

# 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.

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## CONDITIONS

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

06/09/2023



west virginia department of environmental protection

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

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

Monday, June 5, 2023  
WELL WORK PERMIT  
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC  
POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit approval for SAMUEL JONES BRK 10H  
47-009-00337-00-00

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.

A blue ink signature of James A. Martin, Chief, is written over the text of the letter.

James A. Martin  
Chief

Operator's Well Number: SAMUEL JONES BRK 10H  
Farm Name: SAMUEL E. & JUDITH F. JONES  
U.S. WELL NUMBER: 47-009-00337-00-00  
Horizontal 6A New Drill  
Date Issued: 6/5/2023

Promoting a healthy environment.

06/09/2023

WW-6B  
(04/15)

API NO. 47-009-4700900337  
OPERATOR WELL NO. Samuel Jones BRK 10H  
Well Pad Name: Samuel Jones Pad

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

1) Well Operator: SWN Production Co., LLC 494512924 009- Brooke 3-Buffalo 247- Bethany  
Operator ID County District Quadrangle

2) Operator's Well Number: Samuel Jones BRK 10H Well Pad Name: Samuel Jones Pad

3) Farm Name/Surface Owner: Samuel E. & Judith F. Jones Public Road Access: Hukill Hill/Marlboro Spur Road

4) Elevation, current ground: 1204' Elevation, proposed post-construction: 1204'

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

(b) If Gas Shallow  Deep   
Horizontal

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  
Target Formation- Marcellus, Down-Dip well to the South, Target Top TVD- 6356', Target Base TVD- 6414', Anticipated Thickness- 58', Associated Pressure- 4169

8) Proposed Total Vertical Depth: 6395'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 22209'

11) Proposed Horizontal Leg Length: 15621'

12) Approximate Fresh Water Strata Depths: 265'

13) Method to Determine Fresh Water Depths: Nearby spring 4700900262

14) Approximate Saltwater Depths: 540'- Salinity Profile analysis

15) Approximate Coal Seam Depths: 397'

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

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

*John P. ...  
4/24/2023*

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MAY 03 2023  
WV Department of  
Environmental Protection

WW-6B  
(04/15)

API NO. 47-<sup>1009</sup>47 00 900 337  
 OPERATOR WELL NO. Samuel Jones BRK 10H  
 Well Pad Name: Samuel Jones Pad

18)

**CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	110'	110' ✓	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	315'	315' ✓	363 sx/CTS
Coal	See	Interm	Casing				
Intermediate	9 5/8"	New	J-55	36#	1764'	1764' ✓	683 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	22209'	22209' ✓	Tail 3969sx/ 100' Inside Intermediate
Tubing							
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.380	2730	633	Class A	1.20/30% Excess
Coal	See	Interm	Casing				
Intermediate	9 5/8"	12 1/4"	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**

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Kind:				
Sizes:				
Depths Set:				

*STRAPICK LOWER  
4/24/2023*

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): 4.94

22) Area to be disturbed for well pad only, less access road (acres): 3.62

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.

WW-9  
(4/16)

API Number 47 - 009 - 00337

Operator's Well No. Samuel Jones BRK 10H

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

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name SWN Production Co., LLC OP Code 494512924

Watershed (HUC 10) Upper Ohio South Quadrangle Bethany

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 SOBM from KOP to TD

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

Additives to be used in drilling medium? Attachment 3B

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

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

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

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

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Office of Oil and Gas

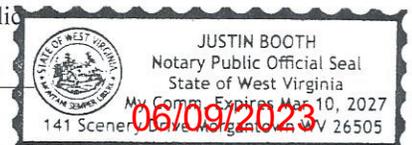
MAY 03 2023

WV Department of  
Environmental Protection

Subscribed and sworn before me this 12th day of April, 2023

*[Signature]* Notary Public

My commission expires 3/10/2027



Form WW-9

Operator's Well No. Samuel Jones BRK 10H

SWN Production Co., LLC

Proposed Revegetation Treatment: Acres Disturbed 4.94 Prevegetation pH \_\_\_\_\_

Lime as determined by pH test min.2 Tons/acre or to correct to pH 3.62

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: Steve Gower STRADER GOWER

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Title: Oil & Gas Inspector

Date: 4/24/2023

Field Reviewed?  Yes  No

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06/09/2023

# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN



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

**API NO. 47-XXX-XXXXX**  
**WELL NAME: Samuel Jones BRK 10H**  
**Bethany QUAD**  
**Buffalo DISTRICT**  
**BROOKE COUNTY, WEST VIRGINIA**

Submitted by:

Name: Brittany Woody

Date: 4/10/2023

*Brittany Woody*

Title: Staff Regulatory Specialist

SWN Production Co., LLC

Approved by:

Name: *Steve Lowery*

Date: 4/24/2023

Title: *Oil & Gas Inspector*

Approved by:

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

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

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

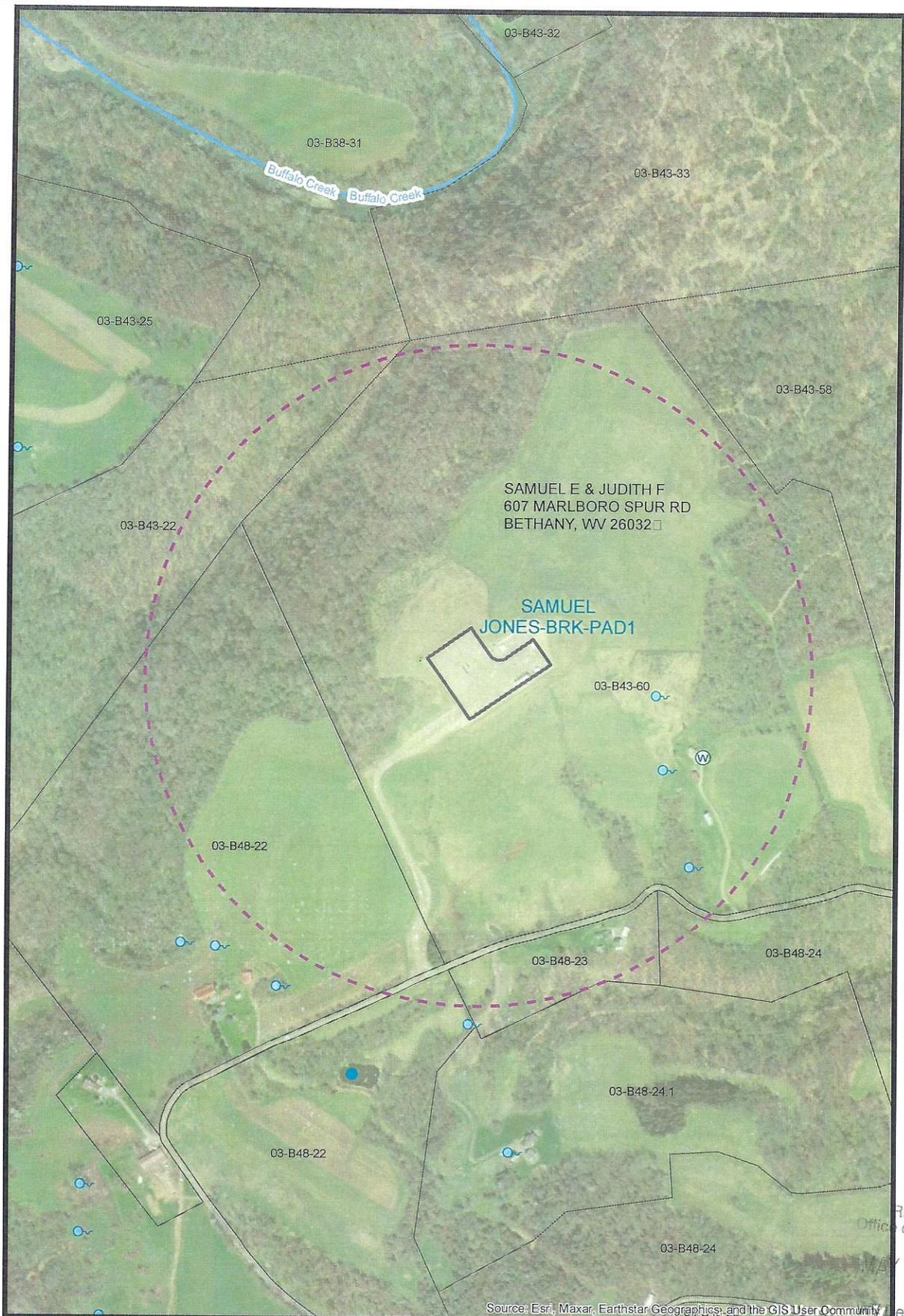
SWN PRODUCTION COMPANY, LLC – CONFIDENTIAL

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MAY 03 2023

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Environmental Protection

06/09/2023



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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.

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MAY 03 2023  
Department of Environmental Protection

<b>Water Purveyor Map</b>		Well Pad: Samuel Jones BRK	County: Brooke
Map by: youngst	Date: 4/12/2023	1 inch = 492 feet	
Nad 83 UTM Z one 17			

06/09/2023

LATITUDE: 40°12'30" SURFACE HOLE (2000' SCALE) 5,468'

10,192'

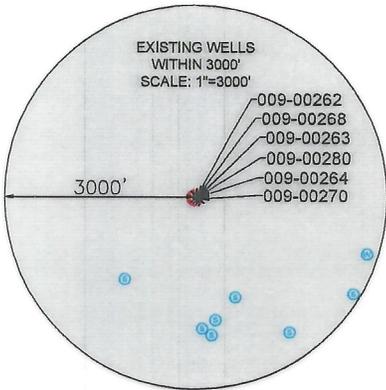
LATITUDE: 40°10'00" BOTTOM HOLE (2000' SCALE)



68011 Vineyard Road
St. Clairsville, Ohio 43950
740-695-6100

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

Table with 3 columns: LINE, BEARING, DISTANCE. Contains data for L1 and L2.



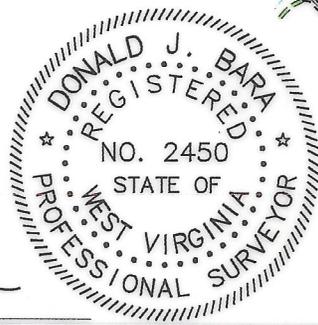
NOTES ON SURVEY

- 1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. 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.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
5. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
6. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
7. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.

Table with 3 sections: SURFACE HOLE LOCATION (SHL), LANDING POINT LOCATION (LPL), BOTTOM HOLE LOCATION (BHL). Each section lists UTM coordinates.

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. 2450



GRAPHIC SCALE IN FEET

COMPANY: SWN Production Company, LLC

Form containing well details: (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, WVDEP OFFICE OF OIL & GAS, WELL TYPE: OIL, WASTE DISPOSAL, PRODUCTION, DEEP, GAS, LIQUID INJECTION, STORAGE, SHALLOW, WATERSHED: UPPER OHIO SOUTH, DISTRICT: BUFFLO, COUNTY: BROOKE, SURFACE OWNER: SAMUEL E. & JUDITH F. JONES, OIL & GAS ROYALTY OWNER: RESOURCE MINERAL HEADWATER I, LP, DRILL, DRILL DEEPER, REDRILL, FRACTURE OR STIMULATE, PLUG OFF OLD FORMATION, PERFORATE NEW FORMATION, CONVERT, PLUG & ABANDON, CLEAN OUT & REPLUG, OTHER CHANGE, TARGET FORMATION: MARCELLUS, ESTIMATED DEPTH: 8,395 TMD, WELL OPERATOR: SWN PRODUCTION COMPANY, LLC, DESIGNATED AGENT: BRITTANY WOODY.

