



west virginia department of environmental protection

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

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

Thursday, October 17, 2024
WELL WORK PERMIT
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC
POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit approval for MICHAEL SOUTHWORTH MSH 410H
47-051-02523-00-00

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: MICHAEL SOUTHWORTH MSH
Farm Name: BARRY A. & KIMBERLY S. I
U.S. WELL NUMBER: 47-051-02523-00-00
Horizontal 6A New Drill
Date Issued: 10/17/2024

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. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Also, 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.
11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

10/18/2024

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

1) Well Operator: SWN Production Co., LLC 494512924 051-Marshall 6-Sandhi 648-Valley Grove
Operator ID County District Quadrangle

2) Operator's Well Number: Michael Southworth MSH 410H Well Pad Name: Michael Southworth MSH Pad

3) Farm Name/Surface Owner: Barry A. & Kimberly S. Litman Public Road Access: Walnut Grove Road

4) Elevation, current ground: 1271' Elevation, proposed post-construction: 1271'

5) Well Type (a) Gas Oil Underground Storage

Other _____

(b) If Gas Shallow Deep

Horizontal

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Target Formation- Marcellus, Down-Dip well to the South, Target Top TVD- 6507', Target Base TVD- 6559', Anticipated Thickness- 52', Associated Pressure- 4263

8) Proposed Total Vertical Depth: 6539'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14763'

11) Proposed Horizontal Leg Length: 6090.59'

12) Approximate Fresh Water Strata Depths: 632'

13) Method to Determine Fresh Water Depths: Nearby watwe well (Edith Folmar)

14) Approximate Saltwater Depths: 1403' Salinity Profile on BW Edge pad

15) Approximate Coal Seam Depths: 734'

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

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

SEP 16 2024

(a) If Yes, provide Mine Info: Name: Ohio County Mine

WV Department of
Environmental Protection

Depth: 734'

Seam: Pittsburgh

Owner: Ohio County Coal Resources/ACNR Inc.

Strader Gower

9/10/2024

WW-6B
(04/15)

API NO. 47-051 **4705102523**
 OPERATOR WELL NO. Michael Southworth MSH 410H
 Well Pad Name: Michael Southworth MSH Pad

18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	136'	136' ✓	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	764'	764' ✓	879 sx/CTS ✓
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	2011'	2011' ✓	773 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	14763'	14763' ✓	Tail 2564sx/100' Inside Intermediate
Tubing							
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A ✓	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.330	1730	633	Class A	1.20/30% Excess
Coal	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.352	3520	1768	Class A	1.19/40% Excess
Production	5 1/2"	8 3/4"-8 1/2"	0.361	14360	10500	Class A	1.19/10-15% Excess
Tubing							
Liners							

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PACKERS

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

Strader Gower
9/10/2024

WW-6B
(10/14)

API NO. 47- 051 -
OPERATOR WELL NO. Michael Southworth MSH 410H
Well Pad Name: Michael Southworth MSH Pad

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

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

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

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

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 16.88

22) Area to be disturbed for well pad only, less access road (acres): 9.67

23) Describe centralizer placement for each casing string:

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

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

See Attachment ***

25) Proposed borehole conditioning procedures:

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

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*Note: Attach additional sheets as needed.

4705102523

CEMENT ADDITIVES						
INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTier PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER) <small>up to 3%</small>	XXXXXXXXXX	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	0110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION <small>up to 3%</small>	XXXXXXXXXX	INTEGRA SEAL	0600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
INTERMEDIATE	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	0047	FP 28L	XXXXXXXXXX	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	XXXXXXXXXX	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	CemNet	XXXXXXXXXX	XXXXXXXXXX	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	XXXXXXXXXX	XXXXXXXXXX	CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
	XXXXXXXXXX	55-IIV	0880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	DO47	FP 28L	XXXXXXXXXX	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	XXXXXXXXXX	XXXXXXXXXX	OX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
	XXXXXXXXXX	XXXXXXXXXX	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATICAMIDE POLYMER	PROPRIETARY
	0255	XXXXXXXXXX	XXXXXXXXXX	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
	XXXXXXXXXX	XXXXXXXXXX	CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
	XXXXXXXXXX	FL-66	0501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
	XXXXXXXXXX	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	XXXXXXXXXX	VISCOFIER/ANTI-SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
	D198	R-3	XXXXXXXXXX	CEMENT RETARDER	LIGNIN	8068-51-6
	SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1
	D065	XXXXXXXXXX	XXXXXXXXXX	DISPERSANT	SODIUM POLYNAPHTHALENE SULFONATE	8068-51-6
	D800	XXXXXXXXXX	XXXXXXXXXX	CEMENT RETARDER (Mid-Temperature)	SODIUM LIGNOSULFONATE	8061-51-6

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Southwestern Energy Company

Proposed Drilling Program

Well: MICHAEL SOUTHWORTH MSH 410H
 Field: PANHANDLE FIELD WET
 County: MARSHALL
 SHL (NAD83): 40.012789 Latitude -80.614784 Longitude
 BHL (NAD83): 39.988896 Latitude -80.591806 Longitude
 KB Elev: 1,298 ft MSL KB Height: 26 ft AGL

Drilling Rig: SDC 41
 Formation: Marcellus Shale
 State: WV
 GL Elev: 1,272 ft MSL



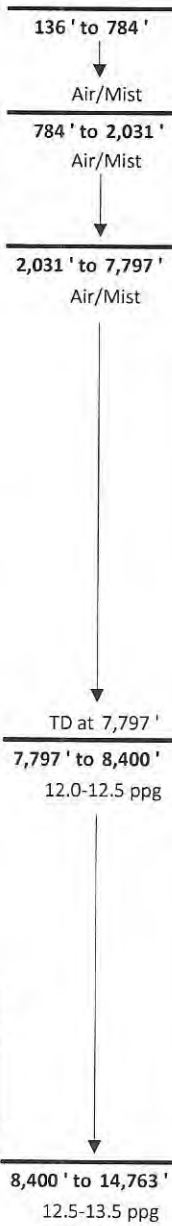
NO COAL VOID EXPECTED

PROD TOC @ 2,011' MD

TUBULAR DETAIL					
Casing String	Casing Size (in)	Weight (Min)	Grade (Min)	Planned Interval	
				From	To
Conductor	20	94.0 #	J-55	0'	136'
Surface/Coal	13.375	54.4 #	J-55	0'	764'
Intermediate	9.625	36.0 #	J-55	0'	2,011'
Production	5.5	20.0 #	P-110 HP	0'	14,763'

CEMENT DETAIL

	Sacks	Class	Density
Conductor	173	A	19.3
Surface	879	A	15.6
Intermediate	773	A	15.6
Production	2564	A	14.5-15.0



