API Number: <u>4700900336</u>

#### 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.



#### 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

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 8H 47-009-00336-00-00

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-

Martin

Operator's Well Number: SAMUEL JONES BRK 8H

Farm Name: SAMUEL E. & JUDITH F. JON

U.S. WELL NUMBER: 47-009-00336-00-00

Horizontal 6A New Drill

Date Issued: 6/5/2023

47 00 9 0 0 3 3 6

OPERATOR WELL NO. Samuel Jones BRK 8H 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 8H 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 X Oil Underground Storage
Other
(b)If Gas Shallow x / Deep
Horizontal X
6) Existing Pad: Yes or No Yes
7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):  Target Formation- Marcellus, Down-Dip well to the South, Target Top TVD- 6333', Target Base TVD- 6395', Anticipated Thickness- 62', Associated Pressure- 4156
8) Proposed Total Vertical Depth: 6378'
9) Formation at Total Vertical Depth: Marcellus
10) Proposed Total Measured Depth: 21775'
11) Proposed Horizontal Leg Length: 15289.48'
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 Nox
(a) If Yes, provide Mine Info: Name:  RECEIVED Office of Öil and Gas
Depth: MAY <b>0 3</b> 2023
Seam: Wy Department of
Owner:

Jana La 2013

4700900336

API NO. 47-\_009

OPERATOR WELL NO. Samuel Jones BRK 8H

Well Pad Name: Samuel Jones Pad

18)

#### CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	<u>Grade</u>	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#	21775'	21775'	Tail 3885sx/ 100' Inside Intermediate
Tubing						100000000000000000000000000000000000000	
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
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**

Kind:	RECEIVED Office of Oil and Gas
Sizes:	MAY 0 3 2023
Depths Set:	WV Department of Environmental Protection

Well Pad Name: Samuel Jones Pad

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

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

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

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

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

25) Proposed borehole conditioning procedures:

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

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Office of Oil and Gas

MAY 03 2023

WV Department of Environmental Protection

\*Note: Attach additional sheets as needed.

Page 3 of 3 06/09/2023 WW-9 (4/16)

API Number	47 -	009	<u> </u>
One	rator's	Well No	Samuel Iones RRK 8H

### 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	
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 Waste	es:
Land Application Underground Injection (UIC P Reuse (at API Number At the ne Off Site Disposal (Supply form Other (Explain recovery and so	WW-9 for disposal location)
Will closed loop system be used? If so, describe: Yes- Se	ee Attachment 3A
	zontal)? Air, freshwater, oil based, etc. Air drill to KOP, fluid drill with SOBM from KOP to TD
-If oil based, what type? Synthetic, petroleum, et	
Additives to be used in drilling medium? Attachment 3B	
Drill cuttings disposal method? Leave in pit, landfill, remo	oved offsite, etc.   landfill
-If left in pit and plan to solidify what medium wi	Il be used? (cement, lime, sawdust)
Apex Sanitary Landilli Ub-U8438, Brooke Co Permittee shall provide written notice to the Office of Oil a	SWF-1032, Short Creek SWF-1034, Carbon Limestone MSWL018781, Wetzel County 1021 SVVF-1U13, FMS 3531UU and Gas of any load of drill cuttings or associated waste rejected at any ided within 24 hours of rejection and the permittee shall also disclose
on August 1, 2005, by the Office of Oil and Gas of the Wei provisions of the permit are enforceable by law. Violatio law or regulation can lead to enforcement action.  I certify under penalty of law that I have person application form and all attachments thereto and that, I	RECEIVED
Company Official Signature	Office of Oil and Gas
Company Official (Typed Name) Brittany Woody	MAY 0 3 2023
Company Official Title Staff Regulatory Specialist	WV Department of Environmental Protection
OA NA	Notary Publi
My commission expires 3/10/2027	Notary Public Official Seal State of West Virginia My Carry Express 2310, 202;

#### 4700900336

Operator's Well No. Samuel Jones BRK 8H

Proposed Revegetation Treatment: Acres Disturbed 4.94	Prevegetation pH	
Lime _as determined by pH test min.2 Tons/acre or to correct to pH _		
Fertilizer type 10-20-20		
Fertilizer amount 600/500 lbs/	acre	
Mulch Hay/Straw Tons/acr	re	
Seed 1	<u>Mixtures</u>	
Temporary	Permanent	
Seed Type Ibs/acre Attachment 3C	Seed Type lbs/acre	
Maps(s) of road, location, pit and proposed area for land applicati rovided). If water from the pit will be land applied, include dime	on (unless engineered plans including this info have been nsions (L x W x D) of the pit, and dimensions (L x W), and	 nd area in
Maps(s) of road, location, pit and proposed area for land applicati rovided). If water from the pit will be land applied, include dime creage, of the land application area.	on (unless engineered plans including this info have been nsions (L x W x D) of the pit, and dimensions (L x W), an	d area ir
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	Office of	CENTER

## MARCELLUS WELL DRILLING PROCEDURES AND 4700900336 WELL SITE SAFETY PLAN



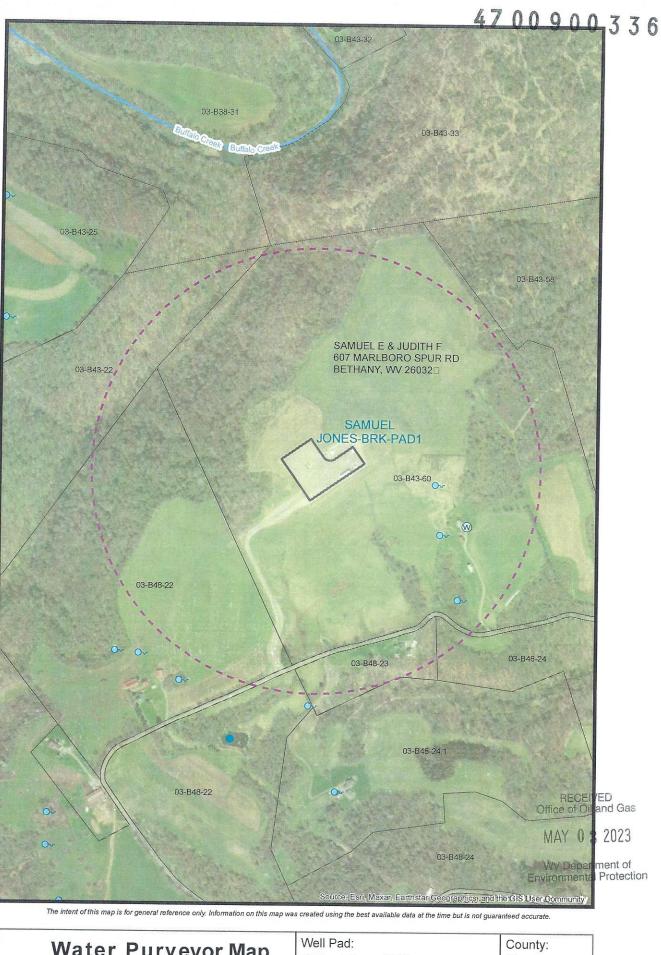
SWN Production Company, LLC 1300 Fort Pierpont Drive, Suite 201 Morgantown, West Virginia 26508