Table with 3 columns: LEGEND, REVISIONS, DATE. Legend includes symbols for proposed surface hole, existing wellhead, landing point, water well, spring, natural waterway, surveyed boundary, lease boundary, proposed path, public road.

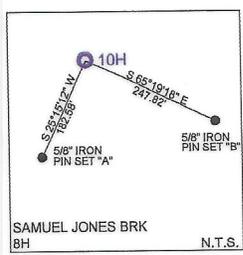
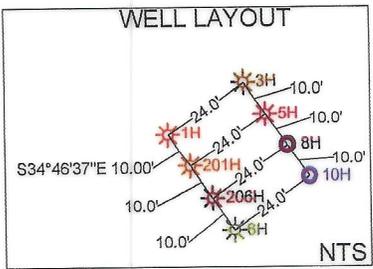
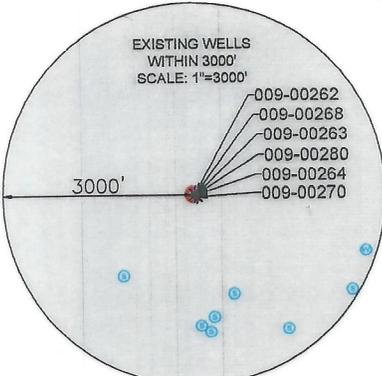
LATITUDE: 40°12'30" SURFACE HOLE (2000' SCALE) ← 5,468'

LATITUDE: 40°10'00" BOTTOM HOLE (2000' SCALE)

**JHA** ENGINEERS SURVEYORS ENVIRONMENTAL GIS MAPPING  
 www.jhacompanies.com  
 68011 Vineyard Road  
 St. Clairsville, Ohio 43950  
 740-695-6100

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

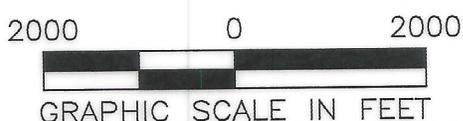
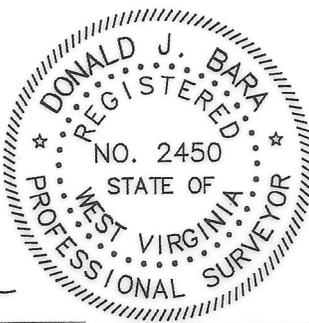
LINE	BEARING	DISTANCE
L1	S60°48'07"E	2568.32'
L2	S53°11'58"E	2227.80'



- NOTES ON SURVEY**
- COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
  - 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.
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  - NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
  - NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.

<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448992.19 EASTING: 537366.86
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448972.14 EASTING: 537713.95
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4444550.96 EASTING: 539476.88

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.



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

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	MINIMUM DEGREE OF ACCURACY: 1/200  PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	OPERATOR'S WELL #: SAMUEL JONES BRK 10H  API WELL #: 47 009 00337 STATE COUNTY PERMIT
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WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW

WATERSHED: UPPER OHIO SOUTH ELEVATION: 1204.0'

DISTRICT: BUFFLO COUNTY: BROOKE QUADRANGLE: BETHANY, WV

SURFACE OWNER: SAMUEL E. & JUDITH F. JONES ACREAGE: ±164.74

OIL & GAS ROYALTY OWNER: RESOURCE MINERAL HEADWATER I, LP ACREAGE: ±164.74

DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION

CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 8,395' TVD 22,209' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

