epartment of Environmental Protection headq of such documents or additional information r <u>wv.gov/oil-and-gas/pages/default.aspx</u> .	uarters, located	l at 601 57 <sup>th</sup>	Street, SE,	

# Notice is hereby given by:

Well Operator: Telephone:	SWN PRODUCTION COMPANY, LLC	Address:	PO BOX 1300	in the second
	304-884-1610		JANE LEW, WV 26378	
Email:	dee_southall@swn.com or brittany_woody@swn.com	Facsimile:		Ga .

## Oil and Gas Privacy Notice:

entry				but no more that	n FORTY-FIVE (45) days prior to
Date of Noti	ce: <u>3/2/2021</u>	Date of Plan	ined Entry: 3/9/2021	_	
Delivery me	thod pursuant	to West Virginia Co	ode § 22-6A-10a		
D PERSO		1010101010	☐ METHOD OF DELP		
SERVIC	CE	MAIL	RECEIPT OR SIGNA	<b>ATURE CONFIR</b>	MATION
but no more beneath such owner of mir and Sedimen Secretary, wh enable the su	than forty-five of tract that has fi- nerals underlyin t Control Manu- hich statement s rface owner to o	lays prior to such ent led a declaration pur g such tract in the co al and the statutes an hall include contact obtain copies from th	ry to: (1) The surface owner of suant to section thirty-six, arti- unty tax records. The notice and d rules related to oil and gas of nformation, including the add	of such tract; (2) icle six, chapter t shall include a sta exploration and p	shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any atement that copies of the state Erosion production may be obtained from the age on the Secretary's web site, to
Notice is her	eby provided t	:0:			
SURFA	CE OWNER(s)		COAL	OWNER OR LE	SSEE
Name:			Name:		BECENED
Address:			Address:		RECEIVED Office of Oil and Gas
Name:				AL OWNER(s)	JUN 0 3 2021
Name:			Name: Micha Address: 18	el A. Fish 795 Beverly Drive	WV Department of Environmental Protection
				additional forms if ne	cessary
Pursuant to V	ereby given: Vest Virginia Co on the tract of l wv			undersigned wel le & Longitude:	l operator is planning entry to conduct 39.684757, -80.640554
County:	Wetzel		Public Road Ac	cess:	Macedonia Ridge
District:	Proctor		Watershed:		Upper Ohio South
Quadrangle:	Wileyville		Generally used	farm name:	SWN A WTZ Pad

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

#### Notice is hereby given by:

Well Operator:	SWN PRODUCTION COMPANY, LLC	Address:	PO BOX 1300	
Telephone:	304-884-1610		JANE LEW, WV 26378	
Email:	dee_southall@swn.com or brittany_woody@swn.com	Facsimile:		

## Oil and Gas Privacy Notice:

#### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to entry Date of Notice: 3/2/2021 Date of Planned Entry: 3/9/2021 Delivery method pursuant to West Virginia Code § 22-6A-10a D PERSONAL REGISTERED ☐ METHOD OF DELIVERY THAT REQUIRES A SERVICE MAIL RECEIPT OR SIGNATURE CONFIRMATION Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary. Office un Gas Notice is hereby provided to: JUN 0 3 2021 SURFACE OWNER(s) COAL OWNER OR LESSEE WV Dapanyizm of Name: Name: Environmental Protection Address: Address: Name: MINERAL OWNER(s) Address: Name: Jeffrey L. Fish Name: Address: 18757 Beverly Drive Address: North Benton, OH 4449 \*please attach additional forms if necessary Notice is hereby given: Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State:	WV	Approx. Latitude & Longitude:	39.684757, -80.640654
County:	Wetzei	Public Road Access:	Macedonia Ridge
District:	Proctor	Watershed:	Upper Ohio South
Quadrangle:	Wilayville	Generally used farm name:	SWN A WTZ Pad

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

## Notice is hereby given by:

Well Operator:	SWN PRODUCTION COMPANY, LLC	Address:	PO BOX 1300	
Telephone:	304-884-1610		JANE LEW, WV 26378	
Email:	dee_southell@swn.com or britteny_woody@swn.com	Facsimile:		

