

#### west virginia department of environmental protection

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

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

Friday, February 19, 2021 WELL WORK PERMIT Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Permit approval for WILLIAM RITCHEA WTZ 10H

47-103-03372-00-00

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.

James A. Martin

Chief

Operator's Well Number: WILLIAM RITCHEA WTZ 10H Farm Name: WILLIAM D. RITCHEA & SHI

U.S. WELL NUMBER: 47-103-03372-00-00

Horizontal 6A New Drill Date Issued: 2/19/2021

API 1	Number:	
API 1	Number:	

### PERMIT CONDITIONS

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

#### **CONDITIONS**

- 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.

API NO. 47- 168 7 1 0 3 0 3 3 7 2

OPERATOR WELL NO. William Ritchea WTZ 10H

Well Pad Name: William Ritchea WTZ pad

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

1) Well Operat	tor: SWN F	Production C	o., LLC	494512924	103- Wetzel	007-Pro	681-Wileyville
				Operator ID	County	District	Quadrangle
2) Operator's '	Well Numbe	r: William Ri	itchea W	/TZ 10H Well	Pad Name: Willia	m Ritchea	WTZ pad
3) Farm Name	/Surface Ow	ner: William D. Ri	tchea & Shirley	E. Ritchea Public F	Road Access: Har	lan Ridge	
4) Elevation, c	urrent groun	d: 1563'	E	levation, propos	ed post-constructi	on: 1563'	
5) Well Type	(a) Gas	X	Oil _	U	nderground Stora	ge	
	Other						
	(b)If Gas	Shallow	X	Deep	L		
2 2 2 4 1 4		Horizontal	X				DMH
6) Existing Pac			23. 1				1-13-21
1	-			and the second of the second o	ss and Expected P e TVD- 7702', Anticipated		Associated Pressure- 5006
8) Proposed To	otal Vertical	Depth: 768	6'				
9) Formation a	it Total Verti	cal Depth:	Marcellu	S			
10) Proposed 7	Total Measur	ed Depth:	17449'				
11) Proposed I	Horizontal L	eg Length:	9464.49'				
12) Approxima	ate Fresh Wa	iter Strata De	pths:	541'			
13) Method to	Determine F	resh Water D	epths:	BOFW determined from	salinity calculations from W	Villiam Ritchea W	TZ 3H logs (API 47-103-03129)
14) Approxima	ate Saltwater	Depths: 15	56' Salin	ity Profile Analy	sis		
15) Approxima	ate Coal Sea	m Depths: 1	492'				
16) Approxima	ate Depth to	Possible Voi	d (coal m	ine, karst, other	): None that we	are aware	of.
17) Does Prop	osed well loo	cation contain	coal sea	ıms			
directly overly				Yes	No.	X	
(a) If Yes, pr	ovide Mine I	Info: Name					
		Depth	:			RECE!	VED Gas
		Seam:				Office of	
		Owner	r:			12.50	12
						WV Enviro	Department of Department of Departmental Proteotion

WW-6B (04/15) API NO. 47-403 1 0 3 0 3 3 7 2

OPERATOR WELL NO. William Ritchea WTZ 10H

Well Pad Name: William Ritchea WTZ pad

18)

### CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	126'	126'	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	591'	591'	598 sx/CTS
Coal	See	Interm	Casing				
Intermediate	9 5/8"	New	J-55	36#	2957'	2957'	966 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	17449'	17449'	Tail 3018sx/ 100' Inside Intermediate
Tubing							
Liners							

1-13-91 DWH

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (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"	0.352	3520	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		1					

### **PACKERS**

Kind:	RECEIVED Gas
Sizes:	Office of
Depths Set:	WV Department of Environmental Protection
	Environmental)

API NO. 47- 103 -

OPERATOR WELL NO. William Ritches WTZ 10H

Well Pad Name: William Ritchea 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.)

Dat 1-13-21

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. 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.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 13.6
- 22) Area to be disturbed for well pad only, less access road (acres): 9.7

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.

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\*Note: Attach additional sheets as needed.

			CEMENT A	ADDITIVES	47103	03372
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTIER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER)	><	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	> <	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
	D047	FP 28L	$\times$	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
INTERMEDIATE	><	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	CemNet	><	><	LOST CIRC MATERIAL	COATED FIBERGLASS FIBERS	PROPRIETARY
	SUGAR	SUGAR	CJ795	CMT RETARDER	SUCROSE	57-50-1
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
			CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
		SS-11W	CJ880	SURFACTANT NONIONIC SURFACTANT		6540-99-4
	D047	FP 28L	X	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	><	> <	CJX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
	><	><	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATIC AMIDE POLYMER	PROPRIETARY
PRODUCTION	D255	$\supset$	X	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
			CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
		FL-66	CJ501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
		BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	X	VISCOSIFIER/ANTI- SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
COAL PROTECTION up to 3%  NTERMEDIATE	D198	R-3		CEMENT RETARDER	LIGNIN	8068-51-6
	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1

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#### **Proposed Drilling Program Southwestern Energy Company** Re-entry Rig: SDC 41 WILLIAM RITCHEA WTZ 10 Well: Marcellus Shale Field: VICTORY FIELD WET Prospect: WV State: County: WETZEL -80.6592 Longitude SHL: 39.6696 Latitude -80.6336 Longitude BHL: 39.6509 Latitude 1,563 ft MSL 1,589 ft MSL KB: 26 ft AGL GL Elev: KB Elev: 126 'to 601' Air/Mist PROD TOC Lead @ 2,957 'MD 601 'to 2,977' Air/Mist **TUBULAR DETAIL** Planned Interval Casing Size Weight Grade **Casing String** (Min) (in) (Min) From To 2,977 'to 6,630 ' Conductor 20 94.0# J-55 0' 126 Air/Mist 591' Surface 13.375 54.4# 1-55 01 Interm./Coal 9.625 36.0# J-55 0' 2,957 Production 5.5 20.0 # P-110 HP 0' 17,449 CEMENT DETAIL Sacks Class Density Conductor 160 19.3 598 15.6 Surface A Interm/Coal 966 A 15.6 Production 3018 15.6 A TD at 6,630 ' Freshwater Depth - 541 'TVD RECEI6,630 'to 7,980 ' KOP at 6,630 'MD Coal Depth - 1,492 'TVD Office of Oil a12:0325 ppg Saltwater Depth - 1,556 'TVD TVD - 7,686 1 TMD - 17,449 ' WV Department of Environmental Protection TD at 17,449 ' MD 7,686 'TVD 7,568 ' Target Center EOB at 7,980 ' MD Onondaga 7,700 'TVD 7,980 ' to 17,449 ' SHL Onondaga 7,582 'TVD 12.5-13.5 ppg Created by: Alex Pfeifer on 12/16/2020

API	Operator	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones Not Perforated
103-00043	Perkins Oil & Gas Inc	Active	***	***	2,975'	Unknown	
103-01234	Perkins Oil & Gas Inc	Active	***	***	4,285'	Gordan Stray, Gordan	
103-01292	Perkins Oil & Gas Inc	Active	***	***	3,576'	Gordan Stray, Gordan	
103-73062	Unknown	Unknown	***	***	Unknown	Unknown	

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Environmental Protection

API Number	47 -	103			
One	rator's	Well	No wat	am Ritchea WTZ 10H	

# 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) Fish Creek	Quadrangle Wileyville
Do you anticipate using more than 5,000 bbls of water Will a pit be used? Yes No	to complete the proposed well work? Yes Vo
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 Wa	astes:
Land Application	
	C Permit Number_Various Approved Facilities
Reuse (at API Number Atth	e next anticpiated well  orm WW-9 for disposal location)
Off Site Disposal (Supply to	
Will closed loop system be used? If so, describe: Yes	- See Attachment 3A
Drilling medium anticipated for this well (vertical and	norizontal)? Air, freshwater, oil based, etc. Alrednii to KOP, duid dnii with SQBM from KOP to TD
-If oil based, what type? Synthetic, petroleum	, etc. Synthetic Oil Base
Additives to be used in drilling medium? Attachment 31	3
Drill cuttings disposal method? Leave in pit, landfill, r	emoved offsite, etc. landfill
-If left in pit and plan to solidify what medium	will be used? (cement, lime, sawdust)
Apex Sanitary Landtill U6-U8438, Brooke	
	Dil and Gas of any load of drill cuttings or associated waste rejected at any provided within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the provisions of the permit are enforceable by law. Violated and or regulation can lead to enforcement action.  I certify under penalty of law that I have perapplication form and all attachments thereto and the	ms and conditions of the GENERAL WATER POLLUTION PERMIT issued West Virginia Department of Environmental Protection. I understand that the ations of any term or condition of the general permit and/or other applicable ersonally examined and am familiar with the information submitted on this at, based on my inquiry of those individuals immediately responsible for tion is true, accurate, and complete. I am aware that there are significant a possibility of fine or imprisonment.  RECEIVED Office of Oil and Gas
Company Official (Typed Name) Brittany Woody	10
Company Official Title Senior Regulatory Analyst	
Company Official Title_ Contact Regulatory Full layer	WV Department of
Subscribed and sworn before me this 4th d	ay of January . 20 7 1
Ten Content and sworn volore me uns_1	
My commission expires August 21, 2024	Notary Public REID CROFT  Notary Public Official Seal State of West Virginia My Comm. Expires Aug 21, 202

Field Reviewed?

SWN Production Co., LLC			
Proposed Revegetation Treatment: Acres Disturbed 13.6		Prevegetation pH	
Limeas determined by pH test min.2 Tons/acre or to correct to	pH 9.7		
Fertilizer type 10-20-20	_		
Fertilizer amount 600/500	_lbs/acre		
Mulch Hay/Straw Tor	ns/acre		
<u>s</u>	Seed Mixtures		
Temporary		Perman	ent
Seed Type Ibs/acre Attachment 3C		Seed Type	lbs/acre
Attach: Maps(s) of road, location, pit and proposed area for land approvided). If water from the pit will be land applied, include acreage, of the land application area.  Photocopied section of involved 7.5' topographic sheet.	plication (unless e e dimensions (L x	engineered plans including W x D) of the pit, and d	ng this info have been limensions (L x W), and area ir
Plan Approved by:			
Comments:			
			RECEIVE Office of Oil and
			JAN 19
րյելը։ Oil & Gas Inspector	Date:	1-13-21	WV Department

#### 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)

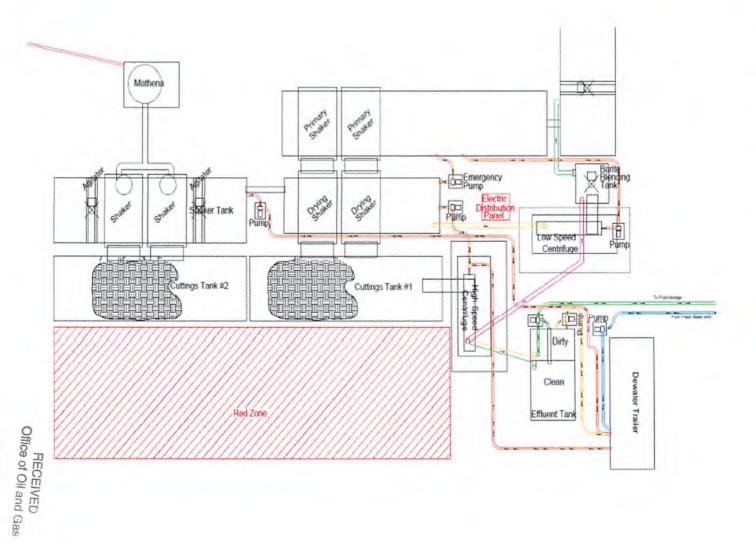
When drilling is converted to liquids drilling, the shale gas separator and associated shaker tank are bypassed, and the liquids system is processed over the primary and drying shaker systems. Cuttings drop into the cuttings tank for additional processing. Any recoverable associated liquids attached 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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# Solids Control Layout





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### **Attachment 3B**

### **Drilling Mediums**

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

Air

Freshwater (if needed based on conditions)

### Intermediate/Coal (if present):

Air

Brine (In Gas Storage areas)

Organophilic Bentonite

### **Production Hole:**

Air

Synthetic Oil (Base Fluid for mud system)

Barite

Calcium Chloride

Lime

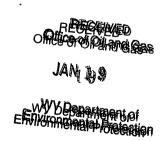
**Organophilic Bentonite** 

**Primary and Secondary Emulsifiers** 

Gilsonite

Calcium Carbonate

**Friction Reducers** 



### Attachment 3C



### **WVD Seeding Specification**



To Order Seed contact Lyndsi Eddy Flippo office 570-996-4271 cell 501-269-5451 lyndsi\_eddy@swn.com

50lbs per acre of Winter Wheat

(please allow 7 to 10 days for delivery)

NON-ORGANIC PROPERTIES							
Seed Mixture: ROW Mix	SWN Supplied						
Orchardgrass	40%						
Timothy	15%						
Annual Ryegrass	15%						
Brown Top Millet	5%						
Red Top Offic PE	5%						
Medium Red Clover	5% All legumes at innoculated at 5x r	re					
White Clover	annoculated at 5x r	normal					
Birdsfoot Trefoil	5%s rate						
Rough Bluegrass Niron Den	5%						
Rough Bluegrass  Apply @ 100lbs per ackey Port April 16th- Oct. 14th	Apply @ 200lbs per acre Oct. 15th- April 15th PLUS						
April 16th- Oct. 14th	Follower are of Winter Wheet						

CONTRACTOR OF	THE RESERVE	A ST STATE OF THE REAL PROPERTY.	CONTRACTOR OF	STATE OF THE PARTY.
		MIL AREA	110.00	N G COL
SOILA	VI VIII E			W APP 35

10-20-20 Fertilizer	*Apply @ 500lbs per Acre
Pelletized Lime	Apply @ 2 Tons per Acre
	*unless otherwise dictated by soil test results

#### 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

#### Synopsis:

Every 622 linear feet in a 70' ROW/LOD, you should be using (2) 50lb bags of seed, (4) 50lb bags of fertilizer and (80) 50lb bags of Lime (2x seed in winter months + 50lb Winter Wheat/ac).

#### Special Considerations:

Landowner Special Considerations including CREP program participants require additional guidance that is not given here. Discuss these requirements with SWN supervision at the beginning of the project to allow time for special seed delivery.

