



west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Monday, June 22, 2020
WELL WORK PERMIT
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC
POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit approval for BRIAN TESLOVICH BRK 3
47-009-00311-00-00

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: BRIAN TESLOVICH BRK 3
Farm Name: BRIAN L. TESLOVICH
U.S. WELL NUMBER: 47-009-00311-00-00
Horizontal 6A New Drill
Date Issued: 6/22/2020

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

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

PERMIT CONDITIONS

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

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 009- Brooke 3- Buffalo 641- Tiltonsville
Operator ID County District Quadrangle

2) Operator's Well Number: Brian Teslovich BRK 3H Well Pad Name: Brian Teslovich BRK

3) Farm Name/Surface Owner: Brian L. Teslovich Public Road Access: McCord Hill Road

4) Elevation, current ground: 1149' Elevation, proposed post-construction: 1151'

5) Well Type (a) Gas Oil _____ Underground Storage _____
Other _____

(b) If Gas Shallow Deep _____
Horizontal _____

6) Existing Pad: Yes or No No

C-Blk 4-3-20

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Target Formation- Marcellus, Up-Dip well to the North, Target Top TVD- 5743', Target Base TVD- 5794', Anticipated Thickness- 51', Associated Pressure- 3766

8) Proposed Total Vertical Depth: 5778' ✓

9) Formation at Total Vertical Depth: Marcellus RECEIVED Office of Oil and Gas

10) Proposed Total Measured Depth: 18907' ✓ MAY 20 2020

11) Proposed Horizontal Leg Length: 12594.12' ✓ WV Department of Environmental Protection

12) Approximate Fresh Water Strata Depths: 115' ✓

13) Method to Determine Fresh Water Depths: Nearby spring

14) Approximate Saltwater Depths: 405'- Salinity Profile

15) Approximate Coal Seam Depths: 266' ✓

16) Approximate Depth to Possible Void (coal mine, karst, other): Possible Void 266' -

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

(a) If Yes, provide Mine Info: Name: Windsor Mine Windsor Coal Consol
Depth: 2166'
Seam: _____
Owner: Consol

WW-6B
(04/15)

4700900311
API NO. 47-009
OPERATOR WELL NO. Brian Teslovich BRK 3H
Well Pad Name: Brian Teslovich BRK

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	H-40	94#	100'	100'	CTS
Fresh Water	13 3/8"	New	H-40	48#	320'	320'	323 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	1609'	1609'	632 sx/CTS
Production	5 1/2"	New	HCP-110	20#	18907	18907'	lead 7/8sx/Tail 3081sx/ 100' Inside Ingress
Tubing							
Liners							

C-MO 4.3.20

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	1.19/50% Excess
Fresh Water	13 3/8"	17.5"	0.380	2740	633	Class A	1.19/50% Excess
Coal	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/50% Excess
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	1.20/50% Excess
Tubing							
Liners							

RECEIVED
Office of Oil and Gas
MAY 20 2020

PACKERS

Kind:				WV Department of Environmental Protection
Sizes:				
Depths Set:				

WW-6B
(10/14)

4700900311
API NO. 47- 009 -
OPERATOR WELL NO. Brian Teslovich BRK 3H
Well Pad Name: Brian Teslovich BRK

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

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

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

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

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 11.42

22) Area to be disturbed for well pad only, less access road (acres): 6.17

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 ***

RECEIVED
Office of Oil and Gas

MAY 20 2020

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	NEXTier PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER)	 	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION	 	INTEGRA SEAL	CJ600	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
	D047	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
	 	SS-11W	CJ880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	D047	FP 28L	 	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	 	 	CJX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
	 	 	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATIC AMIDE POLYMER	PROPRIETARY
	D255	 	 	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
	 	 	CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
	 	FL-66	CJ501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
	 	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	 	VISCOSIFIER/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	

Southwestern Energy Company

Proposed Drilling Program

Well: BRIAN TESLOVICH BRK 3 Re-entry Rig: TBD
 Field: PANHANDLE FIELD WET Prospect: PANHANDLE
 County: BROOKE State: WV
 SHL: 40.2167 Latitude -80.6334 Longitude
 BHL: 40.2487 Latitude -80.6487 Longitude
 KB Elev: 1,175 ft MSL KB: 26 ft AGL GL Elev: 1,149 ft MSL



Coal Void at 266' TVD

PROD TOC Lead @ 1,629' MD
 PROD TOC Tail @ 5,100' MD

Handwritten signature and date: 4-3-20

TUBULAR DETAIL

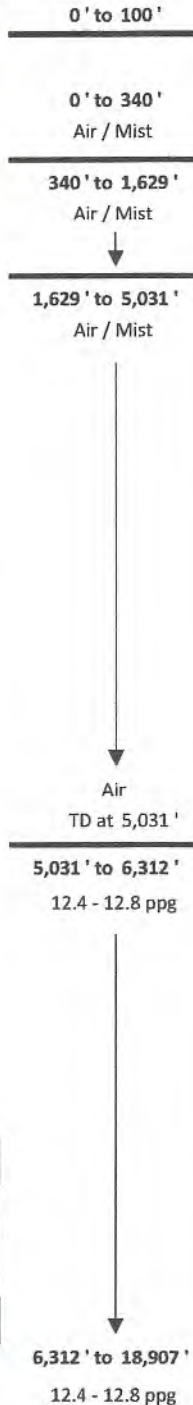
	Size (in)	Weight	Grade	From	To
Conductor/Coal:	20	94.0 #	H-40	0'	100'
Surf./Coal:	13.375	48.0 #	H-40	0'	320'
Intermediate:	9.625	36.0 #	J-55	0'	1,609'
Production:	5.5	20.0 #	HCP-110	0'	18,907'

CEMENT DETAIL

	Sacks	Class	Density
Conductor	151	A	19.3
Surface	323	A	15.6
Intermediate	632	A	15.6
Production Lead	776	A	15.6
Production Tail	3061	A	15.6

KOP at 5,031' MD

Freshwater Depth - 115' TVD
 Coal Void Depth - 266' TVD
 Saltwater Depth - 405' TVD
 TVD - 5,778'
 TMD - 18,907'



RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

5,778' Target Center

TD at 18,907' MD
5,634' TVD

EOB at 5,778' TVD

SHL Onondaga 5,794' TVD

~~Onondaga 5,650' TVD~~

Area of Review

API	Operator	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones Not Perforated
Teslovich BRK 3H AOR							
4709300053	Berea Oil and Gas Corporation	N/A	39.028047	-79.442466	N/A	N/A	N/A
4709300054	Berea Oil and Gas Corporation	N/A	39.023619	-79.443045	8473	Oriskany	N/A
4709300057	Hydrocarbon Exploration, Inc.	N/A	N/A	N/A	N/A	N/A	N/A
4709300047	Berea Oil and Gas Corporation	N/A	N/A	N/A	N/A	N/A	N/A
4709300045	Columbia Gas Transmission Corporation	Completed	N/A	N/A	N/A	N/A	N/A
4700900015	Dr. Michael J. Miller, Jr., dba Joint Venture Company	Plugged	40.218317	-80.628013	1890	Berea	N/A
4709700151	Cumberland & Allegheny Gas Company	Completed	38.860133	-80.253003	2130	Fifth	N/A
4709300013	Columbia Carbon Company	Plugged	39.171751	-79.634098	6385	Tuscarora	N/A
4700900057	Jesse P. West	Completed	40.230351	-80.634257	N/A	N/A	N/A
4709700244	Cameron Producing	Plugged	38.916956	-80.234682	4540	Brallier	N/A
4709300064	Berea Oil and Gas Corporation	Plugged	39.089138	-79.454338	9700	Oriskany	N/A
4709300063	Cities Service Oil & Gas Corporation	Plugged	39.220207	-79.609345	9594	Tuscarora	N/A

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

WW-9
(4/16)

API Number 47 - 009 -
Operator's Well No. Brian Teslovich BRK 3H

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) Grog Run Quadrangle Tiltonsville

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

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

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 SOBM 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,

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 Senior Regulatory Analyst



Subscribed and sworn before me this 3rd day of April, 2020

Jessica L. Vangilder Notary Public

My commission expires 7-20-20

SWN Production Co., LLC

Proposed Revegetation Treatment: Acres Disturbed 11.42 Prevegetation pH _____

Lime as determined by pH test min.2 Tons/acre or to correct to pH 6.17

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

Construction plan

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: [Signature] 4.3.20

Comments: _____

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

Title: Oil & Gas Inspector Date: 4.3.20

Field Reviewed? () Yes () No



WVD Seeding Specification

Attachment 3C

To Order Seed contact Lyndsi Eddy Filippo office 570-996-4271 cell 501-269-5451 lyndsi_eddy@swn.com (please allow 7 to 10 days for delivery)

R² → V⁺
A

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 inoculated 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

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of Environmental Protection

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

Attachment 3A

CLOSED LOOP SYSTEM

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

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

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

AIR DRILLING INTERVALS

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

LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

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

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

Attachment 3B

Drilling Mediums

Surface/Coal(if present)/Freshwater Intervals:

Air

Freshwater (if needed based on conditions)

Intermediate/Coal (if present):

Air

Production Hole:

Air

Synthetic Oil (Base Fluid for mud system)