<b>LEGEND:</b> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD LPL * LANDING POINT LOCATION W EXISTING WATER WELL S EXISTING SPRING --- NATURAL WATERWAY --- SURVEYED BOUNDARY --- LEASE BOUNDARY --- PROPOSED PATH --- PUBLIC ROAD	<b>REVISIONS:</b> DATE: 04-11-2023 API NO: 47-009-XXXX DRAWN BY: Z. WOOD SCALE: 1" = 2000' DRAWING NO: 2019-0265 WELL LOCATION PLAT
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ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	PRESLIE ROWAN LLC	3-B43-33
B	FONNER MARY LOU	3-B43-58
C	PUSKARICH TRACY T	3-B43-59
D	WV ST OF DEPT OF COMM DIV OF NAT RE WILDLIFE RES SEC	3-B43-62
E	HOGAN ANDREW P	3-B48-34
F	SMITH DEAN S	3-B48-32
G	CAMMARATA NICHOLAS J & JENNIFER C (SURV)	3-B48-25
H	LYCANS AUDIE	3-B48-26
I	WOOD RICHARD A JR & MELANIE (VOYTEK) (SURV)	3-B48-28
J	WOOD RICHARD A & MELANIE	3-B48-29
K	WOOD RICHARD A & MELANIE	3-B48-29
L	MCNICHOLAS JOHN WALTER III	3-B48-36
M	MCNICHOLAS JOHN WALTER III	3-B48-36
N	WALDEN DANIEL E & MARY VIRGNIA	3-B48-37
O	WALDEN DANIEL E & MARY VIRGNIA	3-B48-37
P	WEST VIRGINIA STATE OF - DIVISION OF NATURAL RESOURCES	3-B49-15
ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	PRESLIE ROWAN LLC	3-B43-33
B	FONNER MARY LOU	3-B43-58
C	PUSKARICH TRACY T	3-B43-59
D	WV ST OF DEPT OF COMM DIV OF NAT RE WILDLIFE RES SEC	3-B43-62
E	HOGAN ANDREW P	3-B48-34
F	SMITH DEAN S	3-B48-32
G	CAMMARATA NICHOLAS J & JENNIFER C (SURV)	3-B48-25
H	LYCANS AUDIE	3-B48-26
I	WOOD RICHARD A JR & MELANIE (VOYTEK) (SURV)	3-B48-28
J	WOOD RICHARD A & MELANIE	3-B48-29
K	WOOD RICHARD A & MELANIE	3-B48-29
L	MCNICHOLAS JOHN WALTER III	3-B48-36
M	MCNICHOLAS JOHN WALTER III	3-B48-36
N	WALDEN DANIEL E & MARY VIRGNIA	3-B48-37
O	WALDEN DANIEL E & MARY VIRGNIA	3-B48-37
P	WEST VIRGINIA STATE OF - DIVISION OF NATURAL RESOURCES	3-B49-15
Q	GRIMES DONALD; ANTHONY	3-B48-39
R	STATE OF WV CONSERVATION COMM DIV OF NAT RES PUB LAND CORP	3-L3-1
S	STATE OF WV CONSERVATION COMM	3-L3-1.1
T	PARRISH EDGAR	3-L6-2.2
U	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER	3-L6-10.2
V	GEAR LURA MARIE	3-L6-9.1
W	COWAN CHERYL ANN	3-L6-21
X	MORMANIS GREGORY N AND SHARON LEE	3-L6-13
Y	TOMINACK JOHN I JR	3-L5-10
Z	ENNIS MARJORIE G	3-L5-8
AA	HAYS TIMOTHY R & THELMA C	3-L5-29
AB	COX CHAD & JULIE C	3-L2-12
AC	LEMASTERS G L JR	3-L2-12.1
AD	DEARING JEREMY R & TANYA N	3-L2-12.3
AE	BREITINGER MICHAEL	3-L2-11
AF	SONDA SCOTT, SONDA MARK	3-L2-2
AG	WINDSOR COAL COMPANY	3-L2-9
AH	SONDA SCOTT; SONDA MARK	3-L2-1
AI	STONE MARION P	3-B48-19
AJ	STONE MARC P	3-B48-17
AK	BOHACH JENNIFER LYNNE PYLE; SEIDEWITZ WENDY RAY PYLE (JTWS)	3-B48-18
AL	WINDSOR POWER HOUSE COAL CO	3-B48-21
AM	NORDEN ANNA MAE (TOD); NORDEN - SMITH KATHERINE ETAL	3-B48-22
AN	CHAMBERS CHARLOTTE A	3-B48-23
AO	NORDEN ANNA MAE (TOD)	3-B48-22
AP	CORWIN BRIAN DAVID	3-B43-22
AQ	BETHANY COLLEGE	3-B38-31
AR	AYERS ALBERT GLENN & REBECCA ANN (SURV)	3-B43-61
AS	OHARA MATTHEW JAMES; OHARA DEIRDRA (LIFE ESTATE)	3-L2-10

06/09/2023

REVISIONS: 4700900337	COMPANY: <b>SWN</b> Production Company, LLC		<b>SWN</b> <sup>R-V+0</sup> Production Company™	
	OPERATOR'S	SAMUEL JONES BRK		DATE: 04-11-2023
	WELL #:	10H		API NO: 47-009-XXXXX
	DISTRICT:	COUNTY:	STATE:	DRAWN BY: Z. WOOD
	BUFFLO	BROOKE	WV	SCALE: N/A
				DRAWING NO: 2019-0265
				WELL LOCATION PLAT

WW-6A1  
(5/13)

Operator's Well No. SAMUEL JONES BRK 10H

**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 I 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				

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

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

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

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

Well Operator: SWN Production Co., LLC  
 By: Gavin Nadeau, RPL  
 Its: Senior Landman

EXHIBIT "A"  
Samuel Jones BRK 10H  
Brooke County, West Virginia  
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

