



west virginia department of environmental protection

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

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

Friday, October 13, 2023
WELL WORK PERMIT
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC
POST OFFICE BOX 12359

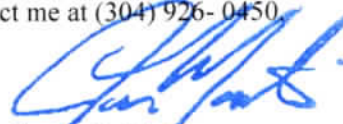
SPRING, TX 773914954

Re: Permit approval for Betty Schafer MSH 205H
47-051-02507-00-00

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: Betty Schafer MSH 205H
Farm Name: Roy A Schafer Jr & Edward J S
U.S. WELL NUMBER: 47-051-02507-00-00
Horizontal 6A: New Drill
Date Issued: 10/13/2023

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.

10/13/2023

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

1) Well Operator: SWN Production Co., LLC 494512924 051-Marshall 6-Sand 486-Moundsville
Operator ID County District Quadrangle

2) Operator's Well Number: Betty Schafer MSH 205H Well Pad Name: Betty Schafer MSH

3) Farm Name/Surface Owner: Roy A. Schafer & Edward J. Schafer Public Road Access: Big Wheeling Creek

4) Elevation, current ground: 848.4' Elevation, proposed post-construction: 848.4'

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, Up-Dip well to the North, Target Top TVD- 5982', Target Base TVD- 6034', Anticipated Thickness- 52', Associated Pressure- 3922

8) Proposed Total Vertical Depth: 6014'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 21997'

11) Proposed Horizontal Leg Length: 14809.88'

12) Approximate Fresh Water Strata Depths: 281'

13) Method to Determine Fresh Water Depths: Salinity Calculations from Betty Schafer MSH 210H API 47-051-01777

14) Approximate Saltwater Depths: 803' Salinity Profile

15) Approximate Coal Seam Depths: 352'

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

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

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(a) If Yes, provide Mine Info: Name: Ohio County Mine
Depth: 352'
Seam: Pittsburgh
Owner: American Consolidated Natural Resources

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Steve Gorman
7/20/2023

WW-6B
(04/15)

4705102507
 API NO. 47-051
 OPERATOR WELL NO. Betty Schafer MSH 205H
 Well Pad Name: Betty Schafer MSH

18)

CASING AND TUBING PROGRAM

| TYPE | Size (in) | New or Used | Grade | Weight per ft. (lb/ft) | FOOTAGE: For Drilling (ft) | INTERVALS: Left in Well (ft) | CEMENT: Fill-up (Cu. Ft.)/CTS |
|-------------------|------------|-------------|-------------|------------------------|----------------------------|------------------------------|--|
| Conductor | 20" | New | J-55 | 94# | 136' | 136' | CTS |
| Fresh Water | 13 3/8" | New | J-55 | 54.4# | 385' | 385' | 437 sx/CTS |
| Coal Intermediate | See 9 5/8" | Surface New | Casing J-55 | 36# | 1710' | 1710' | 690 sx/CTS |
| Production | 5 1/2" | New | P-110 HP | 20# | 21997' | 21997' | Tail 4 1/16x1 1/2" Inside Intermediate |
| Tubing | | | | | | | |
| Liners | | | | | | | |

OK
10/13/23

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

PACKERS




| | | | | |
|-------------|--|--|--|--|
| Kind: | | | | RECEIVED Office of Oil and Gas |
| Sizes: | | | | OCT 13 2023 |
| Depths Set: | | | | WV Department of Environmental Protection |

4705102507



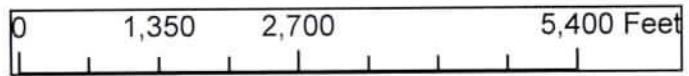
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

-  1000ft Radius
-  BettySchaferMSHPad1
-  Coal Mining



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10/13/2023

WW-6B
(10/14)

4705102507
API NO. 47-051
OPERATOR WELL NO. Betty Schafer MSH 205H
Well Pad Name: Betty Schafer MSH

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): 7.82

22) Area to be disturbed for well pad only, less access road (acres): 2.99

23) Describe centralizer placement for each casing string:

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

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

See Attachment ***

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25) Proposed borehole conditioning procedures:

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

*Note: Attach additional sheets as needed.

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| CEMENT ADDITIVES | | | | | | |
|-------------------------|------------------------------|-----------------------|--------------------------------------|--|---|-------------|
| INTERVAL | SCHLUMBERGER PRODUCT NAME | BJ PRODUCT NAME | NEXTier PRODUCT NAME | PRODUCT USE | CHEMICAL NAME | CAS-Number |
| SURFACE (FRESHWATER) | XXXXXXXXXX | INTEGRA SEAL | CJ600 | LOST CIRC MATERIAL | CELLOPHANE FLAKES | 9005-81-6 |
| | S001 | A-7P | 0110 | ACCELERATOR | CALCIUM CHLORIDE | 10043-52-4 |
| COAL PROTECTION | XXXXXXXXXX | INTEGRA SEAL | 0600 | LOST CIRC MATERIAL | CELLOPHANE FLAKES | 9005-81-6 |
| | S001 | A-7P | CJ80 | 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 | CJM | ACCELERATOR | SODIUM CHLORIDE | 7440-23-5 |
| | XXXXXXXXXX | 55-IW | 0880 | SURFACTANT | NONIONIC SURFACTANT | 8540-99-4 |
| | D047 | 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 | VISCOSI FIER/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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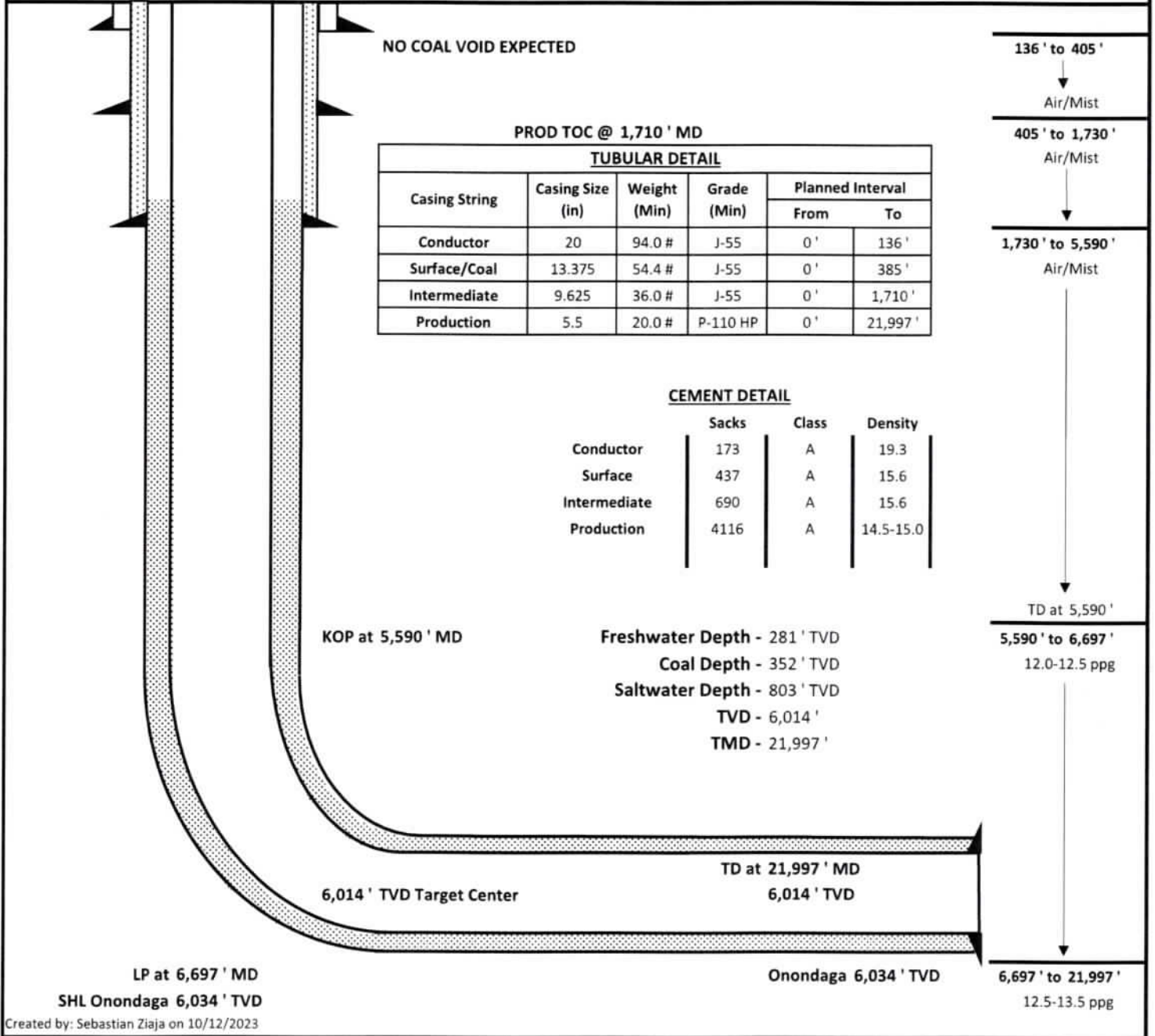
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10/13/2023

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| | |
|------------------------------------|----------------------------------|
| Southwestern Energy Company | Proposed Drilling Program |
|------------------------------------|----------------------------------|

| | |
|--|---|
| Well: BETTY SCHAFER MSH 205 Field: PANHANDLE FIELD WET County: MARSHALL SHL (NAD83): 39.990918 Latitude -80.635533 Longitude BHL (NAD83): 40.030969 Latitude -80.652501 Longitude KB Elev: 874 ft MSL | Re-entry Rig: SDC 40 Prospect: Marcellus Shale State: WV GL Elev: 848 ft MSL |
|--|---|



Created by: Sebastian Ziaja on 10/12/2023

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10/13/2023



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

August 25, 2023

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

RE: Proposed New Well: Betty Schafer MSH 205H

Dear Mr. Brewer:

SWN has reviewed the area of the above mentioned well and discovered no shallow wells within 500' of the lateral. This well is situated on the Schafer's property, in Sand Hill District, Marshall County, West Virginia.

If you have any questions or desire additional information, please me at 304-884-1613.

Thank you.