Barite

Calcium Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

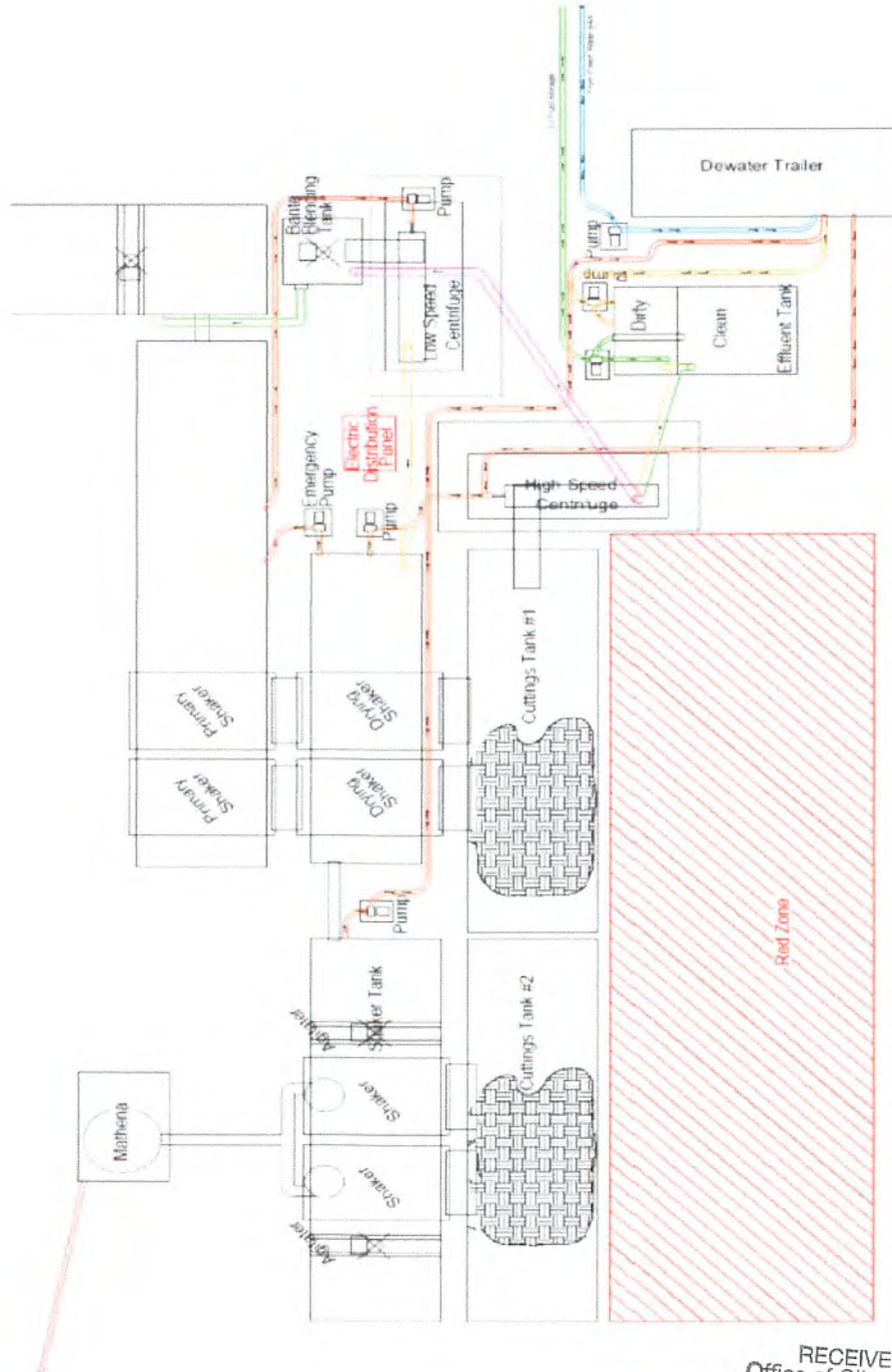
Calcium Carbonate

Friction Reducers

EXAMPLE SCHEMATIC FOR CLOSED LOOP SOLIDS CONTROL SYSTEM



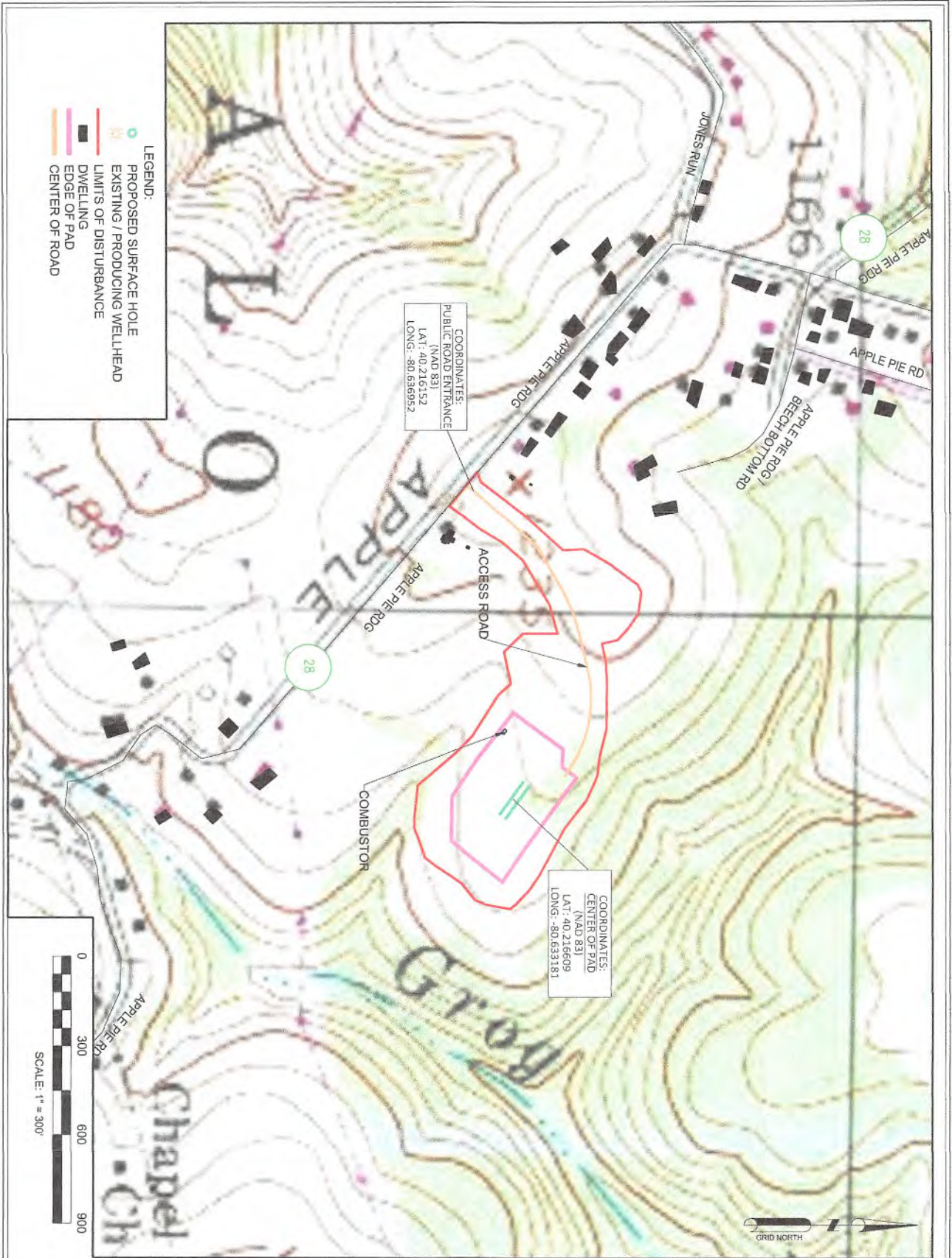
Solids Control Layout



RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection



DATE: FINAL

SHEET NO: 2

PROJECT: BROWN TELSON/CH BRK RD

DATE: 08/24/2010

SCALE: AS NOTED

FOR: BRIAN TESLOVICH BRK PAD

LOCATED IN BUREAU DISTRICT: BROOKS COUNTY, WEST VIRGINIA

TITLE: ACCESS ROAD MAP

JHA ENGINEERS ENVIRONMENTAL

www.jhaengineers.com

68011 VINEYARD ROAD

ST. CLAIRSVILLE, OH 43950

PA, OH, NY, WV

SWN Southwestern Energy

SEAL

PREPARED FOR: MISS UTILITY OF WEST VIRGINIA

2 WORKING DAYS

SEAL/STAMP

001-245-4048

LOCATION MAP NOT TO SCALE

PROJECT LOCATION

THESE DRAWINGS SHALL NOT BE UTILIZED BY ANY PERSON, FIRM OR CORPORATION WITHOUT THE SPECIFIC WRITTEN PERMISSION OF JHA COMPANIES



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
600 MARKETPLACE AVENUE, SUITE 200
BRIDGEPORT, WV 26330
304-933-3119



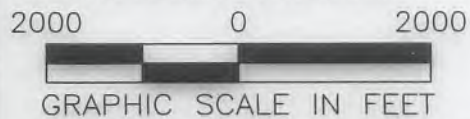
SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,451,870.643 EASTING: 531,194.868
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,451,912.565 EASTING: 531,428.422
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,455,421.813 EASTING: 529,876.194

WELL RESTRICTIONS

1. NO OCCUPIED DWELLINGS > 2500 SQ. FT. WITHIN 625 FEET OF CENTER OF PAD.
2. NO AGRICULTURE BUILDINGS > 2500 SQ. FT. WITHIN 625 FEET OF CENTER OF PAD.
3. WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 2,068 FEET OF PROPOSED WELL.
4. PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 800 FEET OF THE LIMITS OF DISTURBANCE.
5. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
6. NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

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.



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. 991

Dennis E. Miller



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200
PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)

COMPANY: **SWN** Production Company, LLC

BRIAN TESLOVICH BRK
OPERATOR'S WELL #: 3
API WELL #: 47 009 00311
STATE COUNTY PERMIT

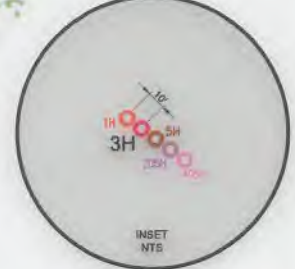
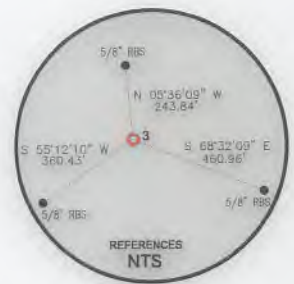
WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: GROG RUN ELEVATION: 1,149.0'
DISTRICT: BUFFALO DISTRICT COUNTY: BROOKE QUADRANGLE: TILTONSVILLE
SURFACE OWNER: BRIAN L. TESLOVICH ACREAGE: 50.911±
OIL & GAS ROYALTY OWNER: BRIAN L. TESLOVICH ACREAGE: 50.911±
DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5778 TVD 18,906.54 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY
ADDRESS: 1300 FORT PIERPONT DRIVE, STE 201 ADDRESS: 1300 FORT PIERPONT DRIVE, STE 201
CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	— SURVEYED BOUNDARY	REVISIONS:	DATE: 04-16-2020
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— DRILLING UNIT		
⊙ EXISTING / PRODUCING WELLHEAD	--- LEASE BOUNDARY		
LPL LANDING POINT LOCATION	— PROPOSED PATH		
⊙ EXISTING WATER WELL			
⊙ EXISTING SPRING			
			DRAWN BY: K.E.S.
			SCALE: 1" = 2000'
			DRAWING NO: 175-057
			WELL LOCATION PLAT

TOP HOLE LATITUDE: 40°15'00"
BOTTOM HOLE LATITUDE: 40°15'00"

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT
Bottom Hole Longitude: 80°37'30"
Top Hole Longitude: 80°37'30"



SURFACE HOLE 12142'

BOTTOM HOLE 486'



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
 600 MARKETPLACE AVENUE, SUITE 200
 BRIDGEPORT, WV 26330
 304-933-3119

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS			
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	BRIAN L. TESLOVICH/SWN PRODUCTION COMPANY,LLC	03-B36-145	50.911
2	RICKEY E. FIBER	03-B36-132	8.46
3	DONNELLY LORIE T. & HOIT MICHAEL S. (SURV)	03-B36-130	5.75
4	JOHN A. CATULLO	03-B36-157	39.50
5	LEMASTERS HARLEY J. & REBECCA K.	03-B36-158	23.70
6	LEMASTERS HARLEY J. & REBECCA K.	03-B36-159	13.00
7	WRIGHT MARKUS K. & PEGGY J.	03-B36-160	7.30
8	MCCONKEY TIMOTHY T. & CATHERINE (SURV)	03-B36-154	9.00
9	MCCONKEY TIMOTHY T. & CATHERINE (SURV)	03-B36-153	18.38
10	JUSTIN & DAYNA HEHR	03-B36-152	10.50
11	JUSTIN HEHR	03-B36-151	10.55
12	LEONARD BRANNON P. & EMILY M. (SURV)	03-B36-171	7.50
13	LEONARD BRANNON P. & EMILY M. (SURV)	03-B36-172	7.80
14	LEONARD PAUL D & KIMBERLY D. (SURV)	03-B36-173	6.15
15	HOFFMAN JOHN R; BUCHANAN ALICE J.	03-B36-174	2.60
16	HOFFMAN JOHN R; BUCHANAN ALICE J.	03-B36-175	6.10
17	FODOR STEPHEN A.; BROWNLEE JUDY L.	03-B36-176	17.65
18	LOMBARD BERNARD J. III	03-B31-81	86.31
19	LOMBARD BERNARD J. III	03-B31-82	100.52
20	SCHIAPPA AND COMPANY INC	03-BB31-65	24.60
21	THOMPSON ET AL & A& G THOMPSON GROUP LLC	03-B31-8	45.25
22	ALLEN CHARLES WESLEY	03-B31-7	6.75
23	BROOKE CO. RT. 2		
24	WEST VIRGINIA DEPARTMENT OF HIGHWAYS	3-B27-11	
25	TOUPS FAMILY TRUST OF 2013 MATHEW & EDJ PADDEN-CO-TRUS	3-B31-14	10.15
26	STATE OF WEST VIRGINIA		

ADJOINING OWNERS TABLE			
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	COULTER LYNN; DAVID ET AL	03-B36-143	1.28
B	COLUMBIA GAS COMPANY	03-B36-144	0.048
C	WINDSOR POWER HOUSE CO.MAPNY	03-B36-104	87.28
D	TAMMY S. MASSEY	03-B36L-39	0.5
E	LOUGHRIE FLOYD R. & DORIS M.	03-B36L-38	2.80
F	KEITH HAMILTON	03-B36L-37	5.10
G	STILLION DANNY L. & THERESA E.	03-B36L-40	2.00
H	BRIAN TESLOVICH	03-B36L-69	50.911
I	CONLEY CHARLES & LINDA LOU	03-B36L-56	5.209
J	BEECH CREST IMPROVEMENT	03-B36L-58	0.52
K	LEMASTERS LARRY W. & LINDA J.	03-B36L-59	2.31
L	GORDER MARK; JOHN; ET AL	03-B36G-21	4.04
M	STEPHENS BARBARA JEAN	03-B36G-19	0.38
N	STEPHENS BARBARA JEAN	03-B36G-18	0.85
O	THOMAS & JENNIFER VIAU	03-B36-161	4.65
P	DEBORAH GRAHAM	03-B36-162	3.21
Q	LEMASTERS HARLEY J.	03-B36-170	10.00
R	BUSINESS DEV CORP OF THE NORTHERN PANHANDLE	03-BB36-23	390.743
S	CARY BUCEY, JEROME BUCEY, TIMOTHY BUCEY, KEITH BUCEY, LYNN BUCEY, CAROLE LAWRENCE, HELEN WELLS JR., REBECCA WELLS BUCEY	03-B31-74	1.72
T	BAKER OTIS M. JR & EDNA JO	03-BB31-19	12.21
U	PELL ALBERT T. & SHELIA (SURV)	03-BB31-25	3.92
V	NIELSEN CARL P. & MARGARET (SURV)	03-B31-58	8.00
W	LOMBARD BERNARD J. III	01-BB31-58	
X	KOKOSINSKI JOHN T.; JASON JARRETT (SURV)	01-BB31-64	12.44
Y	KOKOSINSKI JASON EDWARD	01-BB31-64.1	5.00
Z	ROBINSON PATRICIA GRAYSON	03-B31-83	1.00
AA	GIBSON JENNIFER A.	01-BB31-63	0.52
BB	ALLEN WESLEY & BERNICE	01-BB31-66	1.59
CC	ONONDAGA HOLDING COMPANY LLC	01-BB31-67	3.33
DD	WALNOHA RAY	01-B31-6	26.00
EE	WEEKLY MARION; GROVES NANCY	03-B31-130	6.08
FF	GRIMM JAMES W.	03-B31-129	4.71
GG	GRIMM JAMES W. & ROBIN LYNN (SURV)	03-B31-128	4.40
HH	GRIMM JAMES W.	03-B31-127	4.95
II	LEMASTERS HARLEY J.	03-B31-126	3.50
JJ	STEWART DEBBIE	03-B31-125	3.09
KK	LEMASTERS HARLEY J.	03-B31-124	3.44
LL	LEMASTERS HARLEY J. & REBECCA K. (SURV)	03-B31-123	2.00
MM	COOPER KYLE T. & KATLIN R.	03-B31-122	
NN	WOOLWINE TIMOTHY A. & MELINA BETH	03-B31-80.1	1.00
OO	CROSS REBECCA RUTH	03-B31-81.1	5.00
PP	WOOLWINE TIMOTHY A. & MELINA BETH	03-B31-80	18.42
QQ	WALNOHA MICHAEL S.	03-B31-79	2.77
RR	WALNOHA MICHAEL S.	03-B31-78	5.15
SS	MATHESS JOSHUA	03-B31-77	12.76
TT	WILSON DAVID CURTIS & HAZEL (SURV)	03-B36-15	0.97
UU	LEMASTERS HARLEY J.	03-B36-147	4.00
VV	LEMASTERS HARLEY J.	03-B36-148	3.80
WW	LEMASTERS HARLEY J. & REBECCA K. (SURV)	03-B36-149	2.70
XX	LEMASTERS HARLEY J. & REBECCA K. (SURV)	03-B36-150	3.06
YY	NORTHERN PANHANDLE BOWMEN CLUB	03-B36-70	11.47
ZZ	ELLIOTT HAROLD EARL	03-B36-57	10.48
AAA	MILLER JOSEPH R.	03-B36-48	2.65
BBB	WALNOHA CAROL	03-B36-47	7.26
CCC	MCCONKEY TIMOTHY T. & CATHERINE (SURV)	03-B36-155	11.90
DDD	CIUMMO TARQUINIO; EMMA M; ANTONIO (SURV)	03-B36-156	33.53
EEE	LOUGHERY VICKIE C. & SHEENA R.	03-B37-41	41.00
FFF	MILLER LOUIS	03-B36-125	29.47
GGG	IZSO DAVID LEE; ELIZABETH JANE	03-B36-129	3.00
HHH	KELLY COLIN P. II; TAYLOR NANCY E. (SURV)	03-B36-127	1.00
III	FIBER MERRY M.	03-B36-133	0.43
JJJ	ANDERSON JEROME & CATHY	03-B36-134	4.37
KKK	ADAMS MARK A. & MELODY J.	03-B36-142	6.21