#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG	% INTEREST NOT LEASED BY SWN PRODUCTION COMPANY, LLC
1)	03-0B43-0060-0000	Resource Minerals Headwater 1, LP	SWN Production Company, LLC	18.00%	34/237	0.00%
2)	03-0B48-0024-0000	Hopetal Hilltop, LLC	SWN Production Company, LLC	18.00%	63/370	0.00%
3)	03-0B48-0024-0001	Henry L. Chambers and Beverly R. Chambers, husband and wife	SWN Production Company, LLC	18.00%	63/377	0.00%
4)	03-0B48-0020-0000	Mark Sonda, a married man dealing in his sole and separate property	SWN Production Company, LLC	17.00%	33/179	0.00%
5)	03-0B48-0027-0000	Scott Sonda, a married man dealing in his sole and separate property	SWN Production Company, LLC	17.00%	33/191	0.00%
		William K. Walden and Andrea K. Walden, husband and wife	SWN Production Company, LLC	18.00%	63/237	
		Pittsburgh Terminal Corporation Foundation, Attorney-in-fact for Jewish Federation of Greater Pittsburgh; American Associates Ben Gurion University of the Negev, Inc.; Facts and Logic About the Middle East; American Committee for the Weizmann Institute of Science, Inc.; American Society for Technion Israel Institute of Technology; and Zionist Organization of America Inc.	SWN Production Company, LLC	18.00%		0.00%
6)	03-0B48-0041-0000	Marion Pyle Stone	Phillips Production Company	12.50%	9/21	
			Chesapeake Appalachia, L.L.C.		10/52	
			SWN Production Company, LLC		30/480	
		Gertrude Merrill, Trustee of the Douglas and Gertrude Merrill 1999 Trust	SWN Production Company, LLC	18.00%	42/408	0.00%
		Darlene Zink, a single woman, represented herein by her Power-of-Attorney, Terry Lloyd	SWN Production Company, LLC	18.00%	47/264	
		SWN Production Company, LLC (Company Owned Minerals)	N/A	N/A	392/133	
		SWN Production Company, LLC (Company Owned Minerals)	N/A	N/A	278/550	
7)	03-0B48-0038-0000	William K. Walden and Florence Andrea Walden, husband and wife	SWN Production Company, LLC	18.00%	63/236	0.00%
8)	03-0B48-0040-0000	Donald H. Grimes and Patricia L. Grimes, husband and wife, and Anthony Houston Grimes and Kimberly Grimes, husband and wife	Chesapeake Appalachia, L.L.C.	14.00%	10/26	0.00%
			SWN Production Company, LLC		30/480	
9)	03-00L2-0010-0002	Michael O'Hara and Deirdra O'Hara, husband and wife	Great Lakes Energy Partners, L.L.C.	15.50%	771/346	0.00%
			Chesapeake Appalachia, L.L.C.		808/434	
			SWN Production Company, LLC		883/527	
10)	03-00L2-0010-0001	Michael J. Grimes, a single man, Joelle Wiatroski, a/k/a Joelle Wiatroski-Grimes, a single woman, and Anthony H. Grimes	SWN Production Company, LLC	18.00%	976/493	0.00%
11)	03-00L2-0013-0001	Robert H. Fish, widower	Great Lakes Energy Partners, L.L.C.	15.50%	770/441	0.00%
			Chesapeake Appalachia, L.L.C.		808/434	
			SWN Production Company, LLC		883/527	
12)	03-00L2-0013-0000	Robert H. Fish, widower	Great Lakes Energy Partners, L.L.C.	15.50%	770/441	0.00%
			Chesapeake Appalachia, L.L.C.		808/434	
			SWN Production Company, LLC		883/527	
13)	03-00L6-0010-0000	The Atkinson Family Revocable Living Trust Dated January 31, 2002	Range Resources-Appalachia, LLC	17.00%	790/150	0.00%
			Chesapeake Appalachia, L.L.C.		808/448	
			SWN Production Company, LLC		883/539	
14)	03-00L6-0010-0001	The Atkinson Family Revocable Living Trust Dated January 31, 2002	Range Resources-Appalachia, LLC	17.00%	790/150	0.00%
			Chesapeake Appalachia, L.L.C.		808/448	
			SWN Production Company, LLC		883/539	
15)	03-00L5-0009-0000	Gary Kestner and Terry Kestner, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	814/427	0.00%
			SWN Production Company, LLC		884/1	

END OF EXHIBIT "A"

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**SWN Production Company, LLC**  
179 Innovation Drive  
Jane Lew, WV 26378  
Tel: 304 884 1610  
Fax: 304 471 2497  
www.swn.com

April 10, 2023

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

**RE:** SWN's proposed New Well: Samuel Jones BRK 10H in Brooke County, West Virginia, Drilling under Hukills Hill Road, Locust Grove Road, Rock Woods Road, Grimes Ridge Road, Ohara Drive, and Longs Run Road.

Dear Ms. Adkins:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under Hukills Hill Road, Locust Grove Road, Rock Woods Road, Grimes Ridge Road, Ohara Drive, and Longs Run Road. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Respectfully,

**SWN Production Company, LLC**

Gavin Nadeau, RPL  
Senior Landman

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The Right People doing the Right Things,  
wisely investing the cash flow from our  
underlying assets will create value+  
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WW-PN  
(11-18-2015)

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

**Notice is hereby given:**

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

**Paper:** Brooke County Review

**Public Notice Date:** April 14, 2023 & April 21, 2023

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

**Applicant:** SWN Production Company, LLC **Well Number:** Samuel Jones BRK 10H

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

**Business Conducted:** Natural gas production.

**Location –**

State:	<u>West Virginia</u>	County:	<u>Brooke</u>
District:	<u>Buffalo</u>	Quadrangle:	<u>Bethany</u>
UTM Coordinate NAD83 Northing:	<u>4,448,992</u>		
UTM coordinate NAD83 Easting:	<u>537,367</u>		
Watershed:	<u>Upper Ohio South</u>		

**Coordinate Conversion:**

To convert the coordinates above into longitude and latitude, visit: [http://tagis.dep.wv.gov/convert/llutm\\_conus.php](http://tagis.dep.wv.gov/convert/llutm_conus.php)

**Electronic notification:**

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

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**Reviewing Applications:**

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

**Submitting Comments:**

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

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

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

06/09/2023

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

Date of Notice Certification: 5/2

API No. 47- 009 - 00337  
Operator's Well No. Samuel Jones BRK 10H  
Well Pad Name: Samuel Jones Pad

**Notice has been given:**

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

State: <u>West Virginia</u>	UTM NAD 83	Easting: <u>537,366.86</u>
County: <u>009- Brooke</u>		Northing: <u>4,448,992.19</u>
District: <u>Buffalo</u>	Public Road Access: <u>Hukill Hill/Marlboro Spur Road</u>	
Quadrangle: <u>Bethany</u>	Generally used farm name: <u>Samuel Jones</u>	
Watershed: <u>Upper Ohio South</u>		

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

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:  *PLEASE CHECK ALL THAT APPLY		<b>OOG OFFICE USE ONLY</b>
<input type="checkbox"/> 1. NOTICE OF SEISMIC ACTIVITY or <input checked="" type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED		<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input checked="" type="checkbox"/> 2. NOTICE OF ENTRY FOR PLAT SURVEY or <input type="checkbox"/> NO PLAT SURVEY WAS CONDUCTED		<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 3. NOTICE OF INTENT TO DRILL or <input type="checkbox"/> NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or  <input type="checkbox"/> WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)		<input type="checkbox"/> RECEIVED/ NOT REQUIRED
<input checked="" type="checkbox"/> 4. NOTICE OF PLANNED OPERATION		<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 5. PUBLIC NOTICE	RECEIVED Office of Oil and Gas  MAY 03 2023	<input type="checkbox"/> RECEIVED
<input checked="" type="checkbox"/> 6. NOTICE OF APPLICATION		<input type="checkbox"/> RECEIVED

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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.