ORGANIC PROPERTIES		
Seed Mixture: SWN Production Organic M	ix	SWN Supplied
Organic Timothy	50%	1
Organic Red or White Clover	50%	
OR		
Organic Perennial Ryegrass	50%	
Organic Red or White Clover	50%	
Apply @ 100lbs per acre		Apply @ 200lbs per acre
April 16th- Oct. 14th		Oct. 15th- April 15th
Organic Fertilizer @ 200lbs per Acre		Pelletized Lime @ 2 Tons per Acre

Seed Mixture: Wetland Mix	SWN Supplied
VA Wild Ryegrass	20%
Annual Ryegrass	20%
Fowl Bluegrass	20%
Cosmos 'Sensation'	10%
Redtop	5%
Golden Tickseed	5%
Maryland Senna	5%
Showy Tickseed	5%
Fox Sedge	2.5%
Soft Rush	2.5%
Woolgrass	2.5%
Swamp Verbena	2.5%
Apply @ 25lbs per acre	Apply @ 50lbs per acre
April 16th- Oct. 14th	Oct. 15th- April 15th

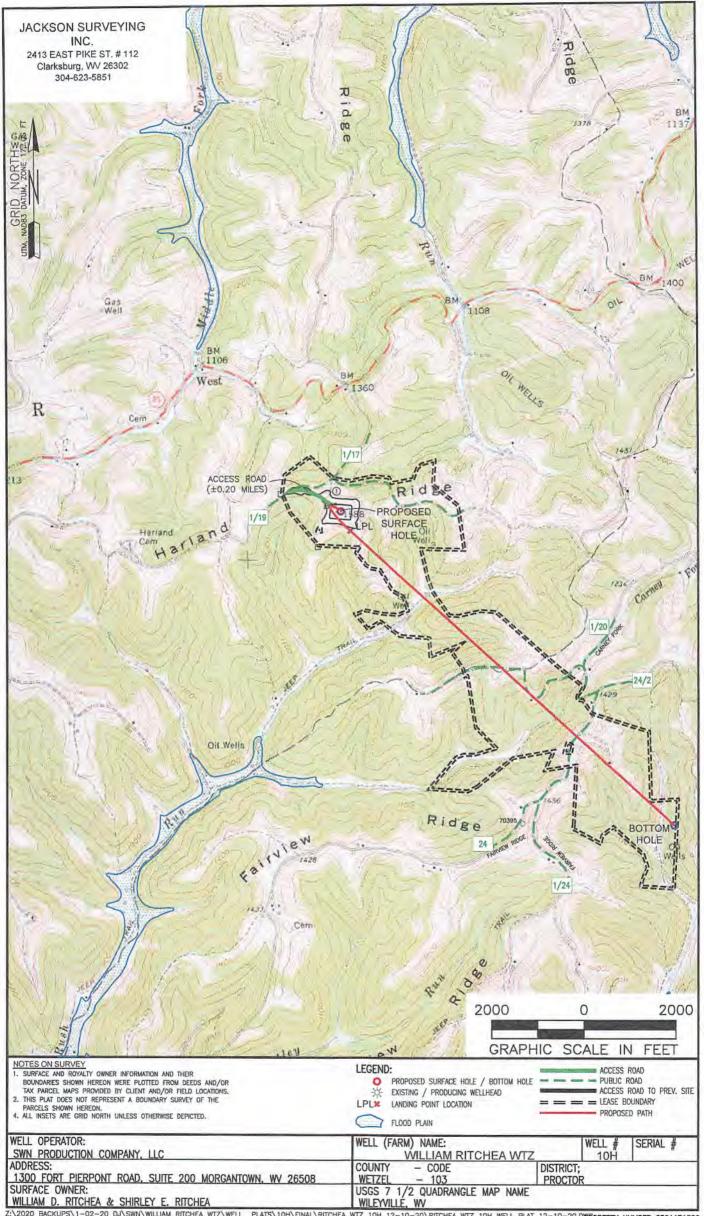
# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN



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

API NO. 47-XXX-XXXXX
WELL NAME: William Ritchea WTZ 10H
Wileyville East QUAD
Proctor DISTRICT
WETZEL COUNTY, WEST VIRGINIA

Submitted by:		
Name: Brittany Woody Suttany Woody	Date: <u>12/16/2020</u>	
Title: Senior Regulatory Analyst	SWN Production Co.,	LLC
Approved by:		
Name:	Date:   -13-3	
Title: 0:1+6.1 Inspector		
Approved by:		
Name:	Date:	RECEIVED Office of Oil and Gas
Title:		1 1 9
SWN PRODUCTION COMPANY, LLC	– CONFIDENTIAL	WV Department of Environmental Protection





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JACKSON SURVEYING INC. 2413 EAST PIKE ST. #112 Clarksburg, WV 26302 304-623-5851

	WELL BORE TRACTS				
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL			
1	RITCHEA WILLIAM D & SHIRLEY E (S/R)	12-0015-21			
TRACT	SURFACE OWNER (S)	TAX PARCEL			
2	DUELLEY BERNARD LEE ETAL & HALL SUSAN(S)	12-0015-22			
3	DUELLEY BERNARD LEE ET AL & HALL SUSAN (S)	12-0015-26			
4	BROWN SANDY K (S)	12-0015-27			
5	LEMASTERS HAROLD E & BETTY S; LEMASTERS KEYSTONE TRUST & STANSBERRY LINDA SNIDER & SNIDER JAMES F. (S)	12-0015-32			
6	MELOTT TERREL LEMOYN (S)	01-0010-22			
7	RITCHEA WILLIAM D; RITCHEA SHIRLEY E (S)	01-0010-21			
8	RICHTER ROMEY & CAROL(S)	01-0010-33.1			
9	RITCHEA WILLIAM D & SHIRLEY E (S)	01-0010-33			
10	FLEMING ALAN & CYNTHIA(S)	01-0010-48			

	ADJOINING OWNERS TABLE	
TRACT	SURFACE OWNER	TAX PARCE
Α	BROWN SANDY K	12-0015-28
В	YOHO KIMBERLY & KEITH ALLEN	12-0015-29
C	MELOTT TERREL L	10-0010-10
D	BARD VANESSA	01-0010-11.3
Ε	WYKERT ERIC D	01-0010-23
F	MCMILLEN SHARON J	01-0010-25
G	MCMILLEN SHARON J	01-0010-34
Н	LASURE MICHAEL E. & VELVA C.	01-0010-35
1	COASTAL FOREST RESOURCES CO	01-0014-03
J	COASTAL FOREST RESOURCES CO & COASTAL TIMBERLANDS CO	01-0014-02.1
K	CAIN GLENN JR & ELEANOR T	01-0014-02
L	COASTAL FOREST RESOURCES CO	01-0010-47
M	CAIN SAMUEL EST & CAIN GLEN JR	01-0010-46
N	WYKERT VERNA	10-0010-45.
0	YEATER CHESTER C JR & LORENE REVOCABLE TRUST	01-0010-32
Р	WYKERT WAYNE	01-0010-45.
Q	JERRELL WILMA & JEFFREY	01-0010-45
R	WYKERT VERNA L	01-0009-12
S	MELLOTT EDWARD NOEL HRS	01-0009-06
T	MELLOTT EDWARD NOEL HRS	01-0009-05
U	RITCHEA WILLIAM D; RITCHEA SHIRLEY	01-0009-16
٧	A&D WOODLANDS LTD	01-0009-15
W	MELLOTT TERREL	01-0009-14
Х	LEMASTERS HAROLD E & BETTY S; LEMASTERS KEYSTONE TRUST & STANSBERRY LINDA SNIDER & SNIDER JAMES F.	12-0015-31
Υ	DUELLEY BERNARD LEE ETAL & HALL SUSAN	12-0015-25
Z	PITOSCIA WILLIAM R	12-0014-27
A2	PITOSCIA WILLIAM R	12-0014-16
B2	URBANEK SCOTT J & CHRYSTAL A	12-0015-13
C2	LEMASTERS H C HRS & MANKER & CHARLES V REVOCABLE LIVING TRU	12-0015-18
D2	LEMASTERS DOLLY G EST	12-0015-19
E2	HEETER HAROLD JR ETAL	12-0015-23
F2	LEMASTERS CEMETERY	12-0015-20

REVISIONS:	COMPANY:	SWN Production Company, LLC	SN Production C	Mompany ™
	OPERATOR'S WELL #: 103-0	WILLIAM RITCHEA	WTZ	DATE: 12-10-2020  DRAWN BY: N. MANO
	DISTRICT: PROCTOR	COUNTY: WETZEL	STATE: WV	SCALE: N/A DRAWING NO: WELL LOCATION PLAT

RECEIVED Office of Oil and Gas

### 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)

FEB 16

Under the oath required to make the verification on page 1 of this Notice and Application mental Protection 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 "A"

\*Co-tenancy utilization - At least 7 mineral owners in tract and at least 75% of the royalty owners have consented to the lawful use or development of the oil or natural gas mineral property on the tract. The interests of the remaining co-tenants will be secured pursuant to the Co-tenancy Modernization and Majority Protection Act.

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

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

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

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

Well Operator:	SWN Production Company, LLC	
By:	Aud Com	
Its:	LAWDMAN	

# Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

*	TMP	LESSOR	LESSEE	ROYALTY	BK/PG	Interest Not Leased by SWN Production Company, LLC
1)	12-15-21	William D. Ritchea and Shirley E. Ritchea, husband and wife	Mobay Chemical Corporation	12.50%	60A/59	0.0000%
		Bayer Corporation, successor in interest to Mobay  Chemical Corporation	Bayer Material Science LLC		396/1	
		Bayer Material Science LLC	Chesapeake Appalachia, L.L.C.		140A/883	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
2)	12-15-22	Arthur Liston, Donald J. Kisner, Lonzo Dolin, Herbert Heeter, Amos Mcpeak, Jr., George Dent, Jack Nice, Lee Mccoy, And Ernest Dent	Mobay Chemical Corporation	12.50%	62A/294	0.0000%
		Mobay Chemical Corporation	Haddad and Brooks, Inc.		65A/67	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Esther Peters, Paul J. Shiben, Katherine Mensore And Edward Shiben, As Executors Under The Wills Of Joseph Shiben And Minnie Shiben, And Shiben Estates, Inc.	Mobay Chemical Corporation	15.00%	62A/309	
		Mobay Chemical Corporation	Haddad and Brooks, Inc.		65A/67	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Chesapeake Appalachia, L.L.C.	Haddad and Brooks, Inc.		113A-927	
		Haddad and Brooks, Inc.	SWN Production Company, LLC		250A/215	
		Chalmer T. Smith And Myrtle Smith, Husband And Wife	Mobay Chemical Corporation	12.50%	64A/639	
		Mobay Chemical Corporation	Haddad and Brooks, Inc.		65A/67	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.	12 500/	102A/302	
		Albert G. Smith And Lillian Smith, Husband And Wife	Mobay Chemical Corporation	12.50%	64A/641	
		Mobay Chemical Corporation	Haddad and Brooks, Inc.		65A/67	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
j		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Fred C. Smith And Imogene Smith, Husband And Wife	Mobay Chemical Corporation	12.50%	64A/643	PEOF
		Mobay Chemical Corporation	Haddad and Brooks, Inc.		65A/67	RECEIVEI Office of Oil an
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	FED 1.6.2

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### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.	1	102A/302	
		Garnet Snider And Hugh Snider, Husband And Wife	Mobay Chemical Corporation	12.50%	64A/645	
		Mobay Chemical Corporation	Haddad and Brooks, Inc.		65A/67	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
_		Fred A. Heeter And Janet K. Heeter; Frank E. Heeter	Haddad and Brooks, Inc.	12.50%	65A/293	
		And Kathleen J. Heeter; Thomas R. Heeter And Robin D. Heeter	madada and prootes, me.	12.50%	30, 4, 200	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		William G. Sheppard And Virginia S. Sheppard, Husband And Wife	Haddad and Brooks, Inc.	12.50%	65A/305	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Harold E. Lemasters And Betty L. Lemasters, Husband And Wife	Mobay Chemical Corporation	12.50%	65A/54	
		Mobay Chemical Corporation	Haddad and Brooks, Inc.		65A/67	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
3)	12-15-26	Sarah J. Taylor, Friend Taylor, her husband, CT Lemasters and Lulu Lemasters, his wife, L.L. Lemasters and Martha J. Lemasters, his wife, Wesley S. Smith and Alma Smith, his wife, Jessie Smith and Irene Smith, his wife, Leona Riter and Virginia Smith and her husband Harold Smith	J. D. Wade and E. Carney, partners as Wade and Carney	12.50%	25A/337	0.0000%
		C.E. Adams, J.D. Wade, and E. J. Carney	O.R. Marty		26A/436	
		C.E. Adams, J.D. Wade, and E. J. Carney	C.M. Hartwig		26A/437	
		J. D. Wade and E. Carney, being partners as Wade and Carney	Chas. Palmer		43A/222	
		Leonard S. Hall, Trustee in Bankruptcy of Jason D. Wade, Bankrupt	J.M. Coggle		31A/281	
		E.J. Carney and Sadie Carney, husband and wife	J.M. Coggle		33A/266	
		The Security Trust Company, as the Executor and Trustee under the Last Will and Testament of J.M.	Carolyn L. Coogle and Charles J. Coogle		177/9	DECENT
ı		Cooper, deceased		1		Office of Oil a

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### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

