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west virginia department of environmental protection

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

Harold D. Ward, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Monday, April 7, 2025  
WELL WORK PERMIT  
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC  
POST OFFICE BOX 12359

SPRING, TX 773914954


Re: Permit approval for BW Edge MSH 10H  
47-051-02538-00-00

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: BW Edge MSH 10H  
Farm Name: William F Edge, Jr. & Barbara   
U.S. WELL NUMBER: 47-051-02538-00-00  
Horizontal 6A New Drill  
Date Issued: 4/7/2025

Promoting a healthy environment.

04/11/2025

# 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

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

04/11/2025

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

1) Well Operator: SWN Production Co., LLC 494512924 051-Marshall 6-Sand 674- Wheeling  
Operator ID County District Quadrangle

2) Operator's Well Number: BW Edge MSH 10H Well Pad Name: BW Edge MSH

3) Farm Name/Surface Owner: William F. Edge, Jr. & Barbara Edge- Tod & David Edge Public Road Access: Big Wheeling Creek Road

4) Elevation, current ground: 1254' Elevation, proposed post-construction: 1254'

5) Well Type (a) Gas x Oil \_\_\_\_\_ Underground Storage \_\_\_\_\_  
Other \_\_\_\_\_  
(b) If Gas Shallow x Deep \_\_\_\_\_  
Horizontal x \_\_\_\_\_

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Target Formation- Marcellus, Down-Dip well to the South, Target Top TVD- 6612', Target Base TVD- 6664', Anticipated Thickness- 52', Associated Pressure- 4332

8) Proposed Total Vertical Depth: 6644'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 34245'

11) Proposed Horizontal Leg Length: 27339.04'

12) Approximate Fresh Water Strata Depths: 615'

13) Method to Determine Fresh Water Depths: Nearby Water Well

14) Approximate Saltwater Depths: 1386' Salinity Profile Analysis

15) Approximate Coal Seam Depths: 744'

16) Approximate Depth to Possible Void (coal mine, karst, other): None that we are aware of.

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes \_\_\_\_\_ No x

(a) If Yes, provide Mine Info: Name: \_\_\_\_\_  
Depth: \_\_\_\_\_  
Seam: \_\_\_\_\_  
Owner: \_\_\_\_\_

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Steve Green  
STRAPROWER  
2/11/2024

WW-6B  
(04/15)

4705102538  
API NO. 47-051  
OPERATOR WELL NO. BW Edge MSH 10H  
Well Pad Name: BW Edge MSH

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#	136'	136'	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	800'	800'	921 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	2059'	2059'	789 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	34245'	34245'	Tot 854Bcu/ 100' Inside Intermediate
Tubing							
Liners							

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"	0.330	1730	633	Class A	1.20/30% Excess
Coal	See	Surface	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	1.19/10-15% Excess
Tubing							
Liners							

**PACKERS**

Kind:				RECEIVED Office of Oil and Gas
Sizes:				MAR 7 2025
Depths Set:				NY Department of Environmental Protection

*John Brown*  
*STRACON*  
*7/11/2024*

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

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

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

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. In some instances, additional toe prep may be performed by pumping additional water in the toe of the well prior to perforating and pumping Stage 1 to ensure that the toe guns/toe sleeves are fully open prior to pumping stage 1. The well is produced through surface facilities consisting of high pressure production units, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 12,500 psi @ 100 barrels a minute.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 13.88

22) Area to be disturbed for well pad only, less access road (acres): 6.58

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 \*\*\*

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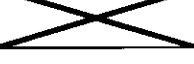





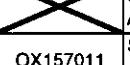


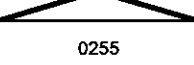


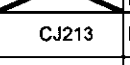

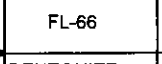
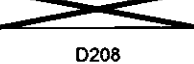
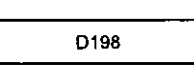
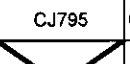



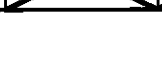
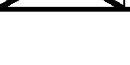
WV Department of  
Environmental Protection

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.

\*Note: Attach additional sheets as needed.



CEMENT ADDITIVES						
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER) <small>us: 10-3</small>		INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	0110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION <small>us: 10-3</small>		INTEGRA SEAL	0600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
INTERMEDIATE	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	0047	FP 28L		LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
		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
PRODUCTION			CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
		55-IIW	0880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	D047	FP 28L		LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
			OX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
			CJ540	HP FLUID LOSS ADDITIVE	ALIPHATICAMIDE POLYMER	PROPRIETARY
	0255			MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
			CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
		FL-66	0501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
		BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301		VISCOFIER/ANTI- SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
	D198	R-3		CEMENT RETARDER	LIGNIN	8068-51-6
	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1
	D065			DISPERSANT	SODIUM POLYNAPHTHALENE SULFONATE	8068-51-6
	D800			CEMENT RETARDER (Mid-Temperature)	SODIUM LIGNOSULFONATE	8061-51-6

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04/11/2025

4705102538

## Southwestern Energy Company

## Proposed Drilling Program

Well: BW EDGE MSH 10H  
 Field: PANHANDLE FIELD WET  
 County: MARSHALL

Drilling Rig: SDC 41  
 Formation: Marcellus Shale  
 State: WV



SHL (NAD83): 40.006592 Latitude -80.627573 Longitude  
 BHL (NAD83): 39.936706 Latitude -80.588366 Longitude  
 KB Elev: 1,280 ft MSL KB Height: 26 ft AGL

GL Elev: 1,254 ft MSL

NO COAL VOID EXPECTED

PROD TOC @ 2,059' MD

TUBULAR DETAIL					
Casing String	Casing Size (in)	Weight (Min)	Grade (Min)	Planned Interval	
				From	To
Conductor	20	94.0 #	J-55	0'	136'
Surface/Coal	13.375	54.4 #	J-55	0'	800'
Intermediate	9.625	36.0 #	J-55	0'	2,059'
Production	5.5	20.0 #	P-110 HP	0'	34,245'

## CEMENT DETAIL

	Sacks	Class	Density
Conductor	173	A	19.3
Surface	921	A/L	15.6
Intermediate	789	A/L	15.6
Production	6548	A/L	14.5-15.0

136' to 820'

Air/Mist

820' to 2,079'

Air/Mist

2,079' to 5,688'

Air/Mist

TD at 5,688'

KOP at 5,688' MD

Freshwater Depth - 615' TVD

Coal Depth - 744' TVD

Saltwater Depth - 1,386' TVD

TVD - 6,644'

TMD - 34,245'

5,688' to 6,776'

12.0-12.5 ppg

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TD at 34,245' MD

6,644' TVD

6,381' TVD Target Center

LP at 6,776' MD

SHL Onondaga 6,402' TVD

Onondaga 6,665' TVD

6,776' to 34,245'

12.5-13.5 ppg

Created by: Colin Kollmer on 06/17/2024

*John C. ...*  
*STRADDLE*  
*7/10/2024*

04/11/2025

BW Edge MSH 10H AOR

API	Operator	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones Not Perforated
051-00515-P	Consolidation Coal Company	Plugged	39.941436	-80.590139	3,003'	Berea	N/A
051-00518-P	Consolidation Coal Company	Plugged	39.938483	-80.585204	2151'	3rd Sand	N/A

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JACKSON SURVEYING  
INC.  
2413 EAST PIKE ST. # 112  
Clarksburg, WV 26301  
304-623-5851



## NOTES ON SURVEY

1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON
3. ALL MEASUREMENTS ARE IN FEET UNLESS OTHERWISE SPECIFIED

## LEGEND:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- EXISTING / PRODUCING WELLHEAD
- LPL\* LANDING POINT LOCATION
- FLOOD PLAIN
- ACCESS ROAD
- PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH
- AZL\* AZIMUTH POINT LOCATION