API WELL #: **47** STATE **009** COUNTY **00311** PERMIT **H6A**

REVISIONS:	COMPANY:			
	OPERATOR'S		BRIAN TESLOVICH BRK	
	WELL #:		3	
	DISTRICT:	COUNTY:	STATE:	DATE: 04-16-2020
	BUFFALO DISTRICT	BROOKE	WV	DRAWN BY: K.E.S.
				SCALE: N/A
				DRAWING NO: 175-057
				WELL LOCATION PLAT 2

**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"

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

*Co-tenancy utilization - At least 7 mineral owners in tract and at least 75% of those owners are leased

**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: 
 Its: Staff Landman

EXHIBIT A
 Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, as Operator
 Brian Teslovich BRK 3H
 Brooke County, West Virginia

4700900311

Tract	Tax Parcel	Lessor	Lessee	Royalty	Book/Page	Interest Not Leased by SWN Production Company, LLC
1	3-B36-145	Mountainer Natural Gas Company	Chesapeake Appalachia, LLC	17%	24/215	0%
			SWN Production Company, LLC		30/480	
			Martha E. Wakefield		47/527	
			Janet L. Debar, a/k/a Janet Agnew Debar		47/774	
			Mark Leavitt, single		47/787	
			Jean E. Leavitt, single		48/1	
			Thomas Leavitt, single		48/200	
			Alan Westelin and Sally A. Westelin, husband and wife		49/20	
2	3-B36-132	Rickey E. Fiber and Merry M. Fiber, his wife	Chesapeake Appalachia, LLC	18.0%	16/422	0%
			SWN Production Company, LLC		18/599	
3	3-B36-130	Lawrence J. Gribben and Joan M. Gribben, his wife and Lawrence K. Gribben, a single man	Chesapeake Appalachia, LLC	18.0%	18/599	0%
			SWN Production Company, LLC		30/480	
4	3-B36-157	Royalty Owners Anna May Miller, a widow dealing herein with her separate property James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property Marilyn Miller, a widow Joanne L. Turner, widow Joseph R. N. Miller III, a married man, dealing herein with his separate property Robert W. Dally, Jr., a single man represented hereby Clifford E. Good, as Power of Attorney Joyce H. Tomalin, represented herein by Attorney-in-Fact Beverly Miller, a widow Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Grealhouse, a married woman, dealing herein with her separate property, Charlene LeMasties, a married woman, dealing herein with her separate property, Wanda Bennett, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Scheene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her separate property Marjorie Cook DeShazer, a widow Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross Dennis Stroh, married, dealing herein with his separate property Daniel Branch, a married man, dealing herein with his separate property Bobbete McCormick, married, dealing herein with her separate property Nancy Stratford, i/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney Peter Bradt, married, dealing herein with his separate property Ray E. Lane, married, dealing herein with his separate property George Diehl II, married, dealing herein with his separate property James Branch, single James Diehl, single Janice Miller, single Karen Binswanger, married, dealing herein with her separate property Laurence B. Lane, married, dealing herein with his separate property Margaret Miller, single Marjorie Miller Winhoven, married, dealing herein with her separate property Eric Price, married, dealing herein with his separate property Frederick Arton Schneider, widow Christine Herrrott, i/k/a Christine George, married, dealing herein with her separate property Susan Sprouse, i/k/a Susan Givens, married, dealing herein with her separate property Sherrel Novinger, i/k/a Sherrel Pierson, single Darrel Pierson, single Arjana Scott, i/k/a Arjana George, married, dealing herein with her separate property Jean Weaver, married, dealing herein with her separate property Lawrence S. George II, a/k/a Stephen George, married herein with his separate property Bonnie Walter Benjamin Miller, single				
			SWN Production Company, LLC	37/112	1.10%	
			SWN Production Company, LLC	38/723		
			SWN Production Company, LLC	38/443		
			SWN Production Company, LLC	38/449		
			SWN Production Company, LLC	38/455		
			SWN Production Company, LLC	38/467		
			SWN Production Company, LLC	38/473		
			SWN Production Company, LLC	38/479		
			SWN Production Company, LLC	38/543		
			SWN Production Company, LLC	39/793		
			SWN Production Company, LLC	40/7		
			SWN Production Company, LLC	40/177		
			SWN Production Company, LLC	40/641		
			SWN Production Company, LLC	41/202		
			SWN Production Company, LLC	41/684		
			SWN Production Company, LLC	41/690		
			SWN Production Company, LLC	41/696		
			SWN Production Company, LLC	41/770		
			SWN Production Company, LLC	41/782		
			SWN Production Company, LLC	41/788		
			SWN Production Company, LLC	42/19		
			SWN Production Company, LLC	42/43		
			SWN Production Company, LLC	42/67		
			SWN Production Company, LLC	42/73		
			SWN Production Company, LLC	46/786		
			SWN Production Company, LLC	46/175		
			SWN Production Company, LLC	48/182		
SWN Production Company, LLC	48/296					
SWN Production Company, LLC	48/483					
SWN Production Company, LLC	48/495					
SWN Production Company, LLC	48/768					
SWN Production Company, LLC	46/774					
SWN Production Company, LLC	47/30					
SWN Production Company, LLC	47/48					
SWN Production Company, LLC	47/607					

RECEIVED
 Office of Oil and Gas
 MAY 20 2020
 West Virginia Department of Environmental Protection

EXHIBIT A

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

Brian Teslovich BRK 3H
Brooke County, West Virginia

4700900811

5	3-836-158	Royalty Owners	1.10%	39/461
		Ernest N. Palmer, a widower, dealing herein with his separate property	14.00%	50/721
		David Drummond, single	14.00%	50/733
		Diane Carol Givens, married, dealing herein with her separate property	14.00%	50/754
		Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	14.00%	48/706
		Jonathan Montgomery, single	16.00%	48/770
		Sheri Lynn Hugic, a divorced woman	16.00%	49/1
		Arthur D. Stoner aka Art Dwight Stoner, a divorced man	16.00%	49/141
		Donald Gear and Dolores Ann Gear aka Dee Gear, husband and wife	16.00%	49/248
		Pamela Sue Amadri, a divorced woman	16.00%	49/300
		Scott G. Duncan and Heather S. Durcan, husband and wife	16.00%	49/438
		Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	16.00%	57/466
		Andres Glassow and Karen S. Glassow, husband and wife	16.00%	386/387
		Sean Timothy Duncan, a divorced man	14.00%	53/368
		William H. M. Ryan		
		SWN Production Company, LLC (Company owned minerals)		
		Jerome Williams		
		Anna May Miller, a widow dealing herein with her separate property	18.00%	37/112
		James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing hereing with her sperate property	14.00%	38/723
		Marilyn Miller, a widow	16.00%	39/443
		Joanne L. Turner, widow	16.00%	39/449
		Joseph R. N. Miller III, a married man, dealing herein with his sperate property	16.00%	39/455
		Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	18.00%	39/467
		Joyce H. Tomalin, represented herein by Attorney-in-Fact	18.00%	39/473
		Beverly Miller, a widow	18.00%	39/479
		Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his sperate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greathouse, a married woman, dealing herein with her sperate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Berniet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Poslie, a married woman, dealing herein with her separate property	18.00%	39/543
		Marjorie Cook DeShazer, a widow	14.00%	38/793
		Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	18.00%	40/7
		Dennis Stroh, married, dealing herein with his separate property	14.00%	40/177
		Daniel Branch, a married man, dealing herein with his separate property	14.00%	40/641
		Bobette McCormick, married, dealing herein with her separate property	14.00%	41/202
		Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	14.00%	41/684
		Peter Brade, married, dealing herein with his separate property	14.00%	41/690
		Ray E. Lane, married, dealing herein with his separate property	14.00%	41/696
		George Diehl II, married, dealing herein with his separate property	14.00%	41/770
		James Branch, single	14.00%	41/782
		James Diehl, single	14.00%	41/788
		Janice Miller, single	14.00%	41/794
		Karen Binswanger, married, dealing herein with her separate property	14.00%	42/19
		Laurence B. Lane, married, dealing herein with his separate property	14.00%	42/43
		Margaret Miller, single	14.00%	42/67
		Marjorie Miller-Wimhoven, married, dealing herein with her separate property	18.00%	42/73
		Eric Price, married, dealing herein with his separate property	18.00%	46/786
		Frederick Anton Schneider, widow	18.00%	46/176
		Christine Herritt, f/k/a Christine George, married, dealing herein with her separate property	18.00%	46/182
		Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	14.00%	46/296
		Sherrel Novinger, f/k/a Sherrel Pierson, single	14.00%	46/483
		Darrel Pierson, single	14.00%	46/495
		Arjanta Scott, f/k/a Arjanta George, married, dealign herein with her separate property	18.00%	46/766
		Jean Weaver, married, dealing herein with her separate property	18.00%	46/774

RECEIVED
Office of Oil and Gas
MAY 30 2020
West Virginia Department of Environmental Protection

6	3-836-159	Royalty Owners	SWN Production Company, LLC	18.00%	47/30
		Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	18.00%	47/48
		James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing hereing with her sperate property	SWN Production Company, LLC	18.00%	47/607
		Marlyn Miller, a widow	SWN Production Company, LLC	18.00%	39/461
		Joanne L. Turner, widow	SWN Production Company, LLC	14.00%	50/721
		Joseph R. N. Miller III, a married man, dealing herein with his sperate property	SWN Production Company, LLC	14.00%	50/733
		Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	14.00%	50/754
		Joyce H. Tomalin, represented herein by Attorney-in-Fact	SWN Production Company, LLC	14.00%	50/742
		Beverly Miller, a widow	SWN Production Company, LLC	16.00%	48/706
		Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his sperate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greathouse, a married woman, dealing herein with her sperate property, Charlene LeMasties, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Posle, a married woman, dealing herein with her separate property	SWN Production Company, LLC	16.00%	48/778
		Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	16.00%	49/1
		Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	16.00%	49/141
		Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	16.00%	49/248
		Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	16.00%	49/300
		Bobbete McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	16.00%	49/438
		Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	18.00%	386/387
		Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	53/368
		Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	37/112
		George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	38/723
		James Branch, single	SWN Production Company, LLC	16.00%	39/443
		James Diehl, single	SWN Production Company, LLC	16.00%	39/449
		Janice Miller, single	SWN Production Company, LLC	16.00%	39/455
		Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/467
		Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/473
		Margaret Miller, single	SWN Production Company, LLC	18.00%	39/479
		Marjorie Miller Winbren, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/543
		Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	39/793
		Frederick Anton Schenckler, widow	SWN Production Company, LLC	18.00%	40/7
		Christine Herrott, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	40/177
		Susan Sprouse, f/k/a Susan Pugs, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	40/641
		Sherrel Novinger, f/k/a Sherrel Person, single	SWN Production Company, LLC	14.00%	41/202
			SWN Production Company, LLC	14.00%	41/684
			SWN Production Company, LLC	14.00%	41/680
			SWN Production Company, LLC	14.00%	41/696
			SWN Production Company, LLC	14.00%	41/770
			SWN Production Company, LLC	14.00%	41/782
			SWN Production Company, LLC	14.00%	41/788
			SWN Production Company, LLC	14.00%	41/794
			SWN Production Company, LLC	14.00%	42/19
			SWN Production Company, LLC	14.00%	42/43
			SWN Production Company, LLC	14.00%	42/67
			SWN Production Company, LLC	18.00%	42/73
			SWN Production Company, LLC	18.00%	46/766
			SWN Production Company, LLC	18.00%	46/176
			SWN Production Company, LLC	18.00%	46/182
			SWN Production Company, LLC	14.00%	46/296
			SWN Production Company, LLC	14.00%	46/483