# API NO. 47-XXX-XXXXX WELL NAME: Samuel Jones BRK 8H Bethany QUAD Buffalo DISTRICT BROOKE COUNTY, WEST VIRGINIA

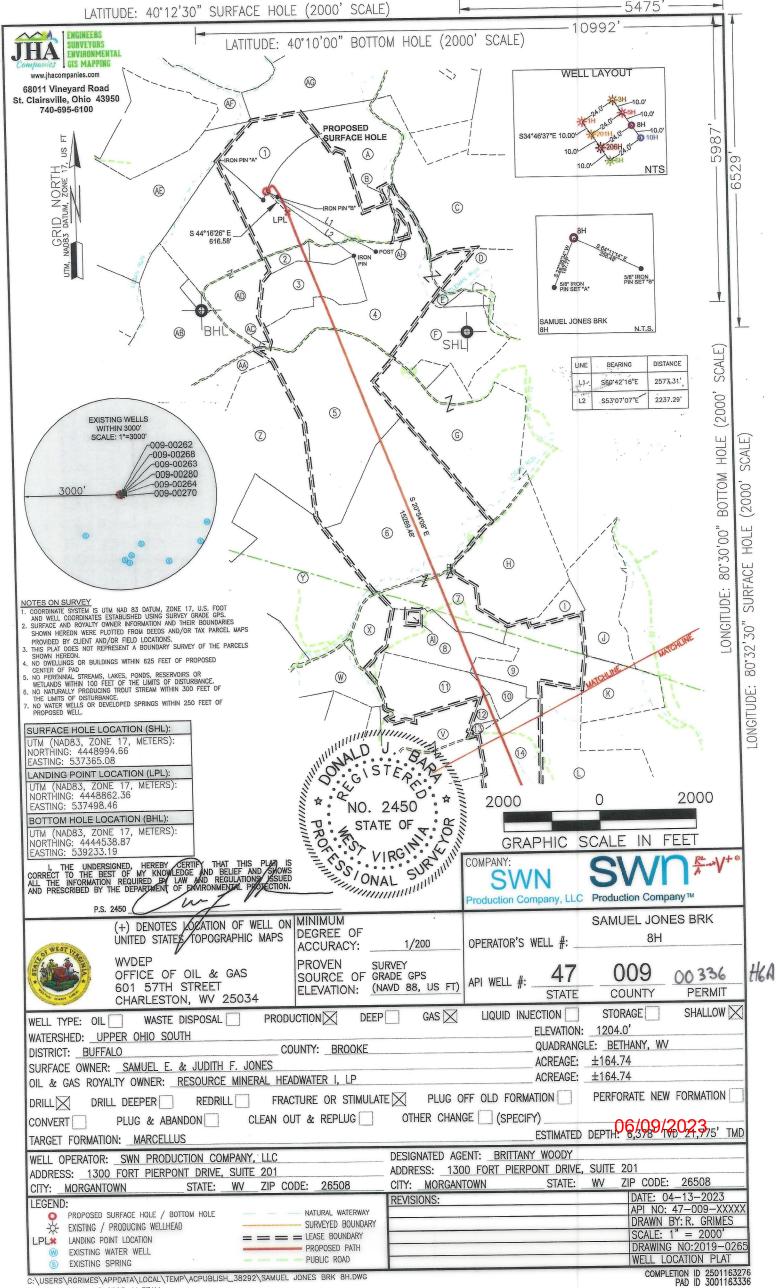
Submitted by:	
Name: Brittany Woody Suttany Woody	Date: <u>4/10/2023</u>
Title: Staff Regulatory Specialist	SWN Production Co., LLC
Approved by:	
Name: Stores	Date: 4/24/2023
Title: Oild GAS INSPECTOR	
Approved by:	
Name:	Date:
Title:	
SWN PRODUCTION COMPANY, LLC -	- CONFIDENTIAL

Office of Öil and Gas
MAY 0 3 2023

WV Department of Environmental Protection



Water P	urveyor Map	Well Pad: Samuel Jones BRK	County: Brooke	
Map by: youngst Date: 4/12/2023	Radius 1,500 ft	1 in	ch = 492 feet	N N
Nad 83 UTM Z one 17 SWD Share-senten foregut	Pond W Well Ov Spring	0 175 350	700 1,05	<b>96/09/20</b> 2