## WELL OPERATOR:

SWN PRODUCTION COMPANY, LLC

## ADDRESS:

1300 FORT PIERPONT RD., SUITE 200 MORGANTOWN, WV 26508

## SURFACE OWNER:

WILLIAM F. EDGE, JR. &amp; BARBARA EDGE-TOD &amp; DAVID WAYNE EDGE

## WELL (FARM) NAME:

BW EDGE MSH

## COUNTY - CODE

MARSHALL - 051

## USGS 7 1/2 QUADRANGLE MAP NAME

WHEELING, WV-OHIO

## WELL #

10H

## SERIAL #

SAND HILL

## API #:

Z:\2024 BACKUPS\1-02-24 OJ\SWN\BW EDGE MSH\WELL PLAT\10H\FINAL\BW EDGE 10H 6-27-24\SWN B&W EDGE 10H WELL PLAT 6-27-24.DWG  
THURSDAY, JUNE 27, 2024 09:27AM

PROPERTY NUMBER 04/634/2025  
PAD ID 3001161674

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WW-9  
(4/16)

API Number 47 - 051

4705102538

Operator's Well No. BW Edge MSH 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) Grandstaff Run of Wheeling Creek Quadrangle Wheeling

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes ☒ No ☐

Will a pit be used? Yes ☐ No ☒

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes ☐ No ☒ If so, what ml.? \_\_\_\_\_

Proposed Disposal Method For Treated Pit Wastes:

- ☐ Land Application
- ☒ Underground Injection ( UIC Permit Number Various Approved Facilities )
- ☒ Reuse (at API Number At the next anticipated well )
- ☐ Off Site Disposal (Supply form WW-9 for disposal location)
- ☒ Other (Explain recovery and solidification on site)

Will closed loop system be used? If so, describe: Yes- See Attachment 3A

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air drill to KOP, fluid drill with SOB from KOP to TD

-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base

Additives to be used in drilling medium? Attachment 3B

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. landfill

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) \_\_\_\_\_

-Landfill or offsite name/permit number? Meadowfill SWF- 1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021

Apex Sanitary Landfill 06-08438, Brooke Co SWF-1013, FMS 353100

Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed.

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

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

Company Official Signature *Brittany Woody*

Company Official (Typed Name) Brittany Woody

Company Official Title Staff Regulatory Specialist

Subscribed and sworn before me this 14 day of May, 2024

*Elizabeth Blankenship*

My commission expires 6/23/2029

Notary Public



SWN Production Co., LLC

4705102538

Proposed Revegetation Treatment: Acres Disturbed 13.88 Prevegetation pH

Lime as determined by pH test min. 2 Tons/acre or to correct to pH 6.58

Fertilizer type 10-20-20

Fertilizer amount 600/500 lbs/acre

Mulch Hay/Straw Tons/acre

Seed Mixtures

## Temporary

## Permanent

Seed Type lbs/acre

Seed Type lbs/acre

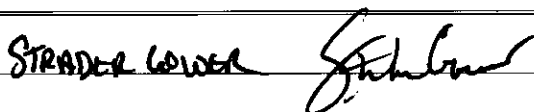
Attachment 3C

## Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by:



Comments:

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WV Department of  
Environmental Protection

Title: Oil &amp; Gas Inspector

Date:

7/11/2024

Field Reviewed?

(X) Yes

( ) No

04/11/2025

## 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 a Shale Gas Separator, 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 highly weighted 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 haul off to an approved landfill site. (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 Separator 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)

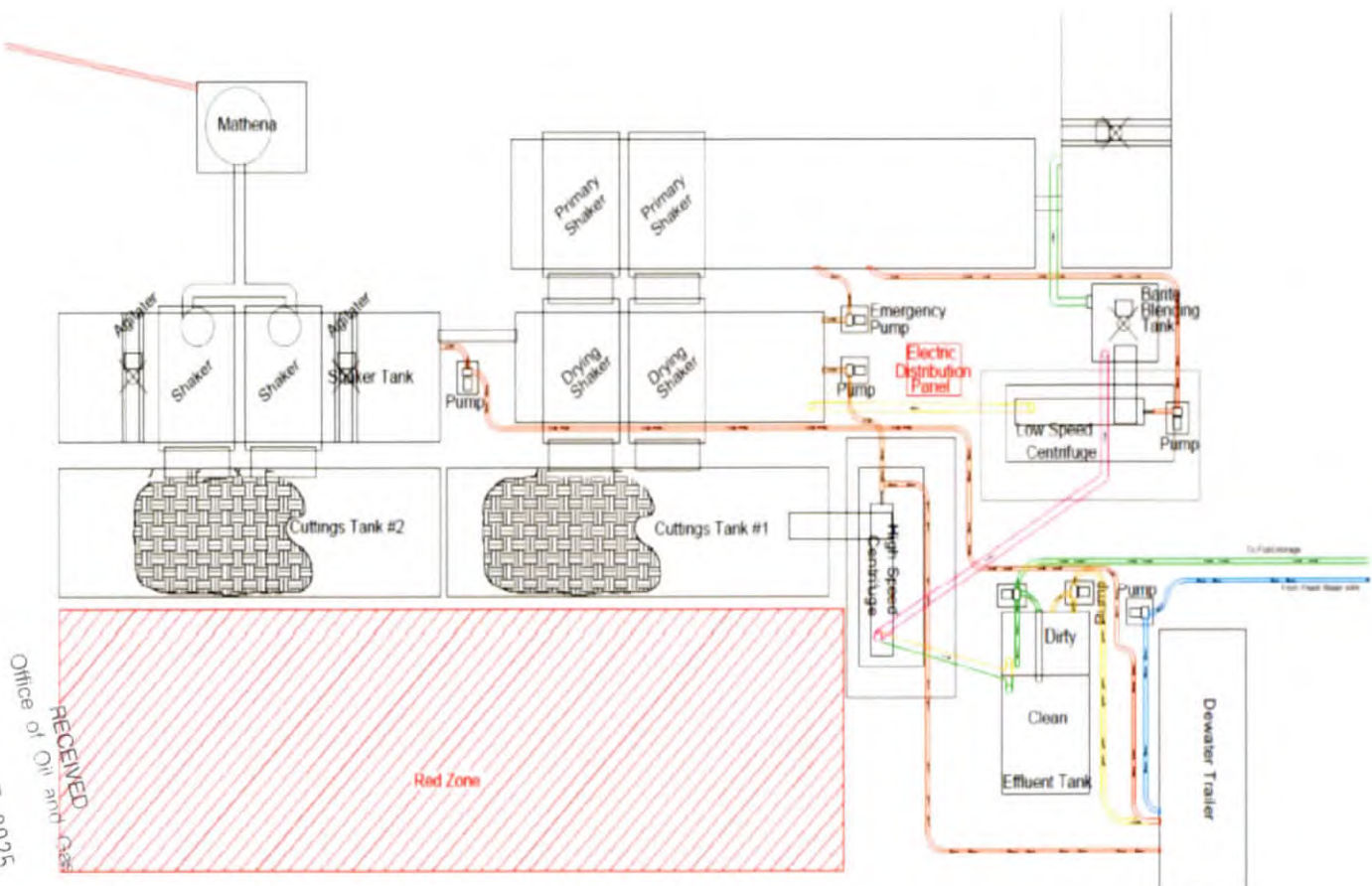
When drilling is converted to liquids drilling, the Shale Gas Separator and associated shaker tank are bypassed, and the liquids system is processed over the primary and drying shaker systems. Cuttings drop into the cuttings tank for additional processing. Any recoverable associated liquids attached 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.