Well ID	Owner	SWN Production Company, LLC	Percentage
46/495	Darrel Pierson, single	SWN Production Company, LLC	14.00%
46/768	Arijanta Scott, f/w/a Arijanta George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%
46/774	Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%
47/30	Lawrence S. George II, a/w/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%
47/48	Bonnie Walter	SWN Production Company, LLC	18.00%
47/607	Benjamin Price, single	SWN Production Company, LLC	18.00%
39/461	Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%
50/721	David Drummond, single	SWN Production Company, LLC	14.00%
50/733	Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%
50/754	Jessica Marie Jensen, f/w/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%
50/742	Jonathan Montgomery, single	SWN Production Company, LLC	14.00%
48/706	Sherr Lynn Hugic, a divorced woman	SWN Production Company, LLC	16.00%
48/770	Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%
49/1	Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%
49/141	Pamela Sue Amadri, a divorced woman	SWN Production Company, LLC	16.00%
49/248	Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	16.00%
49/300	Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%
49/438	Andreas Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	16.00%
57/466	Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	18.00%
386/387	William H. M. Ryan	SWN Production Company, LLC	18.00%
53/368	SWN Production Company, LLC (Company owned minerals) Jerome Williams	SWN Production Company, LLC	14.00%
37/112	Royalty Owners	SWN Production Company, LLC	18.00%
38/723	Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	14.00%
39/443	James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing hereing with her sperate property	SWN Production Company, LLC	16.00%
39/449	Marilyn Miller, a widow	SWN Production Company, LLC	16.00%
39/455	Joanne L. Turner, widow	SWN Production Company, LLC	16.00%
39/467	Joseph R. N. Miller III, a married man, dealing herein with his sperate property	SWN Production Company, LLC	18.00%
39/473	Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%
39/479	Joyce H. Tomsalin, represented herein by Attorney-in-Fact	SWN Production Company, LLC	18.00%
39/543	Beverly Miller, a widow	SWN Production Company, LLC	18.00%
39/793	Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his sperate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greshouse, a married woman, dealing herein with her sperate property, Charlene LeVlastes, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her sperate property	SWN Production Company, LLC	14.00%
40/7	Merjorie Cook DeShazer, a widow	SWN Production Company, LLC	18.00%
40/177	Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	14.00%
40/641	Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%
41/202	Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%
41/684	Bobbebe McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%
41/690	Nancy Stratford, f/w/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%
41/770	Peter Brads, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%
41/782	Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%
41/794	George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%
42/19	James Branch, single	SWN Production Company, LLC	14.00%
42/43	James Diehl, single	SWN Production Company, LLC	14.00%
42/67	Janice Miller, single	SWN Production Company, LLC	14.00%
42/73	Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%
46/786	Lance B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%
46/1176	Margaret Miller, single	SWN Production Company, LLC	18.00%
48/182	Michelle Miller-Winhoven, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%
	Eric Pyle, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%
	Frank Anton Schneider, widow	SWN Production Company, LLC	18.00%
	Charles Herrriott, f/w/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%

RECEIVED
 WV Department of
 Environmental Protection
 MAY 20 2020

EXHIBIT A

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WV-5A1, by SWN Production Company, LLC, as Operator

Brian Teslovich BRK 3H
Brooke County, West Virginia

4700900811

8	3-836-154	1.10%	46/296
Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/483
Sherril Novinger, f/k/a Sherrel Pierson, single	SWN Production Company, LLC	14.00%	46/495
Darrel Pierson, single	SWN Production Company, LLC	18.00%	46/774
Arijanta Scott, f/k/a Arijanta George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	47/30
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	47/48
Lawrence S. George II, a/k/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/607
Bonnie Waller	SWN Production Company, LLC	18.00%	39/461
Benjamin Price, single	SWN Production Company, LLC	14.00%	50/721
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	14.00%	50/754
David Drummond, single	SWN Production Company, LLC	14.00%	50/742
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	48/706
Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	16.00%	48/770
Jonathan Montgomery, single	SWN Production Company, LLC	16.00%	48/778
Sherril Lynn Hugle, a divorced woman	SWN Production Company, LLC	16.00%	49/1
Arthur D. Stoner aka AT Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	49/141
Danield Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%	49/248
Pamela Sue Amadiri, a divorced woman	SWN Production Company, LLC	16.00%	49/300
Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/438
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%	57/466
Andres Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	18.00%	386/387
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	18.00%	53/368
William H. M. Ryan	SWN Production Company, LLC	14.00%	37/112
SWN Production Company, LLC (Company owned minerals)	SWN Production Company, LLC	14.00%	38/723
Jerome Williams	SWN Production Company, LLC	16.00%	39/443
Royalty Owners	SWN Production Company, LLC	16.00%	39/449
Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	16.00%	39/455
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/467
Marilyn Miller, a widow	SWN Production Company, LLC	18.00%	39/473
Joanne L. Turner, widow	SWN Production Company, LLC	18.00%	39/479
Joseph R. N. Miller III, a married man, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/543
Robert W. Dally, Jr., a single man represented hereby Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%	
Joyce H. Tornalin, represented herein by Attorney-in-Fact	SWN Production Company, LLC	18.00%	
Beverly Miller, a widow	SWN Production Company, LLC	18.00%	
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greathouse, a married woman, dealing herein with her separate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her separate property	SWN Production Company, LLC	14.00%	38/793
Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	18.00%	40/7
Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	14.00%	40/177
Dennis Stroth, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/641
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/202
Bobbele McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/684
Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%	41/690
Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/696
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/770
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/782
James Branch, single	SWN Production Company, LLC	14.00%	41/788
Janice Miller, single	SWN Production Company, LLC	14.00%	41/794
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/19
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	42/43
Margaret Miller, single	SWN Production Company, LLC	14.00%	42/67
Marjorie Miller-Winnover, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	42/73

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

4700900811

9	3-B36-153	1.10%
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%
Frederick Anton Schneider, widow	SWN Production Company, LLC	18.00%
Christine Herriot, <i>fl/va</i> Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%
Susan Sprouse, <i>fl/va</i> Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%
Sherrel Novinger, <i>fl/va</i> Sherrel Pierson, single	SWN Production Company, LLC	14.00%
Darrel Pierson, single	SWN Production Company, LLC	14.00%
Arjanta Scott, <i>fl/va</i> Arjanta George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%
Lawrence S. George II, <i>al/va</i> Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%
Bonnie Waller	SWN Production Company, LLC	47/30
Benjamin Price, single	SWN Production Company, LLC	47/48
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	47/607
David Drummond, single	SWN Production Company, LLC	39/461
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	50/721
Jessica Marie Jensen, <i>fl/va</i> Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	50/733
Jonathan Montgomery, single	SWN Production Company, LLC	50/754
Sherril Lynn Huglic, a divorced woman	SWN Production Company, LLC	50/742
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	48/770
Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	48/778
Pamela Sue Amadiri, a divorced woman	SWN Production Company, LLC	49/1
Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	49/141
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	49/248
Andres Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	49/300
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	49/438
William H. M. Ryan	SWN Production Company, LLC	57/466
SWN Production Company, LLC (Company owned minerals)	SWN Production Company, LLC	386/387
Jerome Williams	SWN Production Company, LLC	53/368
Royalty Owners	SWN Production Company, LLC	14.00%
Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	37/112
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property	SWN Production Company, LLC	38/723
Marilyn Miller, a widow	SWN Production Company, LLC	16.00%
Joanne L. Turner, widow	SWN Production Company, LLC	39/443
Joseph R. N. Miller III, a married man, dealing herein with his separate property	SWN Production Company, LLC	39/449
Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	39/455
Joyce H. Tomalin, represented herein by Attorney-in-Fact	SWN Production Company, LLC	39/467
Beverly Miller, a widow	SWN Production Company, LLC	39/473
	SWN Production Company, LLC	39/479
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greathouse, a married woman, dealing herein with her separate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%
Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	39/543
Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	14.00%
Dennis Stroth, married, dealing herein with his separate property	SWN Production Company, LLC	40/7
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	40/177
Bobbele McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	40/641
Nancy Stratford, <i>fl/va</i> Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	41/202
Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	41/684
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	41/690
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	41/696
James Branch, single	SWN Production Company, LLC	41/770
James Diehl, single	SWN Production Company, LLC	41/782
Janice Miller, single	SWN Production Company, LLC	41/788
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	41/794
	SWN Production Company, LLC	42/19

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

4700900311

10		3-836-152	SWN Production Company, LLC	14.00%	42/43
	Laurence B. Lane, married, dealing herein with his separate property	Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/67
	Margaret Miller, single	James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%	42/73
	Marijone Miller Winhoven, married, dealing herein with her separate property	Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/786
	Fredrick Anton Schneider, widow	Christine Herritt, f/k/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/176
	Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	Sherrel Novinger, f/k/a Sherrel Pierson, single	SWN Production Company, LLC	14.00%	46/182
	Darrel Pierson, single	Arijanta Scott, f/k/a Arjanta George, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/483
	Jean Weaver, married, dealing herein with her separate property	Lawrence S. George II, a/k/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	46/485
	Bonnie Waller	Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/768
	David Drummond, single	Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/774
	Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	Jonathan Montgomery, single	SWN Production Company, LLC	18.00%	47/30
	Arthur D. Stoner aka Art Dwight Stoner, a divorced man	Sherril Lynn Hugic, a divorced woman	SWN Production Company, LLC	18.00%	47/48
	Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	Pamela Sue Amadiri, a divorced woman	SWN Production Company, LLC	18.00%	47/607
	Scott G. Duncan and Heather S. Duncan, husband and wife	Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	18.00%	39/461
	Andres Glassow and Karen S. Glassow, husband and wife	Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	14.00%	50/721
	William H. M. Ryan	SWN Production Company, LLC (Company owned minerals)	SWN Production Company, LLC	14.00%	50/733
	Jerome Williams	Royalty Owners	SWN Production Company, LLC	14.00%	50/754
	Anna May Miller, a widow dealing herein with her separate property	James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property	SWN Production Company, LLC	16.00%	50/742
	Marijone Miller, a widow	Joanne L. Turner, widow	SWN Production Company, LLC	16.00%	48/770
	Joseph R. N. Miller III, a married man, dealing herein with his separate property	Robert W. Dally, Jr., a single man represented hereby Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	16.00%	49/1
	Joyce H. Tornain, represented herein by Attorney-in-Fact	Beverly Miller, a widow	SWN Production Company, LLC	16.00%	49/141
	Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Grealhouse, a married woman, dealing herein with her separate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Bennel, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her separate property	Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	18.00%	49/248
	Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	49/300
	Daniel Branch, a married man, dealing herein with his separate property	Bobette McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	49/438
	Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	57/466
	Ray E. Lane, married, dealing herein with his separate property	George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/387
	James Branch, single	James Branch, single	SWN Production Company, LLC	18.00%	53/368
	George Diehl, single	James Diehl, single	SWN Production Company, LLC	18.00%	37/112
			SWN Production Company, LLC	18.00%	38/723
			SWN Production Company, LLC	16.00%	39/443
			SWN Production Company, LLC	16.00%	39/449
			SWN Production Company, LLC	16.00%	39/455
			SWN Production Company, LLC	18.00%	39/467
			SWN Production Company, LLC	18.00%	39/473
			SWN Production Company, LLC	18.00%	39/479
			SWN Production Company, LLC	18.00%	39/543

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

4700900811

EXHIBIT A
Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WV-6A1, by SWN Production Company, LLC, as Operator
Brian Teslovich BRK 3H
Brooke County, West Virginia

Janice Miller, single	SWN Production Company, LLC	14.00%	41794
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/19
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	42/43
Margaret Miller, single	SWN Production Company, LLC	14.00%	42/67
Marjorie Miller Winhoven, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	42/73
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/786
Frederick Anton Schneider, widow	SWN Production Company, LLC	18.00%	46/176
Christine Herriott, f/k/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/182
Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/296
Sherril Novinger, f/k/a Sherril Pierson, single	SWN Production Company, LLC	14.00%	46/483
Darrel Pierson, single	SWN Production Company, LLC	14.00%	46/495
Arijanta Scott, f/k/a Arijanta George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/768
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/774
Lawrence S. George II, a/k/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/30
Bonnie Waller	SWN Production Company, LLC	18.00%	47/48
Benjamin Price, single	SWN Production Company, LLC	18.00%	47/607
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/461
David Drummond, single	SWN Production Company, LLC	14.00%	50/721
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/733
Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/754
Jonathan Montgomery, single	SWN Production Company, LLC	14.00%	50/742
Sherril Lynn Hugic, a divorced woman	SWN Production Company, LLC	16.00%	48/706
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	48/770
Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%	48/778
Pamela Sue Amadii, a divorced woman	SWN Production Company, LLC	16.00%	49/1
Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/141
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/248
Andrew Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	16.00%	49/300
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	16.00%	49/438
William H. M. Ryan	SWN Production Company, LLC	18.00%	57/466
SWN Production Company, LLC (Company owned minerals)	SWN Production Company, LLC	18.00%	386/387
Royalty Owners	SWN Production Company, LLC	14.00%	53/368

Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	18.00%	37/112
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property	SWN Production Company, LLC	14.00%	38/723
Marilyn Miller, a widow	SWN Production Company, LLC	16.00%	39/443
Joanne L. Turner, widow	SWN Production Company, LLC	16.00%	39/449
Joseph R. N. Miller III, a married man, dealing herein with his separate property	SWN Production Company, LLC	16.00%	39/455
Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%	39/467
Joyce H. Tomsain, represented herein by Attorney-in-Fact	SWN Production Company, LLC	18.00%	39/473
Beverly Miller, a widow	SWN Production Company, LLC	18.00%	39/479
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greathouse, a married woman, dealing herein with her separate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Posile, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/543
Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	14.00%	39/793
Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	18.00%	40/7
Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/177
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/641
Bobete McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/202
Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%	41/684
Peter Grade, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/690
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/686
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/770

3-836-151

11

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

4700900311

12	3-836-171	1.10%	41782
James Branch, single	SWN Production Company, LLC	14.00%	41782
James Diehl, single	SWN Production Company, LLC	14.00%	41788
Janice Miller, single	SWN Production Company, LLC	14.00%	41794
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	4219
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	42/43
Margaret Miller, single	SWN Production Company, LLC	14.00%	42/67
Marjorie Miller Winthoven, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	42/73
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/786
Frederick Anton Schneider, widow	SWN Production Company, LLC	18.00%	46/176
Christine Herritt, f/k/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/182
Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/296
Sherril Novinger, f/k/a Sherril Pierson, single	SWN Production Company, LLC	14.00%	46/483
Darrel Pierson, single	SWN Production Company, LLC	14.00%	46/495
Arijania Scott, f/k/a Arijania George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/768
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/774
Lawrence S. George II, a/k/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/30
Bonnie Waller	SWN Production Company, LLC	18.00%	47/48
Benjamin Price, single	SWN Production Company, LLC	18.00%	47/607
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/461
David Drummond, single	SWN Production Company, LLC	14.00%	50/721
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/733
Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/754
Jonathon Montgomery, single	SWN Production Company, LLC	14.00%	50/742
Sherril Lynn Hugin, a divorced woman	SWN Production Company, LLC	16.00%	48/706
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	48/770
Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%	48/778
Pamela Sue Amadri, a divorced woman	SWN Production Company, LLC	16.00%	49/1
Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/141
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/248
Andreas Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	16.00%	49/300
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	16.00%	49/438
William H. M. Ryan	SWN Production Company, LLC	18.00%	57/466
SWN Production Company, LLC (Company owned minerals)	SWN Production Company, LLC	14.00%	386/387
Jerome Williams	SWN Production Company, LLC	14.00%	53/368
Royalty Owners			
Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	18.00%	37/112
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property	SWN Production Company, LLC	14.00%	38/723
Marilyn Miller, a widow	SWN Production Company, LLC	16.00%	39/443
Joanne L. Turner, widow	SWN Production Company, LLC	16.00%	39/448
Joseph R. N. Miller III, a married man, dealing herein with his separate property	SWN Production Company, LLC	16.00%	39/455
Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%	39/467
Joyce H. Tomalin, represented herein by Attorney-in-Fact	SWN Production Company, LLC	18.00%	39/473
Beverly Miller, a widow	SWN Production Company, LLC	18.00%	39/479
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Grealhouse, a married woman, dealing herein with her separate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Bennel, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/543
Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	14.00%	39/793
Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	18.00%	40/7
Dennis Stroth, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/177
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/641
Bobette McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/202
Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%	41/684

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

14		14.00%	14.00%	41/202
Bobbete McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/684	41/684
Nancy Stratford, f/w/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%		
Peter Brede, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/690	41/690
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/696	41/696
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/770	41/770
James Branch, single	SWN Production Company, LLC	14.00%	41/782	41/782
James Diehl, single	SWN Production Company, LLC	14.00%	41/788	41/788
Janice Miller, single	SWN Production Company, LLC	14.00%	41/794	41/794
Karen Biniswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/19	42/19
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	42/43	42/43
Margaret Miller, single	SWN Production Company, LLC	14.00%	42/67	42/67
Marjorie Miller-Winhover, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	42/73	42/73
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/176	46/176
Frederick Anton Schneider, widow	SWN Production Company, LLC	18.00%	46/182	46/182
Christine Herrrott, f/w/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/296	46/296
Susan Sprouse, f/w/a Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/483	46/483
Sherrel Novinger, f/w/a Sherrel Pierson, single	SWN Production Company, LLC	14.00%	46/485	46/485
Darrel Pierson, single	SWN Production Company, LLC	18.00%	46/768	46/768
Arjanta Scott, f/w/a Arjanta George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/774	46/774
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	47/30	47/30
Lawrence S. George II, a/w/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/48	47/48
Bonnie Waller	SWN Production Company, LLC	18.00%	47/607	47/607
Benjamin Price, single	SWN Production Company, LLC	18.00%	39/461	39/461
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%	50/721	50/721
David Drummond, single	SWN Production Company, LLC	14.00%	50/733	50/733
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/754	50/754
Jessica Marie Jensen, f/w/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/742	50/742
Jonathan Montgomery, single	SWN Production Company, LLC	16.00%	48/706	48/706
Sherri Lynn Huglic, a divorced woman	SWN Production Company, LLC	16.00%	48/770	48/770
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	48/778	48/778
Donald Gear and Dolores Ann Gear aka Dee Gear, husband and wife	SWN Production Company, LLC	16.00%	49/1	49/1
Pamela Sue Antadri, a divorced woman	SWN Production Company, LLC	16.00%	49/141	49/141
Scott G. Duncan and Heather S. Durcan, husband and wife	SWN Production Company, LLC	16.00%	49/248	49/248
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/300	49/300
Andres Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	16.00%	49/438	49/438
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	18.00%	57/466	57/466
William H. M. Ryan	SWN Production Company, LLC	18.00%	386/387	386/387
SWN Production Company, LLC (Company owned minerals) Jerome Williams	SWN Production Company, LLC	14.00%	53/368	53/368
Royalty Owners				
Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	18.00%	37/112	37/112
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing hereing with her sperate property	SWN Production Company, LLC	14.00%	38/723	38/723
Marilyn Miller, a widow	SWN Production Company, LLC	16.00%	39/443	39/443
Joanne L. Turner, widow	SWN Production Company, LLC	16.00%	39/449	39/449
Joseph R. N. Miller III, a married man, dealing herein with his sperate property	SWN Production Company, LLC	16.00%	39/455	39/455
Robert W. Dally, Jr., a single man represented hereby Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%	39/467	39/467
Joyce H. Tomalin, represented herein by Attorney-in-Fact Bevery Miller, a widow	SWN Production Company, LLC	18.00%	39/473	39/473
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his operate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greathouse, a married woman, dealing herein with her sperate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Posile, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/543	39/543
Merjorie Cook DeShazer, a widow	SWN Production Company, LLC	14.00%	39/793	39/793

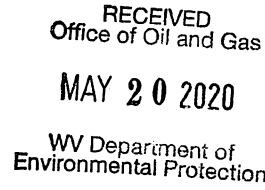


EXHIBIT A

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-5A1, by SWN Production Company, LLC, as Operator

Brian Teslovich BRK 3H
Brooke County, West Virginia

4700900311

Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attomey-in-Fact, Susanne M. Ross	SWN Production Company, LLC	18.00%	40/7
Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/177
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/641
Bobbele McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/202
Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%	41/684
Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/690
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/696
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/770
James Branch, single	SWN Production Company, LLC	14.00%	41/782
James Diehl, single	SWN Production Company, LLC	14.00%	41/788
Janice Miller, single	SWN Production Company, LLC	14.00%	41/794
Karen Biswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/19
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	42/43
Margaret Miller, single	SWN Production Company, LLC	14.00%	42/67
Marjorie Miller Winhoven, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	42/73
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/786
Frederick Anton Schneider, widow	SWN Production Company, LLC	18.00%	46/176
Christine Harriott, f/k/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/182
Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/296
Sherril Novinger, f/k/a Sherril Pierson, single	SWN Production Company, LLC	14.00%	46/483
Darrel Pierson, single	SWN Production Company, LLC	14.00%	46/495
Arijanta Scott, f/k/a Arjanta George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/768
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/774
Lawrence S. George II, a/k/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/50
Bonnie Waller	SWN Production Company, LLC	18.00%	47/48
Benjamin Price, single	SWN Production Company, LLC	18.00%	47/607
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/461
David Drummond, single	SWN Production Company, LLC	14.00%	50/721
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/733
Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/754
Jonathan Montgomery, single	SWN Production Company, LLC	14.00%	50/742
Sherri Lynn Husic, a divorced woman	SWN Production Company, LLC	16.00%	48/706
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	48/770
Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%	48/778
Pamela Sue Amadri, a divorced woman	SWN Production Company, LLC	16.00%	49/1
Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/141
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/248
Andres Glaesow and Karen S. Glaesow, husband and wife	SWN Production Company, LLC	16.00%	49/300
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	16.00%	49/438
William H. M. Ryan	SWN Production Company, LLC	18.00%	57/466
SWN Production Company, LLC (Company owned minerals)	SWN Production Company, LLC	18.00%	386/387
Jerome Williams	SWN Production Company, LLC	14.00%	53/368
Royalty Owners	SWN Production Company, LLC	18.00%	37/112
Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	14.00%	38/723
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing hereing with her sperate property	SWN Production Company, LLC	16.00%	39/443
Marilyn Miller, a widow	SWN Production Company, LLC	16.00%	39/449
Joanne L. Turner, widow	SWN Production Company, LLC	16.00%	39/455
Joseph R. N. Miller III, a married man, dealing herein with his sperate property	SWN Production Company, LLC	18.00%	39/467
Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%	39/473
Joyce H. Tornalin, represented herein by Attorney-in-Fact	SWN Production Company, LLC	18.00%	39/479
Beverly Miller, a widow	SWN Production Company, LLC	18.00%	39/479

3-B36-174
RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

4700900811

		18.00%	39/543
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Greathouse, a married woman, dealing herein with her separate property, Charlene LeMasters, a married woman, dealing herein with her separate property, Wanda Bennett, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoene, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Posle, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/543
Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	14.00%	39/793
Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	18.00%	40/7
Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/177
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/641
Bobette McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/202
Nancy Stratford, <i>fi/va</i> Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%	41/684
Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/690
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/696
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/770
James Branch, single	SWN Production Company, LLC	14.00%	41/782
James Diehl, single	SWN Production Company, LLC	14.00%	41/788
Janice Miller, single	SWN Production Company, LLC	14.00%	41/794
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/19
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	42/43
Margaret Miller, single	SWN Production Company, LLC	14.00%	42/67
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	42/73
Marjorie Miller Winhoven, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/786
Frederick Anton Schneider, widow	SWN Production Company, LLC	18.00%	46/776
Christine Herritt, <i>fi/va</i> Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/182
Susan Sprouse, <i>fi/va</i> Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/296
Sherri Novinger, <i>fi/va</i> Sherri Pierson, single	SWN Production Company, LLC	14.00%	46/483
Darrel Pierson, single	SWN Production Company, LLC	14.00%	46/495
Arjanta Scott, <i>fi/va</i> Arjanta George, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/768
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/774
Lawrence S. George II, <i>si/va</i> Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/30
Bonnie Waller	SWN Production Company, LLC	18.00%	47/48
Benjamin Price, single	SWN Production Company, LLC	18.00%	47/607
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/461
David Drummond, single	SWN Production Company, LLC	14.00%	50/721
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/733
Jessica Marie Jensen, <i>fi/va</i> Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/754
Jonathan Montgomery, single	SWN Production Company, LLC	14.00%	50/742
Sherri Lynn Hujic, a divorced woman	SWN Production Company, LLC	16.00%	48/706
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	48/770
Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%	48/778
Pamela Sue Amadill, a divorced woman	SWN Production Company, LLC	16.00%	49/1
Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/141
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/248
Andrew Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	16.00%	49/300
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	16.00%	49/438
William H. M. Ryan	SWN Production Company, LLC	18.00%	57/466
(Company owned minerals)	SWN Production Company, LLC	14.00%	386/387
(Jerome Williams)	SWN Production Company, LLC	14.00%	53/368
Royalty Owners	SWN Production Company, LLC	18.00%	37/112
Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	14.00%	38/723
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing herein with her separate property	SWN Production Company, LLC	16.00%	39/443
Manlynn Miller, a widow	SWN Production Company, LLC	16.00%	39/449
Joanne L. Turner, widow	SWN Production Company, LLC	16.00%	39/455
Joseph R. N. Miller III, a married man, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/467
Robert W. Dally, Jr., a single man represented herein by Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%	39/467