Sincerely,

Brittany Woody
Staff Regulatory Specialist
Southwestern Energy Production Company, LLC

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WW-9
(4/16)

API Number 47 - 051 - _____
Operator's Well No. Betty Schafer MSH 205H

**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) Wheeling Creek Quadrangle Moundsville

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 SCRM from KOP to TD

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

Additives to be used in drilling medium? Attachment 3B

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

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

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

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

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

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

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

Company Official Signature Brittany Woody

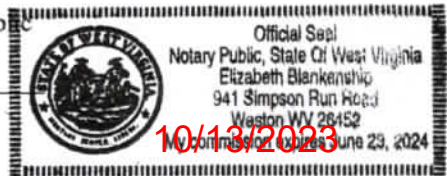
Company Official (Typed Name) Brittany Woody

Company Official Title Staff Regulatory Specialist

Subscribed and sworn before me this 24 day of July, 2023

Elizabeth Blankenship Notary Public

My commission expires 6/23/2024



SWN Production Co., LLC

Proposed Revegetation Treatment: Acres Disturbed 7.82 Prevegetation pH _____

Lime as determined by pH test min. 2 Tons/acre or to correct to pH 2.99

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: *Stt Gano*

Comments: _____

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Title: Oil & Gas Inspector

Date: 7/20/2023

Field Reviewed? () Yes () No

Attachment 3A

CLOSED LOOP SYSTEM

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

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

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

AIR DRILLING INTERVALS

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

LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

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

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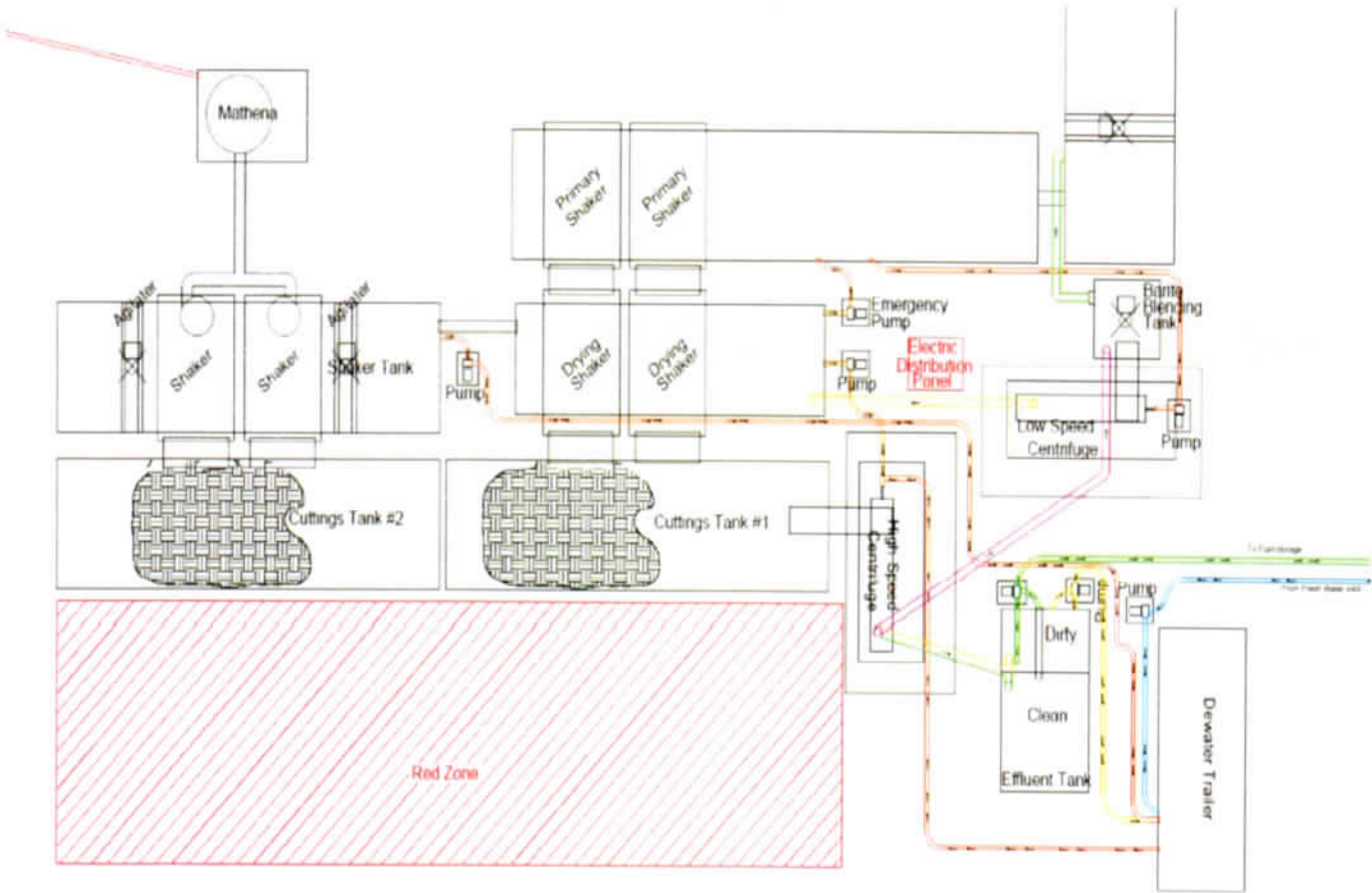
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Solids Control Layout



EXAMPLE SCHEMATIC FOR CLOSED LOOP SOLIDS CONTROL SYSTEM



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8.30.2022

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Attachment 3B
Drilling Mediums

Surface/Coal(if present)/Freshwater Intervals:

Air

Freshwater (if needed based on conditions)

Intermediate/Coal (if present):

Air

Production Hole:

Air

Synthetic Oil (Base Fluid for mud system)

Barite

Calcium Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

Calcium Carbonate

Friction Reducers

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Southwestern Energy

WVD Seeding Specification



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

| NON-ORGANIC PROPERTIES | |
|---|--------------------------|
| Seed Mixture: ROW Mix | SWN Supplied |
| Orchardgrass | 40% |
| Timothy | 15% |
| Annual Ryegrass | 15% |
| Brown Top Millet | 5% |
| Red Top | 5% |
| Medium Red Clover | 5% |
| White Clover | 5% |
| Birdsfoot Trefoil | 5% |
| Rough Bluegrass | 5% |
| All legumes are inoculated at 5x normal rate | |
| Apply @ 100lbs per acre April 16th- Oct. 14th Apply @ 200lbs per acre Oct. 15th- April 15th PLUS 50lbs per acre of Winter Wheat | |
| SOIL AMENDMENTS | |
| 10-20-20 Fertilizer | *Apply @ 500lbs per Acre |
| Pelletized Lime | Apply @ 2 Tons per Acre |
| *unless otherwise dictated by soil test results | |
| Seeding Calculation Information: | |
| 1452' of 30' ROW/LOD is One Acre | |
| 871' of 50' ROW/LOD is One Acre | |
| 622' of 70' ROW/LOD is One Acre | |
| Synopsis: | |
| Every 622 linear feet in a 70' ROW/LOD, you should be using (2) 50lb bags of seed, (4) 50lb bags of fertilizer and (80) 50lb bags of Lime (2x seed in winter months + 50lb Winter Wheat/ac). | |
| Special Considerations: | |
| Landowner Special Considerations including CREP program participants require additional guidance that is not given here. Discuss these requirements with SWN supervision at the beginning of the project to allow time for special seed delivery. | |

| ORGANIC PROPERTIES | |
|--|-----------------------------------|
| Seed Mixture: SWN Production Organic Mix | SWN Supplied |
| Organic Timothy | 50% |
| Organic Red or White Clover | 50% |
| OR | |
| Organic Perennial Ryegrass | 50% |
| Organic Red or White Clover | 50% |
| Apply @ 100lbs per acre April 16th- Oct. 14th Apply @ 200lbs per acre Oct. 15th- April 15th | |
| Organic Fertilizer @ 200lbs per Acre | Pelletized Lime @ 2 Tons per Acre |
| WETLANDS (delineated as jurisdictional wetlands) | |
| Seed Mixture: Wetland Mix | SWN Supplied |
| VA Wild Ryegrass | 20% |
| Annual Ryegrass | 20% |
| Fowl Bluegrass | 20% |
| Cosmos 'Sensation' | 10% |
| Redtop | 5% |
| Golden Tickseed | 5% |
| Maryland Senna | 5% |
| Showy Tickseed | 5% |
| Fox Sedge | 2.5% |
| Soft Rush | 2.5% |
| Woolgrass | 2.5% |
| Swamp Verbena | 2.5% |
| Apply @ 25lbs per acre April 16th- Oct. 14th Apply @ 50lbs per acre Oct. 15th- April 15th | |
| NO FERTILIZER OR LIME INSIDE WETLAND LIMITS | |

RECEIVED
Office of Oil and Gas
WV Department of Environmental Protection
SEP 08 2023

4705102507

MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN

4705102507



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

API NO. 47-XXX-XXXXX
WELL NAME: Betty Schafer MSH 205H
Moundsville QUAD
Sand Hill DISTRICT
MARSHALL COUNTY, WEST VIRGINIA

Submitted by:

Name: Brittany Woody

Brittany Woody

Date: 6/15/2023

Title: Staff Regulatory Specialist

SWN Production Co., LLC

Approved by:

Name: *John Coombs*

Date: 7/20/2023

Title: *Oil & Gas Inspector*

Approved by:

Name: _____

Date: _____

Title: _____

RECEIVED
Office of Oil and Gas

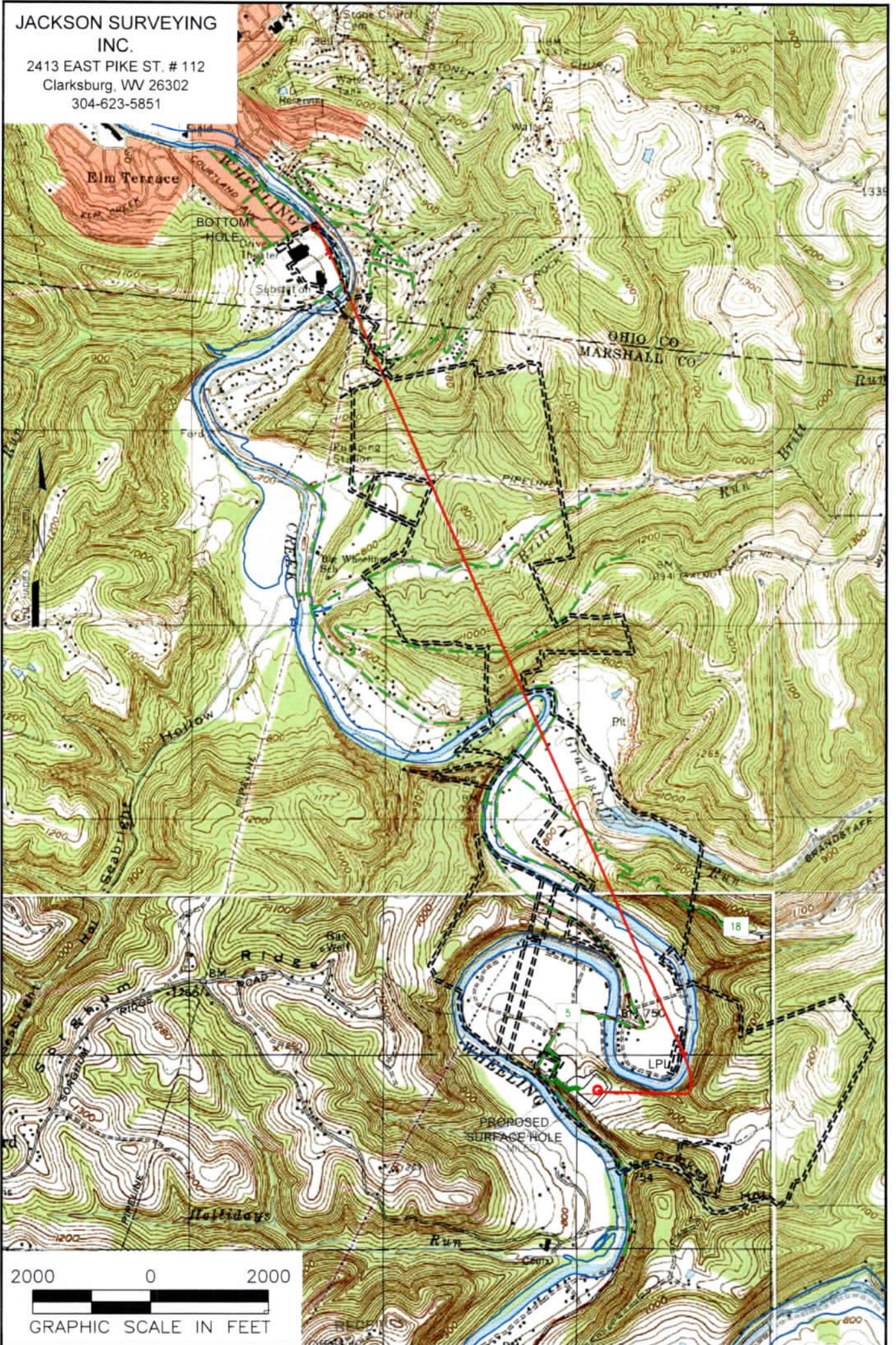
SEP 08 2023

WV Department of
Environmental Protection

SWN PRODUCTION COMPANY, LLC – CONFIDENTIAL

10/13/2023

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



NOTES ON SURVEY
1. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

SEP 18
WV Department of
Environmental Protection

LEGEND:

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- ⊙ EXISTING / PRODUCING WELLHEAD
- ✱ LPL LANDING POINT LOCATION
- FLOOD PLAN
- ACCESS ROAD
- PROPOSED PATH
- LEASE BOUNDARY

10/13/2023

| | | | |
|--|--|-------------------------------|-----------------|
| WELL OPERATOR: SWN PRODUCTION COMPANY, LLC | WELL (FARM) NAME: BETTY SCHAFER MSH | WELL # 205H | SERIAL # |
| ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 MORGANTOWN, WV 26508 | COUNTY - CODE MARSHALL - 051 | DISTRICT; SAND HILL | |
| SURFACE OWNER: ROY A. SCHAFER JR. & EDWARD J. SCHAFER | USGS 7 1/2 QUADRANGLE MAP NAME MOUNDSVILLE, WV | API # 47-051- | |

Latitude: 40°00'00" SURFACE HOLE 2951'

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

Latitude: 40°02'30"

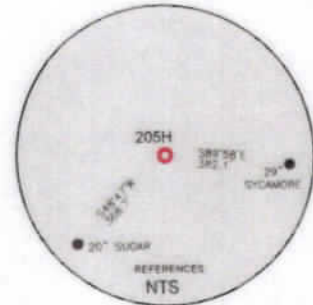
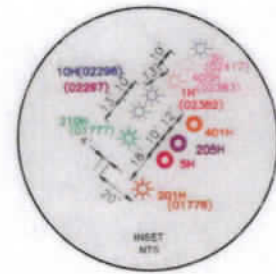
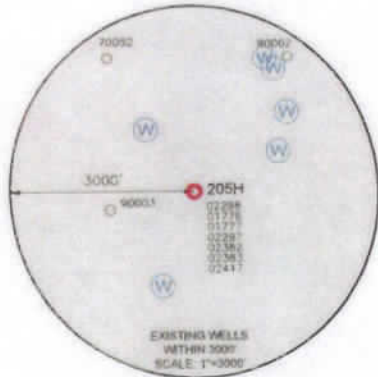
BOTTOM HOLE 7,701'

BOTTOM HOLE 3,897'
SURFACE HOLE 3,308'
Longitude: 80°37'30"

| |
|---|
| SURFACE HOLE LOCATION (SHL): |
| UTM (NAD83, ZONE 17, METERS) NORTHING: 4,426,812.799 EASTING: 531,114.918 |
| LANDING POINT LOCATION (LPL): |
| UTM (NAD83, ZONE 17, METERS) NORTHING: 4,427,000.595 EASTING: 531,557.840 |
| BOTTOM HOLE LOCATION (BHL): |
| UTM (NAD83, ZONE 17, METERS) NORTHING: 4,431,252.351 EASTING: 529,649.002 |



| LINE | BEARING | DISTANCE | DESCRIPTION | MONUMENT |
|------|---------------|----------|-----------------|---------------|
| L1 | N 74°14'17" W | 821.56' | SHL TO LANDMARK | FD 5/8" REBAR |
| L2 | S 56°03'42" E | 1690.85' | SHL TO LANDMARK | FD 5/8" REBAR |
| LINE | BEARING | DISTANCE | CURVE LENGTH | DESCRIPTION |
| L3 | N 67°01'24" E | 1578.38' | 2241.38' | SHL TO LPL |
| L4 | N 28°50'40" W | 482.35' | 482.94' | AZEL TO BHL |



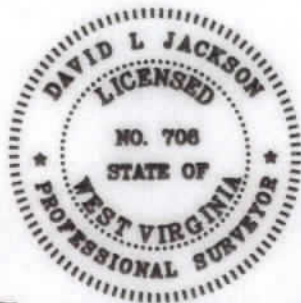
WELL RESTRICTIONS

- NO OCCUPIED DWELLINGS > 2500 SQ FT WITHIN 625 FEET OF CENTER OF WELL
- NO AGRICULTURE BUILDINGS > 2500 SQ FT WITHIN 625 FEET OF CENTER OF WELL
- NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL
- NO PERENNIAL STREAMS, LAKES, POND, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 500 FEET OF LIMITS OF DISTURBANCE
- NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, T & S CONTROLS OR PUBLIC WATER SUPPLY

NOTES ON SURVEY

- 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.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- ALL METERS 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.



2000 0 2000



P.S. 706

David L Jackson

COMPANY: **SWN** Production Company LLC **SWN** Production Company™

| | | | | | | | | | | | | |
|--|---|--|--|--|-------------------|--|-------------------|--|-------------|--|--------------------|---|
| <p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p> | <p>MINIMUM DEGREE OF ACCURACY: 1/200</p> <p>PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)</p> | <p>COMPANY: BETTY SCHAFER MSH</p> <p>OPERATOR'S WELL #: 205H</p> <p>API WELL #: 47 STATE 051 COUNTY D2507 PERMIT</p> | | | | | | | | | | |
| | <p>WELL TYPE: OIL WASTE DISPOSAL PRODUCTION <input checked="" type="checkbox"/> DEEP GAS <input checked="" type="checkbox"/> LIQUID INJECTION STORAGE SHALLOW <input checked="" type="checkbox"/></p> <p>WATERSHED: WHEELING CREEK (HUC-10) ELEVATION: 848.4'</p> <p>DISTRICT: SAND HILL COUNTY: MARSHALL QUADRANGLE: MOUNDSVILLE, WV</p> <p>SURFACE OWNER: ROY A. SCHAFER JR. & EDWARD J. SCHAFER ACREAGE: ±205.06</p> <p>OIL & GAS ROYALTY OWNER: ROY A. SCHAFER JR. & EDWARD J. SCHAFER ACREAGE: ±205.06</p> <p>DRILL <input checked="" type="checkbox"/> DRILL DEEPER REDRILL FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION PERFORATE NEW FORMATION</p> <p>CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)</p> <p>TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 10/13/2023 TMD</p> | <p>WELL OPERATOR: SWN PRODUCTION COMPANY, LLC</p> <p>ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200</p> <p>CITY: MORGANTOWN STATE: WV ZIP CODE: 26508</p> | <p>DESIGNATED AGENT: BRITTANY WOODY</p> <p>ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200</p> <p>CITY: MORGANTOWN STATE: WV ZIP CODE: 26508</p> | | | | | | | | | |
| <p>LEGEND:</p> <ul style="list-style-type: none"> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ★ EXISTING / PRODUCING WELLHEAD LPL★ LANDING POINT LOCATION ⊙ EXISTING WATER WELL ⊕ EXISTING SPRING — SURVEYED BOUNDARY — CURVING UNIT == LEASE BOUNDARY — PROPOSED PATH | <p>REVISIONS:</p> <table border="1"> <tr> <td> </td> <td>DATE: 07-18-2023</td> </tr> <tr> <td> </td> <td>DRAWN BY: N. MANO</td> </tr> <tr> <td> </td> <td>SCALE: 1" = 2000'</td> </tr> <tr> <td> </td> <td>DRAWING NO:</td> </tr> <tr> <td> </td> <td>WELL LOCATION PLAT</td> </tr> </table> | | DATE: 07-18-2023 | | DRAWN BY: N. MANO | | SCALE: 1" = 2000' | | DRAWING NO: | | WELL LOCATION PLAT | <p>PROPERTY NUMBER 2501163442 PAD ID 3001161677</p> |
| | DATE: 07-18-2023 | | | | | | | | | | | |
| | DRAWN BY: N. MANO | | | | | | | | | | | |
| | SCALE: 1" = 2000' | | | | | | | | | | | |
| | DRAWING NO: | | | | | | | | | | | |
| | WELL LOCATION PLAT | | | | | | | | | | | |

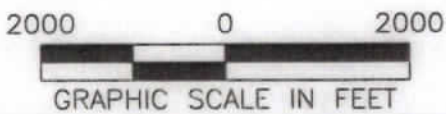
JACKSON SURVEYING
 INC.
 2413 EAST PIKE ST. # 112
 Clarksburg, WV 26302
 304-623-5851