# Solids Control Layout



EXAMPLE SCHEMATIC FOR CLOSED LOOP SOLIDS CONTROL SYSTEM

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8.30.2022



## Drilling Mediums

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

Air

Freshwater (if needed based on conditions)

### Intermediate/Coal (if present)

Air

Freshwater (if needed based on conditions)

Brine (if needed, base fluid for mud systems)

### Production Hole:

Air

Synthetic Oil (Base Fluid for mud system)

Barite

Calcium Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

Calcium Carbonate

Friction Reducers

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## WVD Seeding Specification

To Order Seed contact Lyndsi Eddy Flippo office 570-996-4271 cell 501-269-5451 lyndsi\_eddy@swn.com (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	5%
Medium Red Clover	5%
White Clover	5%
Birdsfoot Trefoil	5%
Rough Bluegrass	5%
All legumes are innoculated at 5x normal rate	
Apply @ 100lbs per acre April 16th- Oct. 14th	
Apply @ 200lbs per acre Oct. 15th- April 15th PLUS 50lbs per acre of Winter Wheat	

### SOIL AMENDMENTS

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 Mix	SWN Supplied
Organic Timothy	50%
Organic Red or White Clover	50%
OR	
Organic Perennial Ryegrass	50%
Organic Red or White Clover	50%
Apply @ 100lbs per acre April 16th- Oct. 14th	
Apply @ 200lbs per acre Oct. 15th- April 15th	
Organic Fertilizer @ 200lbs per Acre	Pelletized Lime @ 2 Tons per Acre

### WETLANDS (delineated as jurisdictional wetlands)

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  
April 16th- Oct. 14th

Apply @ 50lbs per acre  
Oct. 15th- April 15th

NO FERTILIZER OR LIME INSIDE WETLAND LIMITS

4705102538

# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN<sup>4705102538</sup>



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

**API NO. 47-XXX-XXXXX**  
**WELL NAME: BW Edge MSH 10H**  
**Wheeling QUAD**  
**Sand Hill DISTRICT**  
**MARSHALL COUNTY, WEST VIRGINIA**

Submitted by:

Name: Brittany Woody

*Brittany Woody*

Date: 5/13/2024

Title: Staff Regulatory Specialist

SWN Production Co., LLC

Approved by:

Name: STRADLER GOWER

Date: 7/11/2024

Title: Oil & Gas Inspector

Approved by:

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

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SWN PRODUCTION COMPANY, LLC – CONFIDENTIAL

04/11/2025



JACKSON SURVEYING  
INC.  
2413 EAST PIKE ST. # 112  
Clarksburg, WV 26301  
304-623-5851

4705102538



**NOTES ON SURVEY**

1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS

2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON

3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED

**LEGEND:**

● PROPOSED SURFACE HOLE / BOTTOM HOLE

⊙ EXISTING / PRODUCING WELLHEAD

LPL ✖ LANDING POINT LOCATION

⬢ FLOOD PLAIN

04/11/2025

— PUBLIC ROAD

— ACCESS ROAD TO PREV. SITE

===== LEASE BOUNDARY

— PROPOSED PATH

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: BW EDGE MSH	WELL # 10H	SERIAL #
ADDRESS: 1300 FORT PIERPONT RD., SUITE 200 MORGANTOWN, WV 26508	COUNTY - CODE MARSHALL - 051	DISTRICT; SAND HILL	
SURFACE OWNER: WILLIAM F. EDGE, JR. & BARABARA EDGE-TOD & DAVID WAYNE EDGE	USGS 7 1/2 QUADRANGLE MAP NAME WHEELING, WV-OHIO	API #: 47-051-	







2413 EAST PIKE ST. # 112  
Clarksburg, WV 26301  
304-623-5851





I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 708

David L Jackson

04/11/2025

REVISIONS:	COMPANY:		
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Production Company, LLC</p> </div> <div style="text-align: center;">  <p>Production Company™</p> </div> </div>		
	OPERATOR'S		API #:
	BW EDGE MSH		47-051-02538
	WELL #:		DATE: 06-27-2024
	10H		
	DISTRICT:	COUNTY:	DRAWN BY: N. MANO
	SAND HILL	MARSHALL	SCALE: N/A
		STATE:	DRAWING NO:
		WV	WELL LOCATION PLAT 2

JACKSON SURVEYING  
INC.

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26301  
304-623-5851



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS  
CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS  
ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED  
AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 708

*David L Jackson*

04/11/2025

REVISIONS:	COMPANY:	SWN <sup>R-V+</sup> Production Company, LLC	
	OPERATOR'S	BW EDGE MSH	API #:
	WELL #:	10H	47-051-02538
	DISTRICT:	COUNTY:	STATE:
	SAND HILL	MARSHALL	WV
			DATE: 06-27-2024
			DRAWN BY: N. MANO
			SCALE: N/A
			DRAWING NO:
			WELL LOCATION PLAT 3



JACKSON SURVEYING  
INC.  
2413 EAST PIKE ST. # 112  
Clarksburg, WV 26301  
304-623-5851

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	EDGE WILLIAM JR & BARBARA ANN - TOD & DAVID WAYNE EDGE (S)/ FLETCHER JOSEPHINE (R)	12-9-8
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	WHEELING POWER COMPANY (S)	12-9-8.1
3	ISALY ROBERT A SR EST (S)	12-2-13
4	GIBSON WILLIAM E (S)	12-9-12
5	GRAY JOHN ALVIN EST (S)	12-9-11
6	WV DEPT OF HIGHWAYS (S)	MILLER HILL ROAD
7	MERINAR JAMES MARTIN ET UX (S)	12-9-15.1
8	MERINAR CALVIN C - LIFE (S)	12-9-15
9	FISHER CHARLES B & CARLA S (S)	12-9-20
10	MERINAR CALVIN C - LIFE (S)	12-9-19
11	MERINAR CALVIN C - LIFE (S)	12-9-18
12	MERINAR CALVIN C (S)	12-11-1
13	CLAYTON CHARLES W ET AL (S)	12-11-2
14	EQ T TGH L EXPLORATION, LLC (S)	12-11-3
15	THOMAS RICHARD LEE BARTON (S)	12-11-16
16	ISKCON - NEW MATHURA VRINDABAN (S)	15-1-8
17	ISKCON - NEW MATHURA VRINDABAN (S)	15-1-9
18	ISKCON - NEW MATHURA VRINDABAN (S)	15-1-12
19	ISKCON - NEW MATHURA VRINDABAN (S)	15-1-15
20	ISKCON - NEW MATHURA VRINDABAN (S)	15-1-16
21	ANDERSON SARA JO (S)	15-2-4
22	MARKONICH RICHARD J (S)	15-3-2
23	BENNETT ROBERT A ET UX (S)	15-3-25.5
24	STRAUTMANN BONNIE & JEFF (S)	15-3-25.4
25	GRIMM JOYCE E (S)	15-3-24
26	GRIMM JOYCE E (S)	15-6-3
27	ANDERSON JULIE A (S)	15-6-5.1
28	STROPE ANTHONY (S)	15-6-4
29	STROPE ANTHONY (S)	15-6-6.5
30	ANGEL KYLEA (S)	15-6-6
31	BURKEY MICHAEL J & LINDA (S)	15-6-14
32	FITZSIMMONS MARK B & DEBORAH A (S)	15-6-15

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	WV BRIGHTMONT LLC	12-1-16
B	WV BRIGHTMONT LLC	12-2-14
C	G F P CORP	12-2-12
D	G F P CORP	12-2-7
E	PORTER CARLA S	12-9-13
F	TOTH JOHN J SR & ALICE - TRUST	12-8-4.1
G	RICHEY RANDY ET UX	12-8-35
H	MERINAR CALVIN C - LIFE	12-8-34
I	MERINAR CALVIN C - LIFE	12-9-16
J	MERINAR CALVIN C - LIFE	12-9-16.1
K	TOLAND WILLIAM R	12-8-33
L	TOLAND SONDR A J & WILLIAM E	12-9-17
M	TEMPLE TERRY L & BEVERLY J - TOD	12-11-4
N	GRAY DONALD G - TOD & GRAY WYATT MATTHEW	12-11-8
O	HILLBERRY PAUL E JR	12-11-9.3
P	LOUGHERY JAMES P JR & BROCK ROBIN M	12-11-9.2
Q	JUNKINS RONALD D JR ET AL	12-11-15
R	CONSOL LAND DEVELOPMENT CO	12-16-18
S	KUPFER PHILLIP A	12-16-2.3
T	KING CHRISTOPHER I ET UX	12-16-4
U	SWARTZEL MOSES D & LILA K	12-16-2
V	ISKCON - NEW MATHURA VRINDABAN	15-1-14
W	ISKCON - NEW MATHURA VRINDABAN	15-1-13
X	ISKCON - NEW MATHURA VRINDABAN	15-1-12.2
Y	MARKWEST LIBERTY MIDSTREAM & RESOURCES LLC	15-3-3.1
Z	MURPHY MARIAN	12-16-2.2
A2	MARKONICH RICHARD J	15-3-3
B2	BENNETT PATRICIA A	15-3-25
C2	BENNETT ROBERT E ET UX	15-3-25.3
D2	STRAUTMANN BONNIE L & JEFFREY	15-3-25.2
E2	OHIO VALLEY HEART INSTITUTE INC - CAYTON STEVEN & JESSICA	15-3-25.1
F2	EBERT RENEE LYNN GRIMM	15-3-21
G2	PETHTEL JASON ET AL	15-3-23
H2	GRIMM JOYCE E	15-3-24.1
I2	EBERT RENEE LYNN GRIMM	15-6-3.1
J2	STROPE GARY ANTHONY	15-6-5
K2	FISH TE ET UX	15-6-25
L2	FOSTER KERRY GLENN ET UX	15-6-24
M2	BURKEY MICHAEL J & LINDA	15-6-14.1