1		Caroline L. Coogle, Charles J. Coogle and Edith	George F. Eagon		40A/149	
		Coogle, husband and wife Martha Palmer, as Administratrix of the Estate of Charles R. Palmer	George F. Eagon		43A/221	
		Blanche Eagon, in her own individual right and as Executrix of the Estate of George F. Eagon, Mildred M. Lartigue and Carl L. Eagon	Friend West		43A/224	
		Mary Jane West, widow, in her own right and as Executrix of the Estate of Friend West	Phillip John West		52A/417	
		Glenda P. Goddard	Haddad and Brooks, Inc.		65A/406	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
4)	12-15-27	Sarah J. Taylor, Friend Taylor, her husband, CT Lemasters and Lulu Lemasters, his wife, L.L. Lemasters and Martha J. Lemasters, his wife, Wesley S. Smith and Alma Smith, his wife, Jessie Smith and Irene Smith, his wife, Leona Riter and Virginia Smith and her husband Harold Smith	J. D. Wade and E. Carney, partners as Wade and Carney	12.50%	25A/337	0.0000%
		C.E. Adams, J.D. Wade, and E. J. Carney	O.R. Marty		26A/436	
		C.E. Adams, J.D. Wade, and E. J. Carney	C.M. Hartwig		26A/437	
		J. D. Wade and E. Carney, being partners as Wade and Carney	Chas. Palmer		43A/222	
		Leonard S. Hall, Trustee in Bankruptcy of Jason D.  Wade, Bankrupt	J.M. Coggle		31A/281	
		E.J. Carney and Sadie Carney, husband and wife	J.M. Coggle		33A/266	
		The Security Trust Company, as the Executor and Trustee under the Last Will and Testament of J.M.  Cooper, deceased	Carolyn L. Coogle and Charles J. Coogle		177/9	
		Cooper, deceased  Caroline L. Coogle, Charles J. Coogle and Edith  Coogle, husband and wife	George F. Eagon		40A/149	
		Martha Palmer, as Administratrix of the Estate of Charles R. Palmer	George F. Eagon		43A/221	
		Blanche Eagon, in her own individual right and as Executrix of the Estate of George F. Eagon, Mildred	Friend West		43A/224	
		M. Lartigue and Carl L. Eagon				RECEIVED Office of Oil and Gas

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### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

Mary Jane West, widow, in her own right and as Executrix of the Estate of Friend West	Phillip John West		52A/417	
Glenda P. Goddard	Haddad and Brooks, Inc.		65A/406	
Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
Sarah J. Taylor, Friend Taylor, her husband, CT Lemasters and Lulu Lemasters, his wife, L.L. Lemasters and Martha J. Lemasters, his wife, Wesley S. Smith and Alma Smith, his wife, Jessie Smith and Irene Smith, his wife, Leona Riter and Virginia Smith and her husband Harold Smith	J. D. Wade and E. Carney, partners as Wade and Carney	12.50%	25A/337	
C.E. Adams, J.D. Wade, and E. J. Carney	O.R. Marty		26A/436	
C.E. Adams, J.D. Wade, and E. J. Carney	C.M. Hartwig		26A/437	
J. D. Wade and E. Carney, being partners as Wade and Carney	Chas. Palmer		43A/222	
Leonard S. Hall, Trustee in Bankruptcy of Jason D. Wade, Bankrupt	J.M. Coggle		31A/281	
E.J. Carney and Sadie Carney, husband and wife	J.M. Coggle		33A/266	
The Security Trust Company, as the Executor and Trustee under the Last Will and Testament of J.M.  Cooper, deceased	Carolyn L. Coogle and Charles J. Coogle		177/9	
Caroline L. Coogle, Charles J. Coogle and Edith Coogle, husband and wife	George F. Eagon		40A/149	
Martha Palmer, as Administratrix of the Estate of Charles R. Palmer	George F. Eagon		43A/221	
Blanche Eagon, in her own individual right and as Executrix of the Estate of George F. Eagon, Mildred M. Lartigue and Carl L. Eagon	Friend West		43A/224	
Mary Jane West, widow, in her own right and as Executrix of the Estate of Friend West	Phillip John West		52A/417	
Glenda P. Goddard	Haddad and Brooks, Inc.		65A/406	
Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	RECEIVED
BRC Appalachian Minerals I, LLC	BRC Working Interest Company, LLC	12.88%	103A/320	Office of Oil and G
BRC Working Interest Company, LLC	Chesapeake Appalachia, L.L.C.		103A/470	FEB <b>16</b> 2b2

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

	1	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
5)	12-15-32	Sarah J. Taylor, Friend Taylor, her husband, CT Lemasters and Lulu Lemasters, his wife, L.L. Lemasters and Martha J. Lemasters, his wife, Wesley S. Smith and Alma Smith, his wife, Jessie Smith and Irene Smith, his wife, Leona Riter and Virginia Smith and her husband Harold Smith	J. D. Wade and E. Carney, partners as Wade and Carney	12.50%	25A/337	0.0000%
		C.E. Adams, J.D. Wade, and E. J. Carney	O.R. Marty		26A/436	
		C.E. Adams, J.D. Wade, and E. J. Carney	C.M. Hartwig		26A/437	
		J. D. Wade and E. Carney, being partners as Wade and Carney	Chas. Palmer		43A/222	
		Leonard S. Hall, Trustee in Bankruptcy of Jason D. Wade, Bankrupt	J.M. Coggle		31A/281	
		E.J. Carney and Sadie Carney, husband and wife	J.M. Coggle		33A/266	
		The Security Trust Company, as the Executor and Trustee under the Last Will and Testament of J.M.  Cooper, deceased	Carolyn L. Coogle and Charles J. Coogle		177/9	
		Caroline L. Coogle, Charles J. Coogle and Edith Coogle, husband and wife	George F. Eagon		40A/149	
		Martha Palmer, as Administratrix of the Estate of Charles R. Palmer	George F. Eagon		43A/221	
		Blanche Eagon, in her own individual right and as Executrix of the Estate of George F. Eagon, Mildred M. Lartigue and Carl L. Eagon	Friend West		43A/224	
		Mary Jane West, widow, in her own right and as Executrix of the Estate of Friend West	Phillip John West		52A/417	
		Glenda P. Goddard	Haddad and Brooks, Inc.		65A/406	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		Sarah J. Taylor, Friend Taylor, her husband, CT Lemasters and Lulu Lemasters, his wife, L.L. Lemasters and Martha J. Lemasters, his wife, Wesley S. Smith and Alma Smith, his wife, Jessie Smith and Irene Smith, his wife, Leona Riter and Virginia Smith	J. D. Wade and E. Carney, partners as Wade and Carney	12.50%	25A/337	
		and her husband Harold Smith				RECEIVED Office of Oil and C
l		1				FEB <b>16</b> 202

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# Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

		C.E. Adams, J.D. Wade, and E. J. Carney	O.R. Marty	1	26A/436	
		C.E. Adams, J.D. Wade, and E. J. Carney	C.M. Hartwig	1	26A/437	
		J. D. Wade and E. Carney, being partners as Wade and Carney	Chas. Palmer		43A/222	
		Leonard S. Hall, Trustee in Bankruptcy of Jason D.  Wade, Bankrupt	J.M. Coggle		31A/281	
		E.J. Carney and Sadie Carney, husband and wife	J.M. Coggle		33A/266	
		The Security Trust Company, as the Executor and Trustee under the Last Will and Testament of J.M. Cooper, deceased	Carolyn L. Coogle and Charles J. Coogle		177/9	
		Caroline L. Coogle, Charles J. Coogle and Edith Coogle, husband and wife	George F. Eagon		40A/149	
		Martha Palmer, as Administratrix of the Estate of Charles R. Palmer	George F. Eagon		43A/221	
		Blanche Eagon, in her own individual right and as Executrix of the Estate of George F. Eagon, Mildred M. Lartigue and Carl L. Eagon	Friend West		43A/224	
		Mary Jane West, widow, in her own right and as Executrix of the Estate of Friend West	Phillip John West		52A/417	
		Glenda P. Goddard	Haddad and Brooks, Inc.		65A/406	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		102A/302	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		BRC Appalachian Minerals I, LLC	BRC Working Interest Company, LLC	12.88%	103A/320	
		BRC Working Interest Company, LLC	Chesapeake Appalachia, L.L.C.		103A/470	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
6)	1-10-22	George Ray Lemley	Haddad and Brooks, Inc.	12.50%	79A/194	0.0000%
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		Sandra L. Richie	Haddad and Brooks, Inc.	12.50%	79A/202	
ļ		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		James H. Rush	Haddad and Brooks, Inc.	12.50%	79A/198	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	RECEIVED
<u> </u>		William R. Gaddis	Haddad and Brooks, Inc.	12.50%	84A/35	RECEIVED Office of Oil and Gas
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	FEB 1 6 2021

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Ī	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Mary Jane Poleski, a widow	Chesapeake Appalachia, L.L.C.	17.00%	128A/886	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Sarah Jean Rush	Chesapeake Appalachia, L.L.C.	17.00%	128A/891	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Marlene Louise Gardner	Chesapeake Appalachia, L.L.C.	17.00%	128A/896	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Melvin E. Silvis and Patricia J. Silvis, husband and	Chesapeake Appalachia, L.L.C.	17.00%	128A/901	
	wife				
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	William J. Grubbs and Janet C. Grubbs, husband and	Chesapeake Appalachia, L.L.C.	17.00%	130A/559	
	wife	CHAIR Developed and Commence III C		1574/540	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Nancy Grubbs Burford., a widow	Chesapeake Appalachia, L.L.C.	17.00%	130A/842	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Angela Crellin	Chesapeake Appalachia, L.L.C.	17.00%	132A/747	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Geraldine Jackson	Chesapeake Appalachia, L.L.C.	17.00%	132A/742	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	James Withrow, a married man	Chesapeake Appalachia, L.L.C.	17.00%	132A/752	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Rebecca Massey	Chesapeake Appalachia, L.L.C.	17.00%	132A/871	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Michael Withrow, a married man	Chesapeake Appalachia, L.L.C.	17.00%	134A/520	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Christopher Thomas Wood and Brenda Sue Wood,	Chesapeake Appalachia, L.L.C.	18.00%	140A/247	
	his wife				
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Michelle Carpenter, f/k/a Michelle Lea Wood, a	Chesapeake Appalachia, L.L.C.	18.00%	140A/257	
	married woman dealing in her sole and separate			1	
	property	CIA/AI Dua duation Commons II C		157A/540	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	10.000/		··············
	Gregory Paul Wood, a single man	Chesapeake Appalachia, L.L.C.	18.00%	140A/252	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	RECEIVED
	Jonathan Kent Wood	Chesapeake Appalachia, L.L.C.	18.00%	140A/696	Office of Oil and G
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Douglas Charles Wood	Chesapeake Appalachia, L.L.C.	18.00%	140A/691	FEB 1 6 202

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
Karen G. Kuhn, a/k/a Karen Harbert Kuhn, widow	SWN Production Company, LLC	18.00%	194A/936	
Stephen Guy Pettit & Sarah Pettit, husband and wife	SWN Production Company, LLC	16.00%	167A/430	
James E. Barr and Linda Barr, husband and wife	SWN Production Company, LLC	16.00%	167A/451	
Samuel Burton and Joyce K. Burton, husband and wife	SWN Production Company, LLC	16.00%	167A/442	
 James Burton and Tammy Lynn Burton, husband and wife	SWN Production Company, LLC	16.00%	167A/445	
Kermit E. Persinger and Frances Persinger, husband and wife	SWN Production Company, LLC	16.00%	167A/454	
Robert Richmond and Virginia Richmond, husband and wife	SWN Production Company, LLC	16.00%	167A/463	
Charles Spaine and Mary Spaine, husband and wife	SWN Production Company, LLC	16.00%	168A/633	
Suzette Station, a single woman	SWN Production Company, LLC	16.00%	168A/630	
Sam E. Whitlach and Diana Whitlach, husband and wife	SWN Production Company, LLC	16.00%	167A/466	
Joseph Matthew Stocklask and Rhonda Stocklask, husband and wife	SWN Production Company, LLC	16.00%	168A/627	
Allie Virginia Hall, by Billie Jo Beegle as her Attorney- in-Fact	SWN Production Company, LLC	16.00%	168A/636	
Gerald Brett Hawkins and Julie A. Hawkins, husband and wife	SWN Production Company, LLC	16.00%	168A/624	
Ralph Clayton and Sara Clayton, husband and wife	SWN Production Company, LLC	16.00%	167A/460	
Raymond Clayton	SWN Production Company, LLC	16.00%	167A/457	
Judy Ann Frey and Joseph F Frey, wife and husband	SWN Production Company, LLC	16.00%	167A/433	
Frank Anthony Stocklask	SWN Production Company, LLC	16.00%	167A/427	
Alfred E. Burton and Linda A. Burton, husband and wife	SWN Production Company, LLC	16.00%	167A/439	
Okla Dale Burton and Shirley Burton, husband and wife	SWN Production Company, LLC	16.00%	167A/436	
Christy Holmes and Danny L. Holmes, wife and husband	SWN Production Company, LLC	16.00%	167A/448	
Mary Barrett and Michael ray Barrett, wife and husband	SWN Production Company, LLC	16.00%	166A/910	RECEIVE
John David Rush and Judith Rush, husband and wife	SWN Production Company, LLC	16.00%	166A/904	Office of Oil and

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# Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

Harlan C. Wood and Mary L. Wood, husband and wife	SWN Production Company, LLC	16.00%	166A/901	
Marianne F. Wood, a widow	SWN Production Company, LLC	16.00%	166A/913	
Ronald L. hall, a single man	SWN Production Company, LLC	16.00%	166A/919	
Guy Elery Hawkins, a single man	SWN Production Company, LLC	16.00%	170A/469	· · ·
Vincent Goff and Joyce Goff, husband and wife	SWN Production Company, LLC	16.00%	166A/916	
William J. Hall	SWN Production Company, LLC	16.00%	166A/924	
Alfred Burns and Belinda Burns, husband and wife	SWN Production Company, LLC	16.00%	166A/907	
Linda Stevens and Alfred Stevens, wife and husband	SWN Production Company, LLC	18.00%	188A/116	
Samuel J. Wood, a married man, dealing in his sole and separate property	SWN Production Company, LLC	18.00%	199A/493	
Marta Jo Zukoff Thomas, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	199A/499	
Dana Beth Oakland, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	199A/505	
Paula Kay Zukoff Romanoski, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	199A/665	
Chelsea Oakland, a single woman	SWN Production Company, LLC	18.00%	200A/547	
John K. Hill, a married man, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	201A/773	
Marilyn P. Dehart	SWN Production Company, LLC	18.00%	201A/779	
Daniel L. Lemasters, a married man, dealing in his sole and separate property	SWN Production Company, LLC	18.00%	203A/50	
Margaret L. Chambers, a single woman	SWN Production Company, LLC	18.00%	203A/817	
Corrinda Kay Nail, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	206A/576	
Michael G. Lemasters, a single man	SWN Production Company, LLC	18.00%	207A/673	
Ray Elwood Blake, II, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	221A/934	
Douglas Edward Wood & Shelly Lynn Wood, husband and wife	SWN Production Company, LLC	18.00%	222A/774	
Linda Stansberry, a single woman	SWN Production Company, LLC	18.00%	223A/208	
James F. Snider, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	223A/653	RECEIVI Office of Oil a
Carole J. Brownlee, a single woman	SWN Production Company, LLC	18.00%	223A/671	<del>United of Oil a</del>