	WELL BORE TABLE FOR SURFACE/ROYALTY OWNERS	
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	JONES SAMUEL E & JUDITH F IRREVOCABLE TRUST (S) RESOURCE MINERALS HEADWATER I, LP (R)	3-B43-60
TRACT	SURFACE OWNER	TAX PARCEL
2	CHAMBERS CHARLOTTE A	3-B48-23
3	CHAMBERS HARRY L & BEVERLY R (SURV)	3-B48-24.1
4	CHAMBERS CHARLOTTE A	3-B48-24
5	SONDA SCOTT & MARK	3-B48-20
6	STONE MARION PYLE	3-B48-41
7	GRIMES DONALD; ANTHONY HOUSTON (SURV)	3-B48-40
8	OHARA MATTHEW JAMES; OHARA DEIRDRA (LIFE ESTATE)	3-L2-10.2
9	GRIMES MICHAEL J	3-L2-10.1
10	FISH HARRY ALAN FISH R H & P C RES'V L/E	3-L2-13.1
11	BREITINGER MICHAEL	3-L2-11
12	DEARING JEREMY R & TANYA N	3-L2-11.3
13	LEMASTERS G L JR	3-L2-12.1
14	FISH HARRY ALAN	3-L2-12.1
15	ENNIS MARJORIE G	3-L2-13
16	KESTNER GARY & TERRY	
10	ADJOINING OWNERS TABLE	3-L5-9
TDACT		
TRACT	SURFACE OWNER	TAX PARCEL
A	FONNER MARY LOU	3-B43-58
С	PUSKARICH TRACY T  WV ST OF DEPT OF COMM DIV OF NAT RE WILDLIFE RES  SEC	3-B43-59 3-B43-62
D	HOGAN ANDREW P	3-B48-34
E	SMITH DEAN S	
F	CAMMARATA NICHOLAS J & JENNIFER C (SURV)	3-B48-32
G	WALDEN WILLIAM K & FLORENCE ANDREA (SURV)	3-B48-25
Н		3-B48-27
	WALDEN WILLIAM K & ANDREA	3-B48-38
J	GRIMES DONALD; ANTHONY  WEST VIRGINIA STATE OF - DIVISION OF NATURAL	3-B48-39 3-B49-15
K	RESOURCES  STATE OF WV CONSERVATION COMM DIV OF NAT RES PUB LAND CORP	3-L3-1
L	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER	3-L6-10
M	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER	3-L6-10.1
N	ATKINSON GREGORY D; ET AL C/O JENNIFER TUCKER	3-L6-10.1
0		
Р	GEAR LURA MARIE	3-L6-9.1
Q	COWAN CHERYL ANN  MONTGOMERY PATRICK J & MONTGOMERY BRENDA	3-L6-21 3-L6-11.1
R	LEE MORMANIS GREGORY N AND SHARON LEE	3-L6-13
S	TOMINACK JOHN I JR	3-L5-10
T	DOLENCE DONALD F & J L	
U		3-L5-11 3-L5-29
V	HAYS TIMOTHY R & THELMA C  COX CHAD & JULIE C	
W		3-L2-12
	SONDA SCOTT SONDA MARK	3-L2-2
X	WINDSOR COAL COMPANY	3-L2-9
Υ	SONDA SCOTT SONDA MARK	3-L2-1
Z	STONE MARION P	3-B48-19
AA	STONE MARC P	3-B48-17
AB	BOHACH JENNIFER LYNNE PYLE; SEIDEWITZ WENDY RAY PYLE (JTWS)	3-B48-18
AC	WINDSOR POWER HOUSE COAL CO	3-B48-21
AD	NORDEN ANNA MAE (TOD) NORDEN - SMITH KATHERINE ETAL	3-B48-22
AE	CORWIN BRIAN DAVID	3-B43-22
AF	BETHANY COLLEGE	3-B38-31
	PRESLIE ROWAN LLC	3-B43-33
AG		
AG	AYERS ALBERT GLENN & REBECCA	3-B43-61

06/09/2023

REVISIONS: 4700906334	COMPANY:	SWN Production Company, LLC		SWN A ***********************************
	OPERATOR'S	SAMUEL JO	NES BRK	DATE: 04-13-2023
	WELL #:	81-	1	API NO: 47-009-XXXXX DRAWN BY:R. GRIMES
	DISTRICT: BUFFALO	COUNTY: BROOKE	STATE: WV	SCALE: N/A DRAWING NO:2019-0265 WELL LOCATION PLAT

WW-6A1 (5/13)

Operator's Well No. SAMUEL JONES BRK 8H

#### 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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Office of Oil and Gas

MAY 0 3 2023

WV Department of Environmental Protection

\*Co-tenancy utilization - At least 75% of the royalty owners have consented to the lawful use or development of the oil or natural gas mineral property on the tract. The interests of the remaining co-tenants will be secured pursuant to the Co-tenancy Modernization and Majority Protection Act.

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

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

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

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

Well Operator: SWN PRODUCTION COMPANY, LLC

By:

Its:

GAVIN NADEAU, SENIOR LANDMAN

Page 1 of 2

EXHBIT "A" Samed Jones BBK SH Brooke County, West Virginia Oncounty, West Virginia Oncounty, West Virginia Attached to and made a part of the State of West Virginia CdI and Gas Permit Form, WW-6AL by SWN Production Company, LLC., Operator						
) 03-0B43-00e	0-0000 Resource Minerals Headwater I, LP	LESSEE	ROYALTY	BK/PG	% INTEREST NOT LEASED BY S PRODUCTION COMPANY, LL	
03-0B48-002 03-0B48-002	3-0000 Hopeful Hilltop, LLC	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	34/257	0.00%	
03-0848-00	Harry L. Chambers and Beverly R. Chambers, husband and wife     Hopeful Hilltop, LLC	SWN Production Company, LLC	18.00%	63/370 63/377	0.00%	
03-0B48-003	0-0000 Mark Sonda, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	63/370	0.00%	
	Scott Senda, a married man dealing in his sele and separate property  4000 Marion Pyle Stone	SWN Production Company, LLC SWN Production Company, LLC	17.00% 17.00%	33/179 33/191	0.00%	
03-05-46-004	-0000 Marion Pyle Stone	Phillips Production Company	12.50%	9/21		
		Chesapeake Appalachia, L.L.C. SWN Production Company, LLC		10/552		
	Gertrude Merrill, Trustee of the Douglas and Gertrude Merrill 1999 Trust Darlora Zink, a single surgest and beautiful for the Company of the	SWN Production Company, LLC	18.00%	30/480 42/408	0.00%	
	Darlene Zink, a single woman, represented herein by her Fower-of-Attorney, Terry Lloyd SWN Production Company, LLC (Company Owned Minerals)	SWN Production Company, LLC	18.00%	47/264		
03-0348-004	SWN Production Company, LLC (Company Owned Minerals)	N/A N/A	N/A N/A	392/133 378/550	And I	
	1-0000 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%	10/426	****	
03-00L2-001	-0002 Michael O'Hara and Deirdra O'Hara, husband and wife	SWN Production Company, LLC	0.00010.00120	30/480	0.00%	
		Great Lakes Energy Partners, L.L.C. Chesapeake Appalachia, L.L.C.	15.50%	771/346 808/343	0.00%	
03-00L2-001	-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		883/527	0.00%	
03-00L2-001	-0001 Robert H. Fish, widower	SWN Production Company, LLC	18.00%	976/493	0.00%	
		Great Lakes Energy Partners, L.L.C. Chesapeake Appalachia, L.L.C.	15.50%	770/441 808/434	0.00%	
03-00L2-0011		SWN Production Company, LLC		883/527	9.590 /B	
	Garrison Kent Grewell, a married man dealing in his sole and separate property	N/A SWN Production Company, LLC	NA 14.00%	N/A	1.19%	
	Beitye Herman, a single woman The Doris Mae Hermann Downey Trust	SWN Production Company, LLC	14.00%	933/491 938/732		
	Paul G. Seelman, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	942/121		
	Carol J. Young, a married woman dealing in her sole and separate property	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	945/186		
	Camerine Seelman Goetz, a married woman dealing in her sole and separate property  Leada Seelman, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	945/175 943/698		
	Gail Scelman Falasco, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	942/792		
	Ted Freeman by Rita F, Johnson POA Patricia E, Eckles, a widow	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	945/8 942/114		
	Marilyn F. Slater, a merried woman dealing in her sale and senarate property.	SWN Production Company, LLC	18.00%	944/792		
	Connic M. Sims a married woman dealing in her role and expense are set.	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	945/1		
	Jereme Bernard Hermann, a married man dealing in his sole and separate property  Dolores Mcl'adden, a single woman	SWN Production Company, LLC	18.00% 18.00%	943/377 941/118		
	Kemeth P. Courselman, a single man	SWN Production Company, LLC	18.00%	942/760		
	Karen R. Goree, a married woman dealing in her sole and senarate property	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	940/354 946/389		
	Lynn Stroud, a married woman dealing in her sole and separate property  James S. Rogers, Jr., a married man dealing in his sole and separate property	SWN Production Company 11 C	18.00%	948/216		
	Gati Pennington, a married woman dealing in her sole and senarate property	SWN Production Company, LLC	18.00%	947/321		
	Berry Jean Flanagan, a widow	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	947/315 942/779		
	James A. Maibach, a married man dealing in his sole and separate property  Ruth Ann Stingleton, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	946/395		
	Susan McDougal, a married woman dealing in her sole and senarate property	SWN Production Company, LLC SWN Production Company, LLC	18.00%	947/7		
	Emily B. Morris, a single woman Jeffrey S. Maibach, a single man	SWN Production Company, LLC	18.00% 18.00%	946/40 948/228		
	Beth Garrison-Kemp, a married woman dealing in her sole and senarate property	SWN Production Company, LLC	18.00%	945/162		
	Sally Brokken, a married woman dealing in her sole and senarate property	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	950/627		
	Patricia M. Leohr, a married woman dealing in her sole and separate property  Robert C. Seelman, III, a single man	SWN Production Company, LLC	18.00%	949/293 950/639		
	Paul L. Garrison, a single man	SWN Production Company, LLC	18.00%	948/397		
	Richard Fermine Walker, a married man dealing in his sole and separate property	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	954/1 976/432		
	Keith Garrison, a married man dealing in his sole and separate property  Frank Dawson Garrison, IV, a single man	SWN Production Company, LLC	18.00%	976/376		
	Kimberly Monka, a married woman dealing in her sole and senarate property	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	976/390		
	Michael J. Walker, a murried man dealing in his sole and constant accounts	SWN Production Company, LLC	18.00%	976/383 976/397		
	Josie Diane Snuffer, a married woman dealing in her sole and separate property  Rodney J. Garrison, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	976/425		
	Michael Garnson, a married man dealing in his sole and separate property	SWN Production Company, LLC SWN Production Company, LLC	18.00%	976/362		
	Cathy Walker Bowman, a married woman dealing in her sole and separate property Sharon L. Garrison, a widow	SWN Production Company, LLC	18.00% 18.00%	976/369 976/404		
	Gary Mitchell Walker, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	976/355		
	Frank G. Garrison, a married man dealing in his sole and separate property	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	976/418 993/251		
	Brian Garrison, a single man Connie L. Kemp, a single woman	SWN Production Company, LLC	18.00%	993/251 989/770		
	Maurice R. Garrison, Jr., a sinele man	SWN Production Company, LLC	18.00%	990/522		
	Richard Garrison, a single man Russell Lewis Hatcher	SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	994/20 922/422		
	Teress Ann Hatcher Lagor, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	994/62		
	Catherine 1. Walker, a single woman	SWN Production Company, LLC SWN Production Company, LLC	18.00%	994/68		
	Dalene Annette Blevins, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00% 18.00%	977/426 976/411		
	Susan Leigh Walker-Poline, a married woman dealing in her sole and separate property Tracey Linn Hatcher Hambly, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	977/489		
		SWN Production Company, LLC SWN Production Company, LLC	18.00% 18.00%	994/14 996/605		
	The Jack A. Hermann and Jean Hermann Revocable Trist UTA dated December 6, 1999, successor in interest to the Jack Albert Hermann Trist Thelma C. Flays, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	996/605 1006/565		
	Sue M. Schaad, a married woman dealing in the sole and scharate property	SWN Production Company, LLC	18.00%	1003/710		
03-001,2-0012-0	03 Michael J. Pritt and Patricia L. Pritt, husband and wife	SWN Production Company, LLC Range Resources - Appalachia, LLC	18.00% 15.00%	1018/506 787/703		
		Chesapeake Appalachia, L.L.C.		808/542	0.00%	
03-001.2-0012-0	01 Gary E. Carter and Mary A. Carter, husband and wife	SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	18.00%	883/539		
	00 Robert H. Fish, widower	SWN Production Company, LLC	18.00%	820/104 885/608	0.00%	
	The state of the s	Great Lakes Energy Partners, L.L.C.	15.50%	770/441		
03.001.6.0000.00		Chesapeake Appalachia, L.L.C. SWN Production Company, LLC		808/434 883/527	0.00%	
03-00L5-0008-0	O Joseph E, Ennis and Marjorie G, Ennis, husband and wife	Great Lakes Energy Partners, L.L.C.	15.50%	883/527 771/748		
		Chesapeake Appalachia, L.L.C.	943100. <del>7</del> 11	808/368	0.00%	
03-00L5-0009-00	00 Gary Kestner and Terry Kestner, husband and wife	SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	18.00%	883/527		
		SWN Production Company, LLC	18.00Te	814/427	0.00%	

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MAY 0 3 2023

WV Department of Environmental Protection





**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 57th St., SE Charleston, WV 25304

RE: SWN's proposed New Well: Samuel Jones BRK 8H 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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MAY 0 3 2023

WV Department of Environmental Protection

WW-PN (11-18-2015)

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

#### Notice is hereby given:

Paper: Brooke County Review

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.