4705102507



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*



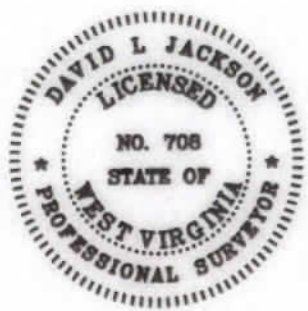
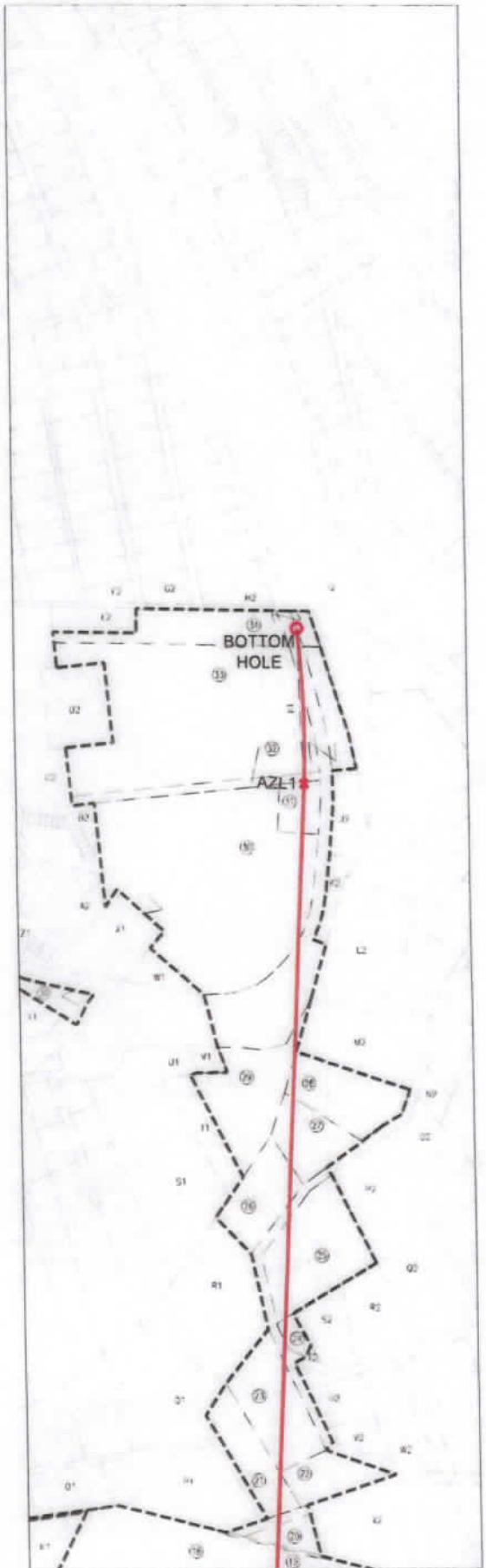
10/13/2023

| | | | |
|------------|----------|-------------|----------------------|
| REVISIONS: | COMPANY: | | |
| | | OPERATOR'S | BETTY SCHAFER MSH |
| | | WELL #: | 205H |
| | | DISTRICT: | SAND HILL |
| | | COUNTY: | MARSHALL |
| | | STATE: | WV |
| | | API # | 47-051- |
| | | DATE: | 07-18-2023 |
| | | DRAWN BY: | N. MAND |
| | | SCALE: | 1" = 2000' |
| | | DRAWING NO: | WELL LOCATION PLAT 2 |

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

4705102507



DETAIL "A"



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*

10/13/2023



| | | | | |
|------------|------------|-------------------|---|----------------------|
| REVISIONS: | COMPANY: | |   | |
| | OPERATOR'S | BETTY SCHAFER MSH | API # | DATE: 07-18-2023 |
| | WELL #: | 205H | 47-051- | DRAWN BY: N. MANO |
| | DISTRICT: | SAND HILL | COUNTY: | SCALE: N/A |
| | | | STATE: | DRAWING NO: |
| | | | WV | WELL LOCATION PLAT 3 |

**JACKSON SURVEYING
INC.**

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

4705102507

| WELL BORE TRACTS | | |
|------------------|--|-------------|
| TRACT | SURFACE OWNER (S) / ROYALTY OWNER (R) | TAX PARCEL |
| 1 | SCHAFER ROY A JR & EDWARD J (S/R) | 12-9-22 |
| TRACT | SURFACE OWNER (S) | TAX PARCEL |
| 2 | FISHER CHARLES B & CARLA S (S) | 12-9-20 |
| 3 | GRAY JOHN ALVIN (S) | 12-9-21 |
| 4 | GRAY JOHN ALVIN (S) | 13-3-14 |
| 5 | STEADMAN STELLA M - TOD (S) | 12-9-5.1 |
| 6 | SMITH BEVERLY JILL ANITA (S) | 12-9-5.5 |
| 7 | MANNERS DANIEL J ET UX (S) | 12-9-5 |
| 8 | DYE ALBERT M - LIFE (S) | 12-9-6 |
| 9 | WHEELING CREEK WATERSHED COMM (S) | 12-9-6.1 |
| 10 | HADSELL SANDRA L (S) | 12-1-20 |
| 11 | MERINAR JUSTIN K (S) | 12-1-21 |
| 12 | MAAS BRIAN J & AMY C - TRUST (S) | 13-3-10 |
| 13 | ADASE GEORGE & LAURIE (S) | 12-1-29 |
| 14 | KUNTZ JOHN H (S) | 12-1-31 |
| 15 | MERCER DARICK B & RENEE A (S) | 12-1-32 |
| 16 | CONSOLIDATION COAL COMPANY; MURRAY ENERGY C/O LAND DEPT (S) | 12-1-10.2 |
| 17 | COFFIELD MICHAEL L & TYLENE R (S) | 12-1-10 |
| 18 | HAMILTON MARY SCHENK & GARY P (S) | 12-1-5.1 |
| 19 | ENGINEERED FOUNDATION SOLUTIONS, PLLS (S) | 12-1A-94 |
| 20 | FRANK WILLIAM EMMETT ET UX (S) | 12-1A-19.1 |
| 21 | ROMAGNOLI JUDY E (S) | 12-1A-21 |
| 22 | THOMPSON MARIAN ANITA - TOD (S) | 12-1A-20.1 |
| 23 | DORAN LOUIS WILLIAM ET UX (S) | 12-1A-20 |
| 24 | LUCAS DONNA J - TOD (S) | 12-1A-8.1 |
| 25 | WRIGHT WARREN W & CHERYL D (S) | 12-1A-6 |
| 26 | WOLF CHARLES E ET UX (S) | 12-1A-3 |
| 27 | WOLFE CHARLES E & JUDITH LEE WOLFE EST (S) | 6-T17B-21 |
| 28 | MARCELLUS DARCY L & C J (S) | 6-T17B-20 |
| 29 | FLATLEY R KEVIN (S) | 16-1-38 |
| 30 | BOARD OF EDUCATION (S) | 10-W96-40.2 |
| 31 | ROBRECHT RICHARD M & SUSAN L (S) | 10-W96-43 |
| 32 | CARDINAL HEALTH 110 LLC (S) | 10-W96-39.5 |
| 33 | CARDINAL HEALTH 110 LLC (S) | 10-W96-39 |
| 34 | CARDINAL HEALTH 110 LLC (S) | 10-W96-39.4 |

| | | | |
|------------|---|---|----------------------|
| REVISIONS: | COMPANY: | 10/13/2023 | |
| |  |  | |
| | OPERATOR'S | BETTY SCHAFER MSH | API # |
| | WELL #: | 205H | 47-051- |
| | DISTRICT: | SAND HILL | COUNTY: |
| | | | MARSHALL |
| | | | STATE: |
| | | | WV |
| | | | DATE: 07-18-2023 |
| | | | DRAWN BY: N. MANO |
| | | | SCALE: N/A |
| | | | DRAWING NO: |
| | | | WELL LOCATION PLAT 4 |

**JACKSON SURVEYING
INC.**



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

4705102507

| ADJOINING OWNERS TABLE | | | ADJOINING OWNERS TABLE | | |
|------------------------|---|------------|------------------------|---|--------------|
| TRACT | SURFACE OWNER | TAX PARCEL | TRACT | SURFACE OWNER | TAX PARCEL |
| A | SCHAFFER ROY A JR & SCHAFFER EDWARD J | 12-9-23 | C2 | CARDINAL HEALTH 110 LLC | 10-W96-39.1 |
| B | SCHAFFER ROY A JR & SCHAFFER EDWARD J | 12-9-22.1 | D2 | CARDINAL HEALTH 110 LLC | 10-W96-39.6 |
| C | OHIO COUNTY COAL RESOURCES INC | 12-9-22.2 | E2 | DANAHEY MARY MARGARET (LE) DANAHEY U L; LEECH D | 10-W96-39.3 |
| D | FISH PATRICIA A & FREDERICK W | 12-10-1.2 | F2 | HETZEL LYNN E | 10-W96-36 |
| E | ROMAN EUGENE H | 12-10-1 | G2 | VOSVICK MILAN | 10-W96-37 |
| F | HOGG THOMAS G & DONN W ET AL | 13-8-3 | H2 | ARMBRUSTER JOHN D | 10-W96-38.1 |
| G | SCHAFFER ROY A JR & EDWARD J | 12-9-24 | I2 | OHIO COUNTY PUBLIC SERV DIST | 06-T178-1.1 |
| H | HART JOHN J & RENEE A | 13-8-2.1 | J2 | SILO INC C/O ROBINSON RICHARD | 06-T178-324 |
| I | HART JOHN J & RENEE A | 13-3-11 | K2 | LANGMYER LEXIE | 06-T178-7 |
| J | LANGMYER SCOTT R & MELANEY F | 12-9-3 | L2 | MAXWELL SHIRLEY L | 06-T178-17 |
| K | LANGMYER RAYMOND J | 12-9-4 | M2 | MAXWELL SHIRLEY L & C L JR | 06-T178-18 |
| L | GRAY JOHN ALVIN | 13-3-13 | N2 | KOVAL MATTHEW F KOVAL SUSAN R | 06-T178-48.2 |
| M | LANGMYER RAYMOND J | 12-9-3.1 | O2 | BATES ROBERT A & KAREN A | 06-T178-69.1 |
| N | MANNERS-THIELE NADENE R & CHARLES L THIELE | 12-9-5.4 | P2 | BATES ROBERT A & KAREN A | 06-T178-69 |
| O | TEACOACH JAY M ET UX | 12-9-5.3 | Q2 | HOLPP SHIRLEY J | 12-1A-7 |
| P | DYE WILLIAM R | 12-9-1 | R2 | WATSON JAMES W & MARGARET L IRREVOCABLE TRUST | 12-1A-8.2 |
| Q | THIELE CHARLES L & NADENE R MANNERS-THIELE | 12-9-2.3 | S2 | CLOUGH GARY T & CHRISTINE M | 12-1A-8 |
| R | STRONG GREGORY S & LOUISE M | 12-9-2 | T2 | CLOUGH GARY T & CHRISTINE M | 12-1A-8.3 |
| S | MAAS BRIAN J & AMY C - TRUST | 13-3-9 | U2 | WESTFALL LAIRL W ET UX | 12-1A-9 |
| T | MAAS BRIAN J & AMY C - TRUST | 13-3-10 | V2 | HISSAM BETTY ROSE | 12-1A-9.1 |
| U | MAAS BRIAN J & AMY C - TRUST | 13-3-8 | W2 | KOCH JULIE | 12-1A-10.1 |
| V | MALARSKI PETE E ET UX | 12-18-35 | X2 | WARNICK RONALD & ESTHER | 12-1A-19 |
| W | MALARSKI PETE E ET UX | 12-18-36 | Y2 | BLUST HAROLD F | 12-1A-18.2 |
| X | STEGMAN CATHERINE A - TOD | 12-18-37 | Z2 | BLUST HAROLD F | 12-1A-87 |
| Y | STEGMAN CATHERINE A - TOD | 12-18-37.1 | A3 | SNYDER JOHN J ET UX | 12-1A-85 |
| Z | STEGMAN CATHERINE A - TOD | 12-18-38 | B3 | SNYDER JOHN J ET UX | 12-1A-84 |
| A1 | WHARTON PETER R ET AL | 12-1-34 | C3 | ZDONCZYK ROBIN G | 12-1A-83.1 |
| B1 | ESTEP DOUGLAS J & LINDA R - TOD | 12-1-33.1 | D3 | SNYDER LONNIE A | 12-1A-83 |
| C1 | SLIGAR JOHN WALTER | 12-1-39 | E3 | HARTMAN WALTER L ET UX | 12-1-10.1 |
| D1 | ROMAN EUGENE H | 12-1-40.1 | F3 | COFFIELD MICHAEL & TYLENE | 12-1-47 |
| E1 | EARNEST ALLEN DOUGLAS | 12-1-40 | G3 | BARTOLOVICH STEPHEN M | 12-1-11 |
| F1 | HENRY LORI MYLES | 12-1-41 | H3 | LEASURE ANNA | 12-1-30 |
| G1 | MARPLE JEFFREY J & BARBARA J | 12-1-32.1 | I3 | SCHELLHASE MARK A ET UX | 12-1-18 |
| H1 | HIGGINS CONSTANCE L - LIFE | 12-1-7.3 | J3 | ADASE GEORGE & LAURIE | 12-1-28 |
| I1 | RUNKLE SHERRY L | 12-1-7.2 | K3 | GRAY JOHN A ET UX | 12-1-28.2 |
| J1 | SLIGAR KAREN SCHENK & TERRY B | 12-1-5.2 | L3 | SAVAGE CHARLES JACKSON | 12-1-29.1 |
| K1 | SLIGAR KAREN SCHENK | 12-1-5 | M3 | PALMER ADAM R | 12-1-26 |
| L1 | REARDON SHELLY S | 12-1-5.6 | N3 | FRAZIER GREGORY SCOTT - TOD | 12-1-24 |
| M1 | HAMILTON MARY SCHENK & GARY P | 12-1-5.4 | O3 | DUFF JAMES E & BROOKE L CAPP | 12-1-22 |
| N1 | WETMORE BROOKE L & BRIAN B | 12-1-5.5 | P3 | DUFF JAMES E & BROOKE L CAPP | 12-1-22.1 |
| O1 | ROMAGNOLI JUDY E | 12-1A-23 | Q3 | FOLMAR EDITH A TRUST | 12-1-19 |
| P1 | ROMAGNOLI JUDY E | 12-1A-22 | R3 | ISALY ROBERT A SR EST | 12-9-9 |
| Q1 | ROMAGNOLI JUDY E | 12-1A-27 | S3 | PIKEWOOD ENERGY CORP | 12-9-10 |
| R1 | LUCAS DAVID S JR | 12-1A-4 | T3 | PROVANANCE FRANK J & ELIZABETH & BARRY F | 13-3-14.5 |
| S1 | YOST HAROLD JACK & INA K | 16-1-35 | U3 | SHEPHERD TIMOTHY & DEBORAH L | 13-3-14.4 |
| T1 | FLATLEY R KEVIN | 16-1-36 | V3 | JESTERS COURT 13 INC | 13-3-14.3 |
| U1 | ATLAS REAL ESTATE LLC | 16-1-35.2 | W3 | JESTERS COURT 13 INC | 13-3-14.2 |
| V1 | FLATLEY R KEVIN | 16-1-37 | X3 | JESTERS COURT 13 INC | 13-3-14.1 |
| W1 | WHEELING POWER CO WHEELING ELECTRIC CO | 10-W99-2 | Y3 | GRAY JOHN ALVIN | 12-9-11 |
| X1 | WHEELING POWER COMPANY WHEELING ELECTRIC CO | 10-W99-1 | Z3 | MERINAR JAMES MARTIN ET UX | 12-9-15.1 |
| Y1 | TJG PROPERTIES LLC | 13-2-16 | A4 | MERINAR CALVIN C - LIFE | 12-9-15 |
| Z1 | TJG PROPERTIES LLC | 10-W99-4 | B4 | MERINAR CALVIN C - LIFE | 12-9-19 |
| A2 | TJG PROPERTIES LLC | 10-W99-3 | C4 | GRAY JARED | 13-3-14.7 |
| B2 | STEVICK DENISE A | 10-W99-7 | | | |