KOP at 7,797' MD

Freshwater Depth - 632' TVD
 Coal Depth - 734' TVD
 Saltwater Depth - 1,403' TVD
 TVD - 6,539'
 TMD - 14,763'

6,474' TVD Target Center

TD at 14,763' MD
 6,539' TVD

LP at 8,400' MD
 SHL Onondaga 6,495' TVD

Onondaga 6,560' TVD

Created by: Colin Kollker on 09/05/2024

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WW-9
(4/16)

4705102523

API Number 47 - 051

Operator's Well No. Michael Southworth MSH 410H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name SWN Production Co., LLC OP Code 494512924

Watershed (HUC 10) Grandstaff Run of Wheeling Creek Quadrangle Valley Grove

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

Will a pit be used? Yes No

If so, please describe anticipated pit waste: _____

Will a synthetic liner be used in the pit? Yes No If so, what ml.? _____

Proposed Disposal Method For Treated Pit Wastes:

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

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

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

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

Additives to be used in drilling medium? Attachment 3B

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

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

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

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

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

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

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

Company Official Signature Brittany Woody

Company Official (Typed Name) Brittany Woody

Company Official Title Staff Regulatory Specialist

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Subscribed and sworn before me this 27 day of March, 2024

Elizabeth Blankenship
Notary Public

My commission expires 6/23/2024



10/18/2024

SWN Production Co., LLC

Proposed Revegetation Treatment: Acres Disturbed 16.88 Prevegetation pH _____

Lime as determined by pH test min.2 Tons/acre or to correct to pH 9.67

Fertilizer type 10-20-20

Fertilizer amount 600/500 lbs/acre

Mulch Hay/Straw Tons/acre

Seed Mixtures

Temporary

Permanent

Seed Type lbs/acre

Seed Type lbs/acre

Attachment 3C

Attach:

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: STRADLER GOWEN *Stradler Gowen*

Comments: _____

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Title: Oil & Gas Inspector

Date: 4/17/2024

Field Reviewed? Yes No

MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

4705102523



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

API NO. 47-XXX-XXXXX
WELL NAME: Michael Southworth MSH 410H
Valley Grove QUAD
Sandhill DISTRICT
MARSHALL COUNTY, WEST VIRGINIA

Submitted by:

Name: Brittany Woody

Brittany Woody

Date: 3/25/2024

Title: Staff Regulatory Specialist

SWN Production Co., LLC

Approved by:

Name: STRADEN GOWLE

Date: 4/17/2024

Title: OIL & GAS INSPECTOR

Approved by:

Name: _____

Date: _____

Title: _____

SWN PRODUCTION COMPANY, LLC – CONFIDENTIAL

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OWNERNAME	OWNERSTREE	OWNERSTRE2	LEGALDESC	short_PID
GREGORY JOHN W ET UX	800 WALNUT GROVE RD	WHEELING, WV 26003	3.238 WHEELING CREEK & O&G	12-2-9.1

The intent of this map is for general reference only. Information on this map was created using the best available data at the time but is not guaranteed accurate.

<h2>Water Purveyor Map</h2> <p>Created By: skans Date Expired: 3/31/2024 9:42 AM Spatial Reference: Name: NAD 1983 BLM Zone 17N RUS</p>	<p>Water Sources</p> <p>Type</p> <ul style="list-style-type: none"> Spring Water Well Pond 1500 ft. Buffer 	<p>WELL PAD: Michael Southworth MSH</p>	<p>COUNTY: MARSHALL</p>
	<p>Scale: 1:6,033</p> <p>0 180 360 720 1,080 1,440 Feet</p> <p style="text-align: right; color: red; font-weight: bold;">10/18/2024</p>		

Latitude: 40°02'30"

SURFACE HOLE 8,806'

Latitude: 40°00'00" BOTTOM HOLE 2374'

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

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

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,247.784 EASTING: 532,875.792

LANDING POINT (LPL):

UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,375.648 EASTING: 534,065.014

BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,604.595 EASTING: 534,849.037

Table with columns: LINE, BEARING, DISTANCE, DESCRIPTION, MONUMENT. Contains data for lines L1, L2, L3, L4.

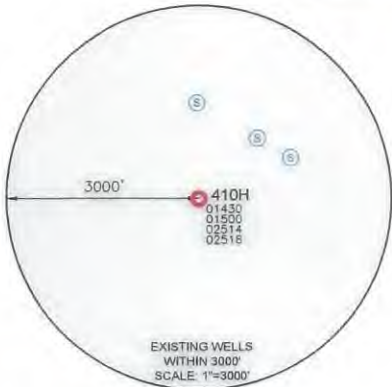
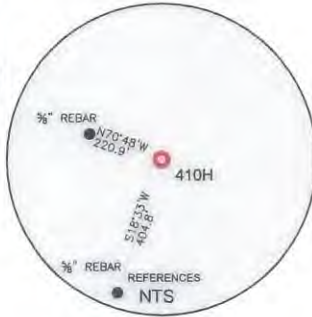
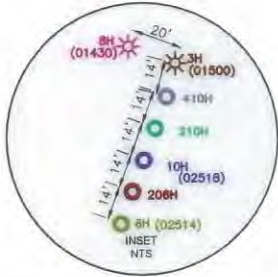


BOTTOM HOLE 4,045'

SURFACE HOLE 10,520'

Longitude: 80°35'00"

Longitude: 80°35'00"



WELL RESTRICTIONS

- 1. THERE ARE TWO 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. NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
4. NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 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.

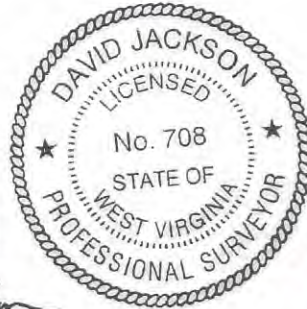
NOTES ON SURVEY

- 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.
4. 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. 708

David L Jackson



2000 0 2000

GRAPHIC SCALE IN FEET

COMPANY: SWN Production Company, LLC



(+) 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 SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