# Oil and Gas Privacy Notice:

	equirement:	Notice shall be prov	ded at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to
entry Date of Notice:	3/2/2021	Date of Plan	ned Entry: 3/9/2021
Delivery meth	od pursuant i	to West Virginia Co	de § 22-6A-10a
D PERSON	AL I	REGISTERED	METHOD OF DELIVERY THAT REQUIRES A
SERVICE		MAIL	RECEIPT OR SIGNATURE CONFIRMATION
on to the surfac but no more that beneath such that owner of miner and Sediment C Sceretary, while enable the surface	te tract to cond an forty-five d act that has fil als underlying Control Manua th statement sl ace owner to c	duct any plat surveys ays prior to such ent led a declaration purs g such tract in the con al and the statutes an- hall include contact i obtain copies from th	rior to filing a permit application, the operator shall provide notice of planned entry required pursuant to this article. Such notice shall be provided at least seven days ty to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams much to section thirty-six, article six, chapter twenty-two of this code; and (3) any onty tax records. The notice shall include a statement that copies of the state Erosion I rules related to oil and gas exploration and production may be obtained from the information, including the address for a web page on the Secretary's web site, to e secretary.
Notice is hereb	y provided t	0:	
	EOWNER(s)		COAL OWNER OR LESSEE
Name:			Name:
Address:	_		Address:
Name:	_		
Address:			MINERAL OWNER(s)
Name:			
Address:			New Martinsville, WV 26155
			*please attach additional forms if necessary
a plat survey on State: <u>v</u> County: <u>v</u> District: <u>r</u>	st Virginia Co 1 the tract of la NV Netzel Proctor	ode § 22-6A-10(a), n and as follows:	Public Road Access:     Macedonia Ridge       Watershed:     Upper Ohio South
Quadrangle: <u>w</u>	Vileyville		Generally used farm name: SWN A WTZ Pad
may be obtained Charleston, WV	d from the Sec / 25304 (304	cretary, at the WV D -926-0450). Copies	Manual and the statutes and rules related to oil and gas exploration and production epartment of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, SE, of such documents or additional information related to horizontal deiling may be wv.gov/oil-and-gas/pages/default.aspx.
Notice is here	by given by	: - · ·	JUN 0 3 2021
Well Operator:		ION COMPANY, LLC	Address: PO BOX 1300
Telephone:	304-884-1610		JANE LEW, WV 26378 WV Deparamental Protection
Email:	dee_southall@sv	vn.com or brittany_woody@s	wn.com Facsimile:

### Oil and Gas Privacy Notice:

entry       Date of Planned Entry: 50001         Delivery method pursuant to West Virginia Code § 22-6A-10a         PERSONAL       REGISTERED       METHOD OF DELIVERY THAT REQUIRES A         SERVICE       MAIL       RECEIPT OR SIGNATURE CONFIRMATION         Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned e on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven do to no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lease eff coal sea beneath such tract that has filed a declaration pursuant to section thiry-six, article six, chapter twenty-two of this codes and (2) any owner or lease eff coal sea beneath such tract that has filed a declaration pursuant to section thiry-six, article six, chapter twenty-two of this codes and (2) any owner or othered such article as the county tax records. The notice shall include a statement that objets of the state End of balan copies of the state End of old and gas exploration and production may be obtained from the secretary.         Notice is hereby provided to: <ul> <li>FECEIVED</li> <li>GREACE OWNER(s)</li> <li>Name:</li> <li>JUN 0 3 2021</li> <li>Address:</li> <li>JUN 0 3 2021</li> <li>Address:</li> <li>JUN 0 3 2021</li> <li>Address:</li> <li>MINERAL OWNER(s)</li> <li>Name:</li> <li>Address:</li> <li>Miner Krystatk Comp</li> <li>Address:</li> <li>More Krystatk Comp</li> <li>Address:</li> <li>More Matters in Additosal forms if necessar</li></ul>		lequirement:	Notice shall be prov	vided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to
Delivery method pursuant to West Virginia Code § 22-6A-10a         PERSONAL       REGISTERED       METHOD OF DELIVERY THAT REQUIRES A SERVICE         MAIL       RECEIPT OR SIGNATURE CONFIRMATION         Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned e on to the surface tract to conduct any plat surveys required pursuant to state article six, chapter twenty-two of this code; and (3) ar owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state End and sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from to Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.         Notice is hereby provided to:       BECENVED Coll OWNER(s)       Method DWNER(s) Name:         Name:       JUN (0, 3, 2021         Address:       MINERAL OWNER(s)         Name:       Address:       WU Department of Environmental Protection and as follows:         Name:       Address:       MINERAL OWNER(s)         Name:       Approx. Latitude & Longitude:       Metersion Read Metersion Read         Tentorion formation of Sediment Control Manual and the statutes and rules related to oil and as follows:       Metersion Read Metersion Read         State:       WV Departmental Follows:       Metersion Read Metersion, CH44497	entry Date of Notice	: 3/2/2021	Date of Plan	nned Entry: 3/9/2021
SERVICE       MAIL       RECEIPT OR SIGNATURE CONFIRMATION         Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall be provided at least seven de on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven de but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal sea beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) ar owner of minerals underlying such tract in the contry tax records. The notice shall include a statement that copies of the state End of on and gas exploration and production may be obtained from to Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.         Notice is hereby provided to: <ul> <li>General Address:</li> <li>Mame:</li> <li>JUN Ø 3 2021</li> <li>Address:</li> <li>Mine:</li> <li>Address:</li> <li>Mine:</li> <li>Address:</li> <li>Mine:</li> <li>Address:</li> <li>Mine:</li> <li>Address:</li> <li>Mane:</li> <li>Math.</li> <li>Math.</li> <li>Mathe additional forms if necessary</li> </ul> Notice is hereby given:         Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to come a plat survey on the tract of land as follows:         State:       w/v         Pursuant to West Vir	Delivery meth	od pursuant (		
SERVICE       MAIL       RECEIPT OR SIGNATURE CONFIRMATION         Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned e on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven de but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal sea beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) ar owner of minerals underlying such trace in the county tax records. The notice shall include a statement that copies of the state End of and agas exploration and production may be obtained from to Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.         Notice is hereby provided to: <ul> <li>GENERACE OWNER(s)</li> <li>Name:</li> <li>Address:</li> <li>WU Deparament of Environmental Protection</li> <li>Address:</li> <li>MINERAL OWNER(s)</li> <li>Name:</li> <li>Address:</li> <li>MINERAL OWNER(s)</li> </ul> Name: Kystath, Camp     Matter State Additional forms if necessary         Notice is hereby given:       Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to come a plat survey on the tract of land as follows: <ul> <li>Approx. Latitude &amp; Longitude : 36.884767.40.64664</li> <li>District:</li> <li>Preaser</li> <li>Maddress:</li></ul>	D PERSON	AL 🔳	REGISTERED	METHOD OF DELIVERY THAT REQUIRES A
Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned e on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven da but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal sea beneath such tract that has filed a declaration pursuant to to section thirty-six, article six, chapter twenty-two of this code; and (3) and owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state En and Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary. Notice is hereby provided to: SURFACE OWNER(s) Name: Address: Name: Address: Name: Address: Name: Address: Notice is hereby given: Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to come a plat survey on the tract of land as follows: Statewell State: Marker: Approx. Latitude & Longitude: Marker: Outlice Share Planet Control Manual and the Secretary, and Secretary Notice is thereby given: Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to come a plat survey on the tract of land as follows: State: Outlice for the state Encion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the W V Department of Environmental Protection headquatters, located at 601 S7th Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary, at the W V Department of Environmental Protection headquatters, located at 601 S7th Street				
Office of Oil and Gas         Name:       Name:       JUN 0 3 2021         Address:       Name:       JUN 0 3 2021         Address:       WV Department of Environmental Protection       Environmental Protection         Name:       Address:       WV Department of Environmental Protection         Name:       Address:       Status       Status         Notice is hereby given:       Name:       Approx. Latitude & Longitude:       Status         Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conca a plat survey on the tract of land as follows:       State:       Meedonine Ridge         County:       Weteral       Public Road Access:       Meedonine Ridge       Meedonine Ridge         Quadrangle:       Wileyelle       Generally used farm name:       SWNAWTZ Pad         Copies of the state Erosion and Sediment Control	on to the surface but no more that beneath such tr owner of miner and Sediment C Secretary, which	ce tract to conc an forty-five d act that has fil cals underlying Control Manua ch statement sl	luct any plat surveys ays prior to such ent ed a declaration pur- such tract in the co il and the statutes an nall include contact i	is required pursuant to this article. Such notice shall be provided at least seven days attry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams rsuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any pointy tax records. The notice shall include a statement that copies of the state Erosion and rules related to oil and gas exploration and production may be obtained from the information, including the address for a web page on the Secretary's web site, to
SURFACE OWNER(s)       COAL OWNER OR LESSEE         Name:	Notice is herel	oy provided to	<b>):</b>	RECEIVED Office of Oil and Gas
Address:       Address:       WV Departmental Protection         Name:       MinterAL OWNER(s)       Environmental Protection         Name:       MinterAL OWNER(s)       Name:         Name:       Address:       0366 Pricetown Read         Berin Center, OH 44401       **please attach additional forms if necessary         Notice is hereby given:       Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conca plat survey on the tract of land as follows:         State:       WV       Approx. Latitude & Longitude:       30.884757, -80.640564         County:       Weized       Public Road Access:       MeesdoneRidge         District:       Prodect       Watershed:       Upper Othe South         Quadrangle:       Wileyelle       Generally used farm name:       SWN A WTZ Pad         Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the W V Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may b obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.         Notice is hereby given by:       Address:       Po BOX 1300         Well Operator:       SWN PRODUCTION COMPANY, LLC       Address	□ SURFACE	E OWNER(s)		COAL OWNER OR LESSEE
Name:				
Name:	Address:			Address: WV Department of
Address:       Image: MINERAL OWNER(s)         Name:       Address:         Name:       Address:         Address:       Berlin Canter, OH 44401         Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conda plat survey on the tract of land as follows:         State:       WV         County:       Weizel         District:       Proder         Quadrangle:       WileyMle         Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may b obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.         Notice is hereby given by:       Well Operator:         Well Operator:       SWN PRODUCTION COMPANY, LLC         Address:       PO BOX 1300         JANE LEW, WV 28378       JANE LEW, WV 28378	Name:			
Name:				MINERAL OWNER(s)
Address:       Berlin Center, OH 44401         "plcase attach additional forms if necessary         Notice is hereby given:         Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to concar a plat survey on the tract of land as follows:         State:       WV         County:       Weizel         Public Road Access:       Macadonia Ridge         District:       Procker         Quadrangle:       Wileyville         Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may b obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.         Notice is hereby given by:       Well Operator:         SWN PRODUCTION COMPANY, LLC       Address:         Yell Operator:       SWN PRODUCTION COMPANY, LLC         Address:       PO BOX 1300         JAHE LEW, WV 26376       JANE LEW, WV 26376				Name: Kystal K. Camp
*please attach additional forms if necessary         Notice is hereby given:         Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to cone a plat survey on the tract of land as follows:         State: WV         Approx. Latitude & Longitude: 30.684757, -80.640564         County: Weizel         Product       Public Road Access:         Macadonia Ridge       Macadonia Ridge         District:       Product         Quadrangle:       Wileyville         Goneerally used farm name: SWNA WTZ Pad         Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may b obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.         Notice is hereby given by:         Well Operator:       SWN PRODUCTION COMPANY, LLC       Address:       F0 B0X 1300         JANE LEW, WV 26376	Name:			
Notice is hereby given:         Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to cona a plat survey on the tract of land as follows:         State:       WV       Approx. Latitude & Longitude: 39.684757, -80.640564         County:       Wetzel       Public Road Access:       Mecedonia Ridge         District:       Procter       Watershed:       Upper Ohle South         Quadrangle:       Wileyville       Generally used farm name:       SWN A WTZ Pad         Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.         Notice is hereby given by:       Well Operator:       SWN PRODUCTION COMPANY, LLC       Address:       P0 BOX 1300         Well Operator:       SWN PRODUCTION COMPANY, LLC       Address:       P0 BOX 1300       JANE LEW, WV 26376	Address:			
District:       Producr       Watershed:       Upper Ohlo South         Quadrangle:       Wileyville       Generally used farm name:       Upper Ohlo South         Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.         Notice is hereby given by:       Well Operator:       SWN PRODUCTION COMPANY, LLC         Well Operator:       SWN PRODUCTION COMPANY, LLC       Address:         PO BOX 1300       JANE LEW, WV 26376	Pursuant to We a plat survey or State:	st Virginia Co 1 the tract of la		Approx. Latitude & Longitude: 39.684757, -80.640554
Quadrangle:       Wileyville       Generally used farm name:       SWN A WTZ Pad         Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.         Notice is hereby given by:       Well Operator:       SWN PRODUCTION COMPANY, LLC       Address:       PO BOX 1300         Telephone:       304-684-1610       JANE LEW, WV 26376		Zi wan		107 · . 1 · 1
Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and product may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u> . Notice is hereby given by: Well Operator: <u>SWN PRODUCTION COMPANY, LLC</u> Telephone: <u>304-684-1610</u> Address: <u>FO BOX 1300</u> JANE LEW, WV 26376				
Well Operator:     SWN PRODUCTION COMPANY, LLC     Address:     PO BOX 1300       Telephone:     304-684-1610     JANE LEW, WV 26376	Copies of the st may be obtaine Charleston, WV	ate Erosion an d from the Sec 7 25304 (304-	cretary, at the WV D 926-0450). Copies	I Manual and the statutes and rules related to oil and gas exploration and production Department of Environmental Protection headquarters, located at 601 57 <sup>th</sup> Street, SE, s of such documents or additional information related to horizontal drilling may be
Well Operator:     SWN PRODUCTION COMPANY, LLC     Address:     PO BOX 1300       Telephone:     304-684-1610     JANE LEW, WV 26376	Notice is here	by given by:		
				Address: PO BOX 1300
Email: dee_southall@swn.com or brittany_woody@swn.com Facsimile:		304-884-1610		JANE LEW, WV 26378
	Email:	dee_southall@sw	n.com or britlany_woody@s	swn.com Facsimile:

#### Oil and Gas Privacy Notice:

Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to	,
entry	

Date of Notice: 3/2/2021 Date of Planned Entry: 3/9/2021

Delivery method pursuant to West Virginia Code § 22-6A-10a

D PERSONAL	REGISTERED	$\square$ METHOD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL.	RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessec of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

#### Notice is hereby provided to:

□ SURFACE OWNER(s)	□ COAL OWNER OR LESSEE	
Name:	Name:	
Address:	Address:	
		RECEIVED Office of Oil and Gas
Name:	-	Office of Orl and Gas
Address:	MINERAL OWNER(s)	ILINE A & DOOL
	Name: Rodney A. Calvert	JUN 0 3 2021
Name:	Address: 13998 Proctor Creek Road	MALE
Address:	New Martinsville, WV 26155	WV Department of Environmental Protection
	*please attach additional forms if necessary	annion de l'Ideologi

## Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State:	wv	Approx. Latitude & Longitude:	39,664757, -80,640554	
County:	Wetzel	Public Road Access:	Macedonia Ridge	
District:	Proctor	Watershed:	Upper Ohio South	
Quadrangle:	Wileyville	Generally used farm name:	SWN A WTZ Pad	

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

#### Notice is hereby given by:

Well Operator:	SWN PRODUCTION COMPANY, LLC	Address:	PO BOX 1300	
Telephone:	304-884-1610	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	JANE LEW, WV 26378	
Email:	dee_southali@swn.com or brittany_wocdy@swn.com	Facsimile:		

## Oil and Gas Privacy Notice:

Notice Time Require entry	nent: Notice shall be prov	ided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to
Date of Notice: 3/2/2021	Date of Plan	nned Entry: 3/9/2021
Delivery method purs	uant to West Virginia C	ode § 22-6A-10a
PERSONAL	REGISTERED	METHOD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION
on to the surface tract t but no more than forty- beneath such tract that owner of minerals under and Sediment Control I Secretary, which staten	o conduct any plat survey. five days prior to such ent has filed a declaration pur erlying such tract in the co Manual and the statutes an	Prior to filing a permit application, the operator shall provide notice of planned entry s required pursuant to this article. Such notice shall be provided at least seven days try to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams suant to section thirty-six, article six, chapter twenty-two of this code; and (3) any unty tax records. The notice shall include a statement that copies of the state Erosion d rules related to oil and gas exploration and production may be obtained from the information, including the address for a web page on the Secretary's web site, to be secretary.