*Highlighted Parcels may be impacted during drilling

10/13/2023

| | | | |
|------------|------------|---|----------------------|
| REVISIONS: | COMPANY: |   | |
| | OPERATOR'S | BETTY SCHAFFER MSH | API # |
| | WELL #: | 205H | 47-051- |
| | DISTRICT: | COUNTY: | STATE: |
| | SAND HILL | MARSHALL | WV |
| | | | DATE: 07-18-2023 |
| | | | DRAWN BY: N. MANO |
| | | | SCALE: N/A |
| | | | DRAWING NO: |
| | | | WELL LOCATION PLAT 5 |

WW-6A1
(5/13)

Operator's Well No. BETTY SCHAFER MSH 205H

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

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

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

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

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

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

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

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

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

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

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

EXHIBIT "A"

Betty Schafer MSH 205H

Marshall County and Ohio 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 | 12-9-22 | 733731/000 | Betty Jane Schafer, a widow (Life Estate Interest); Roy Alvin Schafer (Remainderman); and Edward J. Schafer (Remainderman) | TriEnergy Holdings, LLC | 18.00% | 722/505 | 0.00% |
| | | | TriEnergy Holdings, LLC | NPAR, LLC | | 24/199 | |
| | | | NPAR, LLC | Chevron U.S.A. Inc. | | 756/332 | |
| | | | Chevron U.S.A. Inc. | Statoil USA Onshore Properties Inc. | | 30/494 | |
| | | | Chevron U.S.A. Inc. | Chesapeake Appalachia, L.L.C. | | 30/532 | |
| | | | Chesapeake Appalachia, L.L.C. | SWN Production Company, LLC | | 33/110 | |
| | | | Statoil USA Onshore Properties Inc. | SWN Production Company, LLC | | 33/424 | |
| | | | Roy Alvin Schafer, Jr., a married man dealing in his sofe and separate property | SWN Production Company, LLC | 18.00% | 1077/97 | 0.00% |
| | | | Edward John Schafer, a married man dealing in his sole and separate property | SWN Production Company, LLC | 18.00% | 1077/102 | 0.00% |
| 2 | 12-9-20 | 733654/001 | Charles B. Fisher and Carla S. Fisher, husband and wife | TriEnergy, Inc. | 12.50% | 655/559 | 0.00% |
| | | | TriEnergy, Inc. | AB Resources LLC | | 19/623 | |
| | | | AB Resources LLC | Chevron U.S.A. Inc. | | 756/397 | |
| | | | Chevron U.S.A. Inc. | Chesapeake Appalachia, L.L.C. | | 30/532 | |
| | | | Chesapeake Appalachia, L.L.C. | SWN Production Company, LLC | | 33/110 | |
| | | | Statoil USA Onshore Properties Inc. | SWN Production Company, LLC | | 33/424 | |
| 3 | 12-9-21 | 735396/000 | John Alvin Gray and Judy C. Gray, husband and wife | Chesapeake Appalachia, L.L.C. | 18.00% | 834/165 | 0.00% |
| | | | Chesapeake Appalachia, L.L.C. | SWN Production Company, LLC | | 33/110 | |
| | | | Statoil USA Onshore Properties Inc. | SWN Production Company, LLC | | 33/424 | |
| 4 | 13-3-14 | 744736/000 | John Alvin Gray and Judy C. Gray, husband and wife | Chesapeake Appalachia, L.L.C. | 18.00% | 840/631 | 0.00% |
| | | | Chesapeake Appalachia, L.L.C. | SWN Production Company, LLC | | 35/32 | |

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EXHIBIT "A"

Betty Schafer MSH 205H

Marshall County and Ohio 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

| | | | | | | | |
|----|----------|------------|--|---|--------|-------------------------------------|-------|
| 5 | 12-9-5.1 | 750061/000 | Franklin L. Steadman, a married man dealing in his sole and separate property American Petroleum Partners Operating, LLC | American Petroleum Partners Operating, LLC SWN Production Company, LLC | 18.00% | 1033/545 45/381 | 0.00% |
| 6 | 12-9-5.5 | 761075/000 | Beverly Jill Anita Smith, a single woman | SWN Production Company, LLC | 17.00% | 1104/553 | 0.00% |
| 7 | 12-9-5 | 728934/000 | Daniel J. Manners and Gina Marie Manners, husband and wife Chesapeake Appalachia, L.L.C. Statoil USA Onshore Properties Inc. | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC SWN Production Company, LLC | 18.00% | 721/250 33/110 33/424 | 0.00% |
| 8 | 12-9-6 | 749689/002 | William R. Dye, married | SWN Production Company, LLC | 15.00% | 1073/217 | 0.00% |
| | | 749689/004 | Kimberly D. Schoger, a/k/a Kimberly A. Schoger-Dye, and Matthias D. Schoger, wife and husband | SWN Production Company, LLC | 15.00% | 1073/501 | 0.00% |
| | | 749689/001 | Richard D. Dye, a/k/a Richard Douglas Dye, married | SWN Production Company, LLC | 15.00% | 1073/577 | 0.00% |
| | | 749689/003 | Mark M. Dye, a/k/a Mark Montgomery Dye, and Tania L. Dye, husband and wife | SWN Production Company, LLC | 15.00% | 1073/601 | 0.00% |
| 9 | 12-9-6.1 | 761130/000 | Wheeling Creek Watershed Protection and Flood Prevention Commission, a West Virginia Corporation, d/b/a Wheeling Creek Watershed Corporation | SWN Production Company, LLC | 18.00% | 1095/333 | 0.00% |
| 10 | 12-1-20 | 751313/000 | Sandra L. Hadsell and William R. Hadsell, wife and husband | SWN Production Company, LLC | 18.00% | 1100/149 | 0.00% |
| 11 | 12-1-21 | 751245/000 | Justin K. Merinar, a divorced man and not remarried | SWN Production Company, LLC | 18.00% | 1099/155 | 0.00% |
| 12 | 13-3-10 | 761025/000 | Brian J. Maas and Amy C. Maas, Trustees under the Brian and Amy Maas Living Trust, dated August 6, 2007, as amended | SWN Production Company, LLC | 18.00% | 1106/609 | 0.00% |

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Marshall County and Ohio County, West Virginia

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| | | | | | | | |
|----|---------|------------|--|-------------------------------------|--------|----------|-------|
| 13 | 12-1-29 | 733681/001 | George R. Adase and Laurie Adase, his wife | TriEnergy Holdings, LLC | 17.00% | 696/206 | 0.00% |
| | | | TriEnergy Holdings, LLC | NPAR, LLC | | 24/180 | |
| | | | NPAR, LLC | Chevron U.S.A. Inc. | | 756/332 | |
| | | | Chevron U.S.A. Inc. | Statoil USA Onshore Properties Inc. | | 30/494 | |
| | | | Chevron U.S.A. Inc. | Chesapeake Appalachia, L.L.C. | | 30/532 | |
| | | | Chesapeake Appalachia, L.L.C. | SWN Production Company, LLC | | 33/110 | |
| | | | Statoil USA Onshore Properties Inc. | SWN Production Company, LLC | | 33/424 | |
| | | 744835/001 | American Foundation for the Blind, Inc., a New York corporation, by Rick Bozeman, Assistant Treasurer | Chesapeake Appalachia, L.L.C. | 18.00% | 846/518 | 0.00% |
| | | | Chesapeake Appalachia, L.L.C. | SWN Production Company, LLC | | 35/32 | |
| | | 744445/001 | Children's Hospital and Healthcare Services Foundation, a Virginia corporation, by Chris Broughton-Spruill, President, as Agent for Crippled Children's Hospital | SWN Production Company, L.L.C. | 18.00% | 866/590 | 0.00% |
| 14 | 12-1-31 | 750964/000 | John H. Kuntz, a single man | SWN Production Company, LLC | 18.00% | 1078/370 | 0.00% |