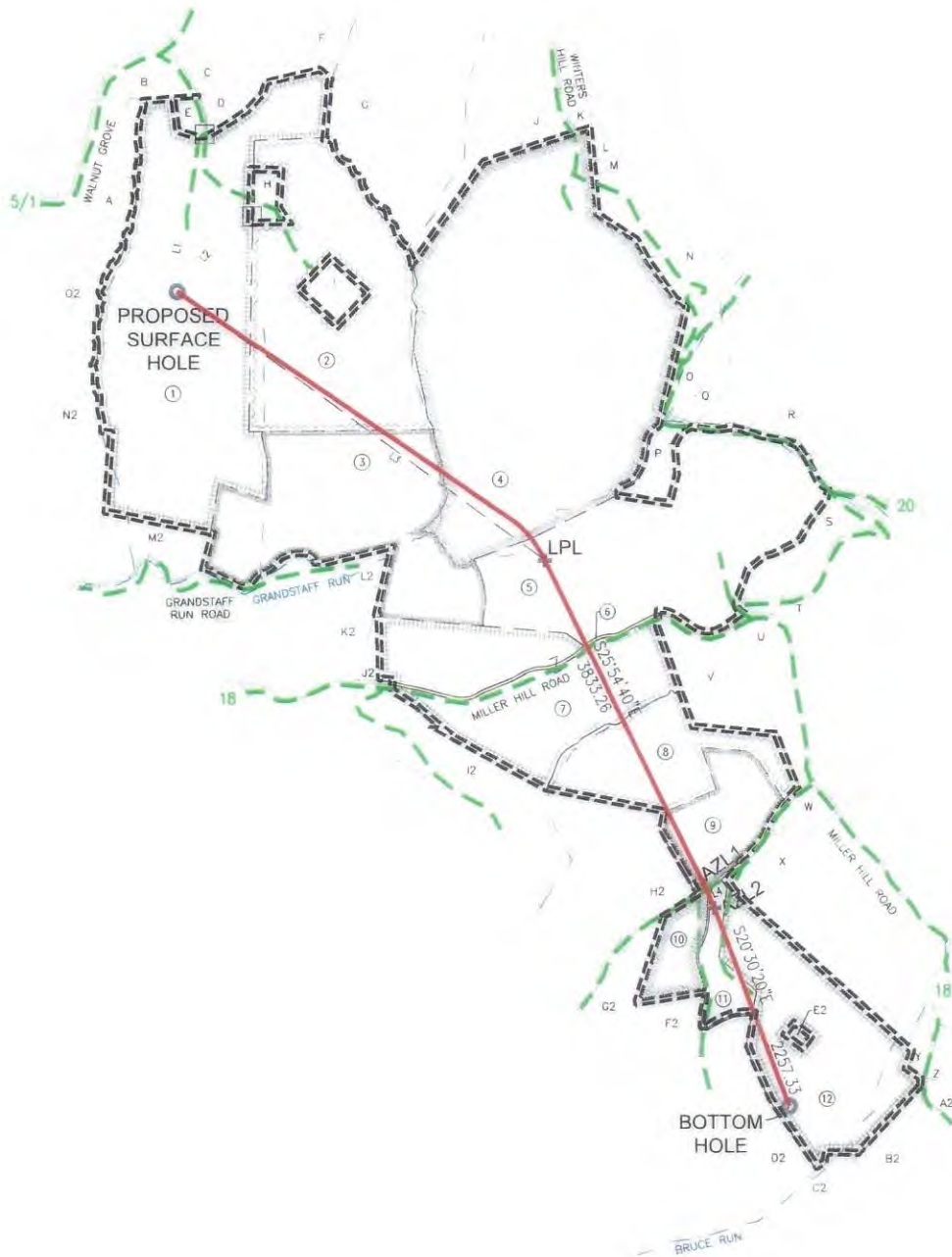
MICHAEL SOUTHWORTH MSH OPERATOR'S WELL #: 410H API WELL #: 47 STATE 051 COUNTY 02523 PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION X DEEP GAS X LIQUID INJECTION STORAGE SHALLOW X WATERSHED: GRANDSTAFF RUN OF WHEELING CREEK (HUC-10) DISTRICT: SANDHILL COUNTY: MARSHALL SURFACE OWNER: BARRY A. & KIMBERLY S. LITMAN OIL & GAS ROYALTY OWNER: BARRY A. & KIMBERLY S. LITMAN DRILL X DRILL DEEPER REDRILL FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION PERFORATE NEW FORMATION CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) 10/18/2024 TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,539 TVD 14,763 TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

Table with columns: LEGEND, REVISIONS, DATE. Includes symbols for proposed surface hole, existing wellhead, landing point, water well, spring, surveyed boundary, drilling unit, lease boundary, proposed path.

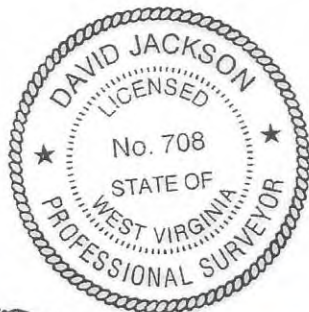
JACKSON SURVEYING
 INC.
 2413 EAST PIKE ST. # 112
 Clarksburg, WV 26302
 304-623-5851



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

P.S. 708

David L Jackson



47051010/18/2024

REVISIONS:	COMPANY:			DATE: 09-06-2024
	OPERATOR'S			
	WELL #:		410H	DRAWN BY: N. MANO
	DISTRICT:		SANDHILL	SCALE: N/A
	COUNTY:		MARSHALL	DRAWING NO:
STATE:		WV	WELL LOCATION PLAT 2	



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

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	EDGE WILLIAM F JR - TOD ET AL	12-2-16
B	LITMAN JAMES M & LUCY A	12-2-16.1
C	VELLENOWETH SCOTT U ET UX	12-2-1.1
D	LITMAN BARRY A	12-2-10.2
E	RADCLIFFE JOHN D & ANNA M	12-2-10.1
F	BLATT THERESA L	12-2-23
G	BAIRD FAMILY TRUST	12-2-2
H	GREGORY JOHN W ET UX	12-2-9.1
I	REINEKE RICHARD S	12-2-9.2
J	MCFARLAND DANIEL W & VICKI L	12-2-24
K	MCFARLAND DANIEL W JR	12-2-4.1
L	HUNTER RODNEY J	12-3-14
M	HUNTER MARILYN DARLENE	12-3-14.2
N	MCFARLAND BRIAN MATTHEW	12-3-12.1
O	GANTZER GREGORY	12-3-12
P	PARKER PETER	12-2-6
Q	GANTZER GREGORY	12-3-11.1
R	MCVICKER R G JR	12-3-11
S	TOTH JOHN J SR & ALICE J REVOCABLE TRUST	12-8-11
T	TOTH JOHN J SR & ALICE J REVOCABLE TRUST	12-8-12
U	GODDARD THERESA M	12-8-9
V	GODDARD THERESA M	12-8-8
W	SCHULTZ CHARLES E & CLAUDIA M - TOD	12-8-29.1
X	SCHULTZ CHARLES E & CLAUDIA M - TOD	12-8-29
Y	FONNER TRAVIS R & STACEY L	12-8-26
Z	STORCH LOIS M	12-8-25
A2	WILSON TERRY WAYNE	12-8-24
B2	STORCH JOSEPH WILLIAM ET UX	12-11-12
C2	STORCH JOSEPH WILLIAM ET UX	12-11-7
D2	WINTERS BEVERLY DIANE	12-11-6
E2	KENT PERRY L	12-8-30.1
F2	WINTERS BEVERLY DIANE	12-8-31.2
G2	TOLAND MARGARET	12-8-32
H2	TOLAND CARRIE M	12-8-33.1
I2	RICHEY RANDY ET UX	12-8-35
J2	TOTH JOHN J SR & ALICE - TRUST	12-8-4.1
K2	PORTER CARLA S	12-9-13
L2	G F P CORP	12-2-7
M2	G F P CORP	12-2-12
N2	WV BRIGHTMONT LLC	12-2-14
O2	EDGE WILLIAM F JR - TOD ET AL	12-2-15