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Kelly J. Wooley, a married woman dealing in her sole	SWN Production Company, LLC	18.00%	224A/484	
and separate property				
Brett Stiffler, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	224A/490	
Jason James Blake and Sarah E. Cobb, husband and wife	SWN Production Company, LLC	18.00%	225A/786	
Lawrence Brock Hawkins, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	233A/943	
Kathleen M. Wilson, a widow	SWN Production Company, LLC	18.00%	234A/877	
Patricia A. Wallace, a single woman	SWN Production Company, LLC	18.00%	230A/535	
Jay Howard Millard, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	231A/338	· · · · · · · · · · · · · · · · · · ·
David Russell Sauder and Amy S. Sauder, husband and wife	SWN Production Company, LLC	18.00%	232A/361	
Karen Jane McAfoos f/k/a Karen Jane Sauder, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	236A/49	
 Juanita Lee Meekins, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	235A/592	
Charlene I. Robbin f/k/a Charlene I. Kraft and Mark B. Robbin, wife and husband	SWN Production Company, LLC	18.00%	235A/459	
 Kimberly A. Hill, a widow	SWN Production Company, LLC	18.00%	233A/562	
Dorothy J. Moore and Danny R. Moore, wife and husband	SWN Production Company, LLC	18.00%	233A/544	
Jonathan S. Lemasters, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	236A/345	
Pamela J. Lemasters f/k/a Pamela J. Lemasters-Putt, a single woman	SWN Production Company, LLC	18.00%	231A/356	
Kevin Lemasters and Sandra C. Lemasters, husband and wife	SWN Production Company, LLC	18.00%	234A/853	
 Keith J. Lemasters and Gloria S. Lemasters, husband and wife	SWN Production Company, LLC	18.00%	231A/350	
Lee Roy Lemasters, Jr., a single man, by his Attorney- in-Fact Neita M. Pound	SWN Production Company, LLC	18.00%	231A/332	
Neita M. Pound, a single woman	SWN Production Company, LLC	18.00%	231A/326	
Donna Sue Stevenson, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	229A/716	
Tammy L. Lemasters, a single woman	SWN Production Company, LLC	18.00%	232A/62	
Tomi A. Skeens, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	229A/710	RECEIVED
Lee R. Lemasters and Carla J. Lemasters, husband and wife	SWN Production Company, LLC	18.00%	231A/362	ren 10º

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Susan J. Lemasters, a single woman	SWN Production Company, LLC	18.00%	229A/722	
Rose Marie Lemasters-Juresko, a widow, by her Attorney-in-Fact, Linda D. McPherson	SWN Production Company, LLC	18.00%	229A/82	
 Joyce Ann Lemasters, a widow	SWN Production Company, LLC	18.00%	234A/593	
Paul Douglas Lemasters and April L. Lemasters, husband and wife	SWN Production Company, LLC	18.00%	234A/841	
Timothy James Lemasters and Brandi Lee Lemasters, husband and wife	SWN Production Company, LLC	18.00%	235A/604	
Cindy L. Volanty f/k/a Cindy Lou Lemasters, a single woman	SWN Production Company, LLC	18.00%	236A/687	
James R. Jackson, a single man	SWN Production Company, LLC	18.00%	227A/735	
Nicole Lee Jackson, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	227A/729	
David B. Schartiger and Karla R. Schartiger, husband and wife	SWN Production Company, LLC	18.00%	230A/523	
Michael K. Schartiger and Carmen Schartiger, husband and wife	SWN Production Company, LLC	18.00%	231A/570	
Rosemary A. Douglas, a widow	SWN Production Company, LLC	18.00%	229A/704	
 Sherry L. Miga, a single woman	SWN Production Company, LLC	18.00%	229A/88	
Jack D. White, a single man	SWN Production Company, LLC	18.00%	232A/355	
Charles R. White a/k/a Charles Robert White and Linda White, husband and wife	SWN Production Company, LLC	18.00%	232A/68	
Sandra L. Darner and Josh T. Darner, wife and husband	SWN Production Company, LLC	18.00%	232A/349	
Edith A. Douglas, a widow	SWN Production Company, LLC	18.00%	230A/529	
Deborah D. Fisher, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	233A/209	
Brenda K. Ebert, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	236A/351	
Dale F. Sapp, a single man	SWN Production Company, LLC	18.00%	232A/50	
 George Thomas Sapp, a single man	SWN Production Company, LLC	18.00%	233A/556	
Sharon L. Mick, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	233A/550	
Mark E. Riter, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	231A/344	
Roy Dale Wood and Junie Malia Wood	SWN Production Company, LLC	18.00%	231A/564	
 Marian Franzi, a widow	SWN Production Company, LLC	18.00%	236A/570	Office of Oil a
Jerrold A. Franzi and Deborah L. Franzi, husband and wife	SWN Production Company, LLC	18.00%	232A/56	FER 1.6

# Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

	Dennis D. Schopper, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	233A/583	
	Lou Ann Douglas, a widow	SWN Production Company, LLC	18.00%	233A/943	
	Gary Deffenbaugh and Virginia M. Deffenbaugh, husband and wife	SWN Production Company, LLC	18.00%	237A/190	
	Lisa J. Gibson	SWN Production Company, LLC	18.00%	237A/178	
	Deborah Lamp	SWN Production Company, LLC	18.00%	237A/166	
	Vera Jean Rutan	SWN Production Company, LLC	18.00%	237A/160	
	Lisa M. Barrile & Jeffrey V. Barrile, wife and husband	SWN Production Company, LLC	18.00%	237A/172	
	Deborah Hall-Ryan, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	237A/196	
	Allen J. Hall, a single man	SWN Production Company, LLC	18.00%	237A/831	
	Brian Keith Lemasters, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	237A/184	
	Michael Richey, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	237A/825	
	Beatrice Irene Morleock, a single woman	SWN Production Company, LLC	16.00%	245A/410	
	Holly Hall Hatley, a single woman	SWN Production Company, LLC	18.00%	238A/22	
	Trudy L. Burke and Paul B. Burke, wife and husband	SWN Production Company, LLC	18.00%	247A/911	
	Gale Lee Hall, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	247A/904	
	Ruth Ellen Massey, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	247A/897	
	Harold R. Lemasters, Jr., a widower	SWN Production Company, LLC	18.00%	240A/6	
	Lawrence Jay Lemasters & Rebecca Lemasters, husband and wife	SWN Production Company, LLC	18.00%	249A/757	
	Pamela Ann Frabell, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	238A/255	
	Roberta M. Rinaldi, a/k/a Robin M. Rinaldi, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	238A/250	
	Patty A. Balwanz & Robert J. Balwanz, wife and husband	SWN Production Company, LLC	18.00%	248A/739	
	Richard J. Colvin & Jane A. Colvin, his wife	SWN Production Company	18.00%	248A/733	
	Robert L. Colvin, a widower	SWN Production Company, LLC	18.00%	249A/165	
	Chad K. Schartiger	SWN Production Company, LLC	18.00%	238A/800	RECEIVE
1	Jonah Schartiger, a single man	SWN Production Compnay, LLC	18.00%	246A/920	RECEIVED Office of Oil an
	Perkins Oil & Gas, Inc., a West Virginia corporation	SWN Production Company, LLC	18.00%	249A/159	FEB 1 6 2

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David M. Carter, a widower	SWN Production Company, LLC	18.00%	239A/662	
Kristina D. Marks and Joshua A. Marks, wife and husband	SWN Production Company, LLC	18.00%	239A/656	
Amanda M. Lopez	SWN Production Company, LLC	18.00%	239A/668	
Brittany D. Crow, a single woman	SWN Production Company, LLC	18.00%	249A/763	
Anne Deepak, a married woman dealing in her sole and separate property	SWN Production Company	18.00%	248A/662	
Roy Clayton Crow	SWN Production Company, LLC	18.00%	248A/101	
Terry Lee Sommerville	SWN Production Company, LLC	18.00%	248A/101	
Gary Robert Sommerville	SWN Production Company, LLC	18.00%	248A/101	
Sandra Kay Stewart	SWN Production Company, LLC	18.00%	248A/101	
Rosemary Muldowney	SWN Production Company, LLC	18.00%	248A/101	
Rex Foster	SWN Production Company, LLC	18.00%	248A/101	
William G. Hill, Jr.	SWN Production Company, LLC	18.00%	248A/101	
 Mia Nicole Crow Kinder	SWN Production Company, LLC	18.00%	248A/101	
Robert A. Lemasters	SWN Production Company, LLC	18.00%	248A/101	
Samuel Warner, Jr.	SWN Production Company, LLC	18.00%	248A/101	
April Lea Fluharty	SWN Production Company, LLC	18.00%	248A/101	
Joshua Michael Oates	SWN Production Company, LLC	18.00%	248A/101	
Connor Garrison Oates	SWN Production Company, LLC	18.00%	248A/101	
Kevin Robert Lemasters	SWN Production Company, LLC	18.00%	248A/101	
Howard Deffenbaugh	SWN Production Company, LLC	18.00%	248A/101	
David Randall Lemasters	SWN Production Company, LLC	18.00%	248A/101	
Tiffany Marie Lemasters	SWN Production Company, LLC	18.00%	248A/101	
Amber Rae Lemasters	SWN Production Company, LLC	18.00%	248A/101	
Brittany Nicole Lemasters	SWN Production Company, LLC	18.00%	248A/101	
Alexis Ann Lemasters	SWN Production Company, LLC	18.00%	248A/101	
Joshua Dale Lemasters	SWN Production Company, LLC	18.00%	248A/101	
 Fonda Lucille Sapp	SWN Production Company, LLC	18.00%	248A/101	
 Howard S. Sapp	SWN Production Company, LLC	18.00%	248A/101	
Donald G. Riter	SWN Production Company, LLC	18.00%	248A/101	
Ralph Thomas Sapp, Jr.	SWN Production Company, LLC	18.00%	248A/101	
Barbara A. Sapp	SWN Production Company, LLC	18.00%	248A/101	Dra-
Brianne Nicole Wood	SWN Production Company, LLC	18.00%	248A/101	Office of Oil are
Christina A. Wood	SWN Production Company, LLC	18.00%	248A/101	
Heirs of Archie Doyle Lemasters	SWN Production Company, LLC	18.00%	248A/101	+EB 16 1

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

		<u> </u>				
		Heirs of Kenneth William Jones	SWN Production Company, LLC	18.00%	248A/101	
		Stephen M. Carter	SWN Production Company, LLC	18.00%	248A/101	
		Ralph L. Dear	SWN Production Company, LLC	18.00%	248A/101	
		Dorothy William	SWN Production Company, LLC	18.00%	248A/101	
		Brian L. Crow	SWN Production Company, LLC	18.00%	248A/101	
	· · · · · · · · · · · · · · · · · · ·	Kristen Ann Nieman	SWN Production Company, LLC	18.00%	248A/101	
		Christopher D. Riter	SWN Production Company, LLC	18.00%	248A/101	
		Julie Ann Pelton	SWN Production Company, LLC	18.00%	248A/101	
		May K. Pelton	SWN Production Company, LLC	18.00%	248A/101	
		Brian R. Pelton	SWN Production Company, LLC	18.00%	248A/101	
		Terrance Eugene Allen	SWN Production Company, LLC	18.00%	248A/101	
		Harold E. Lemasters and Betty L. Lemasters, acting	SWN Production Company, LLC	18.00%	248A/101	
ĺ		as Trustees of The Lemasters Keystone Trust, dated				
1		April 5, 2012				
7)	1-10-21	George Ray Lemley	Haddad and Brooks, Inc.	12.50%	79A/194	0.0000%
''	2 25 22	Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		Sandra L. Richie	Haddad and Brooks, Inc.	12.50%	79A/202	
İ		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		James H. Rush	Haddad and Brooks, Inc.	12.50%	79A/198	
		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		William R. Gaddis	Haddad and Brooks, Inc.	12.50%	84A/35	
ŀ		Haddad and Brooks, Inc.	Chesapeake Appalachia, L.L.C.		104A/230	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
		Mary Jane Poleski, a widow	Chesapeake Appalachia, L.L.C.	17.00%	128A/886	
İ		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	1	157A/540	
		Sarah Jean Rush	Chesapeake Appalachia, L.L.C.	17.00%	128A/891	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	1	157A/540	
		Marlene Louise Gardner	Chesapeake Appalachia, L.L.C.	17.00%	128A/896	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	1	157A/540	RECEIVED
		Melvin E. Silvis and Patricia J. Silvis, husband and	Chesapeake Appalachia, L.L.C.	17.00%	137A/340 128A/901	Office of Oil and
		wife	спезареаке Арраівсіна, г.с.с.	17.00%	1207/301	FEB 16 2
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	l	157A/540	1

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	William J. Grubbs and Janet C. Grubbs, husband and wife	Chesapeake Appalachia, L.L.C.	17.00%	130A/559	
	wire Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Nancy Grubbs Burford., a widow	Chesapeake Appalachia, L.L.C.	17.00%	130A/842	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	}	157A/540	
	Angela Crellin	Chesapeake Appalachia, L.L.C.	17.00%	132A/747	
i l	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Geraldine Jackson	Chesapeake Appalachia, L.L.C.	17.00%	132A/742	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	James Withrow, a married man	Chesapeake Appalachia, L.L.C.	17.00%	132A/752	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Rebecca Massey	Chesapeake Appalachia, L.L.C.	17.00%	132A/871	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Michael Withrow, a married man	Chesapeake Appalachia, L.L.C.	17.00%	134A/520	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Christopher Thomas Wood and Brenda Sue Wood,	Chesapeake Appalachia, L.L.C.	18.00%	140A/247	
	his wife				
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Michelle Carpenter, f/k/a Michelle Lea Wood, a married woman dealing in her sole and separate	Chesapeake Appalachia, L.L.C.	18.00%	140A/257	
	property			1	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Gregory Paul Wood, a single man	Chesapeake Appalachia, L.L.C.	18.00%	140A/252	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Jonathan Kent Wood	Chesapeake Appalachia, L.L.C.	18.00%	140A/696	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540	
	Douglas Charles Wood	Chesapeake Appalachia, L.L.C.	18.00%	140A/691	
	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	Ì	157A/540	
	Karen G. Kuhn, a/k/a Karen Harbert Kuhn, widow	SWN Production Company, LLC	18.00%	194A/936	
	Stephen Guy Pettit & Sarah Pettit, husband and wife	SWN Production Company, LLC	16.00%	167A/430	
	James E. Barr and Linda Barr, husband and wife	SWN Production Company, LLC	16.00%	167A/451	
	Samuel Burton and Joyce K. Burton, husband and	SWN Production Company, LLC	16.00%	167A/442	RECEIVED Office of Oil and Ga
	wife  James Burton and Tammy Lynn Burton, husband and wife	SWN Production Company, LLC	16.00%	167A/445	FEB 1 6 202