#### Notice is hereby provided to:

□ SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name:	Name:
Address:	Address:
Name:	MINERAL OWNER(s)
Address	Name: Timothy N. Burley
Name:	Address: 10669 Ravenna Ave
Address:	Louisville, OH 44641
	*please attach additional forms if necessary

#### Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State:	WV	Approx. Latitude & Longitude:	39.684757, -80.640554	
County:	Wetzel	Public Road Access:	Macedonia Ridge	
District:	Proctor	Watershed:	Upper Ohio South	
Quadrangle:	Wileyville	Generally used farm name:	SWN A WTZ Pad	

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Telephone: Email:	dea_southall@swn.com or brittany_woody@swn.com	Facsimile:		WV Departmental Protection
	304-884-1610		JANE LEW, WV 26378	and a second ment of
Well Operator:		Address:	PO BOX 1300	JUN 0 3 2021
Notice is here	hu aiyan hu:			Office of Oil and Gas

#### Oil and Gas Privacy Notice:

Notice Time Requirementry	ment: Notice shall be prov	ided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to
Date of Notice: 3/2/2021	Date of Plan	nned Entry: <u>3/9/2021</u>
Delivery method purs	suant to West Virginia Co	ode § 22-6A-10a
D PERSONAL	REGISTERED	☐ METHOD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION
on to the surface tract t but no more than forty- beneath such tract that owner of minerals under and Sediment Control 1 Secretary, which statem	o conduct any plat surveys five days prior to such ent has filed a declaration pur- erlying such tract in the co Manual and the statutes an	Prior to filing a permit application, the operator shall provide notice of planned entry a required pursuant to this article. Such notice shall be provided at least seven days ry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams suant to section thirty-six, article six, chapter twenty-two of this code; and (3) any unty tax records. The notice shall include a statement that copies of the state Erosion d rules related to oil and gas exploration and production may be obtained from the information, including the address for a web page on the Secretary's web site, to e secretary.

#### Notice is hereby provided to:

□ SURFACE OWNER(s)	□ COAL OWNER OR LESSEE			
Name:	Name:	Office of Officer Gas		
Address:	Address:	Office or Child		
Name:		JUN 0 3 2021		
Address:	MINERAL OWNER(s)	WV Department of Environmental Protection		
	Name: Ammon A. Burley	WV Departal Protection		
Name:	Address: 13 Amos Hollow Road	Environniente		
Address:	Cameron, WV 26033	Cameron, WV 26033		
	*please attach additional forms if necessary			

#### Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

WV	Approx. Latitude & Longitude:	39.684757, -80.640554
Wetzel	Public Road Access:	Macedonia Ridge
Proctor	Watershed:	Upper Ohio South
Wileyville	Generally used farm name:	SWN A WTZ Pad
	Proctor	Weizel         Public Road Access:           Proctor         Watershed:

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production 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). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

### Notice is hereby given by:

Well Operator:	SWN PRODUCTION COMPANY, LLC	Address:	PO BOX 1300	
Telephone:	304-884-1610		JANE LEW, WV 26378	
Email:	dee_southall@swn.com or brittany_wcody@swn.com	Facsimile:		

## Oil and Gas Privacy Notice:

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

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to filing a permit application. Date of Notice: 03/18/2021 Date Permit Application Filed:

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

HAND	CERTIFIED MAIL		
DELIVERY	RETURN RECEIPT REQUESTED		

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

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

Name: SWN Production Company, LLC	Name:	_
Address: PO Box 672625	Address:	
Houston, TX 77267		

#### Notice is hereby given:

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

State:	West Virginia	LITAANAD 02 I	Easting:	530,900.716	
County:	Wetzel	UTM NAD 83	Northing:	4,392,601.998	
District:	Proctor	Public Road Acces	ss:	Macedonia Ridge	
Quadrangle:	Wileyville, WV	Generally used far	arm name: SWN A WTZ	SWN A WTZ	
Watershed:	Upper Ohio South				

#### This Notice Shall Include:

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

#### Notice is hereby given by:

Well Operator:	SWN Production Company, LLC	Authorized Representative:	Justin Booth	
Address:	1300 Fort Pierpont Dr., Suite 201	Address:	1300 Fort Pierpont Dr., Suite 201	
	Morgantown, WV 26508		Morgantown, WV 26508	
Telephone:	304-884-1675	Telephone:	304-884-1675	
Email:	Justin_Booth@swn.com	Email:	Justin_Booth@swn.com	
Facsimile:	304-884-1691	Facsimile:	304-884-1691	

## 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 informationage please contact DEP's Chief Privacy Officer at <u>depprivacyofficer@wv.gov</u>.