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	LITMAN BARRY A & KIMBERLY S (S/R)	12-2-10
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	REINEKE RICHARD S (S)	12-2-9
3	TDL&G LLC (S)	12-2-8
4	TUBAUGH NORMA HUNTER ET AL (S)	12-2-5
5	TOTH JOHN J SR & ALICE J REVOCABLE TRUST (S)	12-8-1
6	W VA DEPT OF HIGHWAYS (S)	Miller Hill Rd
7	TOTH JOHN J SR & ALICE - TRUST (S)	12-8-4
8	CORNELL SALLY SEIBERT & ROBERT (S)	12-8-5
9	SCHULTZ CHARLES E & CLAUDIA M - TOD (S)	12-8-6
10	JOHNSON LONI M & JAMES A (S)	12-8-31.1
11	ALAMINSKI LUCINDA RUTH (S)	12-8-31.3
12	GRAY ZANDE C (S)	12-8-30

*Highlighted Parcels may be impacted during drilling.

4705106203 10/18/2024

REVISIONS:	COMPANY:		 	
	OPERATOR'S	MICHAEL SOUTHWORTH MSH		DATE: 09-06-2024
	WELL #:	410H		DRAWN BY: N. MANO
	DISTRICT:	COUNTY:	STATE:	SCALE: N/A
	SANDHILL	MARSHALL	WV	DRAWING NO:
				WELL LOCATION PLAT 3

**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"				

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

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

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

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

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

Well Operator: SWN Production Company, LLC
 By: Andrew M. Smith *Andrew M. Smith*
 Its: Landman

4705102523

EXHIBIT "A"
 Michael Southworth MSH 410H
 Marshall County, West Virginia

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

Tract #	Tax Parcel	Lease Number	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN	
1	12-2-10	728963/005	Salvation Army	Chesapeake Appalachia, L.L.C.	18.00%	723/10	0.00%	
			Chesapeake Appalachia, L.L.C.	Statoil USA Onshore Properties Inc.		27/166		
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110		
			Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424		
		725102/001	Robert B. Elliott, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	12.50%	676/179	0.00%
				Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		728963/001	Mable L. Riggle, a widow	Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	18.00%	722/602	0.00%
				Chesapeake Appalachia, L.L.C.	Statoil USA Onshore Properties Inc.		25/582	
				Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
				Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
		728963/003	Gregory Williams, single man	Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	18.00%	723/376	0.00%
				Chesapeake Appalachia, L.L.C.	Statoil USA Onshore Properties Inc.		27/166	
Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC				33/110			
Statoil USA Onshore Properties Inc.	SWN Production Company, LLC				33/424			
728963/002	Elm Grove United Methodist Church	Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	18.00%	722/606	0.00%		
		Chesapeake Appalachia, L.L.C.	Statoil USA Onshore Properties Inc.		27/166			
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110			

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EXHIBIT "A"
 Michael Southworth MSH 410H
 Marshall County, West Virginia

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Tract #	Tax Parcel	Lease Number	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
			Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
	728963/004		Dolores E. Williams, divorced and not remarried	Chesapeake Appalachia, L.L.C.	18.00%	723/382	0.00%
			Chesapeake Appalachia, L.L.C.	Statoil USA Onshore Properties Inc.		27/166	
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
			Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
2	12-2-9	724960/000	Richard S. Reineke and Charlene R. Reineke, his wife	Chesapeake Appalachia, L.L.C.	18.00%	676/341	0.00%
			Chesapeake Appalachia, L.L.C.	Statoilhydro USA Onshore Properties Inc.		21/565	
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
			Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
3	12-2-8	730186/000	John W. Gregory and Donna R. Gregory, his wife	Great Lakes Energy Partners, L.L.C.	12.50%	653/367	0.00%
			Great Lakes Energy Partners, L.L.C.	Range Resources - Appalachia, LLC		19/443	
			Range Resources - Appalachia, LLC	Chesapeake Appalachia, L.L.C.		23/368	
			Chesapeake Appalachia, L.L.C.	Statoil USA Onshore Properties Inc.		24/363	
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
			Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
4	12-2-5	724871/000	Norma Tubaugh, wife, Dawnisa Tubaugh, daughter, Clarence W. Tubaugh, son, and Gary W. Glessner, grandson	Chesapeake Appalachia, L.L.C.	12.50%	673/538	0.00%
			Chesapeake Appalachia, L.L.C.	Statoilhydro USA Onshore Properties Inc.		675/279	

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EXHIBIT "A"
 Michael Southworth MSH 410H
 Marshall County, West Virginia

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

Tract #	Tax Parcel	Lease Number	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
			Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
5	12-8-1	Pending	Sandhill Land Ventures, LP	SWN Production Company, LLC	18.00%	1178/52	0.00%
6	Miller Hill Road	Pending	West Virginia Department of Transportation, Division of Highways	SWN Production Company, LLC	20.00%	1187/293	0.00%
7	12-8-4	727778/000	John Joseph Toth, Sr., a/k/a John J. Toth Sr. and Alice Joann Toth, husband and wife	Chesapeake Appalachia, L.L.C.	18.75%	710/390	0.00%
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
8	12-8-5	732584/000	Sally Seibert Cornell and Robert Cornell, her husband	NPAR, LLC	18.75%	700/464	0.00%
			NPAR, LLC	Chesapeake Appalachia, L.L.C. and Statoil USA Onshore Properties Inc.		25/637	
			Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
			Statoil USA Onshore Properties Inc.	SWN Production Company, LLC		33/424	
9	12-8-6	Pending	Charles E. Schultz and Claudia M. Schultz, husband and wife	SWN Production Company, LLC	18.00%	1183/79	0.00%
10	12-8-31.1	745245/000	Shelley Klamut f/k/a Shelley Edge and f/k/a Shelly Edge and Nicholas P. Klamut, her husband	SWN Production Company, LLC	18.00%	875/469	0.00%
11	12-8-31.3	751394/000	Bounty Minerals, LLC	TH Exploration, LLC	18.00%	965/301	0.00%
			TH Exploration, LLC	American Petroleum Partners Operating, LLC		43/497	
			American Petroleum Partners Operating, LLC	High Road Operating, LLC		44/254	
			High Road Operating, LLC	SWN Production Company, LLC		48/263	