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

Kermit E. Persinger and Frances Persinger, husband and wife	SWN Production Company, LLC	16.00%	167A/454	
Robert Richmond and Virginia Richmond, husband and wife	SWN Production Company, LLC	16.00%	167A/463	
Charles Spaine and Mary Spaine, husband and wife	SWN Production Company, LLC	16.00%	168A/633	
 Suzette Station, a single woman	SWN Production Company, LLC	16.00%	168A/630	
Sam E. Whitlach and Diana Whitlach, husband and wife	SWN Production Company, LLC	16.00%	167A/466	
Joseph Matthew Stocklask and Rhonda Stocklask, husband and wife	SWN Production Company, LLC	16.00%	168A/627	
Allie Virginia Hall, by Billie Jo Beegle as her Attorney- in-Fact	SWN Production Company, LLC	16.00%	168A/636	
Gerald Brett Hawkins and Julie A. Hawkins, husband and wife	SWN Production Company, LLC	16.00%	168A/624	
Ralph Clayton and Sara Clayton, husband and wife	SWN Production Company, LLC	16.00%	167A/460	
Raymond Clayton	SWN Production Company, LLC	16.00%	167A/457	
Judy Ann Frey and Joseph F Frey, wife and husband	SWN Production Company, LLC	16.00%	167A/433	
Frank Anthony Stocklask	SWN Production Company, LLC	16.00%	167A/427	
Alfred E. Burton and Linda A. Burton, husband and wife	SWN Production Company, LLC	16.00%	167A/439	
Okla Dale Burton and Shirley Burton, husband and wife	SWN Production Company, LLC	16.00%	167A/436	
Christy Holmes and Danny L. Holmes, wife and husband	SWN Production Company, LLC	16.00%	167A/448	
Mary Barrett and Michael ray Barrett, wife and husband	SWN Production Company, LLC	16.00%	166A/910	
John David Rush and Judith Rush, husband and wife	SWN Production Company, LLC	16.00%	166A/904	
Harlan C. Wood and Mary L. Wood, husband and wife	SWN Production Company, LLC	16.00%	166A/901	
Marianne F. Wood, a widow	SWN Production Company, LLC	16.00%	166A/913	
Ronald L. hall, a single man	SWN Production Company, LLC	16.00%	166A/919	
Guy Elery Hawkins, a single man	SWN Production Company, LLC	16.00%	170A/469	
Vincent Goff and Joyce Goff, husband and wife	SWN Production Company, LLC	16.00%	166A/916	
William J. Hall	SWN Production Company, LLC	16.00%	166A/924	DECE:
Alfred Burns and Belinda Burns, husband and wife	SWN Production Company, LLC	16.00%	166A/907	Office of Oil and

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### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

Linda Stevens and Alfred Stevens, wife and husband	SWN Production Company, LLC	18.00%	188A/116	
 Samuel J. Wood, a married man, dealing in his sole and separate property	SWN Production Company, LLC	18.00%	199A/493	
Marta Jo Zukoff Thomas, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	199A/499	
Dana Beth Oakland, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	199A/505	
Paula Kay Zukoff Romanoski, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	199A/665	
Chelsea Oakland, a single woman	SWN Production Company, LLC	18.00%	200A/547	
John K. Hill, a married man, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	201A/773	
Marilyn P. Dehart	SWN Production Company, LLC	18.00%	201A/779	
Daniel L. Lemasters, a married man, dealing in his sole and separate property	SWN Production Company, LLC	18.00%	203A/50	
Margaret L. Chambers, a single woman	SWN Production Company, LLC	18.00%	203A/817	
Corrinda Kay Nail, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	18.00%	206A/576	101011
Michael G. Lemasters, a single man	SWN Production Company, LLC	18.00%	207A/673	
Ray Elwood Blake, II, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	221A/934	
Douglas Edward Wood & Shelly Lynn Wood, husband and wife	SWN Production Company, LLC	18.00%	222A/774	
Linda Stansberry, a single woman	SWN Production Company, LLC	18.00%	223A/208	
James F. Snider, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	223A/653	
Carole J. Brownlee, a single woman	SWN Production Company, LLC	18.00%	223A/671	
Kelly J. Wooley, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	224A/484	
Brett Stiffler, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	224A/490	
Jason James Blake and Sarah E. Cobb, husband and wife	SWN Production Company, LLC	18.00%	225A/786	
Lawrence Brock Hawkins, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	233A/943	
Kathleen M. Wilson, a widow	SWN Production Company, LLC	18.00%	234A/877	RECEIVED Office of Oil and
Patricia A. Wallace, a single woman	SWN Production Company, LLC	18.00%	230A/535	OINCE OF OIL AIR
Jay Howard Millard, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	231A/338	FEB 1 6 2

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### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

David Russell Sauder and Amy S. Sauder, husband	SWN Production Company, LLC	18.00%	232A/361	
 and wife  Karen Jane McAfoos f/k/a Karen Jane Sauder, a	SWN Production Company, LLC	18.00%	236A/49	
married woman dealing in her sole and separate	,, ===			
property				_
Juanita Lee Meekins, a married woman dealing in	SWN Production Company, LLC	18.00%	235A/592	
her sole and separate property				
Charlene I. Robbin f/k/a Charlene I. Kraft and Mark	SWN Production Company, LLC	18.00%	235A/459	
B. Robbin, wife and husband				
Kimberly A. Hill, a widow	SWN Production Company, LLC	18.00%	233A/562	
Dorothy J. Moore and Danny R. Moore, wife and	SWN Production Company, LLC	18.00%	233A/544	
husband				
Jonathan S. Lemasters, a married man dealing in his	SWN Production Company, LLC	18.00%	236A/345	
sole and separate property				
 Pamela J. Lemasters f/k/a Pamela J. Lemasters-Putt,	SWN Production Company, LLC	18.00%	231A/356	
 a single woman				
Kevin Lemasters and Sandra C. Lemasters, husband	SWN Production Company, LLC	18.00%	234A/853	
and wife				
Keith J. Lemasters and Gloria S. Lemasters, husband	SWN Production Company, LLC	18.00%	231A/350	
and wife				
Lee Roy Lemasters, Jr., a single man, by his Attorney-	SWN Production Company, LLC	18.00%	231A/332	
in-Fact Neita M. Pound				
Neita M. Pound, a single woman	SWN Production Company, LLC	18.00%	231A/326	
Donna Sue Stevenson, a married woman dealing in	SWN Production Company, LLC	18.00%	229A/716	
her sole and separate property				
Tammy L. Lemasters, a single woman	SWN Production Company, LLC	18.00%	232A/62	
Tomi A. Skeens, a married woman dealing in her	SWN Production Company, LLC	18.00%	229A/710	
sole and separate property				
Lee R. Lemasters and Carla J. Lemasters, husband	SWN Production Company, LLC	18.00%	231A/362	
and wife				
Susan J. Lemasters, a single woman	SWN Production Company, LLC	18.00%	229A/722	
Rose Marie Lemasters-Juresko, a widow, by her	SWN Production Company, LLC	18.00%	229A/82	
Attorney-in-Fact, Linda D. McPherson				
Joyce Ann Lemasters, a widow	SWN Production Company, LLC	18.00%	234A/593	
Paul Douglas Lemasters and April L. Lemasters,	SWN Production Company, LLC	18.00%	234A/841	
husband and wife				
Timothy James Lemasters and Brandi Lee Lemasters,	SWN Production Company, LLC	18.00%	235A/604	
husband and wife	· ·			
Cindy L. Volanty f/k/a Cindy Lou Lemasters, a single	SWN Production Company, LLC	18.00%	236A/687	
woman				RECEIV
James R. Jackson, a single man	SWN Production Company, LLC	18.00%	227A/735	Office of Oil a

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Nicole Lee Jackson, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	227A/729	
David B. Schartiger and Karla R. Schartiger, husband and wife	SWN Production Company, LLC	18.00%	230A/523	
Michael K. Schartiger and Carmen Schartiger, husband and wife	SWN Production Company, LLC	18.00%	231A/570	
 Rosemary A. Douglas, a widow	SWN Production Company, LLC	18.00%	229A/704	
Sherry L. Miga, a single woman	SWN Production Company, LLC	18.00%	229A/88	
 Jack D. White, a single man	SWN Production Company, LLC	18.00%	232A/355	
Charles R. White a/k/a Charles Robert White and Linda White, husband and wife	SWN Production Company, LLC	18.00%	232A/68	
Sandra L. Darner and Josh T. Darner, wife and husband	SWN Production Company, LLC	18.00%	232A/349	
Edith A. Douglas, a widow	SWN Production Company, LLC	18.00%	230A/529	
Deborah D. Fisher, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	233A/209	
Brenda K. Ebert, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	236A/351	
Dale F. Sapp, a single man	SWN Production Company, LLC	18.00%	232A/50	
George Thomas Sapp, a single man	SWN Production Company, LLC	18.00%	233A/556	
Sharon L. Mick, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	233A/550	
Mark E. Riter, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	231A/344	
Roy Dale Wood and Junie Malia Wood	SWN Production Company, LLC	18.00%	231A/564	
Marian Franzi, a widow	SWN Production Company, LLC	18.00%	236A/570	
Jerrold A. Franzi and Deborah L. Franzi, husband and wife	SWN Production Company, LLC	18.00%	232A/56	
Dennis D. Schopper, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	233A/583	
Lou Ann Douglas, a widow	SWN Production Company, LLC	18.00%	233A/943	
Gary Deffenbaugh and Virginia M. Deffenbaugh, husband and wife	SWN Production Company, LLC	18.00%	237A/190	
Lisa J. Gibson	SWN Production Company, LLC	18.00%	237A/178	
Deborah Lamp	SWN Production Company, LLC	18.00%	237A/166	
Vera Jean Rutan	SWN Production Company, LLC	18.00%	237A/160	
Lisa M. Barrile & Jeffrey V. Barrile, wife and husband	SWN Production Company, LLC	18.00%	237A/172	Office of Oil and
Deborah Hall-Ryan, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	237A/196	FEB 16 2

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

	Allen J. Hall, a single man	SWN Production Company, LLC	18.00%	237A/831	
	Brian Keith Lemasters, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	237A/184	
	Michael Richey, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	237A/825	
	Beatrice Irene Morleock, a single woman	SWN Production Company, LLC	16.00%	245A/410	
	Holly Hall Hatley, a single woman	SWN Production Company, LLC	18.00%	238A/22	
	Trudy L. Burke and Paul B. Burke, wife and husband	SWN Production Company, LLC	18.00%	247A/911	
	Gale Lee Hall, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	247A/904	
	Ruth Ellen Massey, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	247A/897	
	Harold R. Lemasters, Jr., a widower	SWN Production Company, LLC	18.00%	240A/6	
	Lawrence Jay Lemasters & Rebecca Lemasters, husband and wife	SWN Production Company, LLC	18.00%	249A/757	
	Pamela Ann Frabell, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	238A/255	
	Roberta M. Rinaldi, a/k/a Robin M. Rinaldi, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	238A/250	
	Patty A. Balwanz & Robert J. Balwanz, wife and husband	SWN Production Company, LLC	18.00%	248A/739	
	Richard J. Colvin & Jane A. Colvin, his wife	SWN Production Company	18.00%	248A/733	
	Robert L. Colvin, a widower	SWN Production Company, LLC	18.00%	249A/165	
	Chad K. Schartiger	SWN Production Company, LLC	18.00%	238A/800	
	Jonah Schartiger, a single man	SWN Production Compnay, LLC	18.00%	246A/920	
	Perkins Oil & Gas, Inc., a West Virginia corporation	SWN Production Company, LLC	18.00%	249A/159	
i	David M. Carter, a widower	SWN Production Company, LLC	18.00%	239A/662	
	Kristina D. Marks and Joshua A. Marks, wife and husband	SWN Production Company, LLC	18.00%	239A/656	
	Amanda M. Lopez	SWN Production Company, LLC	18.00%	239A/668	
	Brittany D. Crow, a single woman	SWN Production Company, LLC	18.00%	249A/763	
	Anne Deepak, a married woman dealing in her sole and separate property	SWN Production Company	18.00%	248A/662	
	Roy Clayton Crow	SWN Production Company, LLC	18.00%	248A/101	
	Terry Lee Sommerville	SWN Production Company, LLC	18.00%	248A/101	Office of Oil an
	Gary Robert Sommerville	SWN Production Company, LLC	18.00%	248A/101	- VIII OI VII BR
	Sandra Kay Stewart	SWN Production Company, LLC	18.00%	248A/101	FEB 1 6 2