Public Notice Date: April 14, 2023 & April 21	, 2023			
The following applicant intends to apply for a surface excluding pipelines, gathering lines ar any thirty day period.				
Applicant: SWN Production Company, LLC		Well Num	ber: Samuel Jor	nes BRK 8H
Address: 1300 Fort Pierpont Dr., Suite 201				
Morgantown, WV 26508				
Business Conducted: Natural gas production	n.			
Location –				
State: West Virginia		County:	Brooke	
District: Buffalo		Quadrangle:	Bethany	RECEIVED
UTM Coordinate NAD83 Northing:	4,448,995			Office of Oil and Gas
UTM coordinate NAD83 Easting:	537,365			MAY 0 3 2023
Watershed: Upper Ohio South				WV Department of

#### **Coordinate Conversion:**

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

#### **Electronic notification:**

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

#### **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 <u>DEP.comments@wv.gov</u>.

#### **Submitting Comments:**

Comments may be submitted online at <a href="https://apps.dep.wv.gov/oog/comments/comments.cfm">https://apps.dep.wv.gov/oog/comments/comments.cfm</a>, 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

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

Notice has been given:  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 list below for the tract of land as follows:  State:  West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms list below for the tract of land as follows:  State:  West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that the provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the figuring 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 state of this article were waived in writing by the surface owner; and Pursuant to Wirginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section that the Operator has properly served the required parties with the following:  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:  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:  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:  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:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certi	Date of Noti	ce Certification:	<b>API No.</b> 47- 0	009 _				
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 list below for the tract of land as follows:  State:  West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms list below for the tract of land as follows:  West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section then of this article, the requirements of subsections (b) and (c), section sixteen of this article were waived in writing by the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article is, and or (ii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to Wirginia 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**  1. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED  **2. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  **3. NOTICE OF INTENT TO DRILL or NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  **3. NOTICE OF PLANNED OPERATION  **4. NOTICE OF PLANNED OPERATION  **4. NOTICE OF APPLICATION  **4. NO					nuel Jones BRK 8H			
Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms list below for the tract of land as follows:  State:  Vest Virginia  ODD- Brooke  District:  Buffalo  Quadrangle:  Bushamy  Watershed:  Public Road Access:  Generally used farm name:  Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that the approved the owners of the surface described in subdivisions (1), (2) and (4), sustection (b), section ten of this article, to fight the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article, to fight the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the not equirements of subsection (b), section sixteen of this article wave 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 subsection to fish 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:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification to SEISMIC ACTIVITY WAS CONDUCTED  1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  2. NOTICE OF ENTRY FOR PLAT SURVEY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  3. NOTICE OF ENTRY FOR PLAT SURVEY or NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  4. NOTICE OF PLANNED OPERATION  3. NOTICE OF PLANNED OPERATION  4. NOTICE OF PLANNED OPERATION  4. NOTICE OF PLANNED OPERATION  5. PUBLIC NOTICE  6. NOTICE OF APPLICATION  AND TOTAL PROOF OF THE								
State:    West Virginia   Ood- Brooke   UTM NAD 83   Easting: Northing: Nort	Notice has	been given:						
State:    West Virginia   Ood- Brooke   UTM NAD 83   Easting: Northing: Nort	Pursuant to the	ne provisions in West Virginia Code	§ 22-6A, the Operator has provided the require	ed parties	with the Notice Forms lister			
County: Dog-Brooke District: Buffalo Public Road Access: Public Road Access: Public Road Access: Generally used farm name: Samuel Jones  Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that the 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; this article; the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article; six-a; or (iii) the notice equirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to Worginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section to find that the Operator has properly served the required parties with the following:  **Please CHECK ALL THAT APPLY**  1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  2. NOTICE OF ENTRY FOR PLAT SURVEY or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  4. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  5. PUBLIC NOTICE  4. NOTICE OF PLANNED OPERATION  5. PUBLIC NOTICE  6. NOTICE OF APPLICATION  **MAY 0 3 2023  **WEDDRICK OF TRECEIVED  6. NOTICE OF APPLICATION  **WEDDRICK OF TRECEIVED  **WEDDRICK OF TREAT SURVEY  **WEDDRICK OF TREAT SURVEY	THE THE	tract of faila as follows.	5					
District:  Buffalo Quadrangle: Bethany Watershed: Upper Ohio South Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section en of this article, information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a rest 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 Wirginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of subsection to 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:  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:  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:  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:  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:  Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certifi			Easting: 537	7,365.08				
Quadrangle: Bethany			Northing: 4,4	48,994.66				
Watershed: Upper Ohio South  Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that thas provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the official strate of the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article, 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. (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*  1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  2. NOTICE OF ENTRY FOR PLAT SURVEY or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  4. NOTICE OF ENTRY FOR PLAT SURVEY or NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  5. PUBLIC NOTICE  4. NOTICE OF PLANNED OPERATION  5. PUBLIC NOTICE  6. NOTICE OF APPLICATION  WAS CONDUCTED  6. NOTICE OF APPLICATION  WAS CONDUCTED  6. NOTICE OF APPLICATION				kill Hill/Marlbo	oro Spur Road			
Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, to information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a rest 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 equirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to We Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section to fit 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**  1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  2. NOTICE OF ENTRY FOR PLAT SURVEY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED RECEIVED  WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)  4. NOTICE OF PLANNED OPERATION  **ACCEIVED Office of Oil and Gas**  **ACCEIVED Office of Oil and Gas**  **BECEIVED Office of Oil and Gas**  **ACCEIVED OFFICE OFFI			Generally used farm name: Sar	muel Jones				
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 rest 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 quirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to We virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section to fit 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  1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  2. NOTICE OF ENTRY FOR PLAT SURVEY or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED  3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED RECEIVED NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED RECEIVED  4. NOTICE OF PLANNED OPERATION  4. NOTICE OF PLANNED OPERATION  AND TRECEIVED  5. PUBLIC NOTICE  MAY 0 3 2023  RECEIVED	watersned:	Upper Ohio South						
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  1. NOTICE OF SEISMIC ACTIVITY or NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED  2. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED  3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED RECEIVED/NOT REQUIRED  WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)  4. NOTICE OF PLANNED OPERATION  RECEIVED  AMAY 0 3 2023  RECEIVED  MAY 0 3 2023  RECEIVED	information re of giving the requirements Virginia Code	equired by subsections (b) and (c), s surface owner notice of entry to s of subsection (b), section sixteen (c) § 22-6A-11(b), the applicant shall	ection sixteen of this article; (ii) that the require urvey pursuant to subsection (a), section ten of of this article were waived in writing by the	on (b), see ement was of this arti	deemed satisfied as a result cle six-a; or (iii) the notice			
SEISMIC ACTIVITY WAS CONDUCTED    2. NOTICE OF ENTRY FOR PLAT SURVEY or   NO PLAT SURVEY WAS CONDUCTED   3. NOTICE OF INTENT TO DRILL   Or   NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or   WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)   4. NOTICE OF PLANNED OPERATION   RECEIVED   RECEIVED     5. PUBLIC NOTICE   Office of Oil and Gas   RECEIVED     6. NOTICE OF APPLICATION   RECEIVED   RECEIVED     MAY 0 3 2023   RECEIVED     RECEIVED   RECEIVED     RECEI	mai me Oper	ator has properly served the require	perator has attached proof to this Notice Certified parties with the following:	ication				
■ 3. NOTICE OF INTENT TO DRILL OF NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED OF WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)  ■ 4. NOTICE OF PLANNED OPERATION  ■ 5. PUBLIC NOTICE  Office of Oil and Gas  MAY ① 3 2023  WW Departs	☐ 1. NOT	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIRED BECAUSE SEISMIC ACTIVITY WAS CONDUCTED	NO				
NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or  WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)  4. NOTICE OF PLANNED OPERATION  RECEIVED NOT REQUIRED  RECEIVED  MAY 0 3 2023  RECEIVED	2. NOT	ICE OF ENTRY FOR PLAT SURV	VEY or $\square$ NO PLAT SURVEY WAS COND	UCTED	☐ RECEIVED			
(PLEASE ATTACH)  4. NOTICE OF PLANNED OPERATION  5. PUBLIC NOTICE  6. NOTICE OF APPLICATION  (PLEASE ATTACH)  RECEIVED  Office of Öil and Gas  MAY 0 3 2023  RECEIVED  WW Departs	■ 3. NOT	ICE OF INTENT TO DRILL or	NOTICE OF ENTRY FOR PLAT SURVEY					
■ 5. PUBLIC NOTICE  Office of Oil and Gas  MAY 0 3 2023  RECEIVED  RECEIVED  RECEIVED  WW Departs				WNER				
■ 6. NOTICE OF APPLICATION  MAY 0 3 2023  RECEIVED  WV Departs	■ 4. NOT	ICE OF PLANNED OPERATION			RECEIVED			
W/ Donort	5. PUBI	LIC NOTICE	RECEIVED Office of Öil and (	Gas	☐ RECEIVED			
WV Department of	■ 6. NOT	ICE OF APPLICATION			☐ RECEIVED			
			WV Department	of				

#### Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

#### Certification of Notice is hereby given:

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

Well Operator: SWN Production Co., LLC

0

1300 Fort Pierpont Dr., Suite 201

By:

Brittany Woody

Morgantown, WV 26508

Its: Telephone:

Staff Regulatory Specialist 304-884-1610

Facsimile: 304-884-1690

Address:

Email:

Brittany\_Woody@swn.com

Subscribed and sworn before me this Am day of April

JUSTIN BOOTH
Notary Public Official Seal
State of West Virginia

6

State of West Virginia
My Comm. Expires Mar 10, 2027
Scenery Drive Morgantown WV 26505
My Co

My Commission Expires 3/10/202>

Notary Public

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 <a href="deepprivacyofficer@wv.gov">deepprivacyofficer@wv.gov</a>.

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Office of Oil and Gas

MAY 0 3 2023

WV Department of Environmental Protection WW-6A (9-13)

47 00 9 00 3 3 6

OPERATOR WELL NO. Samuel Jones BRK 8H
Well Pad Name: Samuel Jones Pad

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

Notice Time Requirement: notice shall be provided no late	er than the filing date of permit application.
Date of Notice: 5 Date Permit Application Filed: Notice of:	-1-
	APPROVAL FOR THE OF AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6	A-10(b)
	ETHOD OF DELIVERY THAT REQUIRES A ECEIPT OR SIGNATURE CONFIRMATION
registered mail or by any method of delivery that requires a recessediment control plan required by section seven of this article, at the surface of the tract on which the well is or is proposed to be oil and gas leasehold being developed by the proposed well word described in the erosion and sediment control plan submitted properator or lessee, in the event the tract of land on which the well work, if the surface tract is to be used for the placement, or impoundment or pit as described in section nine of this article; whave a water well, spring or water supply source located within provide water for consumption by humans or domestic animals; proposed well work activity is to take place. (c)(1) If more than subsection (b) of this section hold interests in the lands, the apprecords of the sheriff required to be maintained pursuant to sect provision of this article to the contrary, notice to a lien holder is	date of the application, the applicant for a permit for any well work or for a or pit as required by this article shall deliver, by personal service or by eipt or signature confirmation, copies of the application, the erosion and and the well plat to each of the following persons: (1) The owners of record of clocated; (2) The owners of record of the surface tract or tracts overlying the rk, if the surface tract is to be used for roads or other land disturbance as ursuant to subsection (c), section seven of this article; (3) The coal owner, ell proposed to be drilled is located [sic] is known to be underlain by one or or tracts overlying the oil and gas leasehold being developed by the proposed construction, enlargement, alteration, repair, removal or abandonment of any (5) Any surface owner or water purveyor who is known to the applicant to one thousand five hundred feet of the center of the well pad which is used to and (6) The operator of any natural gas storage field within which the three tenants in common or other co-owners of interests described in licant may serve the documents required upon the person described in the ion eight, article one, chapter eleven-a of this code. (2) Notwithstanding any not notice to a landowner, unless the lien holder is the landowner. W. Va. so provide the Well Site Safety Plan ("WSSP") to the surface owner and any ting as provided in section 15 of this rule.
☐ Application Notice ☐ WSSP Notice ☐ E&S Plan No	
☑ SURFACE OWNER(s) Name: Smauel & Judith Jones, Irrevocable Trust	☐ COAL OWNER OR LESSEE
Address: 861 Marlboro Spur Road	Name: Conrhein Coal Company
Bethany, WV 26032	Address: 275 Technology Drive, Suite 101 Canonsburg, PA 15317
Name: Anna M. Norden	BECEIVED
Address: 3500 Walker Road	Office of Oil and Gas
Hillard, OH 43026	Name:
☐ SURFACE OWNER(s) (Road and/or Other Disturbance)	Address: MAY 0 3 2023
Name:	SURFACE OWNER OF WATER WELL WV Department of
Address:	AND/OR WATER PURVEYOR(s)  Environmental Protection
Name:	Name: See Attachment 13A Address:
Address:	i rudi coo.
SURFACE OWNER(s) (Impoundments or Pits)	OPERATOR OF ANY NATURAL GAS STORAGE FIELD  Name:  Address:
Name:	Address:
Address:	*Please attach additional forms if necessary
	i rease attach additional forms if flecessary

API NO. 44-709 0 0 0 0 3 3 6

OPERATOR WELL NO. Samuel Jones BRK 8H Well Pad Name: Samuel Jones Pad

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 <a href="https://www.dep.wv.gov/oil-and-gas/pages/default.aspx">www.dep.wv.gov/oil-and-gas/pages/default.aspx</a>.