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4705102523

EXHIBIT "A"
 Michael Southworth MSH 410H
 Marshall County, West Virginia

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

Tract #	Tax Parcel	Lease Number	Lessor	Lessee	Royalty	Book/Page	% Interest Not Leased by SWN	
12	12-8-30	Pending	Zande Claude Gray	SWN Production Company, LLC	18.00%	1162/24	0.00%	
			751375/001	Howard Lynn Kernan, single	American Petroleum Partners Operating, LLC	19.00%	934/295	0.00%
				American Petroleum Partners Operating, LLC	High Road Operating, LLC		44/254	
				High Road Operating, LLC	SWN Production Company, LLC		48/263	
D2	12-11-6	750019/000	Beverly Diane Winters	American Petroleum Partners Operating, LLC	18.00%	910/27	0.00%	
				American Petroleum Partners Operating, LLC	SWN Production Company, LLC		48/381	

*Potentially Impacted Parcel - Parcel that may be impacted during drilling.

End of Exhibit "A"

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 WV Department of
 Environmental Protection

10/18/2024



4705102523

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

September 9, 2024

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

RE: SWN's proposed New Well: Michael Southworth MSH 410H in Marshall County, West Virginia, Drilling under Walnut Grove Road, Miller Hill Road, Pappy Lane, and Haven Lane.

Dear Mr. Brewer:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under Walnut Grove Road, Miller Hill Road, Pappy Lane, and Haven Lane. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Thank you.

Sincerely,

Andrew M. Smith, RPL
Landman
SWN Production Company, LLC

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WV Department of
Environmental Protection

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

10/18/2024

WW-PN
(11-18-2015)

**Horizontal Natural Gas Well Work Permit
Application Notice By Publication**

Notice is hereby given:

Pursuant to West Virginia Code 22-6A-10(e) prior to filing an application for a permit for a horizontal well the applicant shall publish in the county in which the well is located or is proposed to be located a Class II legal advertisement.

Paper: Moundsville Daily Echo

Public Notice Date: March 24, 2024 & April 4, 2024

The following applicant intends to apply for a horizontal natural well work permit which disturbs three acres or more of surface excluding pipelines, gathering lines and roads or utilizes more than two hundred ten thousand gallons of water in any thirty day period.

Applicant: SWN Production Company, LLC **Well Number:** Michael Southworth MSH 410H

Address: 1300 Fort Pierpont Dr., Suite 201
Morgantown, WV 26508

Business Conducted: Natural gas production.

Location –

State: West Virginia County: Marshall
District: Sandhill Quadrangle: Valley Grove
UTM Coordinate NAD83 Northing: 4,429,248
UTM coordinate NAD83 Easting: 532,876
Watershed: Grandstaff Run of Wheeling Creek

Coordinate Conversion:

To convert the coordinates above into longitude and latitude, visit: http://tagis.dep.wv.gov/convert/llutm_conus.php

Electronic notification:

To receive an email when applications have been received or issued by the Office of Oil and Gas, visit <http://www.dep.wv.gov/insidedep/Pages/DEPMailingLists.aspx> to sign up.

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SEP 16 2024

Reviewing Applications:

Copies of the proposed permit application may be reviewed at the WV Department of Environmental Protection headquarters, located at 601 57th Street, SE Charleston, WV 25304 (304-926-0450). Full copies or scans of the proposed permit application will cost \$15, whether mailed or obtained at DEP headquarters. Copies may be requested by calling the office or by sending an email to DEP.comments@wv.gov.

Submitting Comments:

Comments may be submitted online at <https://apps.dep.wv.gov/oog/comments/comments.cfm>, or by letter to Permit Review, Office of Oil and Gas, 601 57th Street, SE Charleston, WV 25304. Please reference the county, well number, and operator when using this option.

Regardless of format for comment submissions, they must be received no later than thirty days after the permit application is received by the Office of Oil and Gas.

For information related to horizontal drilling visit: www.dep.wv.gov/oil-and-gas/pages/default.aspx

10/18/2024

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

Date of Notice Certification: 9/12

API No. 47- 051 - _____
 Operator's Well No. Michael Southworth MSH 410H
 Well Pad Name: Michael Southworth MSH Pad

Notice has been given:

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>532,875.792</u>
County:	<u>051-Marshall</u>		Northing:	<u>4,429,247.784</u>
District:	<u>Sandhill</u>	Public Road Access:	<u>Walnut Grove Road</u>	
Quadrangle:	<u>Valley Grove</u>	Generally used farm name:	<u>Michael Southworth MSH</u>	
Watershed:	<u>Grandstaff Run of Wheeling Creek</u>			

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

<p>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:</p> <p>*PLEASE CHECK ALL THAT APPLY</p> <p><input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED</p> <p><input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED</p> <p><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</p> <p style="padding-left: 100px;"><input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)</p> <p><input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION</p> <p><input checked="" type="checkbox"/> 5. PUBLIC NOTICE</p> <p><input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION</p>	<p>OOG OFFICE USE ONLY</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p> <p><input type="checkbox"/> RECEIVED</p>
<p>RECEIVED Office of Oil and Gas SEP 16 2024</p> <p>WV Department of Environmental Protection</p>	

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.

10/18/2024

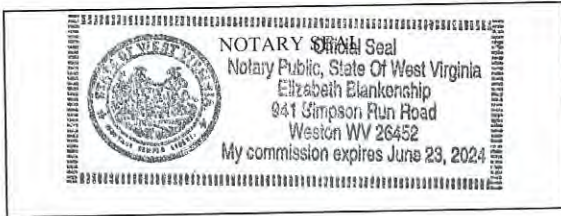
Certification of Notice is hereby given:

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

Well Operator: SWN Production Co., LLC
By: Brittany Woody
Its: Staff Regulatory Specialist
Telephone: 304-884-1610

Brittany Woody

Address: 1300 Fort Pierpont Dr., Suite 201
Morgantown, WV 26508
Facsimile: 304-884-1690
Email: Brittany_Woody@swn.com



Subscribed and sworn before me this 27 day of March 2024.
Elizabeth Blankenship Notary Public
My Commission Expires 6/23/2024

Oil and Gas Privacy Notice:

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

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WW-6A
(9-13)

API NO. 47- 051 -
OPERATOR WELL NO. Michael Southworth MSH 410H
Well Pad Name: Michael Southworth MSH Pad

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

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

Date of Notice: 9/12 **Date Permit Application Filed:** 9/12

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: Barry A. Litman & Kimberly S. Litman
Address: 202 Elliots Lane
Wheeling, WV 26003
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: ACNR Inc
Address: 46226 National Road
St. Clairsville, OH 43950

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

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Office of Oil and Gas
SEP 16 2024
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.