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

	Rosemary Muldowney	SWN Production Company, LLC	18.00%	248A/101	
	Rex Foster	SWN Production Company, LLC	18.00%	248A/101	
<del></del>	William G. Hill, Jr.	SWN Production Company, LLC	18.00%	248A/101	
	Mia Nicole Crow Kinder	SWN Production Company, LLC	18.00%	248A/101	
	Robert A. Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Samuel Warner, Jr.	SWN Production Company, LLC	18.00%	248A/101	
	April Lea Fluharty	SWN Production Company, LLC	18.00%	248A/101	
	Joshua Michael Oates	SWN Production Company, LLC	18.00%	248A/101	
	Connor Garrison Oates	SWN Production Company, LLC	18.00%	248A/101	
	Kevin Robert Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Howard Deffenbaugh	SWN Production Company, LLC	18.00%	248A/101	
	David Randall Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Tiffany Marie Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Amber Rae Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Brittany Nicole Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Alexis Ann Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Joshua Dale Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Fonda Lucille Sapp	SWN Production Company, LLC	18.00%	248A/101	
	Howard S. Sapp	SWN Production Company, LLC	18.00%	248A/101	
	Donald G. Riter	SWN Production Company, LLC	18.00%	248A/101	
	Ralph Thomas Sapp, Jr.	SWN Production Company, LLC	18.00%	248A/101	
	Barbara A. Sapp	SWN Production Company, LLC	18.00%	248A/101	
	Brianne Nicole Wood	SWN Production Company, LLC	18.00%	248A/101	
	Christina A. Wood	SWN Production Company, LLC	18.00%	248A/101	
	Heirs of Archie Doyle Lemasters	SWN Production Company, LLC	18.00%	248A/101	
	Heirs of Kenneth William Jones	SWN Production Company, LLC	18.00%	248A/101	
	Stephen M. Carter	SWN Production Company, LLC	18.00%	248A/101	
	Ralph L. Dear	SWN Production Company, LLC	18.00%	248A/101	
	Dorothy William	SWN Production Company, LLC	18.00%	248A/101	
	Brian L. Crow	SWN Production Company, LLC	18.00%	248A/101	
	Kristen Ann Nieman	SWN Production Company, LLC	18.00%	248A/101	
	Christopher D. Riter	SWN Production Company, LLC	18.00%	248A/101	RECEIVED
	Julie Ann Pelton	SWN Production Company, LLC	18.00%	248A/101	Office of Oil and
	May K. Pelton	SWN Production Company, LLC	18.00%	248A/101	FED 10 1
	Brian R. Pelton	SWN Production Company, LLC	18.00%	248A/101	FEB 1 6 2

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

		Terrance Eugene Allen	SWN Production Company, LLC	18.00%	248A/101	
		Harold E. Lemasters and Betty L. Lemasters, acting as Trustees of The Lemasters Keystone Trust, dated April 5, 2012	SWN Production Company, LLC	18.00%	248A/101	
8)	1-10-33.1	*Royalty Owner	N/a	N/a	N/a	10.2271%
		Christopher S. Burbridge, a single man	SWN Production Company, LLC	16.00%	251A/451	
		Marilyn Jane Erwin a/k/a Jane Erwin, a married woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	249A/781	
		Willard C. Border, Jr., a married man dealing in his sole and separate property	SWN Production Company, LLC	15.00%	250A/247	
		Jacquelyn Anne Moniak, a widow	SWN Production Company, LLC	15.00%	250A/242	
		Roberta Eileen Hart, a amrried woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	249A/183	
		Kyle J. Burbridge, a single man	SWN Production Company, LLC	16.00%	251A/445	
		Bradley D. Morris, a single man	SWN Production Company, LLC	18.00%	252A/43	
		Rachel M. Yoho, a/k/a Rachel Yoho Markin, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	251A/457	
		Waylen E. Whitaker, a widower	SWN Production Company, LLC	15.00%	252A/647	
		Arland J. Pearce & Helen S, Pearce, husband and wife	SWN Production Company, LLC	18.00%	252A/25	
		Tammy L. Lewis, f/k/a Tammy L. Pearce, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/167	
		Cody Alan Pearce, a minor, by David C. White, Esq., as Special Commissioner	SWN Production Company, LLC	18.00%	253A/570	
		Jared L. Broyles f/k/a Jared L. Pearce, a single man	SWN Production Company, LLC	15.00%	249A/189	
		Michael Allen Pearce, a married man dealing in his sole and separarte property	SWN Production Company, LLC	16.00%	252A/851	
		Linda J. Hughes, a single woman	SWN Production Company, LLC	18.00%	252A/31	
		Tribune Resources, LLC	SWN Production Company, LLC	18.00%	248A/122	
		Tawni L. DeCarlo, a married woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	252A/70	
		Scott W. Whitaker, a married man dealing in his sole and separate property	SWN Production Company, LLC	16,00%	252A/37	RECEIVE Office of Oil an
		Keri L. Mock, a married woman dealing in her sole and separate property	SWN Production Company, LLC	16.00%	252A/64	FFB 16 7

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

 Robert M. White, a single man	SWN Production Company, LLC	15.00%	249A/769	
 Danielle White, a single woman	SWN Production Company, LLC	15.00%	249A/171	
Leslie D. White, a single woman	SWN Production Company, LLC	15.00%	249A/177	
Kristy N. Callich, a single woman	SWN Production Company, LLC	15.00%	249A/775	
Arbor Mineral Company, a Wyoming limited liability company	SWN Production Company, LLC	17.00%	252A/13	
FTC, LLC, a Wyoming limited liability company	SWN Production Company, LLC	17.00%	252A/19	
Lost River Trading Company, LLC, a Wyoming limited liability company	SWN Production Company, LLC	17.00%	252A/7	
Three Rivers Royalty II, LLC, Tiffany Culp - VP Land & Legal	SWN Production Company, LLC	18.00%	250A/670	
Linda Berlin, f/k/a Linda Berlin-Lyons, a single woman	SWN Production Company, LLC	18.00%	252A/863	
Andrew Alan Berlin, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	252A/857	
Stephen Thomas Lewin-Berlin, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	252A/869	
Charles L. Inman, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	253A/193	
David L. Strosnider, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	253A/199	
David M. Strosnider & Deborah M. Strosnider, husband and wife	SWN Production Company, LLC	18.00%	253A/180	
Shirley Strosnider, a widow	SWN Production Company, LLC	18.00%	253A/187	
Linda Bacon, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/173	
Debra M. Kemp, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	235A/161	
Diana L. Arnold, a single woman	SWN Production Company, LLC	18.00%	253A/149	
Rhonda J. Dominguez, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/155	
Virginia M. Lee Ledoux, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/143	
Cheryl S. Young, a widow	SWN Production Company, LLC	18.00%	253A/483	
Janice A. Adams, a/k/a Jan A. Adams, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/501	
Kerri A. Strosnider, a widow and not remarried	SWN Production Company, LLC	18.00%	253A/576	RECEIV Office of Oil a
Lois Sharrard, a widow	SWN Production Company, LLC	18.00%	253A/495	<del>- 31100 01</del> 011 8

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		William J. Burbridge, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	253A/489	
		Terea J. Capers, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/132	
		Lori Strosnider	SWN Production Company, LLC	18.00%	253A/583	
9)	1-10-33	*Royalty Owner	N/a	N/a	N/a	10.2271%
		Christopher S. Burbridge, a single man	SWN Production Company, LLC	16.00%	251A/451	
		Marilyn Jane Erwin a/k/a Jane Erwin, a married woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	249A/781	
		Willard C. Border, Jr., a married man dealing in his sole and separate property	SWN Production Company, LLC	15.00%	250A/247	
		Jacquelyn Anne Moniak, a widow	SWN Production Company, LLC	15.00%	250A/242	
		Roberta Eileen Hart, a amrried woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	249A/183	
		Kyle J. Burbridge, a single man	SWN Production Company, LLC	16.00%	251A/445	
		Bradley D. Morris, a single man	SWN Production Company, LLC	18.00%	252A/43	
		Rachel M. Yoho, a/k/a Rachel Yoho Markin, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	251A/457	
		Waylen E. Whitaker, a widower	SWN Production Company, LLC	15.00%	252A/647	
3		Arland J. Pearce & Helen S, Pearce, husband and wife	SWN Production Company, LLC	18.00%	252A/25	
		Tammy L. Lewis, f/k/a Tammy L. Pearce, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/167	
		Cody Alan Pearce, a minor, by David C. White, Esq., as Special Commissioner	SWN Production Company, LLC	18.00%	253A/570	
		Jared L. Broyles f/k/a Jared L. Pearce, a single man	SWN Production Company, LLC	15.00%	249A/189	
		Michael Allen Pearce, a married man dealing in his sole and separarte property	SWN Production Company, LLC	16.00%	252A/851	
		Linda J. Hughes, a single woman	SWN Production Company, LLC	18.00%	252A/31	
		Tribune Resources, LLC	SWN Production Company, LLC	18.00%	248A/122	
		Tawni L. DeCarlo, a married woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	252A/70	
		Scott W. Whitaker, a married man dealing in his sole and separate property	SWN Production Company, LLC	16.00%	252A/37	RECEIVED
		Keri L. Mock, a married woman dealing in her sole and separate property	SWN Production Company, LLC	16.00%	252A/64	Office of Oil and

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

	Robert M. White, a single man	SWN Production Company, LLC	15.00%	249A/769	
	Danielle White, a single woman	SWN Production Company, LLC	15.00%	249A/171	
	Leslie D. White, a single woman	SWN Production Company, LLC	15.00%	249A/177	
	Kristy N. Callich, a single woman	SWN Production Company, LLC	15.00%	249A/775	
	Arbor Mineral Company, a Wyoming limited liability	SWN Production Company, LLC	17.00%	252A/13	
	company	SWIN Floudction Company, LLC	17.00%	232A/13	
	FTC, LLC, a Wyoming limited liability company	SWN Production Company, LLC	17.00%	252A/19	
	Tro, Eco, a viyoning illined liability company	Svvvv roduction company, 220		1	
	Lost River Trading Company, LLC, a Wyoming limited	SWN Production Company, LLC	17.00%	252A/7	
:	liability company				
	Three Rivers Royalty II, LLC, Tiffany Culp - VP Land &	SWN Production Company, LLC	18.00%	250A/670	
	Legal				
	Linda Berlin, f/k/a Linda Berlin-Lyons, a single	SWN Production Company, LLC	18.00%	252A/863	
	woman				
	Andrew Alan Berlin, a married man dealing in his	SWN Production Company, LLC	18.00%	252A/857	
	sole and separate property				
	Stephen Thomas Lewin-Berlin, a married man	SWN Production Company, LLC	18.00%	252A/869	
ļ	dealing in his sole and separate property			1	
j	Charles L. Inman, a married man dealing in his sole	SWN Production Company, LLC	18.00%	253A/193	
	and separate property				
	David L. Strosnider, a married man dealing in his	SWN Production Company, LLC	18.00%	253A/199	
	sole and separate property		10.000/	0504/400	
	David M. Strosnider & Deborah M. Strosnider,	SWN Production Company, LLC	18.00%	253A/180	
	husband and wife	51411 5 1 11 G	10.000/	2524/407	
	Shirley Strosnider, a widow	SWN Production Company, LLC	18.00%	253A/187	
	Linda Bacon, a married woman dealing in her sole	SWN Production Company, LLC	18.00%	253A/173	
	and separate property  Debra M. Kemp, a married woman dealing in her	SWN Production Company, LLC	18.00%	235A/161	
	•	SWN Production Company, LLC	18.00%	255A) 161	
	sole and separate property  Diana L. Arnold, a single woman	SWN Production Company, LLC	18.00%	253A/149	
	, ,				
	Rhonda J. Dominguez, a married woman dealing in	SWN Production Company, LLC	18.00%	253A/155	
	her sole and separate property	CIA/AL Bardustina Communication	10,000/	253A/143	
	Virginia M. Lee Ledoux, a married woman dealing in	SWN Production Company, LLC	18.00%	253A/143	
	her sole and separate property	SWN Production Company, LLC	18.00%	253A/483	
	Cheryl S. Young, a widow Janice A. Adams, a/k/a Jan A. Adams, a married	SWN Production Company, LLC SWN Production Company, LLC	18.00%	253A/463 253A/501	
1	woman dealing in her sole and separate property	SVVN Floudction company, LLC	18.00%	2337/301	
:	woman dealing in her sole and separate property			1	
<del>-  </del>	Kerri A. Strosnider, a widow and not remarried	SWN Production Company, LLC	18.00%	253A/576	
	Rem A. Scrosmaci, a widow and not remained	Strit i roddellon company, etc	10.00,0		RECEIVE
	Lois Sharrard, a widow	SWN Production Company, LLC	18.00%	253A/495	Office of Oil ar

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### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

		William J. Burbridge, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	253A/489	
		Terea J. Capers, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/132	
		Lori Strosnider	SWN Production Company, LLC	18.00%	253A/583	
10)	1-10-48	*Royalty Owner	N/a	N/a	N/a	10.2271%
		Christopher S. Burbridge, a single man	SWN Production Company, LLC	16.000%	251A/451	
		Marilyn Jane Erwin a/k/a Jane Erwin, a married woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	249A/781	
		Willard C. Border, Jr., a married man dealing in his sole and separate property	SWN Production Company, LLC	15.00%	250A/247	
		Jacquelyn Anne Moniak, a widow	SWN Production Company, LLC	15.00%	250A/242	
		Roberta Eileen Hart, a amrried woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	249A/183	
		Kyle J. Burbridge, a single man	SWN Production Company, LLC	16.00%	251A/445	
		Bradley D. Morris, a single man	SWN Production Company, LLC	18.00%	252A/43	
		Rachel M. Yoho, a/k/a Rachel Yoho Markin, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	251A/457	
1		Waylen E. Whitaker, a widower	SWN Production Company, LLC	15.00%	252A/647	
		Arland J. Pearce & Helen S, Pearce, husband and wife	SWN Production Company, LLC	18.00%	252A/25	
		Tammy L. Lewis, f/k/a Tammy L. Pearce, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/167	
		Cody Alan Pearce, a minor, by David C. White, Esq.,	SWN Production Company, LLC	18.00%	253A/570	
		Jared L. Broyles f/k/a Jared L. Pearce, a single man	SWN Production Company, LLC	15.00%	249A/189	
		Michael Allen Pearce, a married man dealing in his sole and separarte property	SWN Production Company, LLC	16.00%	252A/851	
		Linda J. Hughes, a single woman	SWN Production Company, LLC	18.00%	252A/31	
		Tribune Resources, LLC	SWN Production Company, LLC	18.00%	248A/122	
		Tawni L. DeCarlo, a married woman dealing in her sole and separate property	SWN Production Company, LLC	15.00%	252A/70	
		Scott W. Whitaker, a married man dealing in his sole and separate property	SWN Production Company, LLC	16.00%	252A/37	RECEIVE
		Keri L. Mock, a married woman dealing in her sole and separate property	SWN Production Company, LLC	16.00%	252A/64	FEB 16