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
N2	KAISER JOE M & SHIRLEY A FAMILY REVOCABLE TRUST	15-6-17
O2	COFFIELD WILLIAM E & BRENDA K ET AL	15-6-16
P2	MILLER R CRAIG & DONITA D	15-6-11
Q2	FITZSIMMONS MARK B ET UX - TOD	15-6-12
R2	FITZSIMMONS KATIE L	15-6-13
S2	FITZSIMMONS KATIE L	15-6-7
T2	FITZSIMMONS MARK B & DEBORAH A	15-6-6.4
U2	ANGEL KYLEA J	15-6-6.3
V2	STROPE FAMILY TRUST ET AL	15-6-6.1
W2	DUNLAP LARRY W & BARBARA	15-6-9.1
X2	FITZSIMMONS MARK B & DEBORAH A	15-6-9
Y2	DUNLAP LARRY W & BARBARA E	15-6-9.2
Z2	FITZSIMMONS MARK B & DEBORAH A	15-6-2
A3	GALL EDNA S & FRANK P LAUTAR	15-6-1
B3	GIVENS JASPER N	15-3-28
C3	SHIPLEY JAMES S	15-3-27
D3	SHIPLEY JAMES S	15-3-26
E3	MARCELO VANESSA	15-2-12.9
F3	ORTEGA GILDA	15-2-12.6
G3	CLOTHIER VRINDA D ET AL	15-2-12.11
H3	ISKCON NEW VRINDABAN INC	15-2-5
I3	GLTIA	15-2-3.5
J3	ISKCON - NEW MATHURA VRINDABAN	15-2-3.6
K3	ISKCON - NEW MATHURA VRINDABAN	15-1-16.1
L3	ISKCON - NEW MATHURA VRINDABAN	15-1-17
M3	ISKCON - NEW MATHURA VRINDABAN	15-1-18
N3	MOWEN JOHN H JR	15-1-18.1
O3	ISKCON - NEW MATHURA VRINDABAN	15-1-16.3
P3	ISKCON - NEW MATHURA VRINDABAN	15-2-3.3
Q3	FRAENKEL ANDY & RUTH	15-2-3.4
R3	FRAENKEL ANDY & RUTH	15-2-3.7
S3	HELLER ELICIA N	15-2-3.9
T3	ROSL TATIA JOSEPHINE	15-1-19
U3	ISKCON - NEW MATHURA VRINDABAN	15-1-16.2
V3	ISKCON - NEW MATHURA VRINDABAN	P/O 15-1-19
W3	BROWN ELCANORE	15-1-11
X3	ROSE TATIA JOSEPHINE	15-1-10
Y3	PRETTYMAN JEREMY A & BETH A	15-1-19.1
Z3	HICKEY GLENN M	15-1-6.1
A4	HICKEY GLENN M	15-1-7
B4	HICKEY GLENN M	12-10-8
C4	MERINAR KENNETH L ET AL	12-10-9
D4	MERINAR CALVIN C - LIFE	12-10-7
E4	FISH PATRICIA A & FREDERICK W	12-10-1.2
F4	SCHAFLR ROY A JR & BRENDA M	12-9-22
G4	GRAY JOHN ALVIN EST	13-3-14
H4	GRAY JOHN ALVIN EST	12-9-21
I4	PIKEWOOD ENERGY CORP	12-9-10
J4	ISALY ROBERT A SR EST	12-9-9
K4	FOLMAR EDITH A TRUST	12-1-19
L4	SCHELLHASE MARK A ET UX	12-1-18
M4	SCHELLHASE MARK A & ANDREA K	12-1-15.4
N4	WV BRIGHTMONT LLC	12-1-15

\*Highlighted Parcels may be impacted during drilled.

04/11/2025

REVISIONS:	COMPANY:		DATE: 06-27-2024	
	OPERATOR'S		DRAWN BY: N. MANO	
	WELL #:		SCALE: N/A	
	DISTRICT:		DRAWING NO:	
SAND HILL		COUNTY:	STATE:	WELL LOCATION PLAT 4
		MARSHALL	WV	



4705102538

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

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

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

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Exhibit "A"				

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\*Horizontal well unit utilization - Subject to unitization filing with the West Virginia Oil and Gas Conservation Commission.

\*Potentially Impacted Parcels - Parcels that may be impacted during drilling.

**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: Andrew Smith *Andrew M. Smith*

Its: Landman

EXHIBIT "A"  
BW Edge MSH 10H  
Marshall County, West Virginia

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

Tract	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
1	12-9-8	Josephine Fletcher f/k/a Josephine Fisher, a married woman acting in her sole and separate property	NPAR, LLC	at least 1/8th per WV Code §22-6-8	707/584	0.00%
		NPAR, LLC	Chevron, USA, Inc		756/332	
		Chevron, USA, Inc	Chesapeake Appalachia, L.L.C.		30/532	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
2	12-9-8.1	Josephine Fletcher f/k/a Josephine Fisher, a married woman acting in her sole and separate property	NPAR, LLC	at least 1/8th per WV Code §22-6-8	707/584	0.00%
		NPAR, LLC	Chevron, USA, Inc		756/332	
		Chevron, USA, Inc	Chesapeake Appalachia, L.L.C.		30/532	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
3	12-2-13	Robert A. Isaly, Jr. and Margaret A. Isaly, Husband and Wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	834/199	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		Connie S. Harris, a married woman dealing in her sole and separate property	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1073/30	0.00%
		Edward L. Gardner, II, a married man dealing in his sole and separate property	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1074/486	0.00%
		Scott A. Gardner, a married man dealing in his sole and separate property	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1073/44	0.00%

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Department of  
Environmental Protection

4705102538



EXHIBIT "A"  
BW Edge MSH 10H  
Marshall County, West Virginia

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

Tract	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
		Eric M. Gordon, Esq., as Special Commissioner on behalf of James E. Isaly and his Unknown or Missing Heirs and Beneficiaries, pursuant to Order of the Marshall County Circuit Court in Civil Action No. 21-C-36.	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1114/358	0.00%
4	12-9-12	Eric M. Gordon, Esq., as Special Commissioner on behalf of Leota Campbell Ferrell and her Unknown or Missing Heirs and Beneficiaries, pursuant to Order of the Marshall County Circuit Court in Civil Action No. 20-C-78	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1106/576	0.00%
		William E. Gibson, married, dealing in his separate property	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1080/511	0.00%
5	12-9-11	John Alvin Gray, married, dealing in his separate property	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1083/410	0.00%
		Eric M. Gordon, Esq., as Special Commissioner on behalf of Leota Campbell Ferrell and her Unknown or Missing Heirs and Beneficiaries, pursuant to Order of the Marshall County Circuit Court in Civil Action No. 20-C-78	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1106/576	0.00%
6	Miller Hill Road	West Virginia Department of Transportation, Division of Highways	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1187/293	0.00%
7	12-9-15.1	James Martin Merinar and Belinda J. Merinar, his wife	Great Lakes Energy Partners, L.L.C.	at least 1/8th per WV Code §22-6-8	655/81	0.00%
		Range Resources - Appalachia, LLC	Chesapeake Appalachia, L.L.C.		23/368	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
8	12-9-15	Calvin C. Merinar, divorced, dealing in sole and separate property	Great Lakes Energy Partners, L.L.C.	at least 1/8th per WV Code §22-6-8	652/32	0.00%
		Range Resources - Appalachia, LLC	Chesapeake Appalachia, L.L.C.		23/368	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	