Well Location Restrictions

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

WW-6A
(8-13)

API NO. 47-051 -
OPERATOR WELL NO. Michael Southworth MSH-410H
Well Pad Name: Michael Southworth MSH Pad

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

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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.**

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.

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10/18/2024

WW-6A
(8-13)

API NO. 47-051 **4705102523**
OPERATOR WELL NO. Michael Southworth MSH 410H
Well Pad Name: Michael Southworth MSH Pad

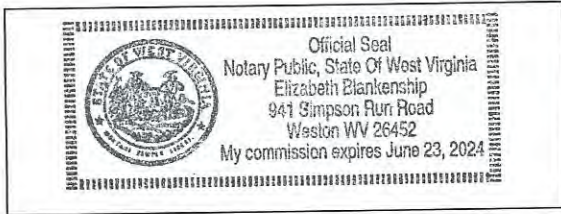
Notice is hereby given by:

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 27 day of March 2024.
Elizabeth Blankenship Notary Public
My Commission Expires 6/23/2024

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WV Department of
Environmental Protection

10/18/2024

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

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

Date of Notice: 3/1/2024 **Date of Planned Entry:** 3/8/2024

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

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

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

Notice is hereby provided to:

SURFACE OWNER(s)

Name: James & Carol Litman
Address: 1224 Walnut Grove Road
Wheeling, WV 26003

Name: _____
Address: _____

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: ACNR Inc
Address: 46226 National Road
St. Clairsville, OH 43950

MINERAL OWNER(s)

Name: Robert B. Elliott
Address: 1081 West Alexander Road
Valley Grove, WV 26060

*please attach additional forms if necessary

Notice is hereby given:

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

State: West Virginia
County: Marshall
District: Sandhill
Quadrangle: Valley Grove

Approx. Latitude & Longitude: 40.019920, -80.615190
Public Road Access: Walnut Grove
Watershed: Grandstaff Run of Wheeling Creek
Generally used farm name: Michael Southworth MSH

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 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

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Environmental Protection

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.

10/18/2024

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

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

Date of Notice: 3/1/2024 **Date of Planned Entry:** 3/8/2024

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

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

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

Notice is hereby provided to:

SURFACE OWNER(s)

Name: _____
Address: _____

Name: _____
Address: _____

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: _____
Address: _____

MINERAL OWNER(s)

Name: Mable L. Riggle
Address: 1284 Dry Ridge Road
Cameron, WV 26033

*please attach additional forms if necessary

Notice is hereby given:

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

State: West Virginia
County: Marshall
District: Sandhill
Quadrangle: Valley Grove

Approx. Latitude & Longitude: 40.019920, -80.615190
Public Road Access: Walnut Grove
Watershed: Grandstaff Run of Wheeling Creek
Generally used farm name: Michael Southworth MSH

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 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

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

10/18/2024

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

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

- PERSONAL SERVICE
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Notice is hereby provided to:

SURFACE OWNER(s)
 Name: _____
 Address: _____

 Name: _____
 Address: _____

 Name: _____
 Address: _____

COAL OWNER OR LESSEE
 Name: _____
 Address: _____

MINERAL OWNER(s)
 Name: Pikewood Energy Corporation
 Address: 4000 Combs Farm Drive
Morgantown WV 26508
 *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>40.019920, -80.615190</u>
County: <u>Marshall</u>	Public Road Access: <u>Walnut Grove</u>
District: <u>Sandhill</u>	Watershed: <u>Grandstaff Run of Wheeling Creek</u>
Quadrangle: <u>Valley Grove</u>	Generally used farm name: <u>Michael Southworth MSH</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.

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

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

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10/18/2024

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

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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: _____
Address: _____

Name: _____
Address: _____

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: _____
Address: _____

MINERAL OWNER(s)

Name: Gregory Williams
Address: 11317 Simpson Ave
Milford, DE 19963

*please attach additional forms if necessary

Notice is hereby given:

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

State: West Virginia
County: Marshall
District: Sandhill
Quadrangle: Valley Grove

Approx. Latitude & Longitude: 40.019920, -80.615190
Public Road Access: Walnut Grove
Watershed: Grandstaff Run of Wheeling Creek
Generally used farm name: Michael Southworth MSH

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 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

RECEIVED
Office of Oil and Gas
SEP 16 2024
WV Department of
Environmental Protection

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.

10/18/2024

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

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

Date of Notice: 3/1/2024 **Date of Planned Entry:** 3/8/2024

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

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

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

Notice is hereby provided to:

SURFACE OWNER(s)

Name: _____
Address: _____

Name: _____
Address: _____

Name: _____
Address: _____

COAL OWNER OR LESSEE

Name: _____
Address: _____

MINERAL OWNER(s)

Name: Elm Grove United Methodist Church
Address: 125 Kruger St
Wheeling WV 26003

*please attach additional forms if necessary

Notice is hereby given:

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

State: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>40.019920, -80.615190</u>
County: <u>Marshall</u>	Public Road Access: <u>Walnut Grove</u>
District: <u>Sandhill</u>	Watershed: <u>Grandstaff Run of Wheeling Creek</u>
Quadrangle: <u>Valley Grove</u>	Generally used farm name: <u>Michael Southworth MSH</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

RECEIVED
Office of Oil and Gas

SEP 16 2024

WV Department of
Environmental Protection

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.

10/18/2024

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: 03/26/2024 **Date Permit Application Filed:** 09/12/2024

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: ACNR Inc. Attn: Steve Bair
Address: 46226 National Road
St. Clairsville, Ohio 43950

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:	<u>WV</u>	UTM NAD 83	Easting:	<u>532,875.792</u>
County:	<u>Marshall</u>		Northing:	<u>4,429,247.784</u>
District:	<u>Sandhill</u>	Public Road Access:		<u>Walnut Grove</u>
Quadrangle:	<u>Valley Grove, WV</u>	Generally used farm name:		<u>Michael Southworth</u>
Watershed:	<u>Grandstaff Run of Wheeling Creek</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: 570-575-6203
Email: bob_laine@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.