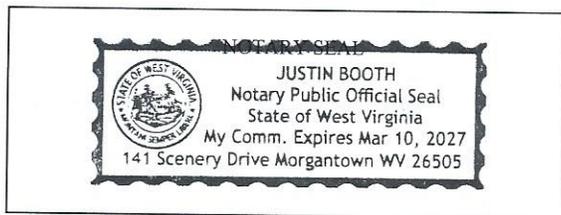
06/09/2023

WW-6AC  
(1/12)

**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 12<sup>th</sup> day of APRIL 2023.

[Signature] Notary Public

My Commission Expires 3/10/2027

**Oil and Gas Privacy Notice:**

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

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

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

Date of Notice: 5/2 Date Permit Application Filed: 5/2

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: Smauel & Judith Jones, Irrevocable Trust

Address: 861 Marlboro Spur Road  
Bethany, WV 26032

Name: Anna M. Norden

Address: 3500 Walker Road  
Hillard, OH 43026

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: Conrhein Coal Company

Address: 275 Technology Drive, Suite 101  
Canonsburg, PA 15317

COAL OPERATOR

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

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

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

Name: See Attachment 13A

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

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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

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

\*Please attach additional forms if necessary

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**Notice is hereby given:**

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

**This Notice Shall Include:**

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

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

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

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

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

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Office of Oil and Gas

**Well Location Restrictions**

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

MAY 03 2023  
WV Department of  
Environmental Protection

06/09/2023

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

**Water Well Testing:**

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

**Water Testing Laboratories:**

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

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

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

**Written Comment:**

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

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

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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.**

06/09/2023

**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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WW-6A  
(8-13)

API NO. 47- 009 - 00337  
OPERATOR WELL NO. Samuel Jones BRK 10H  
Well Pad Name: Samuel Jones Pad

**Notice is hereby given by:**

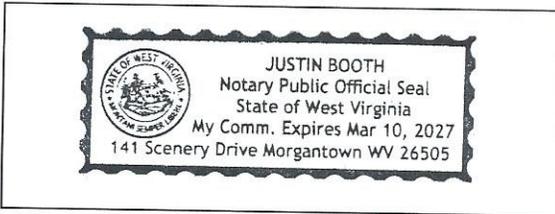
Well Operator: SWN Production Co., LLC  
Telephone: 304-884-1610  
Email: Brittany\_Woody@swn.com

*Brittany Woody*

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

**Oil and Gas Privacy Notice:**

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



Subscribed and sworn before me this 12<sup>th</sup> day of April, 2023.

[Signature] Notary Public

My Commission Expires 3/10/2027

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

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

**Date of Notice:** 3/30/23      **Date of Planned Entry:** 4/6/23

**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: Samuel E & Judith F Jones Irrevocable Trust

Address: 861 Marlboro Spur Road  
Bethany, WV 26032

Name: Anna M. Norden

Address: 3500 Walker Road  
Hillard, OH 43026

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

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

COAL OWNER OR LESSEE

Name: Conrhein Coal Company

Address: 275 Technology Drive, Suite 101  
Canonsburg, PA 15317

MINERAL OWNER(s)

Name: Resources Minerals Headwater I, LP.

Address: 11412 Bee Cave Road  
Austin, TX 78738

\*please attach additional forms if necessary

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**Notice is hereby given:**

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

State: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>40.1090440, -80.560908</u>
County: <u>Brooke</u>	Public Road Access: <u>Hukill Hill Road/Marlboro Spur Road</u>
District: <u>Buffalo</u>	Watershed: <u>Middle Buffalo Creek</u>
Quadrangle: <u>Bethany</u>	Generally used farm name: <u>Samuel Jones</u>

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

**Notice is hereby given by:**

Well Operator: <u>SWN PRODUCTION COMPANY, LLC</u>	Address: <u>1300 Fort Pierpont Dr., Suite 201</u>
Telephone: <u>304-884-1610</u>	<u>Morgantown, WV 26508</u>
Email: <u>brittany_woody@swn.com</u>	Facsimile: <u>304-884-1690</u>

**Oil and Gas Privacy Notice:**

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

**06/09/2023**

**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:** 04/12/2023 **Date Permit Application Filed:** 5/2

**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: Samuel E. and Judith F. Jones Irrevocable Trust  
Address: 861 Marlboro Spur Road  
Bethany, WV 26032

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>537,366.86</u>
County: <u>Brooke</u>		Northing: <u>4,448,992.19</u>
District: <u>Buffalo</u>	Public Road Access: <u>Hukill Hill/Marlboro Spur Road</u>	
Quadrangle: <u>Bethany, WV</u>	Generally used farm name: <u>Samuel Jones</u>	
Watershed: <u>Upper Ohio South</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 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting [www.dep.wv.gov/oil-and-gas/pages/default.aspx](http://www.dep.wv.gov/oil-and-gas/pages/default.aspx).

**Notice is hereby given by:**

Well Operator: SWN Production Company, LLC  
Address: 1300 Fort Pierpont Drive, Suite 201  
Morgantown, WV 26508  
Telephone: 304-884-1642  
Email: reid\_croft@swn.com  
Facsimile: \_\_\_\_\_

Authorized Representative: Reid Croft  
Address: 1300 fort Pierpont Drive, Suite 201  
Morgantown, WV 26508  
Telephone: 304-884-1642  
Email: reid\_croft@swn.com  
Facsimile: \_\_\_\_\_

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**Oil and Gas Privacy Notice:**

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

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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

April 11, 2023

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

Subject: DOH Permit for the Samuel Jones Pad, Brooke County  
Samuel Jones BRK 10H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2018-0335 which has been issued to Southwestern Energy for access to the State Road for a well site located off Brooke County Route 32/1 SLS MP 0.84.