JUN 0 3 2021

WV Department of Environmental Protect 07/16/2021

Pursuant to W. Va. Code § 22-6A-16(b), the Notice of Intent to Drill is only required if the notice requirements of W. Va. Code § 22-6A-10(a) have NOT been met or if the Notice of Intent to Drill requirement has NOT been waived in writing by the surface owner.

Notice Time Requirement: Notice shall be provided at least TEN (10) days prior to fing a permit application. Date of Notice: 03/18/2021 Date Permit Application Filed:

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

HAND	CERTIFIED MAIL		
DELIVERY	RETURN RECEIPT REQUESTED		

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

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

Name: CNX Gas Company, LLC, ATTN: Casey Saunders	Name:	Office of Common Gas	
Address: 1000 Consol Energy Drive	Address:	11.11.1.2.2	
Canonsburg, PA 15317		JUN 0 3 2021	

#### Notice is hereby given:

WV Department of

RECEWEL

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

State:	West Virginia	UTM NAD 83	Easting:	530,900.716	
County:	Wetzel	UTM NAD 85	Northing:	4,392,601.998	
District:	Proctor	Public Road Acc	ess:	Macedonia Ridge	
Quadrangle:	Wileyville, WV	Generally used farm name:		SWN A WTZ	
Watershed:	Upper Ohio South				

#### This Notice Shall Include:

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

#### Notice is hereby given by:

Well Operator:	SWN Production Company, LLC	Authorized Representative:	Justin Booth
Address:	1300 Fort Pierpont Dr., Suite 201	Address:	1300 Fort Pierpont Dr., Suite 201
	Morgantown, WV 26508		Morgantown, WV 26508
Telephone:	304-884-1675	Telephone:	304-884-1675
Email:	Justin_Booth@swn.com	Email:	Justin_Booth@swn.com
Facsimile:	304-884-1691	Facsimile:	304-884-1691

#### Oil and Gas Privacy Notice:

WW-6A5 (1/12) 47 1030 3421 Operator Well No. SWN A WTZ 111

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 03/18/2021 Date Permit Application Filed:

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

CERTIFIED MAIL	
RETURN RECEIPT REQUESTED	

HAND DELIVERY

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

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

(at the address listed in the records of the sheriff at the time of notice):

Name: SWN Production Company, LLC	Name:
Address: PO box 672625	Address:
Houston, TX 77267	

#### Notice is hereby given:

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

State:	West Virginia	LITM NAD 82 Easting	; 530,900.716
County:	Wetzel	UTM NAD 83 Northin	ng; 4,392,601.998
District:	Proctor	Public Road Access:	Macedonia Ridge
Quadrangle:	Wileyville, WV	Generally used farm nam	e: SWN A WTZ
Watershed:	Upper Ohio South		

#### This Notice Shall Include:

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

Well Operator:	SWN Production Company, LLC	Address:	1300 Fort Pierpont Dr., Suite 201	
Telephone:	304-884-1675		Morgantown, WV 26508	
Email:	Justin_Booth@SWN.com	Facsimile:	304-884-1591	

#### **Oil and Gas Privacy Notice:**

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

Office of Oil and Gas	RECEIVED Office of Oil and Gas
JUN 0 3 2021	JUN 0 3 2021
WV Department of Environmental Protection	Er Protection

07/16/2021

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

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 03/18/2021 Date Permit Application Filed:

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

ш	CERTIFIED MAIL	HAND
	RETURN RECEIPT REQUESTED	DELIVERY

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

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

(at the address listed in the records of the sheriff at the time of notice):

Name: CNX Gas Company, LLC ATTN: Casey Saunders	Name:	
Address: 1000 Consol Energy Drive	Address:	
Canonsburg, PA 15317		

#### Notice is hereby given:

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State:	West Virginia	LITA MAD 82 Ea	isting:	530,900,716	
County:	Wetzel	UTM NAD 83	orthing:	4,392,601.998	
District:	Proctor	Public Road Access:		Macedonia Ridge	
Quadrangle:	Wileyville, WV	Generally used farm	name:	SWN A WTZ	
Watershed:	Upper Ohio South				

#### This Notice Shall Include:

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

Well Operator:	SWN Production Company, LLC	Address:	1300 Fort Pierpont Dr., Suite 201	
Telephone:	304-884-1675		Morgantown, WV 26508	
Email:	Justin_Booth@SWN.com	Facsimile:	304-884-1691	

#### **Oil and Gas Privacy Notice:**

RECEIVED Office of Oil and Gas JUN 0 3 2021 WV Department of Environmental Protection



# WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

# **Division of Highways**

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

March 10, 2021

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

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

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

Subject: DOH Permit for the SWN A Pad, Wetzel County SWN A WTZ 1H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0223 which has been issued to Southwestern Energy for access to the State Road for a well site located off Wetzel County Route 89 SLS MP 14.37.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Gary K. Clayton

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

RECEIVED Office of Oil and Gas JUN 0 3 2021 WV Dapartment of Environmental Protection