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

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	Danielle White, a single woman	SWN Production Company, LLC	15.00%	249A/171	
	Leslie D. White, a single woman	SWN Production Company, LLC	15.00%	249A/177	
	Kristy N. Callich, a single woman	SWN Production Company, LLC	15.00%	249A/775	
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	Three Rivers Royalty II, LLC, Tiffany Culp - VP Land & Legal	SWN Production Company, LLC	18.00%	250A/670	
	Linda Berlin, f/k/a Linda Berlin-Lyons, a single woman	SWN Production Company, LLC	18.00%	252A/863	
	Andrew Alan Berlin, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	252A/857	
	Stephen Thomas Lewin-Berlin, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	252A/869	
	Charles L. Inman, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	253A/193	
	David L. Strosnider, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	253A/199	
	David M. Strosnider & Deborah M. Strosnider, husband and wife	SWN Production Company, LLC	18.00%	253A/180	
	Shirley Strosnider, a widow	SWN Production Company, LLC	18.00%	253A/187	
	Linda Bacon, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/173	
	Debra M. Kemp, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	235A/161	
	Diana L. Arnold, a single woman	SWN Production Company, LLC	18.00%	253A/149	
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	Virginia M. Lee Ledoux, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/143	
	Cheryl S. Young, a widow	SWN Production Company, LLC	18.00%	253A/483	
	Janice A. Adams, a/k/a Jan A. Adams, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	253A/501	
:	Kerri A. Strosnider, a widow and not remarried	SWN Production Company, LLC	18.00%	253A/576	RECEIVED Office of Oil and
	Lois Sharrard, a widow	SWN Production Company, LLC	18.00%	253A/495	4 A A

### Attached to and made a part of the State of West Virginia Oil and Gas Form, WW-6A1, by SWN Production Company, L.L.C, as Operator William Ritchea WTZ 10H Wetzel County, West Virginia

	William J. Burbridge, a married man dealing in his	SWN Production Company, LLC	18.00%	253A/489	
	sole and separate property				
	Teresa J. Capers, a married woman dealing in her	SWN Production Company, LLC	18.00%	253A/132	
	sole and separate property				
l	Lori Strosnider	SWN Production Company, LLC	18.00%	253A/583	

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FEB 16 2021



4710303372

SWN Production Company, LLC 1300 Fort Pierpont Dr, Ste 201 Morgantown, WV 26508 Tel: 304 884 1610 Fax: 304 471 2497 www.swn.com

January 4, 2021

Ms. Laura Adkins WV DEP Office of Oil & Gas 601 57<sup>th</sup> St., SE Charleston, WV 25304

**RE:** SWN's proposed New Well: William Ritchea WTZ 10H in Wetzel County, West Virginia, Drilling under Carney Fork Road, and Fairview Ridge Road.

Dear Ms. Adkins:

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 Carney Fork Road, and Fairview Ridge 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,

Name Title

SWN Production Company, LLC

RECEIVED
Office of Oil and Gas

JAN 19

WV Department of Environmental Protection

R2 NV+°

Date of Notice Certification:

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

API No. 47- 103

Operator's Well No. William Ritchea WTZ 10H

		V	Vell Pad N	ame: William	Ritchea WTZ pad
Notice has I Pursuant to th	been given: ne provisions in West Virginia Code §	22-6A, the Operator has provid	ded the req	uired parties v	vith the Notice Forms liste
below for the	tract of land as follows:				
State:	West Virginia		Easting:	529,228.724	
County: District:	103- Wetzel	Nortning:		4,391,141.520	
	Proctor Wileyville	Public Road Access:  Generally used farm name:		Harlan Ridge William Ritchea	
Quadrangle: Watershed:	Fish Creek				
prescribed by it has provide information re of giving the requirements Virginia Code	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and sled the owners of the surface describequired by subsections (b) and (c), se surface owner notice of entry to su of subsection (b), section sixteen or e § 22-6A-11(b), the applicant shall to have been completed by the applicant	hall contain the following inform bed in subdivisions (1), (2) and ction sixteen of this article; (ii) to rvey pursuant to subsection (a) of this article were waived in we ender proof of and certify to the	nation: (14), substhat the reconstruction to the rection to the re	<ol> <li>A certification ection (b), secquirement was en of this artion the surface ov</li> </ol>	on from the operator that ction ten of this article, deemed satisfied as a res cle six-a; or (iii) the not wner; and Pursuant to W
that the Ope	West Virginia Code § 22-6A, the Op rator has properly served the require ECK ALL THAT APPLY	d parties with the following:			OOG OFFICE USE ONLY
☐ 1. NO	TICE OF SEISMIC ACTIVITY or	SEISMIC ACTIVITY WAS			RECEIVED/ NOT REQUIRED
■ 2. NO	TICE OF ENTRY FOR PLAT SURV	YEY or NO PLAT SURVEY	Y WAS CO	ONDUCTED	☐ RECEIVED
■ 3. NO	TICE OF INTENT TO DRILL or	☐ NOTICE NOT REQUIRE NOTICE OF ENTRY FOR PLUAS CONDUCTED or			RECEIVED/ NOT REQUIRED
		WRITTEN WAIVER BY (PLEASE ATTACH)	Y SURFAC	CE OWNER	
■ 4. NO	TICE OF PLANNED OPERATION		RECE Office of O	IVED il and Gas	☐ RECEIVED
					RECEIVED
■ 5. PUI	BLIC NOTICE		JAN I	9	LI 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.

By:

### 4710393372

#### 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: SWN Production Co., LLC

Brittany Woody

Its: Senior Regulatory Analyst

Telephone: 304-884-1610 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Facsimile: 304-884-1690

Email: Brittany\_Woody@swn.com

NOTARY SEAL

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

Subscribed and sworn before me this 4th day of January 2021.

My Commission Expires

Oil and Gas Privacy Notice:

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

API NO. 47-103 0 3 0 3 3 7 2
OPERATOR WELL NO. Wikinam Ritchea WTZ 10H
Well Pad Name: William Ritchea WTZ pad

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

Notice Time Requirement: notice shall be provided no later to	han the filing date of permit application.
D	18
Date of Notice: Date Permit Application Filed:	10-
Notice of:	V
✓ PERMIT FOR ANY ☐ CERTIFICATE OF AN	DDPOVAL FOR THE
HTT - PUNELING WITH THE THE PROPERTY OF THE PROPERTY HER PROPERTY HER PROPERTY HER PROPERTY HER PROPERTY HER P	
WELL WORK CONSTRUCTION OF	F AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-	10(b)
☐ PERSONAL ☐ REGISTERED ☐ MET.	HOD OF DELIVERY THAT REQUIRES A
**************************************	EIPT OR SIGNATURE CONFIRMATION
	te of the application, the applicant for a permit for any well work or for a
sediment control plan required by section seven of this article, and the surface of the tract on which the well is or is proposed to be lo oil and gas leasehold being developed by the proposed well work, described in the erosion and sediment control plan submitted purs operator or lessee, in the event the tract of land on which the well more coal seams; (4) The owners of record of the surface tract or well work, if the surface tract is to be used for the placement, consimpoundment or pit as described in section nine of this article; (5) have a water well, spring or water supply source located within or provide water for consumption by humans or domestic animals; as proposed well work activity is to take place. (c)(1) If more than the subsection (b) of this section hold interests in the lands, the application of the sheriff required to be maintained pursuant to section provision of this article to the contrary, notice to a lien holder is not active to the contrary.	tor signature confirmation, copies of the application, the erosion and I the well plat to each of the following persons: (1) The owners of record of cated; (2) The owners of record of the surface tract or tracts overlying the if the surface tract is to be used for roads or other land disturbance as uant to subsection (c). section seven of this article; (3) The coal owner, proposed to be drilled is located [sic] is known to be underlain by one or tracts overlying the oil and gas leasehold being developed by the proposed struction, enlargement, alteration, repair, removal or abandonment of any Any surface owner or water purveyor who is known to the applicant to be thousand five hundred feet of the center of the well pad which is used to retenants in common or other co-owners of interests described in the reant may serve the documents required upon the person described in the neight, article one, chapter eleven-a of this code. (2) Notwithstanding any of notice to a landowner, unless the lien holder is the landowner. W. Va. provide the Well Site Safety Plan ("WSSP") to the surface owner and any ag as provided in section 15 of this rule.
☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice	ce 🛮 Well Plat Notice is hereby provided to:
☑ SURFACE OWNER(s)	COAL OWNER OR LESSEE
Name: William & Shirley Ritchea	Name: C/O Leatherwood Inc. Attn: Casey Saunders
Address: 12263 Proctor Creek Road	Address: 1000 Consol Energy Drive
New Martinsville, WV 26155	Canonsburg, PA 15317
Name:	COAL OPERATOR
Address:	Name:
SURFACE OWNER(s) (Road and/or Other Disturbance)	Address:
	SURFACE OWNER OF WATER WELL
Name:	AND/OR WATER PURVEYOR(s)
Address:	Name: None
Name:	
Address:	WED GOS
	OPERATOR OF ANY NATURAL GASSTORAGE FIELD
☐ SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name:	Address:
Address:	AN ment ection
	Address:  OPERATOR OF ANY NATURAL GASSTORAGE FIELD  Name: Address:  *Please attach additional forms if necessary January Department of the control of the co
	WY mente

WW-6A (8-13)

RECEIVED Office of Oil and Gas

 $71_{\tiny 17-103}$  0 3 0 3 3 7 2 OPERATOR WELL NO. William Ritches WTZ 10H Well Pad Name: William Ritchea WTZ pad

Notice is hereby given:

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

#### This Notice Shall Include:

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

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

Pursuant to W. Va. Code R. § 35-8-5,7.a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15,2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

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

Well Pad Name: William Ritchea 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: Office of Oil and Gas 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

WV Department of

(304) 926-0450

WV Department of WV Department of WV Departmental Protection WV Departmental Protection Such persons may request, at the time of submitting written comments, notice of the permit decision and antisport persons qualified to test water. NOTE: VOII ARE NOT REQUIRED TO BUE AND COMMENT. test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

WW-6A (8-13)

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

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

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

Comment Requirements

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

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

#### Permit Denial or Condition

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

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

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

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

RECEIVED
Office of Oil and Gas

JAN 1 9

WW-6A (8-13) 471 0303372

OPERATOR WELL NO. William Ritchea WTZ 10H
Well Pad Name: William Ritchea WTZ pad

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1610 Email: Britteny\_Woody@swn.com Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

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 <a href="mailto:deprivacyofficer@wv.gov">deprivacyofficer@wv.gov</a>.

REID CROFT

Notary Public Official Seal
State of West Virginia
My Comm. Expires Aug 21, 2024
47 Sparrow Lane Morgantown WV 26508

Subscribed and swom before me this 4th day of Jan, 7021

Notary Public

My Commission Expires August 21, 2024

RECEIVED
Office of Oil and Gas

JAN 19

Operator Well No. William Ritchea WTZ

### STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

TO						
Date of Notice	1/6/2020	Date of Pla	nned Entry: 1/13/2020	_		
Delivery meth	od pursuant	to West Virginia C	ode § 22-6A-10a			
☐ PERSON.	AL I	REGISTERED	☐ METHOD OF DELI	VERY THAT RE	EOUIRES A	
SERVICE		MAIL	RECEIPT OR SIGN.			
on to the surface but no more that beneath such tro owner of miner and Sediment C Secretary, which	te tract to cond an forty-five d act that has fil als underlying Control Manua th statement sh	duct any plat survey: ays prior to such end led a declaration pur g such tract in the co all and the statutes an	Prior to filing a permit applica is required pursuant to this art try to: (1) The surface owner suant to section thirty-six, art unty tax records. The notice d rules related to oil and gas information, including the ad- e secretary.	icle. Such notice of such tract; (2) icle six, chapter the shall include a stream of properties and p	shall be provided at least sev to any owner or lessee of cor wenty-two of this code; and atement that copies of the sta roduction may be obtained f	en days al seams (3) any ite Erosion from the
Notice is hereb	y provided to	0:				
SURFACE	OWNER(s)	/	■ COAL	OWNER OR LE	SSEE	
Name: William & S		1/		eatherwood Attn: Casey		
Address: HC 60		V	-	00 Consol Energy Drive		
New Martinsville, WV			Canonsburg, PA	15317		
Name:			□ vavin	AL OUNTEDAN	V.	
Address:			-	RAL OWNER(s)		
Vame:				m & Shirley Ritchea		
valino.						
Address:			New Martineville	WW 26355		
Address:			New Martinsville *please attach	additional forms if ne	cessary	
Notice is here Pursuant to We a plat survey on State:	eby given: st Virginia Co n the tract of Ia West Virginia	ode § 22-6A-10(a), n	*please attach otice is hereby given that the Approx. Latitue	additional forms if ne undersigned well de & Longitude:	operator is planning entry to	o conduct
Notice is here Pursuant to We. I plat survey on State:	eby given: st Virginia Co the tract of la West Virginia Wetzel	ode § 22-6A-10(a), n	*please attach  otice is hereby given that the  Approx. Latitue  Public Road Ac	additional forms if ne undersigned well de & Longitude:	operator is planning entry to 39.670670 -80.663580 Harlan Ridge	o conduct
Notice is here Pursuant to We. a plat survey on State: County:	eby given: st Virginia Co n the tract of Ia West Virginia	ode § 22-6A-10(a), n	*please attach otice is hereby given that the Approx. Latitue	additional forms if ne undersigned well de & Longitude: ocess:	operator is planning entry to	o conduct
Notice is here Pursuant to We. In plat survey on State: County: District: Quadrangle: Copies of the st may be obtained Charleston, WV Obtained from the	eby given: st Virginia Co the tract of la West Virginia Wetzel Proctor Wileyville atte Erosion ar d from the Sec 7 25304 (304- he Secretary b	nd Sediment Control cretary, at the WV E-926-0450). Copies by visiting www.dep	*please attach  otice is hereby given that the  Approx. Latitue Public Road Ac Watershed:	undersigned well de & Longitude: ccess: farm name: rules related to of Protection headqual information r	operator is planning entry to 39.670670 -80.663580  Harlan Ridge Little Fishing Creek William Ritchea  il and gas exploration and properties, located at 601 57th Stelated to horizontal drilling of	oduction treet, SE, NaWeD Oil and Gas
Notice is here Pursuant to We. In plat survey on State: County: District: Quadrangle: Copies of the st may be obtained Charleston, WV Obtained from to	eby given: st Virginia Co n the tract of la West Virginia Wetzel Proctor Mileyville atte Erosion ar d from the Sec 7 25304 (304- he Secretary b	nd § 22-6A-10(a), n and as follows: and Sediment Control cretary, at the WV E -926-0450). Copies by visiting www.dep	*please attach  otice is hereby given that the  Approx. Latitue Public Road Ac Watershed: Generally used  Manual and the statutes and department of Environmental of such documents or additio	undersigned well de & Longitude: ecess: farm name: rules related to o Protection headqual information related.	operator is planning entry to 39.670670 -80.663580  Harlan Ridge Little Fishing Creek William Ritchea  il and gas exploration and properators, located at 601 57th Stelated to horizontal drilling of Office of	oduction treet, SE, maybeD Oil and Gas
Notice is here Pursuant to We. I plat survey on State: County: District: Quadrangle: Copies of the st may be obtained Charleston, WV	eby given: st Virginia Co n the tract of la West Virginia Wetzel Proctor Mileyville atte Erosion ar d from the Sec 7 25304 (304- he Secretary b	nd Sediment Control cretary, at the WV E-926-0450). Copies by visiting www.dep	*please attach  otice is hereby given that the  Approx. Latitue Public Road Ac Watershed: Generally used  Manual and the statutes and bepartment of Environmental of such documents or addition	undersigned well de & Longitude: ccess: farm name: rules related to of Protection headqual information r	operator is planning entry to 39.670670-80.663580  Harlan Ridge Little Fishing Creek William Ritchea  il and gas exploration and properties, located at 601 57th Stelated to horizontal drilling of Office of  JAN  Suite 201	oduction treet, SE, maybeD Oil and Gas