1.10%

3-836-175

16

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

Joeye H. Tomalin, represented herein by Attorney-in-Fact Beverly Miller, a widow	SWN Production Company, LLC SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00% 18.00%	39/473 39/479 39/543
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Grealhouse, a married woman, dealing herein with her separate property, Charlene LeMastres, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifton-Lowe, a married woman, dealing herein with her separate property, Norma Jean Schoens, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her separate property	SWN Production Company, LLC	14.00%	39/793
Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	18.00%	40/7
Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	14.00%	40/177
Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/641
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/202
Bobete McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/684
Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%	41/680
Peter Brado, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/696
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/770
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/782
James Branch, single	SWN Production Company, LLC	14.00%	41/788
James Diehl, single	SWN Production Company, LLC	14.00%	41/784
Janice Miller, single	SWN Production Company, LLC	14.00%	42/43
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/67
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	42/73
Margaret Miller, single	SWN Production Company, LLC	18.00%	46/766
Marjorie Miller Winhoven, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/176
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/182
Frederick Anton Schneider, widow	SWN Production Company, LLC	14.00%	46/296
Christine Herritt, f/k/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/483
Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/495
Sherri Novinger, f/k/a Sherri Pierson, single	SWN Production Company, LLC	18.00%	46/768
Darrel Pierson, single	SWN Production Company, LLC	18.00%	46/774
Arjania Scott, f/k/a Arjania George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	47/30
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	47/48
Lawrence S. George II, a/k/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/607
Bonnie Waller	SWN Production Company, LLC	18.00%	39/461
Benjamin Price, single	SWN Production Company, LLC	14.00%	50/721
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	14.00%	50/733
David Drummond, single	SWN Production Company, LLC	14.00%	50/754
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	16.00%	50/742
Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	16.00%	48/705
Jonathan Montgomery, single	SWN Production Company, LLC	16.00%	48/770
Sherri Lynn Hujic, a divorced woman	SWN Production Company, LLC	16.00%	49/1
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	49/141
Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%	49/248
Pamela Sue Amadri, a divorced woman	SWN Production Company, LLC	16.00%	49/300
Scott G. Duncan and Heather S. Duncan, husband and wife	SWN Production Company, LLC	16.00%	49/438
Mark Bryan Duncan and Cynthia Elizabeth Duncan, husband and wife	SWN Production Company, LLC	16.00%	57/466
Andrew Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	16.00%	386/387
Sean Timothy Duncan, a divorced man	SWN Production Company, LLC	14.00%	53/368
William H. M. Ryan	SWN Production Company, LLC	18.00%	37/112
(Company owned minerals)	SWN Production Company, LLC	14.00%	38/723
Jerome Williams	SWN Production Company, LLC	16.00%	39/443
Royalty Owners			
Anna May Miller, a widow dealing herein with her separate property	SWN Production Company, LLC	18.00%	37/112
James E. Williams, a married man dealing herein with his separate property, and Lois A. Williams, a married woman, dealing hereing with her sperate property	SWN Production Company, LLC	14.00%	38/723
Manlynn Miller, a widow	SWN Production Company, LLC	16.00%	39/443

1.10%

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

3-B36-176

EXHIBIT A

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

Brian Teslovich BRK 3H
Brooke County, West Virginia

4709090311

Joanne L. Turner, widow	SWN Production Company, LLC	16.00%	39/449
Joseph R. N. Miller III, a married man, dealing herein with his separate property	SWN Production Company, LLC	16.00%	39/455
Robert W. Dally, Jr., a single man represented hereby Clifford E. Good, as Power of Attorney	SWN Production Company, LLC	18.00%	39/467
Joyce H. Tomalin, represented herein by Attorney-in-Fact	SWN Production Company, LLC	18.00%	39/473
Beverly Miller, a widow	SWN Production Company, LLC	18.00%	39/479
Donald A. Alexander, a married man, dealing herein with his separate property, Ronnie L. Alexander, a married man, dealing herein with his separate property, August Robert Alexander, a married man, dealing herein with his separate property, Linda S. Grealhouse, a married woman, dealing herein with her separate property, Charlene LeMastes, a married woman, dealing herein with her separate property, Wanda Bennet, a widow, dealing herein with her separate property, Beverly Clifford-Love, a married woman, dealing herein with her separate property, Norma Jean Schoeni, a married woman, dealing herein with her separate property, Dorothy Craft, a single woman, Nancy Postle, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18.00%	39/543
Marjorie Cook DeShazer, a widow	SWN Production Company, LLC	14.00%	39/783
Robert L. Miller, Jr., married, dealing herein with his separate property, represented herein by Attorney-in-Fact, Susanne M. Ross	SWN Production Company, LLC	18.00%	40/7
Dennis Stroth, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/177
Daniel Branch, a married man, dealing herein with his separate property	SWN Production Company, LLC	14.00%	40/641
Bobbete McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	41/202
Nancy Stratford, f/k/a Nancy Miller, widow, represented herein by Margaret Miller as Power of Attorney	SWN Production Company, LLC	14.00%	41/684
Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/690
Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/696
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	41/770
James Branch, single	SWN Production Company, LLC	14.00%	41/782
James Diehl, single	SWN Production Company, LLC	14.00%	41/788
Janice Miller, single	SWN Production Company, LLC	14.00%	41/794
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	42/19
Laurence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14.00%	42/43
Margaret Miller, single	SWN Production Company, LLC	14.00%	42/67
Marjorie Miller-Winhoven, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	42/73
Eric Price, married, dealing herein with his separate property	SWN Production Company, LLC	18.00%	46/786
Frederick Anton Schneider, widow	SWN Production Company, LLC	18.00%	46/176
Christine Herriott, f/k/a Christine George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/182
Susan Sprouse, f/k/a Susan Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	46/296
Sherrel Novinger, f/k/a Sherrel Pierson, single	SWN Production Company, LLC	14.00%	46/483
Darrel Pierson, single	SWN Production Company, LLC	14.00%	46/495
Ajanta Scott, f/k/a Ajanta George, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/768
Jean Weaver, married, dealing herein with her separate property	SWN Production Company, LLC	18.00%	46/774
Lawrence S. George II, a/k/a Stephen George, married herein with his separate property	SWN Production Company, LLC	18.00%	47/30
Bonnie Walter	SWN Production Company, LLC	18.00%	47/48
Benjamin Price, single	SWN Production Company, LLC	18.00%	47/607
Ernest N. Palmer, a widower, dealing herein with his separate property	SWN Production Company, LLC	18.00%	39/461
David Drummond, single	SWN Production Company, LLC	14.00%	50/721
Diane Carol Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/733
Jessica Marie Jensen, f/k/a Jessica Givens, married, dealing herein with her separate property	SWN Production Company, LLC	14.00%	50/754
Jonathon Montgomery, single	SWN Production Company, LLC	14.00%	50/742
Sheri Lynn Hucig, a divorced woman	SWN Production Company, LLC	16.00%	48/706
Arthur D. Stoner aka Art Dwight Stoner, a divorced man	SWN Production Company, LLC	16.00%	48/770
Donald Geer and Dolores Ann Geer aka Dee Geer, husband and wife	SWN Production Company, LLC	16.00%	48/778
Pamela Sue Amadri, a divorced woman	SWN Production Company, LLC	16.00%	49/1
Scott G. Durcan and Heather S. Durcan, husband and wife	SWN Production Company, LLC	16.00%	49/141
Mark Bryan Durcan and Cynthia Elizabeth Durcan, husband and wife	SWN Production Company, LLC	16.00%	49/248
Andres Glassow and Karen S. Glassow, husband and wife	SWN Production Company, LLC	16.00%	49/300
Sean Timothy Durcan, a divorced man	SWN Production Company, LLC	16.00%	49/438
William H. M. Ryan	SWN Production Company, LLC	18.00%	57/466
SWN Production Company, LLC (Company owned minerals)	SWN Production Company, LLC	14.00%	386/387
Jerome Williams	SWN Production Company, LLC	14.00%	53/368
Karen Binswanger, married, dealing herein with her separate property	SWN Production Company, LLC	14%	41/690
Peter Brade, married, dealing herein with his separate property	SWN Production Company, LLC	14%	42/19
George Diehl II, married, dealing herein with his separate property	SWN Production Company, LLC	14%	41/770

0%

3-831-81

18

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

4700900311

EXHIBIT A
Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WV-6A1, by SWN Production Company, LLC, as Operator
Brian Teslovich BRK 3H
Brooke County, West Virginia

19	3-831-82	James Diehl, single	SWN Production Company, LLC	14%	41/788	0%
20	3-831-65	Lawrence B. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14%	42/43	0%
21	3-831-8	Ray E. Lane, married, dealing herein with his separate property	SWN Production Company, LLC	14%	41/696	0%
		Bobette McCormick, married, dealing herein with her separate property	SWN Production Company, LLC	14%	40/177	
		Dennis Stroh, married, dealing herein with his separate property	SWN Production Company, LLC	14%	385/560	
		SWN Production Company, LLC	SWN Production Company, LLC		384/377	
		Bernard J. Lombard, III	SWN Production Company, LLC	18%	36/302	
		Carl H. Ruble, a single man	SWN Production Company, LLC	18%	37/673	
		Michael A. Byrd, a widower	SWN Production Company, LLC	18%	43/198	
		Moniez Fredricks, single	SWN Production Company, LLC	18%	43/203	
		Mary Pearl Thompson, single	SWN Production Company, LLC	18%	43/208	
		Ameen Malik, single	SWN Production Company, LLC	18%	43/213	
		Jaifer Malik, single	SWN Production Company, LLC	18%	43/218	
		Chester Thompson, a married man, dealing herein with his separate property	SWN Production Company, LLC	18%	43/223	
		A & G Thompson Group, LLC	SWN Production Company, LLC	18%	43/228	
		Richard L. Thompson, single	SWN Production Company, LLC	18%	45/284	
		Paula L. Hasty, a married woman, dealing herein with her separate property	SWN Production Company, LLC	18%	45/289	
		Carl E. Thompson, single	SWN Production Company, LLC	18%	45/294	
		J'Kea Thompson, individually, and as Executor of the Estates of James Thompson and Ruth D. Thompson	SWN Production Company, LLC	18%	45/299	
		Janay Thompson	SWN Production Company, LLC	18%	48/679	
		Jasmeen Thompson	SWN Production Company, LLC	18%	48/673	
		Kenneth J. Thompson, II	SWN Production Company, LLC	18%	48/667	
22	3-831-7	Wesley K. Allen and Bernice Allen and, husband and wife	Chesapeake Appalachia, LLC	18%	12/718	0%
23	Brooke Co. RT.2	ROW Only	SWN Production Company, LLC		30/480	
24	3-827-11	HFS Limited Liability Company	Chesapeake Appalachia, LLC	18%	15/394	0%
25	3-831-14	John Matthew Padden and Elizabeth A. Padden, individually, and as Co-Trustees of The Amy M. Toups Family Trust of 2013	SWN Production Company, LLC Fossil Creek Ohio, LLC	18%	30/480 29/166	0%
		American Petroleum Partners Operation, LLC	SWN Production Company, LLC		32/643	
		State of West Virginia Department of Commerce, Division of Natural Resources	SWN Production Company, LLC	20%	576/22	0%
26	Ohio River		SWN Production Company, LLC		55/479	0%

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

April 22, 2020

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

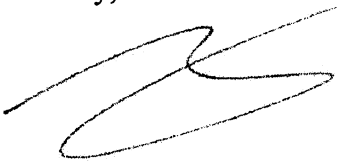
RE: SWN's proposed New Well: Brian Teslovich BRK 3H in Brooke County, West Virginia, Drilling under 4576 WV-2, Apple Pie Ridge Road, and Coss Road .

Dear Ms. Adkins:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under 4576 WV-2, Apple Pie Ridge Road, and Coss 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,



Gary Nuckolls
Staff Landman
SWN Production Company, LLC

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

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

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

Date of Notice Certification: 5/18/20

API No. 47- 009 - _____
Operator's Well No. Brian Teslovich BRK 3H
Well Pad Name: Brian Teslovich BRK

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>531,194.868</u>
County:	<u>009- Brooke</u>		Northing:	<u>4,451,870.643</u>
District:	<u>Buffalo</u>	Public Road Access:	<u>McCord Hill Road</u>	
Quadrangle:	<u>Tiltonsville</u>	Generally used farm name:	<u>Brian Teslovich</u>	
Watershed:	<u>Grog Run</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		OOG OFFICE USE ONLY
<input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED		<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED		<input type="checkbox"/> RECEIVED
<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)	RECEIVED Office of Oil and Gas MAY 20 2020 WV Department of Environmental Protection	<input type="checkbox"/> RECEIVED/ NOT REQUIRED <input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION		<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 5. PUBLIC NOTICE		<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		<input type="checkbox"/> RECEIVED

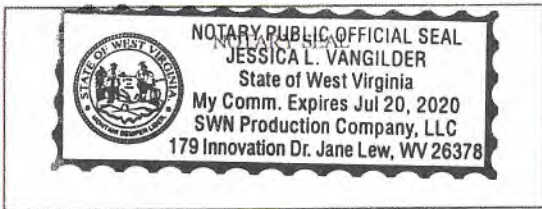
Required Attachments:

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.

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:	<u>SWN Production Co., LLC</u>	Address:	<u>1300 Fort Pierpont Dr., Suite 201</u>
By:	<u>Brittany Woody</u>		<u>Morgantown, WV 26508</u>
Its:	<u>Senior Regulatory Analyst</u>	Facsimile:	<u>304-884-1690</u>
Telephone:	<u>304-884-1610</u>	Email:	<u>Brittany_Woody@swn.com</u>



Subscribed and sworn before me this 17th day of April, 2020.
Jessica L. Vangilder Notary Public
 My Commission Expires 7-20-20

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.