Cc: Brittany Woody Southwestern Energy CH, OM, D-6 File

07/16/2021

E.E.O./AFFIRMATIVE ACTION EMPLOYER

#### Attachment VI Frac Additives

roduct Name	Product Use Mixture	Chemical Name Ethylene divol	CAS Number 107-21 1
I-303 (U.S. Well Services)	Mixture	Ethylene glycol Cinnamaldehyde	107-211 104-55 2
		Butvi cellosolve	111-76 2
		Formic acid	64-18 5
		Polyether	Proprietary
		Acetophenone, thiourea, formaldehyde polymer	68527-49 1
nour lue wellen data	n	Ammonium persulfate	7727-54-0
P ONE (U.S. Well Services)	Breaker		111-30-8
actron K-139 (Champion Technologies)	Blocide	Glutaraldehyde	111-30-8
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
actron K-219 (Champion Technologies)	Biocide	Methanol	67-56-1
		for the second second states and the second second second	
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
arboNRT	Tracer	Ceramic Proppant	66402-68-4
C6486A (Nalco Champion)	Scale Inhibitor	Amine Triphosphate	Proprietary
		Ethylene Glycol	107-21-1
C6734A (Champion Technologies)	Biocide	Hydrogen Peroxide	7722-84-1
		Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
cono-Cl200 (SWN Well Services)	Corrosion Inhibitor	Methanol	67-56-1
		Oxyalkylated fatty acid	68951-67-7
		Fatty acids	61790-12-3
		Modified thiourea polymer	68527-49-1
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	127-08-2
		Formaldehyde	50-00-0
copol-FEAC (SWN Well Services)	Iron Control	Acetic Acid	64-19-7
		Citric Acid	77-92-9
		Water	7732-18-5
DP-S1176-15 (Halliburton)	Friction Reducer	Polyacylate	Proprietary
		Hydrotreated light petroleum distillate	64742-47-8
OJET DR900 LPP [SWN Well Services]	Friction Reducer	Distillates (petroleum) hydrotreated light	64574-47-8
		Ethylene Glycol	107-21-1
		Alcohois, C12-16, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
OJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
R-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
r ro (numbur con)	Theadrineander	Inorganic Salt	Proprietary
YPTRON T-390 (Champion Technologies)	Scale inhibitor	Methanol	67-56-1
remote reaso tenempion rechnologies	Scale minuter	Nonylphenol Ethoxylate	Proprietary
AI-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A
		Hydrochloric Acid	7647-01-0
CL (SWN Well Services)	Hydrocholic Acid	Water	7732-18-5
	A. 1. 1. 1915		
9-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate Ammonium Chloride	Proprietary 12125-02-9
and an and the star line of the	10.000	Distillates, petroleum, hydrotreated light	
PTI-FLEX (U.S. Well Services)	Viscosifying Agent		64742-47-8
exslick 930	Friction Reducer	Copolymer of 2-propenamide	Proprietary
		Hydrotreated Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Alcohols, C12-16, Exoxylated	68551-12-2
		Oleic Acid Diethanolamide	93-83-4
10 P 2 P 2		Ammonium Chloride	12125-02-9
exslick 953	Friction Reducer	Petroleum Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Ammonium Chloride	12125-02-9
		N,N-bis (2-hydroxyethyl) oleamide	93-83-4
exslick 957	Friction Reducer	Petroleum Distillate	64742-47-8
		Ammonium Chloride	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
		Alcohols, C12-16, Exoxylated Water	68551-12-2 7732-15-5
ICOA GOOD HIS IN HIS ISS	Autoris Printing B. 1		
FRA- 200 (U.S. Well Services)	Anionic Friction Reducer	Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide	64742-47-8
50	Casta ta Dilata		9003-05 9
exaid 855 NM	Scale Inhibitor	Diethylenetriamine penta (methylene phosphonic acid)	15827-30-8
exild 922	no data available	Copolymer of 2-propenaminde Distillator (patroloum) hudescented light	69418-26-4
10		Distillates (petroleum), hydotreated light	64742-47-8
epart		Ammonium chloride ((NH4)CI)	12125-02-9
	Dissidal	Oleic Acid Diethnolamide	93-83-4
Sedepsson	Biocidal product	Tetrakis (hydroxymethyl) phosphonium sulphate	55566-30-8
Viroi		Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate	207756 50 7
	Ediction Declarer	groups High-stream of light patrologue distillate	397256-50-7 64742-47-8
D-2950	Friction Reducer	Hydrotreated light petroleum distillate Ethoxylated alcohol	64742-47-8 Proprietary
			Proprietary
		Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched	69011-36-5
agend LD-7750W	Scale Control	Methanol	67-56-1
Beiro CO-112014		Phosphonic Acid Salt	Proprietary

Office of Oil and Gas

NOTES

1. THIS FLAN IS FOR GRADING, STORMWATER SYSTEMS, AND EROSION AND SEDIMENT CONTROL PURPOSES ONLY.

CONTROL FURDES OUT. 2 PROPERTY INFORMATION SHOWN HEREON IS FROM GIS DATA PROVIDED BY SOUTHWESTERN ENERGY PRODUCTION COMPANY AND HAS NOT BEEN FELD VERHED. 3. THE CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS SET FOR DIFFER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SET FULLY DEFICIT ALL WORK ASSOCIATED WITH TH'S PROJECT.