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EXHIBIT "A"
Betty Schafer MSH 205H

Marshall County and Ohio 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

| | | | | | | | |
|----|------------|------------|--|-----------------------------|--------|----------|---------|
| 15 | 12-1-32 | 735449/001 | John H. Kuntz, a/k/a John Howard Kuntz, a single man | SWN Production Company, LLC | 18.00% | 1078/364 | 0.00% |
| | | 735449/011 | Sally Mildred Alig, a widow and not remarried | SWN Production Company, LLC | 18.00% | 1078/310 | 0.00% |
| | | 735449/007 | Sue Ann Marple, a widow and not remarried | SWN Production Company, LLC | 18.00% | 1078/346 | 0.00% |
| | | 735449/008 | Joseph Lawrence Kuntz, a married man dealing in his sole and separate property | SWN Production Company, LLC | 18.00% | 1078/340 | 0.00% |
| | | 735449/014 | Mary Darlene Bryniarski, a married woman dealing in her sole and separate property | SWN Production Company, LLC | 18.00% | 1083/37 | 0.00% |
| | | 735449/009 | Terrence Lee Kuntz, a married man dealing in his sole and separate property | SWN Production Company, LLC | 18.00% | 1078/322 | 0.00% |
| | | 735449/013 | Mark David Kuntz, a married man dealing in his sole and separate property | SWN Production Company, LLC | 18.00% | 1078/352 | 0.00% |
| | | 735449/010 | Stephen Carl Kuntz, a married man dealing in his sole and separate property | SWN Production Company, LLC | 18.00% | 1083/31 | 0.00% |
| | | 735449/004 | Philip B. Kuntz, a/k/a Philip Kuntz, a divorced man and not remarried | SWN Production Company, LLC | 18.00% | 1083/281 | 0.00% |
| | | 735449/002 | Danial Kuntz, also known as Daniel Kuntz, a single man | SWN Production Company, LLC | 18.00% | 1078/334 | 0.00% |
| | | 735449/012 | Mary Nichole Kuntz, also known as Mary Nicole Kuntz, a single woman | SWN Production Company, LLC | 18.00% | 1078/358 | 0.00% |
| | | 735449/003 | Eleanor Virginia Bruney, a married woman dealing in her sole and separate property | SWN Production Company, LLC | 18.00% | 1078/316 | 0.00% |
| | | 735449/005 | Timothy James Kuntz, a single man | SWN Production Company, LLC | 18.00% | 1083/25 | 0.00% |
| | | 735449/006 | David Patrick Kuntz, a single man | SWN Production Company, LLC | 18.00% | 1078/328 | 0.00% |
| 16 | 12-1-10.2 | 745833/000 | CNX Gas Company, LLC, a Virginia limited liability corporation | SWN Production Company, LLC | 17.00% | 902/4 | 0.00% |
| 17 | 12-1-10 | 745543/006 | Michael L. Coffield and Tylene R. Coffield, husband and wife | TH Exploration, LLC | 18.00% | 896/367 | 0.00% |
| | | | TH Exploration, LLC | SWN Production Company, LLC | | 36/488 | |
| 18 | 12-1-5.1 | 751018/000 | Mary Schenk Hamilton and Gary P. Hamilton, wife and husband, as joint tenants with right of survivorship | SWN Production Company, LLC | 18.75% | 1078/375 | 0.00% |
| 19 | 12-1A-94 | N/A | Royalty Owner (subject to unitization filing dated August 24, 2023) | N/A | N/A | N/A | 100.00% |
| 20 | 12-1A-19.1 | N/A | Royalty Owner (subject to unitization filing dated August 24, 2023) | N/A | N/A | N/A | 100.00% |

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EXHIBIT "A"

Betty Schafer MSH 205H

Marshall County and Ohio 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

| | | | | | | | |
|----|-------------|------------|--|---|--------|---|---------|
| 21 | 12-1A-21 | 761639/000 | Judy E. Romagnoli, a widow and not remarried | SWN Production Company, LLC | 17.00% | 1114/191 | 0.00% |
| 22 | 12-1A-20.1 | 776989/000 | Marian Anita Thompson, a widow and not remarried | SWN Production Company, LLC | 18.00% | 1114/200 | 0.00% |
| 23 | 12-1A-20 | 750235/000 | Louis William Doran and Constance M. Doran, husband and wife American Petroleum Partners Operating, LLC | American Petroleum Partners Operating, LLC SWN Production Company, LLC | 18.00% | 926/117 45/381 | 0.00% |
| 24 | 12-1A-8.1 | 750316/000 | Donna J. Lucas, a widow American Petroleum Partners Operating, LLC | American Petroleum Partners Operating, LLC SWN Production Company, LLC | 18.00% | 948/330 45/381 | 0.00% |
| 25 | 12-1A-6 | 750164/000 | Warren W. Wright and Cheryl D. Wright, husband and wife, as joint tenants with right of survivorship and not tenants in common American Petroleum Partners Operating, LLC | American Petroleum Partners Operating, LLC SWN Production Company, LLC | 16.00% | 930/319 45/381 | 0.00% |
| 26 | 12-1A-3 | 751218/000 | Charles E. Wolf, a widower and not remarried | SWN Production Company, LLC | 15.00% | 1095/101 (Marshall) 988/134 (Ohio) | 0.00% |
| 27 | 6-T17B-21 | 751218/000 | Charles E. Wolf, a widower and not remarried | SWN Production Company, LLC | 15.00% | 1095/101 (Marshall) 988/134 (Ohio) | 0.00% |
| 28 | 6-T17B-20 | 761093/000 | Darcy L. Marcellus, f/k/a Darcy L. Gardner, and Christopher J. Marcellus, wife and husband | SWN Production Company, LLC | 18.00% | 995/199 | 0.00% |
| 29 | 12-1-38 | 761062/000 | R. Kevin Flatley, a/k/a Richard Kevin Flatley, a married man dealing in his sole and separate property | SWN Production Company, LLC | 18.00% | 1103/427 | 0.00% |
| 30 | 10-W96-40.2 | 784608/000 | Board of Education of Ohio County | SWN Production Company, LLC | 18.00% | 1030/422 | 0.00% |
| 31 | 10-W96-43 | N/A | Royalty Owner (subject to unitization filing dated August 24, 2023) | N/A | N/A | N/A | 100.00% |
| 32 | 10-W96-39.5 | N/A | Royalty Owner (subject to unitization filing dated August 24, 2023) | N/A | N/A | N/A | 100.00% |
| 33 | 10-W96-39 | N/A | Royalty Owner (subject to unitization filing dated August 24, 2023) | N/A | N/A | N/A | 100.00% |

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EXHIBIT "A"
Betty Schafer MSH 205H

Marshall County and Ohio County, West Virginia

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| 34 | 10-W96-39.4 | N/A | Royalty Owner (subject to unitization filing dated August 24, 2023) | N/A | N/A | N/A | 100.00% |
|----|-------------|------------|--|--|--------|----------|---------|
| M1 | 12-1-5.4 | 751018/000 | Mary Schenk Hamilton and Gary P. Hamilton, wife and husband, as joint tenants with right of survivorship | SWN Production Company, LLC | 18.75% | 1078/375 | 0.00% |
| | | 733002/000 | Mary Schenk Hamilton and Gary P. Hamilton, wife and husband | Chesapeake Appalachia, L.L.C. | 18.75% | 767/512 | 0.00% |
| | | | Chesapeake Appalachia, L.L.C. | SWN Production Company, LLC | | 33/110 | |
| K2 | 6-T17B-7 | | Date Palm Resources, LLC | SWN Production Company, LLC | 17.00% | 1026/703 | 0.00% |
| L2 | 6-T17B-17 | | Calvin L. Maxwell, Jr. and Shirley L. Maxwell, husband and wife | SWN Production Company, LLC | 18.00% | 992/793 | 0.00% |
| M2 | 6-T17B-18 | | Calvin L. Maxwell, Jr. and Shirley L. Maxwell, husband and wife | SWN Production Company, LLC | 18.00% | 993/1 | 0.00% |
| S2 | 12-1A-8 | | Gary T. Clough and Christine M. Clough, husband and wife | TH Exploration, LLC | 19.00% | 957/440 | 0.00% |
| | | | TH Exploration, LLC | American Petroleum Partners Operating, LLC | | 43/497 | |
| | | | American Petroleum Partners Operating, LLC | SWN Production Company, LLC | | 45/381 | |
| U2 | 12-1A-9 | | Lairl W. Westfall and Sharon L. Westfall, husband and wife | TH Exploration, LLC | 19.00% | 957/434 | 0.00% |
| | | | TH Exploration, LLC | American Petroleum Partners Operating, LLC | | 43/497 | |
| | | | American Petroleum Partners Operating, LLC | SWN Production Company, LLC | | 45/381 | |
| V3 | 13-3-14.3 | | Jesters Court 13, Inc. | SWN Production Company, LLC | 18.00% | 875/474 | 0.00% |
| W3 | 13-3-14.2 | | Jesters Court 13, Inc. | SWN Production Company, LLC | 18.00% | 875/474 | 0.00% |
| X3 | 13-3-14.1 | | Jesters Court 13, Inc. | SWN Production Company, LLC | 18.00% | 875/474 | 0.00% |

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

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

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Environmental Protection

4705102507



4705102507
SWN Production Company, LLC
1300 Fort Pierpont Dr, Ste 201
Morgantown, WV 26508
Tel: 304 884 1610
Fax: 304 471 2497
www.swn.com

August 24, 2023

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

RE: SWN's proposed New Well: Betty Schafer MSH 205H in Marshall County, West Virginia, Drilling under Miller Hill Road, Walnut Grove Road, Thompson Road, Agaming Lane, Tylene Drive, Smith Lane, Cedar Rocks Road, Mil Acres Drive, and Big Wheeling Creek Road.

Dear Mr. Brewer:

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

Thank you.

Sincerely,

Andrew M. Smith, RL
Rotational Landman
SWN Production Company, LLC

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

10/13/2023

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

Date of Notice Certification: 9/7

API No. 47- 051 -
Operator's Well No. Betty Schafer MSH 205H
Well Pad Name: Betty Schafer MSH

Notice has been given:

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

| | | | | |
|-------------|-----------------------|---------------------------|---------------------------|----------------------|
| State: | <u>West Virginia</u> | UTM NAD 83 | Easting: | <u>531,114.916</u> |
| County: | <u>051-Marshall</u> | | Northing: | <u>4,426,812.799</u> |
| District: | <u>Sand Hill</u> | Public Road Access: | <u>Big Wheeling Creek</u> | |
| Quadrangle: | <u>Moundsville</u> | Generally used farm name: | <u>Betty Scharfer MSH</u> | |
| Watershed: | <u>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><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 checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED/ NOT REQUIRED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> <p><input checked="" type="checkbox"/> RECEIVED</p> |
|---|--|

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Required Attachments:

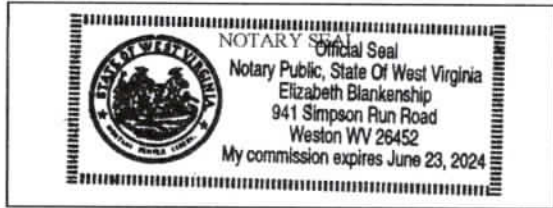
The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication 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.