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

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

## Attachment VI Frac Additives

Product Name	Product Use	Chemical Name	CAS Number
AI-303 (U.S. Well Services)	Mixture	Ethylene glycol	107-21-1
		Cinnamaldehyde	104-55-2
		Butyl cellosolve	111-76-2
		Formic acid	64-18-6
		Polyether	Proprietary
AP ONE (U.S. Well Services)	Breaker	Acetophenone, thiourea, formaldehyde polymer	68527-49-1
Bactron K-139 (Champion Technologies)	Biocide	Ammonium persulfate	7727-54-0
		Glutaraldehyde	111-30-8
Bactron K-219 (Champion Technologies)	Biocide	Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
		Methanol	67-56-1
CarboNRT	Tracer	Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
EC6486A (Nalco Champion)	Scale Inhibitor	Ceramic Proppant	66402-68-4
EC6734A (Champion Technologies)	Biocide	Amine Triphosphate	Proprietary
		Ethylene Glycol	107-21-1
		Hydrogen Peroxide	7722-84-1
Econo-CI200 (SWN Well Services)	Corrosion Inhibitor	Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
		Methanol	67-56-1
		Oxyalkylated fatty acid	68951-67-7
		Fatty acids	61790-12-3
Ecopol-FEAC (SWN Well Services)	Iron Control	Modified thiourea polymer	68527-49-1
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	127-08-2
		Formaldehyde	50-00-0
		Acetic Acid	64-19-7
		Citric Acid	77-92-9
FDP-S1176-15 (Halliburton)	Friction Reducer	Water	7732-18-5
		Polyacrylate	Proprietary
FLOJET DR900 LPP (SWN Well Services)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
		Distillates (petroleum) hydrotreated light	64674-47-8
		Ethylene Glycol	107-21-1
		Alcohols, C12-16, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Water	7732-18-5
		Proprietary	Proprietary
FR-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
		Inorganic Salt	Proprietary
GYPTRON T-390 (Champion Technologies)	Scale Inhibitor	Methanol	67-56-1
		Nonylphenol Ethoxylate	Proprietary
HAI-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A
HCL (SWN Well Services)	Hydrochloric Acid	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
LP-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary
		Ammonium Chloride	12125-02-9
OPTI-FLEX (U.S. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
Plexslick 930	Friction Reducer	Hydrotreated Distillate	Proprietary
		Copolymer of 2-propenamide	64742-47-8
		Sodium Chloride	7647-14-5
		Alcohols, C12-16, Exoxylated	68551-12-2
		Oleic Acid Diethanolamide	93-83-4
Plexslick 953	Friction Reducer	Ammonium Chloride	12125-02-9
		Petroleum Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Ammonium Chloride	12125-02-9
Plexslick 957	Friction Reducer	N,N-bis (2-hydroxyethyl) oleamide	93-83-4
		Petroleum Distillate	64742-47-8
		Ammonium Chloride	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
		Alcohols, C12-16, Exoxylated	68551-12-2
Plexslick V996	no data available	Water	7732-15-5
		Copolymer of 2-Propeenamide	*****
		Distillates (petroleum), hydrotreated light	64742-47-8
		Alcohol Ethoxylate	*****
WFRA-2000 (U.S. Well Services)	Anionic Friction Reducer	Surfactant	*****
		Hydrotreated light distillate (petroleum)	64742-47-8
		Propenoic acid, polymer with propenamide	9003-06-9
Plexaid 655 NM	Scale Inhibitor	Diethylenetriamine penta (methylene phosphonic acid)	15827-30-8
Plexslick 922	no data available	Copolymer of 2-propenamide	69418-26-4
		Distillates (petroleum), hydrotreated light	64742-47-8
		Ammonium chloride ((NH4)Cl)	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
		Phosphonium, tetrakis (hydroxymethyl), Sulfate	55566-30-8
Tolcide 4Frac	Mixture	Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
Tolcide PSS0A	Biocidal product	Tetrakis (hydroxymethyl) phosphonium sulphate	55566-30-8
		Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups	397256-50-7
LD-2950	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
		Ethoxylated alcohol	Proprietary
Legend LD-7750W	Scale Control	Poly (oxy-1,2-ethanediyl) alpha.-tridecyl-.omega.-hydroxy-, branched	69011-36-5
		Methanol	67-56-1
MC MX 8-4743	Specialty Product	Phosphonic Acid Salt	Proprietary
Ferrplex 80	Iron Control	Sodium Nitrate	7631-99-4
Plexaid 655 WG	Scale Inhibitor	Sodium erythorbate	6381-77-7
		Glycerine	67-56-1
		Water	7732-18-5
		Organic Phosphonic Acid Salts	15827-60-8

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OPERATOR: SWN Production Co., LLC