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Environmental Protection

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EXHIBIT "A"  
BW Edge MSH 10H  
Marshall County, West Virginia

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

Tract	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
9	12-9-20	Charles A. Fisher and Carla S. Fisher, his wife	TriEnergy, Inc	at least 1/8th per WV Code §22-6-8	655/559	0.00%
		TriEnergy, Inc	AB Resources, LLC		19/623	
		AB Resources, LLC	Chevron, USA, Inc		756/397	
		Chevron, USA, Inc	Chesapeake Appalachia, L.L.C.		30/532	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
10	12-9-19	Robert A. Smith, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	721/209	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
11	12-9-18	Calvin C. Merinar, a single	TH Exploration, LLC	at least 1/8th per WV Code §22-6-8	1136/207	0.00%
		EQT TGH Exploration, LLC f/k/a TH Exploration, LLC	SWN Production Company, LLC		1202/119	
12	12-11-1	Calvin C. Merinar, divorced	Great Lakes Energy Partners, L.L.C.	at least 1/8th per WV Code §22-6-8	652/32	0.00%
		Range Resources - Appalachia, LLC	Chesapeake Appalachia, L.L.C.		23/368	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
13	12-11-2	Gregory P. Clayton and Denise Clayton, husband and wife	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1067/469	0.00%

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Tract	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
14	12-11-3	APP Minerals, LLC	American Petroleum Partners Operating, LLC	at least 1/8th per WV Code §22-6-8	1091/439	0.00%
		American Petroleum Partners Operating, LLC	SWN Production Company, LLC		48/263	
15	12-11-16	Royalty Owner (subject to Unitization filing dated January 31, 2025)	N/A	at least 1/8th per WV Code §22-6-8	N/A	100.00%
16	15-1-8	ISKCON New Vrindaban, Inc.	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1207/641	0.00%
17	15-1-9	Bounty Minerals, LLC	TH Exploration, LLC	at least 1/8th per WV Code §22-6-8	1025/587	0.00%
		TH Exploration, LLC	American Petroleum Partners Operating, LLC		45/146	
		American Petroleum Partners Operating, LLC	SWN Production Company, LLC		46/29	
18	15-1-12	ISKCON New Vrindaban, Inc.	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1207/644	0.00%
19	15-1-15	ISKCON New Vrindaban, Inc.	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1208/89	0.00%
20	15-1-16	International Society of Krishna Consciousness - New Mathura Vrindaban, Inc.	NPAR, LLC	at least 1/8th per WV Code §22-6-8	696/144	0.00%
		NPAR, LLC	Chevron U.S.A. Inc.		765/332	
		Chevron, USA, Inc	Chesapeake Appalachia, L.L.C.		30/532	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties, Inc.	SWN Production Company, LLC		33/424	
21	15-2-4	Sara Jo Anderson, widow	CNX Gas Company, LLC	at least 1/8th per WV Code §22-6-8	696/242	0.00%
		CNX Gas Company, LLC	Noble Energy, Inc.		26/225	
		Noble Energy, Inc. and CNX Gas Company, LLC	Chesapeake Appalachia, L.L.C.		32/113	

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		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/582	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		35/32	
22	15-3-2	Frederick W. Dague, single, and Harriet C. Riggle, married	TriEnergy Holdings, LLC	at least 1/8th per WV Code §22-6-8	699/365	0.00%
		TriEnergy Holdings, LLC	NPAR, LLC		24/180	
		NPAR, LLC	Chevron, USA, Inc		26/16	
		NPAR, LLC	Chevron, USA, Inc		756/332	
		TriEnergy Holdings, LLC and TriEnergy, Inc	Chevron, USA, Inc		28/356	
		Chevron, USA, Inc	Chesapeake Appalachia, LLC		30/532	
		Chesapeake Appalachia, LLC	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
23	15-3-25.5	Jeffrey A. Strautmann and Bonnie L. Strautmann, husband and wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	700/626	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Edward F. Thacker and Linda M. Thacker, husband and wife.	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	700/630	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Donald P. Thacker, single	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	702/53	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		James W. Thacker and Linda L. Thacker, husband and wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	703/169	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles C. Thacker, married and doing business in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	704/199	0.00%

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Tract	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles V. Eller, widower, through Charles Walter Eller, his agent and Attorney-in-Fact	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	828/93	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		Robert E. Bennet, by Robert J. Bennet as Power of Attorney, and Patricia A. Bennett, husband and wife, as joint tenants with right of survivorship	American Petroleum Partners Operating LLC	at least 1/8th per WV Code §22-6-8	1026/606	0.00%
		American Petroleum Partners Operating LLC	SWN Production Company, LLC		45/381	
24	15-3-25.4	Jeffrey A. Strautmann and Bonnie L. Strautmann, husband and wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	700/626	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Joyce A. Ewing and Fred A. Ewing, her husband	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	701/90	0.00%
		Edward F. Thacker and Linda M. Thacker, husband and wife.	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	700/630	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Donald P. Thacker, single	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	702/53	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		James W. Thacker and Linda L. Thacker, husband and wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	703/169	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles C. Thacker, married and doing business in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	704/199	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles V. Eller, widower, through Charles Walter Eller, his agent and Attorney-in-Fact	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	828/93	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
25	15-3-24	Joyce E. Grimm, widow	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	682/131	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

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26	15-6-3	Joyce E. Grimm, widow	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	682/131	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
27	15-6-5.1	Julie A. Foster, f/k/a Julie A. Anderson, married and doing business in her sole and separate right	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	717/566	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
28	15-6-4	Mark Brent Fitzsimmons, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/302	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Rickee Jo Strope, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/305	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
29	15-6-6.5	Rickee Jo Strope, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/323	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Mark Brent Fitzsimmons, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/371	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
30	15-6-6	Rickee Jo Strope, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/323	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Mark Brent Fitzsimmons, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/371	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
31	15-6-14	Rose L. Riley, a widow	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/65	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Robert J. Riley, III and Tammy J. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/76	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

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		Timothy G. Riley and Judy W. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/81	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		David B. Riley and Kelly R. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/86	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Ellen W. Riley and Mark D. Flower, her husband	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	734/370	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Wendy Maxim and Corey Maxim, her husband	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	736/500	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Wendy Rosian, Guardian and Mother of Daniel D. Rufner, for and on behalf of Daniel D. Rufner, a minor child	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	782/403	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Chester A. Burkey, a widower, and Michael J. Burkey and Linda V. Burkey, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	819/127	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Vicki F. Riley, a widow	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/70	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		Brent M. Ruffner, a single man	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	736/510	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

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		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		James B. Riley, Jr. and Cataline E. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	736/515	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
32	15-6-15	Mark B. Fitzsimmons and Deborah A. Fitzsimmons, husband and wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/320	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, L.L.C.		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
E	17-9-13	Greenbrier Royalty Fund II, LLC	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1210/658	0.00%
W	15-1-13	Bounty Minerals, LLC	TH Exploration, LLC	at least 1/8th per WV Code §22-6-8	1025/587	0.00%
		TH Exploration, LLC	American Petroleum Partners Operating, LLC		45/146	
		American Petroleum Partners Operating, LLC	SWN Production Company, LLC		46/29	
Y	15-2-3.1	Ellen J. Harness, single	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1100/220	0.00%
		Mary Lou Allen, married, dealing in her separate property	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1100/213	0.00%
		Stone Coal Resources, LLC	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1100/227	0.00%
B2	15-3-25	Patricia A. Bennett and Dora Jean Cunningham, as joint tenants with right of survivorship	SWN Production Company, LLC	at least 1/8th per WV Code §22-6-8	1051/198	0.00%
		Bonnie L. Strautmann and Feffrey A. Strautmann, her husband	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	700/626	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Edward F. Thacker and Linda M. Thacker, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	700/630	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

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		James W. Thacker and Linda L. Thacker, husband and wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	703/169	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles C. Thacker, married and doing business in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	704/199	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles V. Eller, widower, through Charles Walter Eller, his agent and Attorney-in-Fact	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	828/93	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
J2	15-6-5	Gary W. Strobe and Rickee J. Fitzsimmons Strobe, husband and wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/308	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		Joshua Wayne Strobe, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/353	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		Gary Anthony Strobe, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/356	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		Kylea Jo Reed a/k/a Kylea Jo Strobe, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/3559	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