RECEIVED
 Office of Oil and Gas
 MAY 20 2020
 WV Department of
 Environmental Protection

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

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

Date of Notice: 5/18/20 **Date Permit Application Filed:** 5/18/20

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: Brian L. Teslovich
 Address: 211 Sunset Drive
Belle Vernon, PA 15012
 Name: _____
 Address: _____

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: Windsor Coal Company
 Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

COAL OPERATOR

Name: _____
 Address: _____

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

Name: See Attachment 13A
 Address: _____

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

Name: _____
 Address: _____

*Please attach additional forms if necessary

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

4700900311

03 B3601450000000	TESLOVICH BRIAN L	211 SUNSET DR	BELLE VERNON	PA	15012	1
03 B3601420000000	ADAMS MARK A & MELODY J	4762 APPLEPIE RIDGE RD	WELLSBURG	WV	26070	3
03B36L00420000000	COULTER STANLEY E & JOYCE	5108 APPLE PIE RIDGE RD	WELLSBURG	WV	26070	1

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

Notice is hereby given:

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

This Notice Shall Include:

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

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

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

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

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

RECEIVED
Office of Oil and Gas

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

MAY 20 2020

Environmental Protection

WW-6A
(8-13)

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

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

WW-6A
(8-13)**Time Limits and Methods for Filing Comments.**

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

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

Comment Requirements

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

Disclaimer: All comments received will be placed on our web site <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
MAY 20 2020
WV Department of
Environmental Protection

WW-6A
(8-13)

API NO. 47-009 **4700900311**
OPERATOR WELL NO. Brian Teslovich BRK 3H
Well Pad Name: Brian Teslovich BRK

Notice is hereby given by:

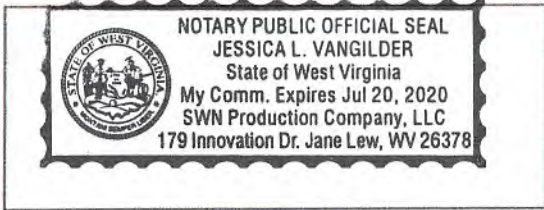
Well Operator: SWN Production Co., LLC
Telephone: 304-884-1610
Email: Brittany_Woody@swn.com

Brittany Woody

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.



Subscribed and sworn before me this 17th day of April 2020
Jessica L. Vangilder Notary Public
My Commission Expires 7-20-20

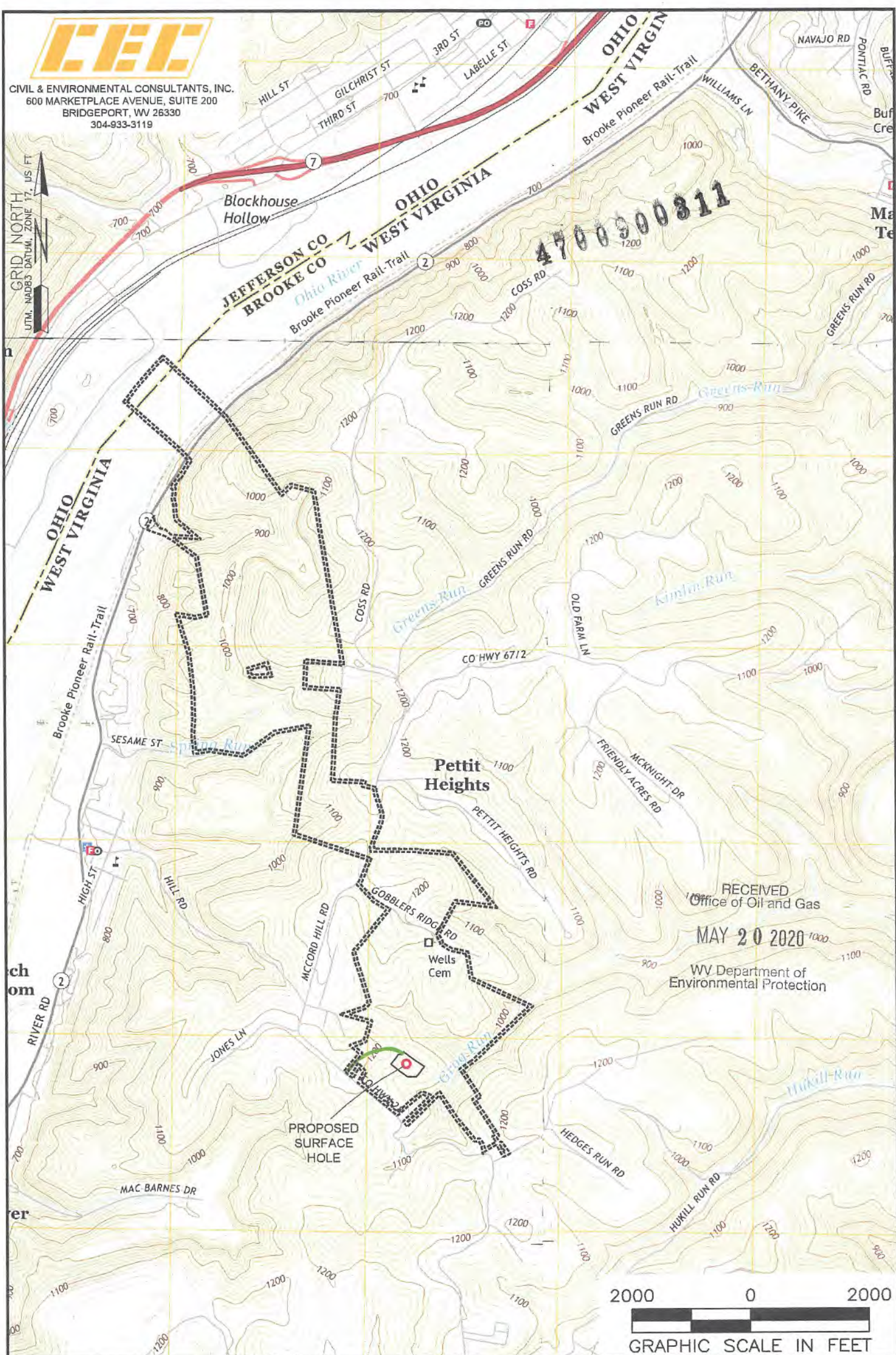
RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

4700900311



CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
600 MARKETPLACE AVENUE, SUITE 200
BRIDGEPORT, WV 26330
304-933-3119

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



4700900311

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

- 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
 - ACCESS ROAD
 - PUBLIC ROAD
 - ACCESS ROAD TO PREV. SITE
 - LEASE BOUNDARY
 - PROPOSED PATH

WELL OPERATOR:
SWN PRODUCTION COMPANY, LLC

ADDRESS:
1300 FORT PIERPONT DRIVE, STE 201 MORGANTOWN, WV 26508

SURFACE OWNER:
BRIAN L. TESLOVICH

WELL (FARM) NAME: BRIAN TESLOVICH BRK	WELL # 3H	SERIAL # XXXX
COUNTY - CODE BROOKE - 009	DISTRICT; BUFFALO DISTRICT	
USGS 7 1/2 QUADRANGLE MAP NAME TILTONVILLE, WV		

**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: 2/27/2020 **Date of Planned Entry:** 3/4/2020

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: Brian L. Teslovich

Address: 411 Sunset Drive
Belle Vernon, PA 15012

Name: _____

Address: _____

Name: _____

Address: _____

COAL OWNER OR LESSEE

Name: C/O Leatherwood, Inc. Attn: Casey Saunders

Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

RECEIVED
Office of Oil and Gas
MAY 20 2020

MINERAL OWNER(s)

Name: Brian L. Teslovich

Address: 411 Sunset Drive
Belle Vernon, PA 15012

WV Department of
Environmental Protection

*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: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>40.216574, -80.633281</u>
County: <u>Brooke</u>	Public Road Access: <u>Apple Pie Ridge</u>
District: <u>Buffalo</u>	Watershed: <u>Lower Buffalo Creek</u>
Quadrangle: <u>Tiltonsville</u>	Generally used farm name: <u>Brian Teslovich</u>

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 57th 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.

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.

**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: 03/17/2020 **Date Permit Application Filed:** 5/18/20

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: Windsor Coal Company
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

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: West Virginia
County: Brooke
District: Buffalo
Quadrangle: Tiltonsville
Watershed: Grog Run

UTM NAD 83 Easting: 531,194.868
Northing: 4,451,870.643
Public Road Access: McCord Hill Road
Generally used farm name: Brian Teslovich BRK

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

This Notice Shall Include:

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

Notice is hereby given by:

Well Operator: SWN Production Company, LLC
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 depprivacvofficer@wv.gov.

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

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

Date of Notice: 03/17/2020 Date Permit Application Filed: 5/18/20

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: Windsor Coal Company
Address: 1000 Consol Energy Drive
Canonsburg, PA 15317

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: West Virginia
County: Brooke
District: Buffalo
Quadrangle: Tiltonsville
Watershed: Grog Run

UTM NAD 83 Easting: 531,194.868
Northing: 4,451,870.643
Public Road Access: McCord Hill Road
Generally used farm name: Brian Teslovich BRK

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

This Notice Shall Include:

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

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.

00900311

**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: 04/03/2020 **Date Permit Application Filed:** 5/18/20

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: Brian L. Teslovich
Address: 211 Sunset Drive
Belle Vernon, PA 15012

Name: _____
Address: _____
RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

Notice is hereby given:

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

State:	West Virginia	UTM NAD 83	Easting:	531,194.868
County:	Brooke		Northing:	4,451,870.643
District:	Buffalo	Public Road Access:	McCord Hill Road	
Quadrangle:	Tiltonsville	Generally used farm name:	Brian Teslovich BRK	
Watershed:	Grog Run			

This Notice Shall Include:

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

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: 04/03/2020 **Date Permit Application Filed:** 5/18/20

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: Brian L. Teslovich
Address: 211 Sunset Drive
Belle Vernon, PA 15012

Name: _____
Address: _____

RECEIVED
Office of Oil and Gas
MAY 20 2020
WV Department of
Environmental Protection

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: <u>West Virginia</u>	UTM NAD 83 Easting: <u>531,194.868</u>
County: <u>Brooke</u>	Northing: <u>4,451,870.643</u>
District: <u>Buffalo</u>	Public Road Access: <u>McCord Hill Road</u>
Quadrangle: <u>Tiltonsville</u>	Generally used farm name: <u>Brian Teslovich BRK</u>
Watershed: <u>Grog Run</u>	

This Notice Shall Include:

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

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.



4700900811

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

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

March 16, 2020

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

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

RECEIVED
Office of Oil and Gas

MAY 20 2020

WV Department of
Environmental Protection

Subject: DOH Permit for the Brian Teslovich Pad, Brooke County
Brian Teslovich BRK 3H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0873 which has been issued to Southwestern Energy for access to the State Road for a well site located off Brooke County Route 28 SLS.

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

Very Truly Yours,

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

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

Attachment VI Frac Additives

4700900811

Product Name	Product Use	Chemical Name	CS Form #
AI-303 (U.S. Well Services)	Mixture	Ethylene glycol	107-21 1
		Cinnamaldehyde	104-55 2
		Butyl cellosolve	111-76 2
		Formic acid	64-18 6
		Polyether	Proprietary
		Acetophenone, thiourea, formaldehyde polymer	68527-49 1
AP ONE (U.S. Well Services)	Breaker	Ammonium persulfate	7727-54-0
Bactron K-139 (Champion Technologies)	Biocide	Glutaraldehyde	111-30-8
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkydimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
Bactron K-219 (Champion Technologies)	Biocide	Methanol	67-56-1
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkydimethyl, Chlorides	68424-85-1
CarboNRT	Tracer	Ceramic Proppant	66402-68-4
EC6486A (Nalco Champion)	Scale Inhibitor	Amine Triphosphate	Proprietary
		Ethylene Glycol	107-21-1
EC6734A (Champion Technologies)	Biocide	Hydrogen Peroxide	7722-84-1
		Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
Econo-CI200 (SWN Well Services)	Corrosion Inhibitor	Methanol	67-56-1
		Oxyalkylated fatty acid	68951-67-7
		Fatty acids	61790-12-3
		Modified thiourea polymer	68527-49-1
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	127-08-2
		Formaldehyde	50-00-0
Ecopol-FEAC (SWN Well Services)	Iron Control	Acetic Acid	64-19-7
		Citric Acid	77-92-9
		Water	7732-18-5
FDP-S1176-15 (Halliburton)	Friction Reducer	Polyacrylate	Proprietary
		Hydrotreated light petroleum distillate	64742-47-8
FLOJET DR900 LPP (SWN Well Services)	Friction Reducer	Distillates (petroleum) hydrotreated light	64674-47-8
		Ethylene Glycol	107-21-1
		Alcohols, C12-16, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
FR-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
		Inorganic Salt	Proprietary
GYPTRON T-390 (Champion Technologies)	Scale Inhibitor	Methanol	67-56-1
		Nonylphenol Ethoxylate	Proprietary
HAI-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A
HCL (SWN Well Services)	Hydrochloric Acid	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
LP-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary
		Ammonium Chloride	12125-02-9
OPTI-FLEX (U.S. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
Plexslick 930	Friction Reducer	Copolymer of 2-propenamide	Proprietary
		Hydrotreated Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Alcohols, C12-16, Exoxylated	68551-12-2
		Oleic Acid Diethanolamide	93-83-4
		Ammonium Chloride	12125-02-9
Plexslick 953	Friction Reducer	Petroleum Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Ammonium Chloride	12125-02-9
		N,N-bis (2-hydroxyethyl) oleamide	93-83-4
Plexslick 957	Friction Reducer	Petroleum Distillate	64742-47-8
		Ammonium Chloride	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
		Alcohols, C12-16, Exoxylated	68551-12-2
		Water	7732-15-5
WFRA-2000 (U.S. Well Services)	Anionic Friction Reducer	Hydrotreated light distillate (petroleum)	64742-47-8
		Propenoic acid, polymer with propenamide	9003-06 9
Plexaid 655 NM	Scale Inhibitor	Diethylenetriamine penta (methylene phosphonic acid)	15827-30-8
Plexslick 922	no data available	Copolymer of 2-propenamide	69418-26-4
		Distillates (petroleum), hydrotreated light	64742-47-8
		Ammonium chloride ((NH4)Cl)	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
Tolcide P550A	Biocidal product	Tetrakis (hydroxymethyl) phosphonium sulphate	55566-30-8
		Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups	397256-50-7
LD-2950	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
		Ethoxylated alcohol	Proprietary
Legend LD-7750W	Scale Control	Poly (oxy-1,2-ethanediyl) alpha.-tridecyl.-omega.-hydroxy, branched	69011-36-5
		Methanol	67-56-1
		Phosphonic Acid Salt	Proprietary
MC MX 8-4743	Specialty Product	Sodium Nitrate	7631-99-4