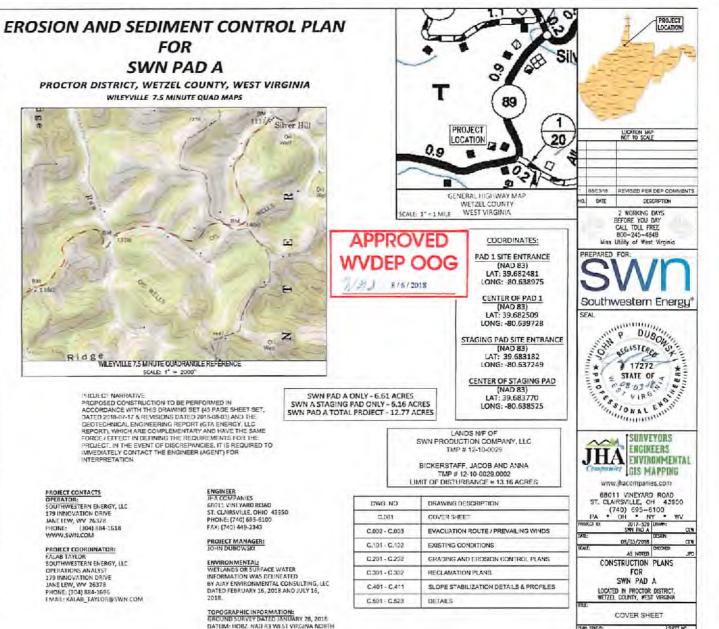
4. SOLL TYPE BOUNDARY, AND CHARACTERISTICS SHOWN HEREON WERE ACQUIRED FROM NRCS WEB SOLL SURVEY.

5. THE GONTRACTOR SHALL REFER TO THE GEOTECHNICAL ENGINEERING REPORT, DATED WARCH 21, 2017, PROVIDED BY GTA ENERGY, LLC FOR FULL SOIL STABILIZATION TECHNIQUES TO BE IMPLEMENTED IN GONSTRUCTION OF GUT AND FALL SLOPES. 6. THE TOPOGRAPHIC SURVEY USED FOR THIS BASE MAPPING INSIDE THE LOD WAS PERFORMED BY JHA COMPANIES FROM MULARY 03, 2017 TO JURE 28, 2018. TOPOGRAPHIC MAPPING OUTSIDE OF THE LOD IS FROM LIDAR DATA FROM WY GIS TECHNICAL CENTER.

 NO TOPSOL REMOVAL BETWEEN LIMIT OF CONSTRUCTION AND LIMIT OF DISTURBANCE. VEGETATIVE BUFFER TO REMAIN.

 FILL WILL BE COMPACTED TO 95% OF STANDARD PROGTOR DENSITY (ASTM-698), FILL LIFT THRENESS WILL BE NO GREATER THAN 12". NOTHING FROZEN OR TOO WET WILL BE PLACED IN FILL AREAS, PARTICLE SIZE OF THE FILL WILL BE NO GREATER THAN 6" AND FREE OF OBJECTIONABLE IMATERIAL.

DESCRIPTION	ESTIMATED QUANTITY	UNIT
18" COMPOSIT FILTER SOCK	135	UF
M' COMPOST FILTER SOCK	4,475	. CP
ROCK CONSTRUCT ON ENTRANCE R 3 AGGREGATE	144	CY
CLASS 4 GEOTEXTILE (APRON UNDERLAYMENT)	434	SY
SITE RESOLAREA	7.4	AC
PROPOSED STORM CATCHBASINS	5	EA
15" HOPE STORM FIPE (GDC 1 AND 3)	142.5	UF
F HPDE STORM P PE (DOC 2)	00	UF.
OUTLET PROTECTION	2	EA
* PERP PVC SCH 40 PIPE (PAD UNDERDRAIN)	1.715	UF
SOLID PVC SCH 40 PIPE (CATCH BASIN OUTLET)	4.07	1.P
WELL PAD PERMETER BERM	1.745	UF
CATE VALVES	5	EA
P PERF. PVC SOR 35 PIPE (FILL SLOPE BENCH DRAIN)	6.615	LF
ST SOLID PYC SDH 35 PIPE (BENCH DRAIN COLLECTOR)	550	UE
AASTHO IE? (BENCH DRA'N BEDDING)	1,443	TONS
PAD HEAVY DUTY MUT STONE (6')	1,070	CY
PAD HEAVY DUTY #1 STONE (14*)	2,490	CY.
PAD STANDARD #467 STONE (4*)	2.770	C۲
PAD STANDARD #1 STONE (12")	8.295	C4
ACCESS ROAD #487 STONE (4*)	290	C۲
ACCESS ROAD #1 STONE (12")	905	CY
PAD CLASS 2 GEDTEXTLE	15,840	87
ACCESS ROAD CLASS 2 GEOTEXTILE	1,300	517
EARTHWORK VOLUMES GUT	57,825	CY
EARTHWORK VOLUMES FILL	55,065	ĊŸ
WELL CELLARS		EA
GEDGRID MIRAGRID SXT OR EQUIVALENTI	3410	87
CLEARING AND GRUPBING	1.0	AC



FINAL

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