#### Oil and Gas Privacy Notice:

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WW-6A4 (1/12)

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

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

Notice Time Date of Notic	Requirement: Notice shall be provided a ce: 12/08/2020 Date Per	t least TEN (10) days prior to filing a rmit Application Filed:	permit application.	
Delivery met	thod pursuant to West Virginia Code §	22-6A-16(b)	RECEIVED Office of Oil and Gas	
☐ HAND	CERTIFIED MAIL			
DELIVE		QUESTED	J4/1 1 9	
receipt request drilling a hor of this subsect subsection mand if availab	sted or hand delivery, give the surface own izontal well: <i>Provided</i> , That notice given tion as of the date the notice was provided ay be waived in writing by the surface own le, facsimile number and electronic mail a	ner notice of its intent to enter upon the pursuant to subsection (a), section to it to the surface owner: <i>Provided, hower.</i> The notice, if required, shall includdress of the operator and the operator	an operator shall by certified mail return the surface covere stand for the purpose of en of this article satisfies the requirements vever. That the notice requirements of this ude the name, address, telephone number, or's authorized representative.	
	reby provided to the SURFACE OV D. & Shirley E. Ritchea	VNER(s): Name:		
	3 Proctor Creek Road	Address:		
New Martinsville		rtudiess.		
State; County:	vner's land for the purpose of drilling a ho West Virginia Wetzel	UTM NAD 83 Easting: Northing:	529,228.724 4,391,141.520	
District:	Proctor	Public Road Access:	Harlan Ridge	
Quadrangle:	Wileyville, WV	Generally used farm name:	William Ritchea WTZ	
Watershed:	Fish Creek (HUC-10)			
Pursuant to V facsimile num related to hor	nber and electronic mail address of the	operator and the operator's authorized Secretary, at the WV Department of	ress, telephone number, and if available, ed representative. Additional information f Environmental Protection headquarters, ep.wv.gov/oil-and-gas/pages/default.aspx.	
	reby given by: r: SWN Production Company, LLC	Authorized Representative:	Steve Teel	
Address:	1300 Fort Pierpont Dr. Suite 201	Address:	1300 Fort Pierpont Dr. Suite 201	
	Morgantown, WV 26508		Morgantown, WV 26508	
Telephone:	832-540-1136	Telephone:	832-540-1136	
Email:	Steve_Teel@swn.com	Email:	Steve_Teel@swn.com	
Facsimile:		Facsimile:		

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WW-6A5 (1/12)

Operator Well No. William Ritches WTZ 1881

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

Lillall.	Steve_Teel@swn.com	racsimile;	-	
Telephone: Email:	832-540-1136	Facsimile:	Morgantown, WV 26	300
Well Operator		Address:	1300 Fort Pierpont I	
to be provided norizontal well surface affected information reheadquarters, gas/pages/defa	est Virginia Code § 22-6A-16(c), this is by W. Va. Code § 22-6A-10(b) to it; and (3) A proposed surface use and it by oil and gas operations to the explated to horizontal drilling may be olocated at 601 57th Street, SE, Chult.aspx.	a surface owner whose compensation agreementent the damages are of btained from the Secretarleston, WV 25304	e land will be unt containing an ompensable und tary, at the WV (304-926-0450)	code section; (2) The information required used in conjunction with the drilling of a offer of compensation for damages to the er article six-b of this chapter. Additional Department of Environmental Protection or by visiting

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.



### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

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

December 9, 2020

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 William Ritchea Pad, Wetzel County
William Ritchea WTZ 10H Well Site

RECEIVED
Office of Oil and Gas

JAN 19

WV Department of Environmental Protection

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2011-0618 which has been issued to Southwestern Energy for access to the State Road for a well site located off Wetzel County Route 1/19 SLS.

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.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator

Dary K. Clayton

Cc: Brittany Woody

Southwestern Energy

CH, OM, D-6

File

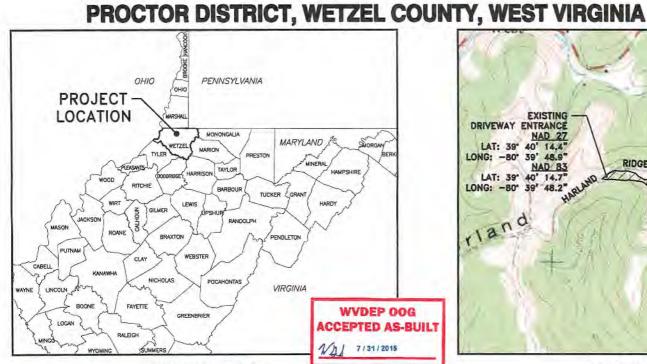
Product Name	Product Use	Chemical Name	107-21 1
AI-303 (U.S. Well Services)	Mixture	Ethylene glycol	107-21 1
		Cinnamaldehyde Butul cellosolve	111-76 2
		Butti companie	64-18 6
		Formic acid	Proprietary
		Polyether Acetophenone, thiourea, formaldehyde polymer	68527-49 1
			7727-54-0
AP ONE (U.S. Well Services)	Breaker	Ammonium persulfate	
Bactron K-139 (Champion Technologies)	Biocide	Glutaraldehyde	111-30-8
		a contract to the second of th	68424-85-1
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol	64-17-5
			67-56-1
Bactron K-219 (Champion Technologies)	Biocide	Methanol	01-20-1
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
SarboNRT	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	54-19-7
		Peroxyacetic Acid	79-21-0
cono-CI200 (SWN Well Services)	Corrosion Inhibitor	Methanol  Ovvally lated fatty acid  Office of Cili and Gas	67-56-1
		CAYGIN POLICE HALLY BOILD	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 Formaldehyde WV Department of	127-08-2
		Formaldehyde WV Department of	50-00-0
Copol-FEAC (SWN Well Services)	Iron Control	Acetic Acid Environmental Protection	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
LOJET DR900 LPP (SWN Well Services)	Friction Reducer	Distillates (petroleum) hydrotreated light	64674-47-8
and allow all faith the wallstand	-11/2/11/2/2/2	Ethylene Glycol	107-21-1
		Alcohols, C12-16, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
FR-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
Tive ( Intilligation)	T T T T T T T T T T T T T T T T T T T	Inorganic Salt	Proprietary
SYPTRON T-390 (Champion Technologies)	Scale Inhibitor	Methanol	67-56-1
arr more 1-350 (champion rectinologies)	Scare (((indicate)	Nonylphenol Ethoxylate	Proprietary
HAI-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A
		Hydrochloric Acid	7647-01-0
HCL (SWN Well Services)	Hydrocholic Acid	Water	7732-18-5
was the frequency of the	ACCOMPANY OF	707	
P-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary
		Ammonium Chloride	12125-02-9
OPTI-FLEX (U.S., Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
	Friction Reducer	Copolymer of 2-propenamide	Proprietary
Plexslick 930		Hydrotreated Distillate	
Plexslick 930			
Plexslick 930		Sodjum Chloride	7647-14-5
Plexslick 930		Sodium Chloride Alcohols, C12-16, Exoxylated	7647-14-5 68551-12-7
Plexslick 930		Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide	7647-14-5 68551-12-7 93-83-4
		Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride	7647-14-5 68551-12-7 93-83-4 12125-02-5
	Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate	7647-14-5 68551-12-2 93-83-4 12125-02-5 64742-47-8
	Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride	7647-14-5 68551-12-1 93-83-4 12125-02-5 64742-47-8 7647-14-5
	Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 7647-14-5 12125-02-5
	Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride	7647-14-5 68551-12-5 93-83-4 12125-02-5 64742-47-8 7647-14-5 12125-02-5 93-83-4
lexslick 953	Friction Reducer Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic, Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 7647-14-5 12125-02-5 93-83-4 64742-47-8
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Plexslick 953		Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride M,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 7647-14-5 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4
Plexslick 953		Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2
Plexslick 953 Plexslick 957	Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5
Plexslick 953 Plexslick 957	Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum)	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8
Plexslick 953 Plexslick 957 VFRA-2000 (U.S. Well Services)	Friction Reducer  Anionic Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5
lexslick 953 lexslick 957 VFRA-2000 (U.S. Well Services)	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic, Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride M,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic, Acid Diethanolamide Alcohols, C12-16, Exoxylated Water hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid)	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 7647-14-5 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8
lexslick 953 lexslick 957 VFRA-2000 (U.S. Well Services)	Friction Reducer  Anionic Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic, Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 7647-14-5 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8
Plexslick 953 Plexslick 957 WFRA-2000 (U.S. Well Services)	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light	7647-14-5 68551-12-2 93-83-4 12125-02-5 64742-47-8 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4
Plexslick 953 Plexslick 957 WFRA-2000 (U.S. Well Services)	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic, Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde	7647-14-5 68551-12-2 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8
Plexslick 953 Plexslick 957  VFRA-2000 (U.S. Well Services)  Plexslick 955 NM  Plexslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light	7647-14-5 68551-12-2 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8
Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI)	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 12125-02-5 93-83-4
Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 12125-02-5 93-83-4
Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 7647-14-5 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 64742-47-8 903-06-9 15827-30-8 69418-26-4 64742-47-8 12125-02-5 93-83-4 55566-30-8
Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922  Folcide PSS0A	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate	7647-14-5 68551-12-2 93-83-4 12125-02-5 64742-47-8 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9008-06-9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8
Plexslick 930  Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922  Folcide PSS0A	Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride (NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups	7647-14-5 68551-12-2 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-50-8
Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922  Folcide PSS0A	Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 6472-47-8 12125-02-9 93-83-4 55566-30-8
Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922  Folcide PSSOA  D-2950	Friction Reducer  Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product  Friction Reducer	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydrotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1, 2-ethanediyl) alphatridecylomegahydroxy-, branched	7647-14-5 68551-12-2 93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 397256-50-64742-47-8 Proprietary 69011-36-5
Plexslick 953  Plexslick 957  WFRA-2000 (U.S. Well Services)  Plexslick 922  Folcide PSSOA	Anionic Friction Reducer  Scale Inhibitor no data available  Biocidal product	Sodium Chloride Alcohols, C12-16, Exoxylated Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol	7647-14-5 68551-12-7 93-83-4 12125-02-5 64742-47-8 12125-02-5 93-83-4 64742-47-8 12125-02-5 93-83-4 68551-12-2 7732-15-5 64742-47-8 9003-06-9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8

# **AS-BUILT SITE PLAN**

**WILLIAM & SHIRLEY RITCHEA** WTZ PAD A









#### COUNTY MAP

#### LOCATION MAP

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AT LEAST 48 HOURS, BUT NOT MORE THAN 10 WORKING AT LEAST 48 HOURS, BUT NOT MORE THAT TO MOVEMENT OF DAYS (EXCLIDING WERKENDS AND HOLDAYS), PRIOR TO TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTACT CONTRACTORS INVOLVED IN THESE ACTIVITIES SHALL CONTACT MISS UTILITY OF WEST VIRGINIA AT 811 OR 1-800-245-4848. Southwestern Energy®

**OPERATOR** 

SWN PRODUCTION CO., LLC ATTN: DEE SOUTHALL P.O. BOX 1300 JANE LEW, WY 26378 (832) 796-1614

SITE DATA

TOTAL DISTURBED AREA: 13.6 ACRES ROAD DISTURBED AREA: 3.9 ACRES PAD DISTURBED ACRES: 9.7 ACRES ACCESS ROAD LENGTH: 1,079' ACCESS ROAD AVERAGE WIDTH: 24' WELL PAD ELEVATION: 1,563.0'

WELL API NUMBERS API 103-03128 ISSUED 06/15/15 3H API 103-03129 ISSUED 06/15/15 5H NOT PERMITTED 6H NOT PERMITTED 201H API 103-03130

ISSUED 06/15/15 NOT PERMITTED 205H API 103-03134 ISSUED 07/23/15 1 OF 14. . . . . . COVER SHEET 2-3 OF 14 . . . . . EVACUATION ROUTE/ PREVAILING WINDS

4 OF 14. . . . . . AS-BUILT SITE PLAN OVERVIEW 5-9 OF 14 . . . . AS-BUILT SITE PLAN 10-12 OF 14 . . . RECLAMATION PLAN 13 OF 14. . . . . ACCESS DRIVE PROFILE

LIST OF DRAWINGS

14 OF 14. . . . . DETAILS

SHEET 1 OF

07/29/2015

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DRAWN DATE 087569009

SCALE: DWG. NO.

AS

SHIRLEY RITCHEA
PAD A SHEET ら

WILLIAM & S PROCTOR