RECEIVED
Office of Oil and Gas
4700300311
MAY 20 2020

WV Department of
Environmental Protection

APPROVED
MODIFICATION
WYDER 006
M.D.S.
4/31/2020

LOCAL EMERGENCY SERVICES	
NAME	TELEPHONE NO.
NAME: JAVIE	911
HOSPITAL: EMERGENCY ROOM	OHIO VALLEY MEDICAL CENTER (304) 234-0132
FIRE DEPARTMENT	911
POLICE DEPARTMENT	911
PERSON CONTROL CENTER	WV 252 252 1822

FLOOD PLAN CONDITIONS	
DO FIRM CONSTRUCTION ACTIVITIES TAKE PLACE IN FLOOD PLAN:	NO
FIRM NEEDED FROM COUNTY FLOOD PLAN COORDINATOR:	NO
REG. HAS STUDY COMPLETED:	NO
FLOOD PLAN REVIEW ON DRAWINGS:	NO
FIRM MAP NUMBER(S) FOR SITE:	[]
APPROVED:	[]
AGREEMENT OF CONSTRUCTION IN FLOOD PLAN:	100% AC

PROJECT OWNER/INTEGRATOR
SOUTHWESTERN PRODUCTION COMPANY, LLC
178 INNOVATION DRIVE
JANE LEW, WV 26707
CONTACT: STEVE VAN HOOK

ENGINEER
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
600 MARKETPLACE AVE. SUITE 200
BRIDGEPORT, WV 26330
PH: (304) 333-3119
CONTACT: JOSEPH D. ROBINSON, P.E.

WEST VIRGINIA
DISTRICT SIX
PH: (800) 842-4000
CONTACT: DISTRICT MANAGER
GUS SWANER

WEST VIRGINIA STATE LAW
CONTRACTOR
YOU MUST
WEST VIRGINIA STATE LAW
REQUIRES YOU OBTAIN THE
NECESSARY PERMITS BEFORE
STARTING THE WORK.



**BRIAN TESLOVICH WELL PAD
SITE PLAN
SWN PRODUCTION COMPANY, LLC**

LAT/LONG: N 40.216735° W -80.634171°
(APPROXIMATE CENTER OF PROJECT)

LOCATION MAP
TILTONSVILLE USGS 7.5 QUAD
SCALE IN FEET
1 INCH = 1000 FEET



VICINITY MAP
BROOKE COUNTY ROAD MAP
SCALE IN FEET
1 INCH = 1 MILE

PLAN REPRODUCTION WARNING
THIS PLAN IS UNLAWFUL TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE ENGINEER.
WARNING - REPRODUCTION MAY BE LEGAL IN SOME JURISDICTIONS AT THE SCALE INDICATED.

SHEET INDEX

- COVER SHEET
- GENERAL NOTES
- MASTER LEGEND
- BARRIERS, OBSTACLES
- PROFILES AND SECTIONS
- PROFILES AND SECTIONS
- PROFILES AND SECTIONS
- PROFILES AND SECTIONS
- PROFILES AND SECTIONS
- DETAILS
- DETAILS
- DETAILS
- DETAILS
- DETAILS
- RECONSTRUCTION PLAN

LOCATION COORDINATES

SITE LOCATIONS	WYDER (RIGHT-OF-WAY)		LIMITS	
	LATITUDE	LONGITUDE	NORTHING	EASTING
MAIN ACCESS ROAD CENTERLINE	40.216148	-80.636957	4451811.2195	530831.3007
CENTROID OF WELL PAD	40.216534	-80.633186	4451855.5804	531212.0185

L.O.D. AREAS

DESCRIPTION	ACRES	CUT (CY)	FILL (CY)	NET (CY)
MAIN ACCESS ROAD	2.84	2.778	5.199	-2.428
WELL PAD	6.17	24,800	17,644	7,156
TOPSOIL/STRIPPING FILE 1	1.26	0	4,818	-4,818
SPILL FILE 1	1.14	27,481	27,481	0
TOTAL	11.42	30,404	8,743	21,661
TOTAL EXCAVATION	30.404	30,404	0	0

LIMITS OF DISTURBANCE

OWNER	TYPICAL	DEEPEST	TOTAL ACRES	TYPE OF DISTURBANCE	ACREAGE
TILTONSVILLE	885 - 435	385 - 445	50.3	MAIN ACCESS ROAD	2.84
BROOKE COUNTY, WEST VIRGINIA				WELL PAD	6.17
				TOPSOIL/STRIPPING FILE 1	1.26
				SPILL FILE 1	1.14
				PARTICULAR TOTAL	11.42
				TOTAL	11.42

SWN QUICK ESTIMATE

ITEM DESCRIPTION	UNIT	QUANTITY
MOBILIZATION/DEMOLITION (limited to 10% of Total Base Bid)	L5	1
STABILIZED CONSTRUCTION LAYOUT	L5	1
CLEARING & GRUBBING	AC	9.58
EARTHWORK	C.Y.	27,661
TOPSOIL REMOVAL, STOCKPILE AND REDISTRIBUTION	S.Y.	21,949
GEOTECHNICAL EROSION CONTROL, SLOPE MAINTENING	S.Y.	5,359
SEEDING, LIMB & FERTILIZER	AC	4.70
12" FILTER SOCK	L.F.	2,689
18" FILTER SOCK	L.F.	181
24" FILTER SOCK	L.F.	225
EROSION CONTROL, WAITING LINED DITCH	L.F.	1,250
RIP-RAP LINED DITCH	L.F.	792
12-IN. CMP CURB	L.F.	97
OUTLET PROTECTION	EA	10
SOIL CEMENT STABILIZATION	S.Y.	21,949
AGGREGATE SURFACE COURSE, 1.12" MINUS (4-IN. AVERAGE DEPTH)	TON	1,700
HET STONE (4-IN. MINIMUM DEPTH)	TON	2,825
RASHTO HET STONE (5-IN. AVERAGE DEPTH)	C.Y.	3,170
TOE KEY EXCAVATION MATERIAL	C.Y.	5,230
TOE KEY AND BONDING OUTLET DRAINS TOTAL LENGTH - 4-IN	L.F.	1,260
PERFORATED SCH 40	L.F.	240
WELL PAD SLUMP-TYPE GCHOP INLET	EA	7
WELL PAD SLUMP-TYPE GCHOP INLET	EA	500
4-IN PVC BALL VALVE	EA	7
RIPPER PIPE AND T-HANDLE	EA	7
WELL PAD EARTH BEAM	L.F.	1,505
TOTAL		

COVER SHEET

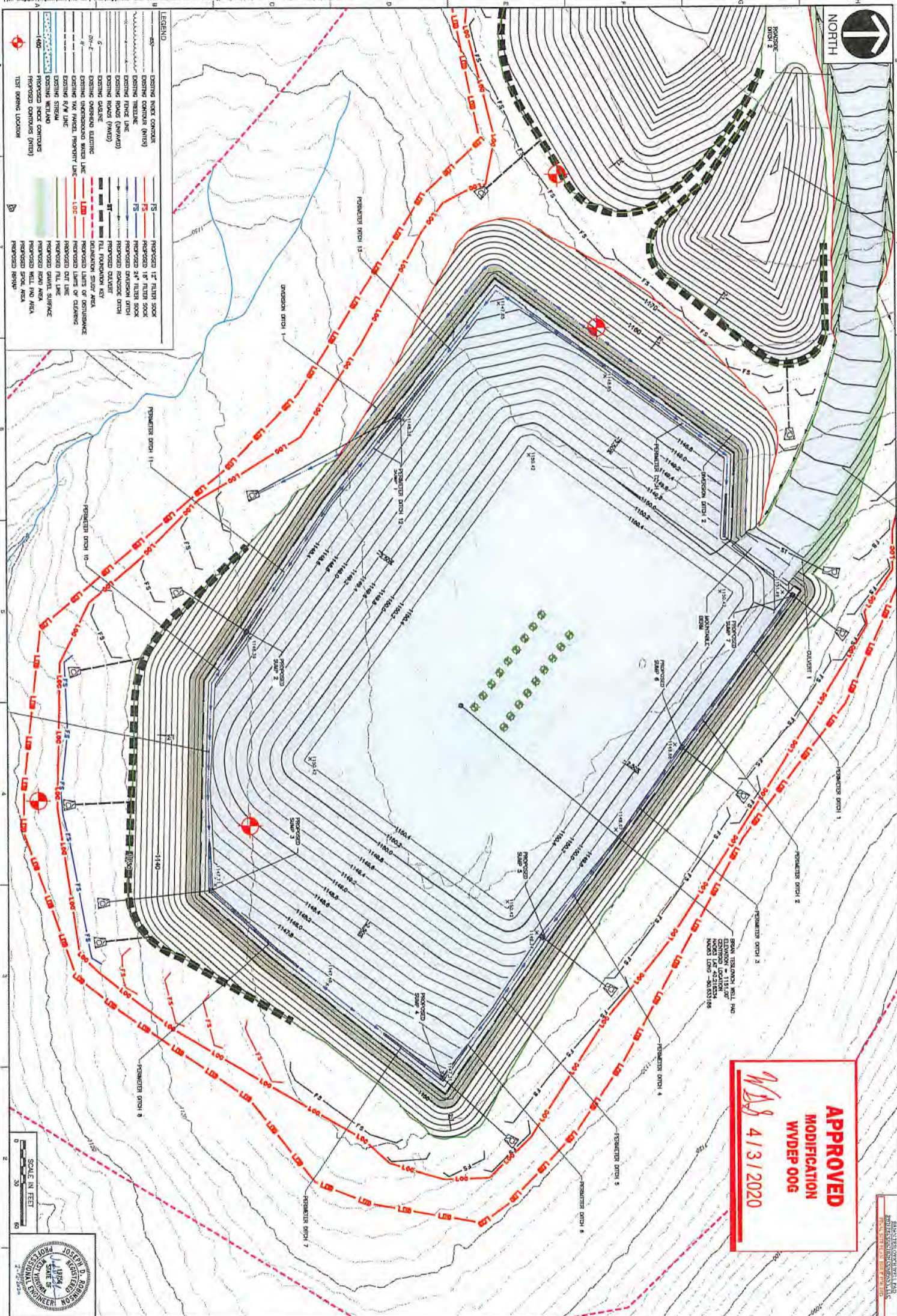
SWN PRODUCTION COMPANY, LLC
BRIAN TESLOVICH WELL PAD
BUFFALO DISTRICT
BROOKE COUNTY, WEST VIRGINIA

DATE: FEBRUARY 2020
DWG SCALE: AS SHOWN
PROJECT NO: 175-057
APPROVED BY: *[Signature]*

C&E
Civil & Environmental Consultants, Inc.
800 Marketplace Ave • Suite 200 • Bridgeport, WV 26330
Ph: 304.333.3119 • 855.488.5539 • Fax: 304.333.3327
www.cecinc.com

REVISION RECORD

NO.	DATE	DESCRIPTION



APPROVED
MODIFICATION
WVDEP 00G
WBS
4/3/2020

SCALE IN FEET
 0 20 40 60



C301
 SITE PLAN - WELL PAD
 FINISHED GRADE
 DATE: FEBRUARY 2020 DRAWN BY: DBS
 DWG SCALE: AS SHOWN CHECKED BY: TWA
 PROJECT NO: 178-057
 APPROVED BY: JDR

SWN PRODUCTION COMPANY, LLC
BRIAN TESLOVICH WELL PAD
BUFFALO DISTRICT
BROOKE COUNTY, WEST VIRGINIA

C&E
Civil & Environmental Consultants, Inc.
 600 Marketplace Ave • Suite 200 • Bridgeport, WV 26330
 Ph: 304.933.3119 • 855.488.5539 • Fax: 304.933.3327
 www.cedinc.com

REVISION RECORD	
NO.	DESCRIPTION