10/13/2023

Certification of Notice is hereby given:

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

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



Subscribed and sworn before me this 24 day of July, 2023
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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 WV Department of
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WW-6A
(9-13)

API NO. 47-051 -
OPERATOR WELL NO. Betty Schafer MSH 205H
Well Pad Name: Betty Schafer MSH

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: an Date Permit Application Filed: an

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: Appalachia Midstream Services, LLC
Address: One Williams Center
Tulsa, OK 74101

Name: Alvin Schafer Jr.
Address: 3609 Big Wheeling Creek Road
Wheeling, WV 26003

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

Name: _____
Address: _____

Name: _____
Address: _____

SURFACE OWNER(s) (Impoundments or Pits)

Name: _____
Address: _____

COAL OWNER OR LESSEE
Name: American Consolidated Natural Resources Attn: Mason Smith
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

RECEIVED
Office of Oil and Gas
SEP 08 2023
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

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(8-13)

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API NO. 47-061 -
OPERATOR WELL NO. Betty Schafer MSH 205H
Well Pad Name: Betty Schafer MSH

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

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

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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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(8-13)

API NO. 47- 051 -
OPERATOR WELL NO. Betty Schafer MSH 205H
Well Pad Name: Betty Schafer MSH

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 deprivacyofficer@wv.gov.



Subscribed and sworn before me this 24 day of July, 2023
Elizabeth Blankenship Notary Public
My Commission Expires 6/23/2024

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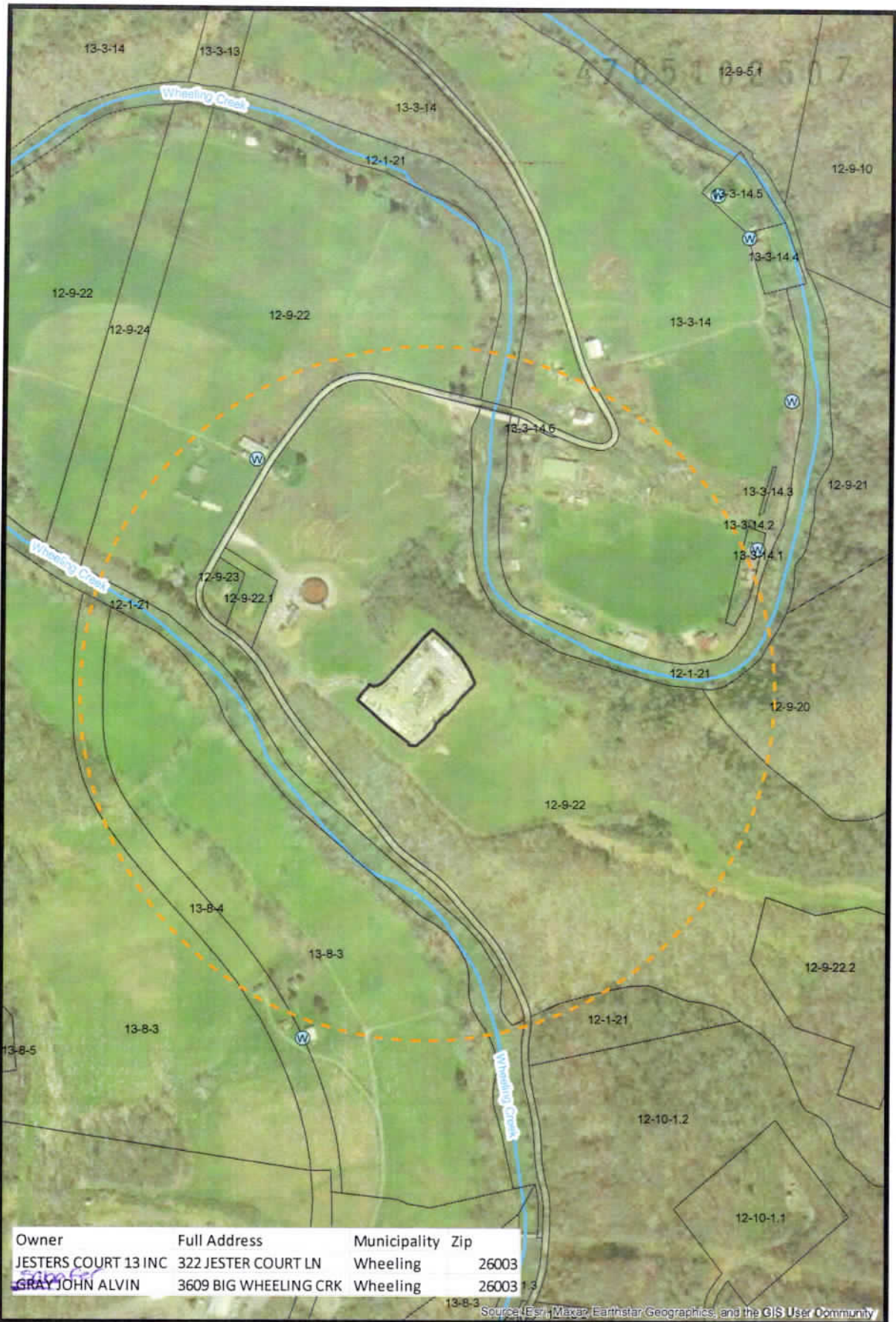
WV Department of
Environmental Protection

10/13/2023







4705102507

| Owner | Full Address | Municipality | Zip |
|----------------------|-----------------------|--------------|-------|
| JESTERS COURT 13 INC | 322 JESTER COURT LN | Wheeling | 26003 |
| SCHAFER JOHN ALVIN | 3609 BIG WHEELING CRK | Wheeling | 26003 |

10/13/2023



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.

| | | | |
|--|-----------------|---|---------------------|
| Water Purveyor Map | | Well Pad: Betty Schafer | County: Marshall |
|  Radius - 1500 ft | Map by: youngel | Water Sources  Spring  Water Well  Pond | |
| | Date: 8/12/2023 | | |
|  | | 1 inch = 472 feet  | |

10/13/2023

4705102507

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: 6/15/2023 **Date of Planned Entry:** 6/22/2023

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: Appalachia Midstream Services, LLC
 Address: One Williams Center
Tulsa, OK 74101

Name: Alvin Schafer Jr.
 Address: 3609 Big Wheeling Creek Road
Wheeling, WV 26003

Name: _____
 Address: _____

COAL OWNER OR LESSEE

Name: American Consolidated Natural Resources Attn: Mason Smith
 Address: 46226 National Road
St. Clairsville, OH 43950

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MINERAL OWNER(S)

Name: Edward J. Schafer & Brenda Schafer
 Address: 148 Valley Blvd.
Wheeling, WV 26003

WV Department of Environmental Protection

*please attach additional forms if necessary

Notice is hereby given:

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

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

Approx. Latitude & Longitude: 39.990980, -80.635696
 Public Road Access: Big Wheeling Creek Road
 Watershed: Grandstaff Run-Wheeling Creek
 Generally used farm name: Betty Schafer 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

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.

10/13/2023

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

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

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

Date of Notice: 07/05/2023 **Date Permit Application Filed:** 9/11

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

HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: Alvin Schaefer Jr.
Address: 3609 Big Wheeling Creek Road
Wheeling, WV 26003

Name: _____
Address: _____

Notice is hereby given:

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

| | |
|---|--|
| State: <u>West Virginia</u> | UTM NAD 83 Easting: <u>531,114.916</u> |
| County: <u>Marshall</u> | Northing: <u>4,426,812.799</u> |
| District: <u>Sand Hill</u> | Public Road Access: <u>Big Wheeling Creek Road</u> |
| Quadrangle: <u>Moundsville, WV</u> | Generally used farm name: <u>Betty Schaefer</u> |
| Watershed: <u>Wheeling Creek (HUC-10)</u> | |

This Notice Shall Include:

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

Notice is hereby given by:

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

Authorized Representative: Justin Booth
Address: 1300 Fort Pierpont Dr., Suite 201
Morgantown, WV 26508
Telephone: 304-884-1675
Email: Justin_Booth@swn.com
Facsimile: _____

Oil and Gas Privacy Notice:

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

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WV Department of Environmental Protection
10/13/2023

WW-6A5
(1/12)

Operator Well No. BETTY SCHAFER MSH 2004

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: 07/05/2023 **Date Permit Application Filed:** 9/11

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: <u>Alvin Schafer Jr.</u> | Name: _____ |
| Address: <u>3609 Big Wheeling Creek Road</u> | Address: _____ |
| <u>Wheeling, WV 26003</u> | _____ |

Notice is hereby given:

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

| | | |
|---|--|--------------------------------|
| State: <u>West Virginia</u> | UTM NAD 83 | Easting: <u>531,114.916</u> |
| County: <u>Marshall</u> | | Northing: <u>4,426,812.799</u> |
| District: <u>Sand Hill</u> | Public Road Access: <u>Big Wheeling Creek Road</u> | |
| Quadrangle: <u>Moundsville, WV</u> | Generally used farm name: <u>Betty Schafer</u> | |
| Watershed: <u>Wheeling Creek (HUC-10)</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: <u>SWN Production Company, LLC</u> | Address: <u>1300 Fort Pierpont Dr., Suite 201</u> |
| Telephone: <u>304-884-1675</u> | <u>Morgantown, WV 26508</u> |
| Email: <u>Justin_Booth@swn.com</u> | 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.