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 of 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

OPERATOR WELL NO. Samuel Jones BRK 8H

Well Pad Name: Samuel Jones Pad

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

#### Water Well Testing:

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

#### Water Testing Laboratories:

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

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

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

#### Written Comment:

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

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

RECEIVED Office of Oil and Gas

MAY 0 3 2023

WV Department of

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

WW-6A (8-13)

API NO. 47-009 0 0 0 0 3 3 6
OPERATOR WELL NO. Samuel Jones BRK 8H

Well Pad Name: Samuel Jones Pad

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 <a href="http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx">http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx</a> 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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Office of Oil and Gas

MAY 0 3 2023

WV Department of Environmental Protection WW-6A (8-13)

API NO. 47 0 0 9 0 0 3 3 6

Notary Public

OPERATOR WELL NO. Samuel Jones BRK 8H Well Pad Name: Samuel Jones Pad

Notice is hereby given by:

Well Operator: SWN Production Co., LLC

Telephone: 304-884-1610 Cmail: Brittany\_Woody@swn.com

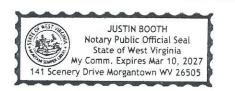
Address: 1300 Fort Pierpont Dr., Suite 201

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.



Subscribed and sworn before me this 12th day of 12023

My Commission Expires 3/10/2027

RECEIVED Office of Oil and Gas

MAY 0 3 2023

WV Department of Environmental Protection

Operator Well No. Samuel Jones BRK

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

Notice Time R	Requirement:	Notice shall be provi	ded at least S	SEVEN (7) d	ays but no more tha	an FORTY-FIVE	(45) days prior to
entry  Date of Notice	3/30/23	Date of Plan	ned Entry: _	1/6/23			
Delivery meth	od pursuant	to West Virginia Co	de § 22-6A-1	0a			
☐ PERSON	AL 🔳	REGISTERED	Пмет	HOD OF DE	LIVERY THAT RI	EOUDES A	
SERVICE	P0.00700	MAIL			NATURE CONFIF		
but no more that beneath such transport of miner and Sediment C Secretary, whice enable the surfa	ce tract to concan forty-five deart that has file als underlying Control Manuach statement shace owner to o	and the statutes and all include contact in btain copies from the	required purs y to: (1) The uant to section ty tax record rules related aformation, in	suant to this a surface owner thirty-six, a ds. The notice to oil and ga	article. Such notice er of such tract; (2) article six, chapter to be shall include a state exploration and n	shall be provided a to any owner or le twenty-two of this atement that copies production may be	at least seven days ssee of coal seams code; and (3) any s of the state Erosion obtained from the
Notice is hereb		):		■ COA	I OWNED ON LE	NCOPP.	
	0.00	avocable Trust			L OWNER OR LE	SSEE	
Name: Samuel E & Judith F Jones Irrevocable Trust  Address: 861 Marlboro Spur Road  Name: Conrhein Coal Company  Address: 275 Technology Drive, Suite 101							<del></del>
Bethany, WV 26032	•			Canonsburg,		ite 101	
Name: Anna M. No	orden						RECEIVED
Address: 3500 W	/alker Road			■ MINI	ERAL OWNER(s)		Office of Oil and Gas
Hillard, OH 43026					sources Minerals Headwate		P.4.1.4 D = ====
Name.					11412 Bee Cave Road		— MAY <b>0 3</b> 2023
Address:				Austin, TX 78	738		140/0
				*please attac	h additional forms if ne	cessary	<ul> <li>WV Department of Environmental Protection</li> </ul>
Notice is house	Land Advanced						
Notice is here		Ja C 22 ( A 10(-)				, , , , ,	
a plat survey on	the tract of la	de § 22-6A-10(a), no	tice is hereby	given that th	ie undersigned well	l operator is planni	ng entry to conduct
•	Vest Virginia	nd as follows.		Annroy Latit	ude & Longitude:	40.1090440, -80.560908	
County: B	Brooke			Public Road A		Hukill Hill Road/Marlbore	
	Buffalo			Watershed:	100000.	Middle Buffalo Creek	o opul Road
Quadrangle: B	ethany		(	Generally use	ed farm name:	Samuel Jones	
Charleston, WV	25304 (304-	d Sediment Control I retary, at the WV De 926-0450). Copies of y visiting www.dep.v	Manual and the partment of E	ne statutes an Environmenta tents or addit	d rules related to oi il Protection headqui ional information re	uarters, located at 6	501 57 <sup>th</sup> Street, SE
Notice is here	hy given by:						
Well Operator:	(S. 1879) A	ON COMPANY, LLC		Address:	1200 Earl Diamant D	Suite 201	
Telephone:	304-884-1610	ON SOME ANT, LLC	34-44-4	11uu1 555.	1300 Fort Pierpont Dr., 9		
Email:	brittany_woody@	SWD COM		Facsimile:	Morgantown, WV 26508 304-884-1690		
- E				i acommic.	554-554-1580		