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		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
M2	15-6-14.1	Rose L. Riley, a widow	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/65	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Robert J. Riley, III and Tammy J. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/76	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Timothy G. Riley and Judy W. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/81	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		David B. Riley and Kelly R. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/86	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Ellen W. Riley and Mark D. Flower, her husband	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	734/370	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Wendy Maxim and Corey Maxim, her husband	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	736/500	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Wendy Rosian, Guardian and Mother of Daniel D. Rufner, for and on behalf of Daniel D. Rufner, a minor child	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	782/403	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Chester A. Burkey, a widower, and Michael J. Burkey and Linda V. Burkey, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	819/127	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Vicki F. Riley, a widow	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	730/70	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		Brent M. Ruffner, a single man	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	736/510	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

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EXHIBIT "A"  
 BW Edge MSH 10H  
 Marshall County, West Virginia

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

Tract	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
		Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		James B. Riley, Jr. and Cataline E. Riley, his wife	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	736/515	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
T2	15-6-6.4	Rickee Jo Strope, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/323	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Mark Brent Fitzsimmons, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	at least 1/8th per WV Code §22-6-8	690/371	0.00%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
Y3	15-1-19.1	Tatia Josephine Rose, a single woman	Chevron U.S.A. Inc.	at least 1/8th per WV Code §22-6-8	820/167	0.00%
		Chevron, USA, Inc	Chesapeake Appalachia, L.L.C.		32/235	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	

End of Exhibit "A"

\*Potentially Impacted Parcels - Parcels that may be impacted during drilling.

\*Horizontal well unit utilization - Subject to unitization filing with the West Virginia Oil and Gas Conservation Commission.

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February 17, 2025

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

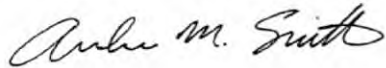
**RE:** SWN's proposed New Well: BW Edge MSH 10H in Marshall County, West Virginia, Drilling under Miller hill Road, Caldwell Hill Road, Stulls Run Road, Lower Stull Run Road, and Irish Ridge Road.

Dear Mr. Brewer:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under Miller hill Road, Caldwell Hill Road, Stulls Run Road, Lower Stull Run Road, and Irish 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,



Andrew Smith  
Landman  
SWN Production Company, LLC

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$\frac{R^+}{A} \rightarrow V^+$

The Right People doing the Right Things,  
wisely investing the cash flow from our  
underlying Assets, will create Value+®

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

Date of Notice Certification: 3/6

API No. 47- 051 -

Operator's Well No. BW Edge MSH 10H

Well Pad Name: BW Edge MSH

**Notice has been given:**

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>531,787,227</u>
County:	<u>051-Marshall</u>		Northing:	<u>4,428,555,258</u>
District:	<u>Sand Hill</u>	Public Road Access:	<u>Big Wheeling Creek Road</u>	
Quadrangle:	<u>Wheeling</u>	Generally used farm name:	<u>BW Edge MSH</u>	
Watershed:	<u>Grandstaff Run of Wheeling Creek</u>			

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:

\*PLEASE CHECK ALL THAT APPLY

- |  |    |   |
|--|----|---|
| <input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY                 | or | <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED     |
| <input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY | or | <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED   |
| <input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL       | or | <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or |
|  |    | <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)                              |
| <input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION     |    |   |
| <input checked="" type="checkbox"/> 5. PUBLIC NOTICE                   |    |   |
| <input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION           |    |   |

**OOG OFFICE USE ONLY**

- |   |
|---|
| <input type="checkbox"/> RECEIVED/ NOT REQUIRED |
| <input checked="" type="checkbox"/> RECEIVED    |
| <input type="checkbox"/> RECEIVED/ NOT REQUIRED |
| <input checked="" type="checkbox"/> RECEIVED    |
| <input checked="" type="checkbox"/> RECEIVED    |
| <input checked="" type="checkbox"/> 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.

MAR 7 2025  
West Virginia  
Department of Environmental Protection  
**04/11/2025**

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**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

Address: 1300 Fort Pierpont Dr., Suite 201

By: Brittany Woody

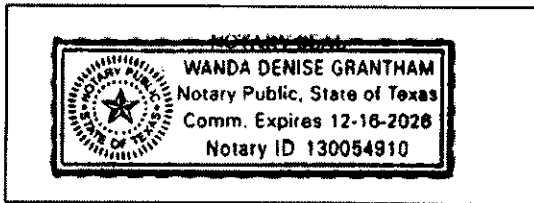
Morgantown, WV 26508

Its: Staff Regulatory Specialist

Facsimile: 304-884-1690

Telephone: 304-884-1610

Email: Brittany\_Woody@swn.com



Subscribed and sworn before me this

3<sup>rd</sup> day of July 2024

Wanda Denise Grantham Notary Public

My Commission Expires

12-16-2026

**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](mailto:depprivacyofficer@wv.gov).

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

47 05 10 2538

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

**Date of Notice:** 3/11 **Date Permit Application Filed:** 3/11

**Notice of:**

- ☒ PERMIT FOR ANY WELL WORK      ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

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

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

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

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

☒ SURFACE OWNER(s)

Name: Barbara Ann & William F. Edge  
Address: 1116 Virginia Street  
Martins Ferry, OH 43935  
Name: David Wayne Edge  
Address: 27 Pine Lane  
Wheeling WV 26003

☐ SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☐ SURFACE OWNER(s) (Impoundments or Pits)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☒ COAL OWNER OR LESSEE

Name: American Consolidated Natural Resources Attn: Steve Blair  
Address: 46226 National Road  
St. Clairsville OH 43950

☐ COAL OPERATOR

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
WV Department of Environmental Protection

☒ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: None  
Address: \_\_\_\_\_

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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

4705102538

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

**Date of Notice:** 3/6 **Date Permit Application Filed:** 3/6

**Notice of:**

- ☒ PERMIT FOR ANY WELL WORK      ☐ CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

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

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

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

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

☒ SURFACE OWNER(s)

Name: Edith Folmer Trust IN CARE OF: Carol Snyder  
Address: 4206 SW 13th Ave  
Cape Coral FL 33914

Name: Wheeling Power Company  
Address: 1 Riverside Place  
Columbus, OH 43215

☐ SURFACE OWNER(s) (Road and/or Other Disturbance)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☐ SURFACE OWNER(s) (Impoundments or Pits)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☐ COAL OWNER OR LESSEE

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☐ COAL OPERATOR

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☐ SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☐ OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary

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**Notice is hereby given:**

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

**This Notice Shall Include:**

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

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

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

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

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

**Well Location Restrictions**

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

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examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

### **Water Well Testing:**

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

### **Water Testing Laboratories:**

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

### **Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:**

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

### **Written Comment:**

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written comments as to the location or construction of the applicant's proposed well work to the Secretary at:

Chief, Office of Oil and Gas  
Department of Environmental Protection  
601 57<sup>th</sup> St. SE  
Charleston, WV 25304  
(304) 926-0450

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

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Office of Oil and Gas  
MAR 7 2025  
WV Department of  
Environmental Protection

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

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

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

**Comment Requirements**

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

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

**Permit Denial or Condition**

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

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

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

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

RECEIVED  
Office of Oil and Gas  
MAR 7 2025  
Department of  
Environmental Protection

04/11/2025

WW-6A  
(8-13)

API NO. 47-051 -  
OPERATOR WELL NO. BW Edge MSH 10H  
Well Pad Name: BW Edge MSH

**Notice is hereby given by:**

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1610

Email: [Brittany\\_Woody@swn.com](mailto:Brittany_Woody@swn.com)

*Brittany Woody*

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Facsimile: 304-884-1690

47 05 10 2538

**Oil and Gas Privacy Notice:**

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



OFFICIAL SEAL  
NOTARY PUBLIC  
STATE OF WEST VIRGINIA  
Elizabeth Blankenship  
60 Simpson Run Road  
Weston, WV 26452  
My Commission Expires June 23, 2029

Subscribed and sworn before me this 14 day of May, 2024.