10/18/2024



4705102523

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

Office of the District Engineer/Manager

District Four

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

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

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

May 3, 2024

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

Subject: DOH Permit for the Michael Southworth Well Pad, Marshall County
Michael Southworth MSH 410H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2011-0026 which has been issued to SWN Production Company, LLC for access to the State Road for a well site located off Marshall County Route 5/1 SLS MP 0.193.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a STATEWIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated March 6, 2023. This letter is valid for permitting purposes for one year from the date of this letter.

Very Truly Yours,

Lacy D. Pratt
Central Office O&G Coordinator

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

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Office of Oil and Gas
SEP 16 2024
WV Department of
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Attachment VI Frac Additives

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

As of 7/5/2023

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SEP 16 2024

WV Department of
Environmental Protection

10/18/2024

OPERATOR: SWN Production Co., LLC

WELL NO: Michael Southworth MSH 410H

PAD NAME: Michael Southworth MSH Pad

REVIEWED BY: _____

SIGNATURE: *Brittany Woody*

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

Well Restrictions

**** Pad Built 2/11/2011**

At Least 100 Feet from Pad and LOD (including any E&S Control Feature) to any Perennial Stream, Lake, Pond, Reservoir or Wetland; OR

DEP Waiver and Permit Conditions

At Least 300 Feet from Pad and LOD (including any E&S Control Feature) to any Naturally Producing Trout Stream; OR

DEP Waiver and Permit Conditions

At Least 1000 Feet from Pad and LOD (including any E&S Control Feature) to any Groundwater Intake or Public Water Supply; OR

DEP Waiver and Permit Conditions

At Least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

At Least 625 Feet from an Occupied Dwelling Structure to Center of the Pad; OR

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad; OR

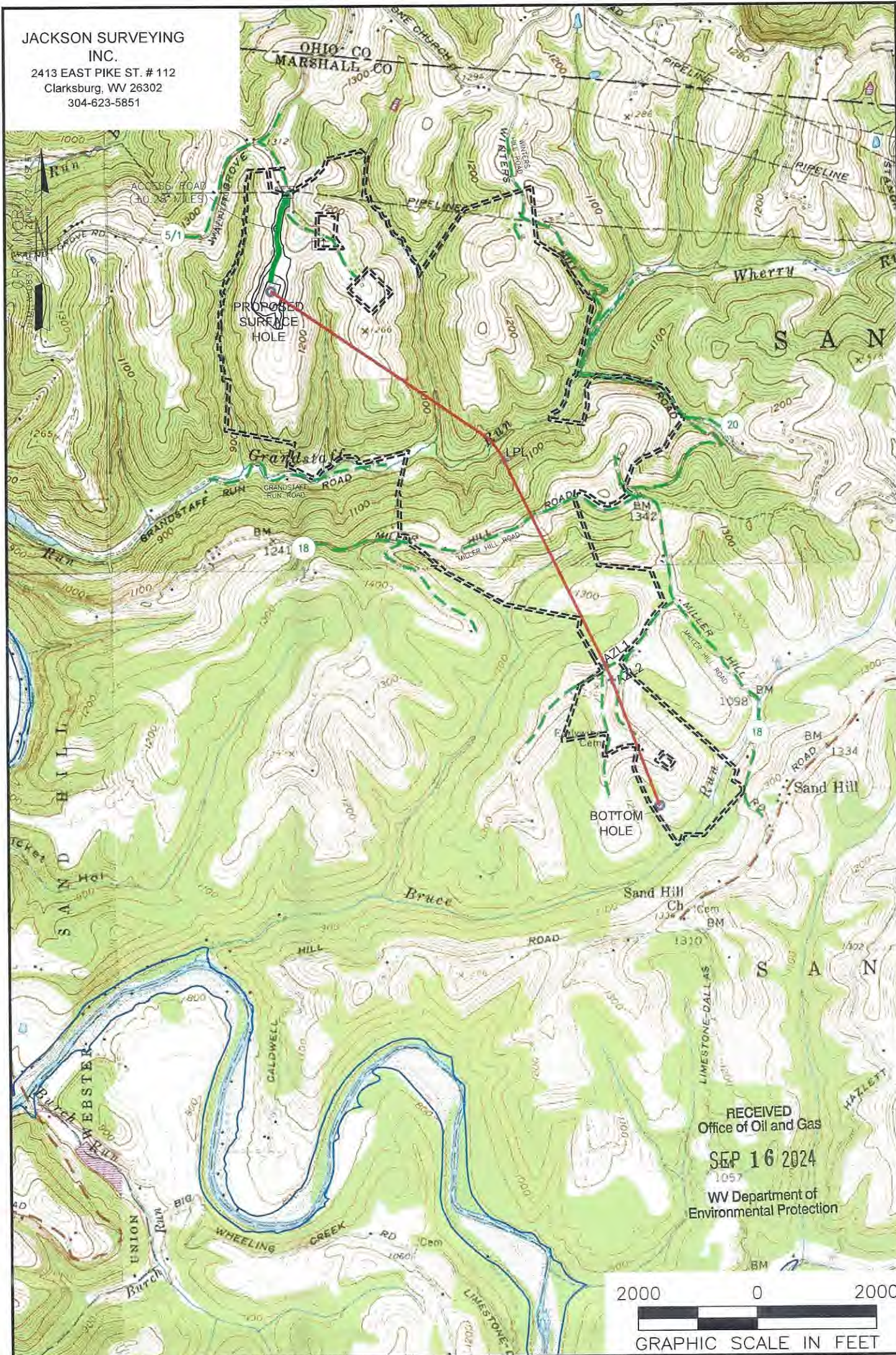
Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

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SEP 16 2024
WV Department of
Environmental Protection

10/18/2024

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



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SEP 16 2024
1057
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
- LANDING POINT LOCATION
- FLOOD PLAIN
- PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH

10/18/2024

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: MICHAEL SOUTHWORTH MSH	WELL # 410H	SERIAL #
ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 MORGANTOWN, WV 26508	COUNTY - CODE MARSHALL - 051	DISTRICT; SANDHILL	
SURFACE OWNER: BARRY A. & KIMBERLY S. LITMAN	USGS 7 1/2 QUADRANGLE MAP NAME WILEYVILLE, WV		

SHEET INDEX

1	COVER
2	GENERAL NOTES
3	EVACUATION PLAN WITHOUT USGS MAP
4	EVACUATION PLAN WITH USGS MAP
5	EXISTING CONDITIONS
6	GRADING & ESC PLAN
7	WELL PAD BASELINE PROFILE
8-26	WELL PAD CROSS SECTIONS
27-32	DETAILS