WELL NO: Samuel Jones BRK 10H

PAD NAME: Samuel Jones Pad

REVIEWED BY: \_\_\_\_\_

SIGNATURE: *Brittany Woody*

### WELL RESTRICTIONS CHECKLIST

#### HORIZONTAL 6A WELL

*\* Pad Built 10/21/19*

#### 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

RECEIVED  
Office of Oil and Gas

MAY 03 2023

WV Department of  
Environmental Protection

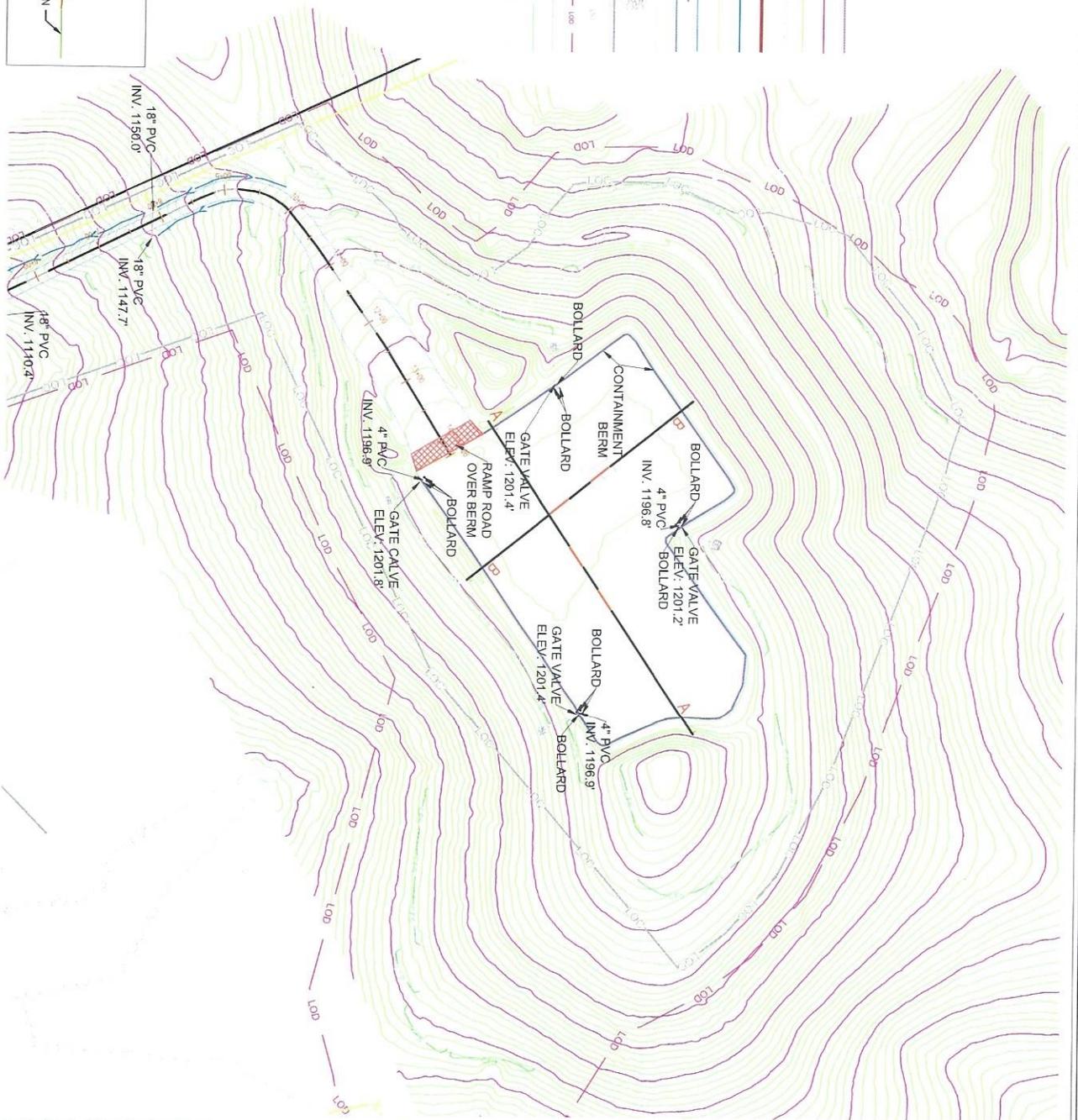
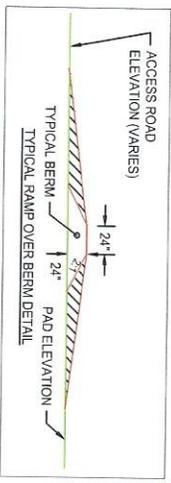
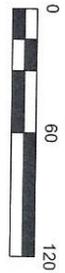
06/09/2023





**WV DEP 006**  
**ACCEPTED AS-BUILT**  
*[Signature]*  
 6/5/2023

- EXISTING BUILDING
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING TREELINE
- EXISTING STORM PIPE
- EXISTING DITCH
- EXISTING GAS LINE
- EXISTING WATER LINE
- EXISTING EDGE OF ROAD
- EXISTING RIP RAP
- EXISTING OVERHEAD ELECTRIC
- LIMITS OF CLEARING
- LIMITS OF DISTURBANCE
- EXISTING EDGE GRAVEL
- EXISTING COMPOST FILTER SOCK
- EXISTING CONSTRUCTION FENCE



**06/09/2023**

NO.	DATE	DESCRIPTION

PREPARED FOR:  
 MISS UTILITY OF WEST VIRGINIA  
 2 WORKING DAYS  
 BEFORE TOLL FREE  
 CALL TOLL FREE  
 800-245-4446

**Southwestern Energy**  
 SWN



**JHA ENGINEERS**  
 ENVIRONMENTAL  
 GIS MAPPING  
 SURVEYORS  
 www.jhacompanies.com  
 68011 VINEYARD ROAD  
 ST. CLAIRSVILLE OH 43980  
 (740) 695-6100  
 PA • OH • NY • WV

PROJECT ID: 2019-0205  
 DATE: 06/01/2023  
 SCALE: AS NOTED  
 DESIGN: CLW  
 CHECKED: CLW  
 DRAWN: CLW

FOR  
**SMUEL JONES PAD AND ROAD**  
 LOCATED IN BIRFIELD DISTRICT  
 BROCKME COUNTY, WEST VIRGINIA

TITLE: **CONSTRUCTION PLAN**  
 SHEET NO: **C-203**  
 DATE: **FINAL**

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