*Elizabeth Blankenship*

Notary Public

My Commission Expires 6/23/2029

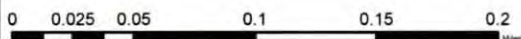
RECEIVED  
Office of Oil and Gas  
MAR 7 2025  
West Virginia Department of  
Environmental Protection

04/11/2025





1 in = 417 ft



Coordinate System: NAD 1983 UTM Zone 17N  
1 Unit = Meter

- S Spring       Parcel
- W Water Well       1500' Buffer
- P Pond       Pad

Water Purveyor Map  
Well Pad: BW Edge  
County: MSH

**SWN** <sup>R<sub>2</sub></sup> <sup>V<sup>+</sup></sup>  
Southwestern Energy

04/11/2025

Coordinates: 40 007263 -80 626769

Date: 5/28/2020

Author: willish



4705102538

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

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

**Date of Notice:** 5/14/2024 **Date of Planned Entry:** 5/21/2024

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

☐ PERSONAL SERVICE      ☒ REGISTERED MAIL      ☐ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

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

**Notice is hereby provided to:**

☒ SURFACE OWNER(s)

Name: Barbara Ann & William F. Edge  
Address: 1116 Virginia Street  
Martins Ferry, OH 43935  
Name: David Wayne Edge  
Address: 27 Pine Lane  
Wheeling WV 26003  
Name: Edith Folmer Trust IN CARE OF: Carol Snyder  
Address: 4206 SW 13th Ave  
Cape Coral FL 33914

☒ COAL OWNER OR LESSEE

Name: American Consolidated Natural Resources  
Address: 46226 National Road  
St. Clairsville OH 43950

☒ MINERAL OWNER(s)

Name: Barbara Ann & William F. Edge  
Address: 7115 Paste Drive  
Martins Ferry, OH 43935

\*please attach additional forms if necessary

**Notice is hereby given:**

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

State: West Virginia  
County: Marshall  
District: Sand Hill  
Quadrangle: Wheeling

Approx. Latitude & Longitude: 40.015294, -80.630  
Public Road Access: Big Wheeling Creek Road  
Watershed: Upper Ohio South  
Generally used farm name: B & W Edge MSH

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: SWN PRODUCTION COMPANY, LLC  
Telephone: 304-884-1610  
Email: Brittany\_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 [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov).

04/11/2025



4705102538

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

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

**Date of Notice:** 5/14/2024      **Date of Planned Entry:** 5/24/2024

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

☐ PERSONAL SERVICE      ☒ REGISTERED MAIL      ☐ METHOD OF DELIVERY THAT REQUIRES A RECEIPT OR SIGNATURE CONFIRMATION

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**Notice is hereby provided to:**

☒ SURFACE OWNER(s)

Name: Wheeling Power Company  
Address: 1 Riverside Place  
Columbus OH 43125

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☒ COAL OWNER OR LESSEE

Name: \_\_\_\_\_  
Address: \_\_\_\_\_

☒ MINERAL OWNER(s)

Name: David Wayne Edge  
Address: 27 Pine Island Road  
Wheeling WV 26003

\*please attach additional forms if necessary

**Notice is hereby given:**

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

State: West Virginia  
County: Marshall  
District: Sand Hill  
Quadrangle: Wheeling

Approx. Latitude & Longitude: 40.015294, -80.630  
Public Road Access: Big Wheeling Creek Road  
Watershed: Upper Ohio South  
Generally used farm name: B & W Edge MSH

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: SWN PRODUCTION COMPANY, LLC  
Telephone: 304-884-1610  
Email: Brittany\_Woody@swn.com

Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Facsimile: 304-884-1690

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04/11/2025



4705102538

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

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

**Notice Time Requirement:** Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

**Date of Notice:** 06/24/2024

**Date Permit Application Filed:** 3/16

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

☐ HAND DELIVERY      ☒ CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

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

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

Name: Barbara Ann & William F. Edge

Address: 1116 Virginia Street

Martins Ferry, OH 43935

Name: \_\_\_\_\_

Address: \_\_\_\_\_

**Notice is hereby given:**

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

State:	WV	UTM NAD 83	Easting:	531,787.227
County:	Marshall		Northing:	4,428,555.258
District:	Sand Hill	Public Road Access:	Grandstaff Run Road	
Quadrangle:	Wheeling, WV-OH	Generally used farm name:	BW EDGE	
Watershed:	Grandstaff Run of Wheeling			

**This Notice Shall Include:**

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

**Notice is hereby given by:**

Well Operator: SWN Production Company, LLC

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Telephone: 304-231-8329

Email: reid\_croft@swn.com

Facsimile: \_\_\_\_\_

Authorized Representative: Reid Croft

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Telephone: 304-231-8329

Email: reid\_croft@swn.com

Facsimile: \_\_\_\_\_

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04/11/2025



4705102538

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

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

**Date of Notice:** 06/24/2024

**Date Permit Application Filed:** 3/4

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

☒ CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

☐ HAND  
DELIVERY

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

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

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

Name: Barbara Ann & William F. Edge

Address: 1116 Virginia Street

Marlins Ferry, OH 43935

Name: \_\_\_\_\_

Address: \_\_\_\_\_

**Notice is hereby given:**

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

State: WV  
County: Marshall  
District: Sand Hill  
Quadrangle: Wheeling, WV-OH  
Watershed: Grandstaff Run of Wheeling

UTM NAD 83 Easting: 531,787.227  
Northing: 4,428,555.258  
Public Road Access: Grandstaff Run Road  
Generally used farm name: BW EDGE

**This Notice Shall Include:**

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

Well Operator: SWN Production Company, LLC

Telephone: 304-231-8329

Email: reid\_croft@swn.com

Address: 1300 Fort Pierpont Dr., Suite 201

Morgantown, WV 26508

Facsimile: \_\_\_\_\_

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04/11/2025



**4705102538**

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

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

**Notice Time Requirement:** Notice shall be provided at least **TEN (10)** days prior to filing a permit application.

**Date of Notice:** 06/24/2024

**Date Permit Application Filed:** 3/16

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

☐ HAND

DELIVERY

☒ CERTIFIED MAIL

RETURN RECEIPT REQUESTED

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

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

Name: Wheeling Power Company

Address: 1 Riverside Place

Columbus, OH 43125

Name: \_\_\_\_\_

Address: \_\_\_\_\_

**Notice is hereby given:**

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

State: WV  
County: Marshall  
District: Sand Hill  
Quadrangle: Wheeling, WV-OH  
Watershed: Grandstaff Run of Wheeling

UTM NAD 83 Easting: 531,787.227  
Northing: 4,428,555.258  
Public Road Access: Grandstaff Run Road  
Generally used farm name: BW EDGE

**This Notice Shall Include:**

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

**Notice is hereby given by:**

Well Operator: SWN Production Company, LLC  
Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Telephone: 304-231-8329  
Email: reid\_croft@swn.com  
Facsimile: \_\_\_\_\_

Authorized Representative: Reid Croft  
Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Telephone: 304-231-8329  
Email: reid\_croft@swn.com  
Facsimile: \_\_\_\_\_

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04/11/2025



4705102538

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

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

**Date of Notice:** 06/24/2024

**Date Permit Application Filed:** 3/16

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



CERTIFIED MAIL



HAND

RETURN RECEIPT REQUESTED

DELIVERY

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

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

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

Name: Wheeling Power Company

Name: \_\_\_\_\_

Address: 1 Riverside Place

Address: \_\_\_\_\_

Columbus, OH 43125

**Notice is hereby given:**

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

State:

WV

County:

Marshall

District:

Sand Hill

Quadrangle:

Wheeling, WV-OH

Watershed:

Grandstaff Run of Wheeling

UTM NAD 83

Easting:

531,787,227

Northing:

4,428,555,258

Public Road Access:

Grandstaff Run Road

Generally used farm name:

BW EDGE

**This Notice Shall Include:**

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

Well Operator:

SWN Production Company, LLC

Address:

1300 Fort Pierpont Dr., Suite 201

Telephone:

304-231-8329

Morgantown, WV 26508

Email:

reid\_croft@swn.com

Facsimile:

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04/11/2025



4705102538

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

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

**Notice Time Requirement:** Notice shall be provided at least **TEN (10)** days prior to file filing a permit application.