SOUTHWESTERN PRODUCTION COMPANY, LLC

CONSTRUCTION PLANS FOR

MICHAEL SOUTHWORTH PAD EXPANSION

MARSHALL COUNTY, WV

JUNE 2024

911 EMERGENCY ADDRESS:
MICHAEL SOUTHWORTH WELL PAD
235 ELLIOTTS LANE
WHEELING, WV 26003

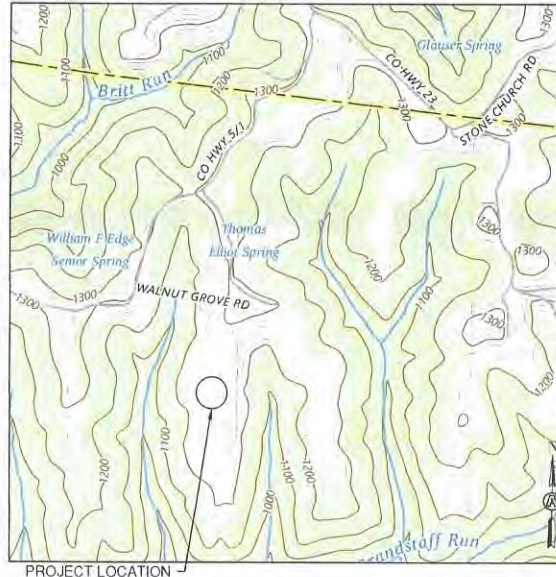
LOCAL EMERGENCY SERVICES	
NAME	NUMBER
AMBULANCE	911
HOSPITAL EMERGENCY ROOM	(304) 243-3000
FIRE DEPARTMENT	911
POLICE DEPARTMENT	911
POISON CONTROL CENTER	(800) 222-1222



LOCATION MAP NOT TO SCALE

6		
5		
4		
3		
2		
1		
NO.	DATE	DESCRIPTION

PREPARED FOR:



1000 0 1000 2000
VALLEY GROVE QUADRANGLE REFERENCE MAP

LOCATION COORDINATES		
ACCESS ROAD ENTRANCE		
LATITUDE: 40.0171023° N	LONGITUDE: -80.513672° W	(DECIMAL DEGREES)
LATITUDE: 40°01'11.22" N	LONGITUDE: 80°36'39.21" W	(DEGREES*MINUTES*SECONDS")
NORTHING: 554491.0042	EASTING: 1655582.7922	(WV SP-83, FEET)
WELL PAD CENTER		
LATITUDE: 40.012620° N	LONGITUDE: -80.514601° W	(DECIMAL DEGREES)
LATITUDE: 40°00'45.55" N	LONGITUDE: 80°36'53.39" W	(DEGREES*MINUTES*SECONDS")
NORTHING: 168520.5352	EASTING: 504826.2903	(WV SP-83, METERS)
NORTHING: 532872.74	EASTING: 4429626.32	(UTM ZONE 17, METERS)

LIMITS OF DISTURBANCE BY PROPERTY:		
PROPERTY#	PROPERTY OWNER	ACRES DISTURBED
25-12-2-10	JAMES L. & CAROLE J. LITMAN	15.38 AC

TOTAL DISTURBED AREA: 15.38 ACRES
EXISTING MICHAEL SOUTHWORTH PAD: 15.38 ACRES

EARTH WORK SUMMARY	
WELL PAD EXPANSION EARTHWORK	
TOTAL CUT:	7,430 - CY
TOTAL FILL:	5,030 - CY
NET (WASTE):	2,400 - CY

- DRIVING DIRECTIONS**
- BEGIN AT BETHLEHEM STAGING YARD ON E. BETHLEHEM BLVD. (LAT: 40.039375, LONG -80.679543)
 - TURN RIGHT ON E. BETHLEHEM BLVD. TOWARD JUNIOR AVE., 1.2 MILES.
 - TURN RIGHT ONTO KRUGER ST., 0.1 MILES
 - TURN LEFT ONTO LOUNEZ AVE., 0.1 MILES
 - CONTINUE ONTO STONE CHURCH RD., 3.2 MILES
 - TURN RIGHT ONTO WALNUT GROVE RD., 0.9 MILES
 - TURN LEFT ONTO ELLIOTT LANE, 0.2 MILES
 - TURN RIGHT TO ENTER MICHAEL SOUTHWORTH SITE

PROJECT COORDINATOR:
JOHN DUBOWSKI
CONSTRUCTION SUPERINTENDENT
SOUTHWESTERN PRODUCTION COMPANY, LLC
1350 FORT PIERPONT DRIVE, SUITE 201
MORGANTOWN, WV 26508
PHONE: (304) 884-1671
EMAIL: JOHN_DUBOWSKI@SWN.COM

PROJECT MANAGER:
ERIC SHORT
ASCENT CONSULTING & ENGINEERING
1700 ANMOORE ROAD
BRIDGEPORT, WV 26330
PHONE: (304) 933-3463
EMAIL: ESHORT@ASCENTWV.COM

TOPOGRAPHIC INFORMATION:
HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE
NAD83 WEST VIRGINIA STATE PLANES
NORTH ZONE, IN U.S. SURVEY FEET

ENGINEER:
MICHAEL NESTOR, PE
ASCENT CONSULTING & ENGINEERING
1700 ANMOORE ROAD
BRIDGEPORT, WV 26330
PHONE: (304) 933-3463
EMAIL: MNESTOR@ASCENTWV.COM

Trader Gover
6/10/2024



MISS UTILITY OF WEST VIRGINIA
1-800-245-8111
WEST VIRGINIA STATE LAW
(SECTION XIV: CHAPTER 24-C)
REQUIRES THAT YOU CALL TWO
BUSINESS DAYS BEFORE YOU DIG IN
THE STATE OF WEST VIRGINIA.
IT'S THE LAW!!!

PREPARED BY:

1700 ANMOORE ROAD
BRIDGEPORT, WV 26330
WWW.ASCENTCONSULTINGENGINEERS.COM
(304) 933-3463

PROJECT NUMBER:	1180	DRAWN:	GRS
DATE:	06-7-24	DESIGN:	GRS
SCALE:	AS SHOWN	CHECKED:	MRN

CONSTRUCTION PLANS FOR
SWN PRODUCTION COMPANY, LLC
MICHAEL SOUTHWORTH WELL PAD
MARSHALL COUNTY, WV

TITLE:	COVER SHEET		
PLAN STATUS:	PERMITTING	SHEET No.	1

CAD FILE: s:_Project 0-1100_1180_SWN_MichaelSouthworthWellPadExpansion\1180-Cover_Sheet.dwg PLOT DATE/TIME: 6/7/2024 1:05 PM

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 Office of Oil and Gas
SEP 16 2024
 WV Department of
 Environmental Protection

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