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SEP 08 2023

WV Department of
Environmental Protection
10/13/2023

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

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

Notice Time Requirement: Notice shall be provided at least **TEN (10)** days prior to filing a permit application.
Date of Notice: 07/05/2023 **Date Permit Application Filed:** 9/17

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

HAND DELIVERY CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: Appalachia Midstream Services LLC
Address: One Williams Center
Tulsa, OK 74101

Name: _____
Address: _____

Notice is hereby given:

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

| | | | |
|-------------|--------------------------------|---------------------------|--------------------------------|
| State: | <u>West Virginia</u> | UTM NAD 83 Easting: | <u>531,114.916</u> |
| County: | <u>Marshall</u> | UTM NAD 83 Northing: | <u>4,426,812.799</u> |
| District: | <u>Sand Hill</u> | Public Road Access: | <u>Big Wheeling Creek Road</u> |
| Quadrangle: | <u>Moundsville, WV</u> | Generally used farm name: | <u>Betty Schaefer</u> |
| Watershed: | <u>Wheeling Creek (HUC-10)</u> | | |

This Notice Shall Include:

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

Notice is hereby given by:

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

Authorized Representative: Justin Booth
Address: 1300 Fort Pierpont Dr., Suite 201
Morgantown, WV 26508
Telephone: 304-884-1675
Email: Justin_Booth@swn.com
Facsimile: _____

Oil and Gas Privacy Notice:

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

Office of Oil and Gas

SEP 08 2023

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: 07/05/2023 **Date Permit Application Filed:** 9/17

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

- CERTIFIED MAIL**
RETURN RECEIPT REQUESTED
- HAND DELIVERY**

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

Notice is hereby provided to the SURFACE OWNER(s)
(at the address listed in the records of the sheriff at the time of notice):

Name: Appalachia Midstream Services LLC Name: _____
Address: One Williams Center Address: _____
Tulsa, OK 74101

Notice is hereby given:

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

| | | |
|---|--|--------------------------------|
| State: <u>West Virginia</u> | UTM NAD 83 | Easting: <u>531,114.916</u> |
| County: <u>Marshall</u> | | Northing: <u>4,426,812.799</u> |
| District: <u>Sand Hill</u> | Public Road Access: <u>Big Wheeling Creek Road</u> | |
| Quadrangle: <u>Moundsville, WV</u> | Generally used farm name: <u>Betty Schafer</u> | |
| Watershed: <u>Wheeling Creek (HUC-10)</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 Address: 1300 Fort Pierpont Dr., Suite 201
Telephone: 304-884-1675 Morgantown, WV 26508
Email: Justin_Booth@swn.com Facsimile: _____

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SEP 08 2023
WV Department of Environmental Protection
10/13/2023



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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

Gregory L. Bailey, P.E.
Interim
State Highway Engineer

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

July 31, 2023

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 Betty Schafer Pad, Marshall County
Betty Schafer MSH 205H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2014-0640 which has been issued to Southwestern Energy for access to the State Road for a well site located off Marshall County Route 5 SLS MP 3.82.

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,

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

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

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Office of Oil and Gas

SEP 08 2023

WV Department of
Environmental Protection

4705102507

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 |
| Ferriplex 80 | Iron Control | 1-Octanol | 111-87-5 |
| | | Triethyl phosphate | 78-40-0 |
| Tolicide 4Frac | Biocide | Sodium Erythorbate | 6381-77-7 |
| | | Tetrakis(Hydroxymethyl) Phosphonium Sulfate | 55566-30-8 |
| | | Quaternary ammonium compounds | 68424-85-1 |
| | | Ethanol | 64-17-5 |
| Plexslick 930 | Friction Reducer | Water | 7732-18-5 |
| | | Hydrotreated Petroleum Distillate | 64742-47-8 |
| | | Water | 7732-18-5 |
| | | copolymer of 2-propenamide | 69418-26-4 |
| | | Oleic Acid Diethanolamide | 93-83-4 |
| | | Alcohol Ethoxylate Surfactants | 68551-12-2 |
| | | Ammonium Chloride | 12125-02-9 |
| Plexaid 655NM | Scale Inhibitor | Sodium Chloride | 7647-14-5 |
| | | ORGANIC PHOSPHONIC ACIDS SALTS | 15827-60-8 |
| Plexslick V996 | Friction Reducer | Water | 7732-18-5 |
| | | Hydrotreated Petroleum Distillate | 64742-47-8 |
| | | Water | 7732-18-5 |
| | | copolymer of 2-propenamide | 69418-26-4 |
| | | Alcohol Ethoxylate Surfactants | 68551-12-2 |
| Plexaid 655WG | Scale Inhibitor | Sodium Chloride | 7647-14-5 |
| | | ORGANIC PHOSPHONIC ACIDS SALTS | 15827-60-8 |
| | | Water | 7732-18-5 |
| | | Glycerin | 67-56-1 |
| Clearal 270 | Biocide | Glutaraldehyde | 111-30-8 |
| | | Didecylidimethylammonium 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 |
| | | 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 08 2023

WV Department of
Environmental Protection

10/13/2023

OPERATOR: SWN Production Co., LLC WELL NO: Betty Schafer MSH 205H

PAD NAME: Betty Schafer MSH

REVIEWED BY: _____

SIGNATURE: *Brittany Naddy*

WELL RESTRICTIONS CHECKLIST

HORIZONTAL 6A WELL

** Pad Built 5/1/15*

Well Restrictions

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

DEP Waiver and Permit Conditions

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

DEP Waiver and Permit Conditions

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

DEP Waiver and Permit Conditions

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

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

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

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

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

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

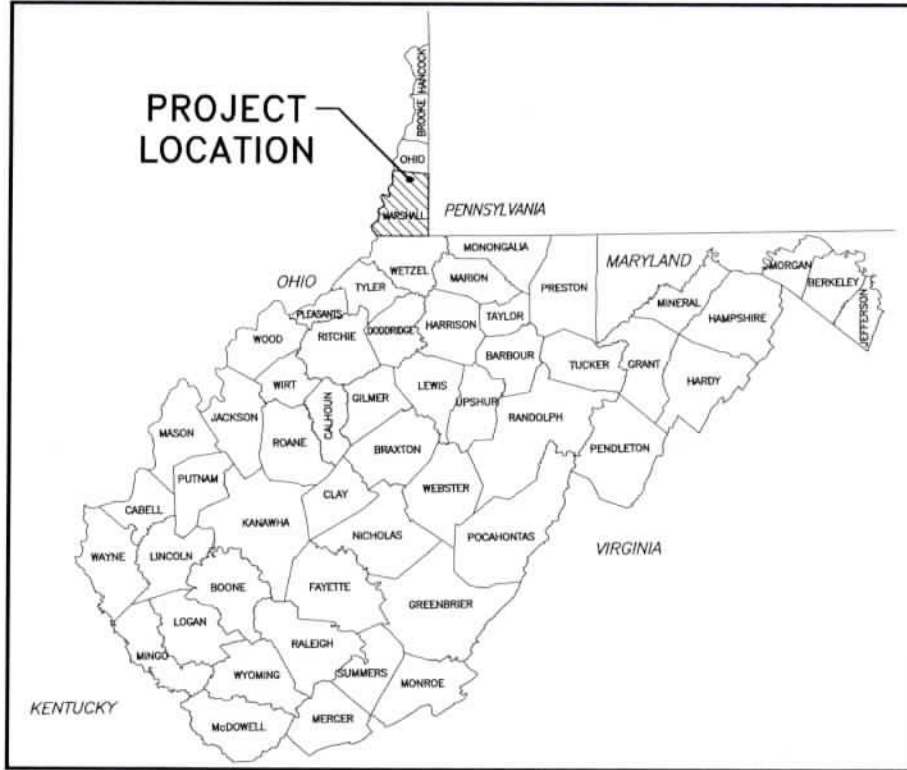
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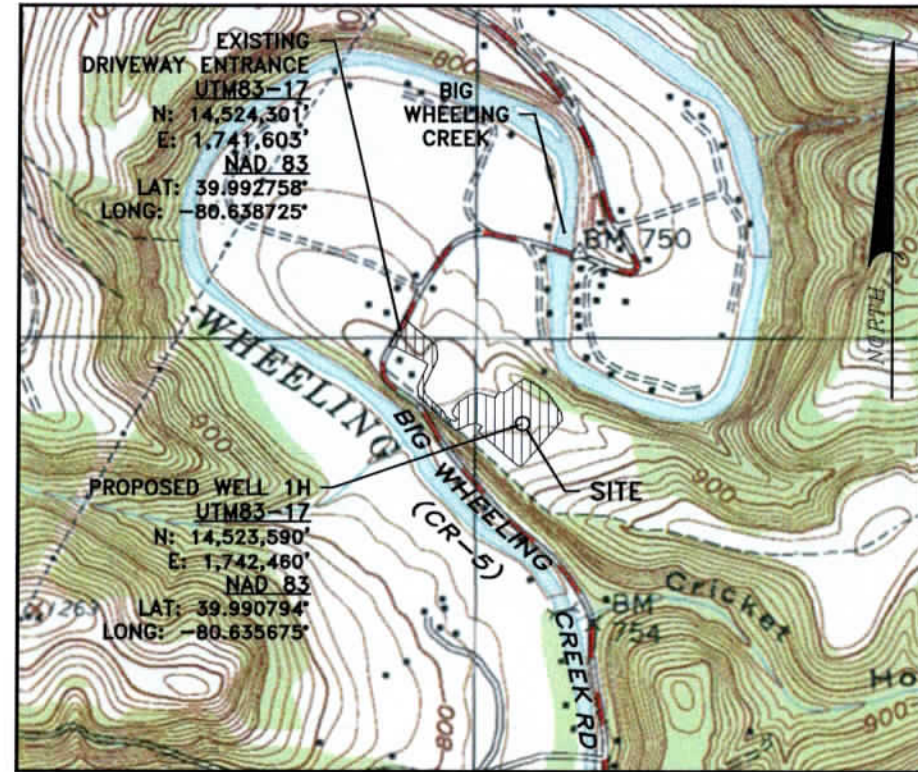
AS-BUILT SITE PLAN FOR BETTY SCHAFER MSH PAD SAND HILL DISTRICT, MARSHALL COUNTY, WV



DRAWN BY: JAR
DATE: 10/21/2015
SCALE: AS SHOWN
DWG. NO.: 087569000



COUNTY MAP
N.T.S.



LOCATION MAP
SCALE - 1"=1000'

WEST VIRGINIA 811
CALL BEFORE YOU DIG!
Dial 811 or 800.245.4848
Miss Utility of West Virginia

AT LEAST 48 HOURS, BUT NOT MORE THAN 10 WORKING DAYS (EXCLUDING WEEKENDS AND HOLIDAYS), PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THESE ACTIVITIES SHALL CONTACT MISS UTILITY OF WEST VIRGINIA AT 811 OR 1-800-245-4848.

SWN
Southwestern Energy®

OPERATOR

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

Steve Casanova
9/20/2023

SITE DATA

TOTAL DISTURBED AREA: 7.82 ACRES
ROAD DISTURBED AREA: 0.73 ACRES
PAD DISTURBED ACRES: 2.99 ACRES
ACCESS ROAD LENGTH: 1,118'
ACCESS ROAD AVERAGE WIDTH: 28'
WELL PAD ELEVATION: 849.1'

WELL API NUMBERS

201H API 051-01776
210H API 051-01777

LIST OF DRAWINGS

- TS1.1 COVER SHEET
- EP2.1 EVACUATION ROUTE/ PREVAILING WINDS
- EP2.2 EVACUATION ROUTE/ PREVAILING WINDS
- AS3.1 AS-BUILT OVERALL SITE PLAN
- AS3.2 AS-BUILT SITE PLAN
- AS3.3 AS-BUILT SITE PLAN
- CRA4.1 ACCESS ROAD PROFILE
- CRA4.2 WELL PAD CROSS SECTIONS
- MRP5.1 RECLAMATION PLAN
- MRD6.1 DETAILS
- MRD6.2 DETAILS
- MRD6.3 DETAILS

TS1.1



COVER SHEET FOR
BETTY SCHAFER MSH PAD
SAND HILL DISTRICT MARSHALL COUNTY, WV