**Date of Notice:** 06/21/2024

**Date Permit Application Filed:** 3/6

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

☐ HAND

DELIVERY

☒ CERTIFIED MAIL

RETURN RECEIPT REQUESTED

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

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

Name: David Wayne Edge

Address: 27 Pine Lane

Wheeling, WV 26003

Name: \_\_\_\_\_

Address: \_\_\_\_\_

**Notice is hereby given:**

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

State: WV  
County: Marshall  
District: Sand Hill  
Quadrangle: Wheeling, WV-OH  
Watershed: Grandstaff Run of Wheeling

UTM NAD 83 Easting: 531,787.227  
Northing: 4,428,555.258  
Public Road Access: Grandstaff Run Road  
Generally used farm name: BW EDGE

**This Notice Shall Include:**

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

**Notice is hereby given by:**

Well Operator: SWN Production Company, LLC  
Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Telephone: 304-231-8329  
Email: reid\_croft@swn.com  
Facsimile: \_\_\_\_\_

Authorized Representative: Reid Croft  
Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Telephone: 304-231-8329  
Email: reid\_croft@swn.com  
Facsimile: \_\_\_\_\_

**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](mailto:depprivacyofficer@wv.gov).

04/11/2025



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

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

**Date of Notice:** 06/24/2024

**Date Permit Application Filed:** 3/16

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

☒ CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

☐ HAND  
DELIVERY

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

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

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

Name: David Wayne Edge

Name: \_\_\_\_\_

Address: 27 Pine Lane

Address: \_\_\_\_\_

Wheeling, WV 26003

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State:	WV	UTM NAD 83	Easting:	531,787,227
County:	Marshall		Northing:	4,428,555,258
District:	Sand Hill	Public Road Access:	Grandstaff Run Road	
Quadrangle:	Wheeling, WV-OH	Generally used farm name:	BW EDGE	
Watershed:	Grandstaff Run of Wheeling			

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Address: 1300 Fort Pierpont Dr., Suite 201

Telephone: 304-231-8329

Morgantown, WV 26508

Email: reid\_croft@swn.com

Facsimile: \_\_\_\_\_

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04/11/2025



4705102538

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
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**Date of Notice:** 06/24/2024

**Date Permit Application Filed:** 3/4

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

☐ HAND DELIVERY      ☒ CERTIFIED MAIL  
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**Notice is hereby provided to the SURFACE OWNER(s):**

Name: FOLMAR EDITH A TRUST, In Care of: SNYDER CAROL

Address: 4206 SW 13TH AVE

CAPE CORAL FL 33914

Name: \_\_\_\_\_

Address: \_\_\_\_\_

**Notice is hereby given:**

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04/11/2025



WW-6A5  
(1/12)

Operator Well No. BW EDGE MSH 8H

4705102538

**STATE OF WEST VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS**  
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**RETURN RECEIPT REQUESTED**

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Address: 4206 SW 13TH AVE

Address: \_\_\_\_\_

CAPE CORAL FL 33914

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04/11/2025



4705102538

**WEST VIRGINIA DEPARTMENT OF TRANSPORTATION**

**Division of Highways**

Office of the District Engineer/Manager  
District Four

Post Office Box 4220 · Clarksburg, West Virginia 26302 · (304) 842-1500

Alanna J. Keller, P.E.  
Deputy Secretary of Transportation  
Deputy Commissioner of Highways

Jimmy Wriston, P. E.  
Secretary of Transportation  
Commissioner of Highways

September 5, 2024

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 BW Edge Well Pad, Marshall County  
BW Edge MSH 10H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2015-0140 which has been issued to SWN Production Company, LLC for access to the State Road for a well site located off Marshall County Route 5/1 SLS MP 0.90.

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 March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Lacy D. Pratt  
Central Office O&G Coordinator

Cc: Brittany Woody  
SWN Production Company, LLC  
OM, D-6  
File



## Attachment VI Frac Additives

Product Name	Product Use	Chemical Name	CAS Number
HCL	Solvent	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
FSTI-CI-02	Corrosion Inhibitor	2-Butoxyethanol	111-76-2
		Ethylene glycol	107-21-1
		N,N-Dimethylformamide	68-12-2
		benzyl chloridequaternized	72480-70-7
		Cinnamaldehyde	104-55-2
		Isopropyl alcohol	67-63-0
		Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)- .omega.-hydroxy-	9016-45-9
		1-Decanol	112-30-1
		1-Octanol	111-87-5
Ferriplex 80	Iron Control	Triethyl phosphate	78-40-0
		Sodium Erythorbate	6381-77-7
Tolicide 4Frac	Biocide	Tetrakis(Hydroxymethyl) Phosphonium Sulfate	55566-30-8
		Quaternary ammonium compounds	68424-85-1
		Ethanol	64-17-5
		Water	7732-18-5
Plexslick 930	Friction Reducer	Hydrotreated Petroleum Distillate	64742-47-8
		Water	7732-18-5
		copolymer of 2-propenamide	69418-26-4
		Oleic Acid Diethanolamide	93-83-4
		Alcohol Ethoxylate Surfactants	68551-12-2
		Ammonium Chloride	12125-02-9
Plexaid 655NM	Scale Inhibitor	Sodium Chloride	7647-14-5
		ORGANIC PHOSPHONIC ACIDS SALTS	15827-60-8
Plexslick V996	Friction Reducer	Water	7732-18-5
		Hydrotreated Petroleum Distillate	64742-47-8
		copolymer of 2-propenamide	69418-26-4
		Alcohol Ethoxylate Surfactants	68551-12-2
		Sodium Chloride	7647-14-5
Plexaid 655WG	Scale Inhibitor	ORGANIC PHOSPHONIC ACIDS SALTS	15827-60-8
		Water	7732-18-5
		Glycerin	67-56-1
Clearal 270	Biocide	Glutaraldehyde	111-30-8
		Didecyltrimethylammonium Chloride	7173-51-5
		Quaternary Ammonium compounds, Benzyl-C12-C16-alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
		Water	7732-18-5
StimSTREAM SC 398 CW	Scale Inhibitor	Ethylene glycol	107-21-1
		CHEMSTREAM-Polymer-10001	CHEMSTREAM-Polymer-10001
		CHEMSTREAM-Polymer-10002	CHEMSTREAM-Polymer-10002
		Water	7732-18-5
StimSTREAM FR 9800	Friction Reducer	Chemstream-Alkane-00001	Chemstream-Alkane-00001
		Chemstream-Polymer-00001	Chemstream-Polymer-00001
		Ethoxylated alcohols (C12-16)	68551-12-2
		Water	7732-18-5
StimSTREAM FR 2800	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8
		Alcohols, C11-14-iso, C13-rich, ethoxylated	78330-21-9
		Water	7732-18-5
StimSTREAM FR 9725	Friction Reducer	Distillates (petroleum), hydrotreated light	64742-47-8
		Ammonium Chloride	12125-02-9
		Water	7732-18-5
StimSTREAM SC 398 C	Scale Inhibitor	CHEMSTREAM-Polymer-10001	CHEMSTREAM-Polymer-10001
		CHEMSTREAM-Polymer-10002	CHEMSTREAM-Polymer-10002
		Water	7732-18-5

As of 7/5/2023

OPERATOR: SWN Production Co., LLC WELL NO: BW Edge MSH 10H

PAD NAME: BW Edge MSH

REVIEWED BY: \_\_\_\_\_ SIGNATURE: Brittany Woody

## WELL RESTRICTIONS CHECKLIST

### HORIZONTAL 6A WELL

\* Pad Built 8/1/15

#### Well Restrictions

- ☐ At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR
  - ☐ DEP Waiver and Permit Conditions
- ☐ At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR
  - ☐ DEP Waiver and Permit Conditions
- ☐ At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR
  - ☐ DEP Waiver and Permit Conditions
- ☒ At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR
  - ☐ Surface Owner Waiver and Recorded with County Clerk, OR
  - ☐ DEP Variance and Permit Conditions
- ☐ At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR
  - ☐ Surface Owner Waiver and Recorded with County Clerk, OR
  - ☐ DEP Variance and Permit Conditions
- ☐ At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR
  - ☐ Surface Owner Waiver and Recorded with County Clerk, OR
  - ☐ DEP Variance and Permit Conditions