#### Oil and Gas Privacy Notice:

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

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

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

Notice Time I Date of Notic	Requirement: Notice shall be provided at leas  e: 04/12/2023	t TEN (10) days prior to filing a	a permit application.
Delivery metl	nod pursuant to West Virginia Code § 22-6A	1-16(b)	
☐ HAND DELIVE	CERTIFIED MAIL RY RETURN RECEIPT REQUES	STED	
drilling a horiz of this subsect subsection ma and if available	. Va. Code § 22-6A-16(b), at least ten days pristed or hand delivery, give the surface owner no zontal well: <i>Provided</i> , That notice given pursuion as of the date the notice was provided to the y be waived in writing by the surface owner. The e, facsimile number and electronic mail address.	partice of its intent to enter upon the part to subsection (a), section to e surface owner: <i>Provided, how</i> The notice, if required, shall include of the operator and the operator	he surface owner's land for the purpose of en of this article satisfies the requirements wever, That the notice requirements of this
Notice is her	eby provided to the SURFACE OWNER	R(s):	
	and Judith F. Jones Irrevocable Trust	Name:	-
Address: 861 M Bethany, WV 2603		Address:	
State: County: District: Quadrangle: Watershed:  This Notice S Pursuant to W facsimile numb related to horiz	est Virginia Code § 22-6A-16(b), notice is her ner's land for the purpose of drilling a horizont west Virginia  Brooke  Buffalo  Bethany, WV  Upper Ohio South  Chall Include: est Virginia Code § 22-6A-16(b), this notice per and electronic mail address of the operate contal drilling may be obtained from the Secret 57th Street, SE, Charleston, WV 25304 (304-92)	UTM NAD 83  Easting: Northing: Public Road Access: Generally used farm name:  e shall include the name, address and the operator's authorize	sollows: 537,365.08 4,448,994.66 Hukill Hill/Marlboro Spur Road Samuel Jones ess, telephone number, and if available, and representative. Additional information
Notice is here		Authorized Representative: Address:	Reid Croft 1300 fort Pierpont Drive, Suite 201
Telephone:	304-884-1642	Telephone:	Morgantown, WV 26508 RECEIVED  Office of Oil and Gas
Email:	reid_croft@swn.com	Email:	
Facsimile:		Facsimile:	reid_croft@swn.com MAY 0 3 2023
Oil and Gas I	Privacy Notice:		WV Department of Environmental Protection

il 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.

WW-6A5 (1/12)

Operator Well No. SAMUEL JONES BRK 10H

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

Notice To Date of N	ime Requirement: notice shall be provided no Notice: 04/12/2023 Date Permit Ap	later than the filing polication Filed:	gtate of permi	t application.
Delivery	method pursuant to West Virginia Code § 2	22-6A-16(c)	1	
	RTIFIED MAIL TURN RECEIPT REQUESTED	HAND DELIVERY		
the plann required t drilling o damages	to W. Va. Code § 22-6A-16(c), no later than reipt requested or hand delivery, give the surfaced operation. The notice required by this sum to be provided by subsection (b), section ten of a horizontal well; and (3) A proposed surface to the surface affected by oil and gas operation of the surface affected by this section shall be given to	ce owner whose land absection shall include this article to a surface use and compend to the extent the design of the extent the ex	d will be used for ide: (1) A copy face owner who sation agreement amages are com	or the drilling of a horizontal well notice of of this code section; (2) The information se land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter
(at the add Name: Sar	hereby provided to the SURFACE OWNER dress listed in the records of the sheriff at the t muel E. and Judith F. Jones Irrevocable Trust 861 Marlboro Spur Road V 26032	R(s) ime of notice): Name: Addres		
Pursuant t		f drilling a horizont  UTM NAD 8  Public Road	I well on the tra  Easting: Northing:	well operator has developed a planned act of land as follows:  537,366.86  4,448,992,19  Hukill Hill/Marlboro Spur Road  Samuel Jones
Pursuant to be pro- horizontal surface af information headquarte	ce Shall Include: To West Virginia Code § 22-6A-16(c), this not wided by W. Va. Code § 22-6A-10(b) to a si well; and (3) A proposed surface use and confected by oil and gas operations to the extent on related to horizontal drilling may be obtainers, located at 601 57 <sup>th</sup> Street, SE, Charle default aspx.	urface owner whose mpensation agreement the damages are content from the Secretary	e land will be unt containing and compensable und	ased in conjunction with the drilling of a offer of compensation for damages to the ler article six-b of this chapter. Additional
Well Oper		Address:	1300 Fort Pierpont D	Drive, Suite 201
Telephone Email:	2: 304-884-1642 reid_croft@swn.com	Facsimile:	Morgantown, WV 26	508
		I acsimile.		
	as Privacy Notice: e of Oil and Gas processes your personal inform	mation such as nam	e address and t	elephone number as part of our regulators

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

MAY 0 3 2023

WV Department of Environmental Protection

06/09/2023



#### WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

#### **Division of Highways**

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

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

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

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 8H 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.

Dary K. Clayton

Regional Operations Engineer Central Office O&G Coordinator

Cc:

Brittany Woody Southwestern Energy

CH, OM, D-6

File

RECEIVED Office of Oil and Gas

MAY 0 3 2023

WV Department of Environmental Protection

In the second se	The second secon		
Product Name Al-303 (U.S. Well Services)	Product Use Mixture	Chemical Name Ethylene glycol	CAS Number
Ar-303 (0.3. Well Services)	Mixture	Cinnamaldehyde	107-21 1
			104-55 2
		Butyl cellosolve	111-76 2
		Formic acid	64-18 6
		Polyether	Proprietary
		Acetophenone, thiourea, formaldehyde polymer	68527-49 1
AP ONE (U.S. Well Services)	Breaker	Ammonium persulfate	7727-54-0
Bactron K-139 (Champion Technologies)	Biocide	Glutaraldehyde	111-30-8
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
		Ethanol	64-17-5
Bactron K-219 (Champion Technologies)	Biocide	Methanol	67-56-1
		Quaternary Ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	68424-85-1
CarboNRT	Tracer	Ceramic Proppant	66402-68-4
EC6486A (Nalco Champion)	Scale Inhibitor	Amine Triphosphate	Proprietary
		Ethylene Glycol	107-21-1
EC6734A (Champion Technologies)	Biocide	Hydrogen Peroxide	7722-84-1
		Acetic Acid	64-19-7
		Peroxyacetic Acid	79-21-0
Econo-CI200 (SWN Well Services)	Corrosion Inhibitor	Methanol	67-56-1
(	CONTOSION INIMIDICO	Oxyalkylated fatty acid	
		Fatty acids	68951-67-7
			61790-12-3
		Modified thiourea polymer	68527-49-1
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	127-08-2
FI FFAC (SV:)		Formaldehyde	50-00-0
Ecopol-FEAC (SWN Well Services)	Iron Control	Acetic Acid	64-19-7
		Citric Acid	77-92-9
		Water	7732-18-5
FDP-S1176-15 (Halliburton)	Friction Reducer	Polyacylate	Proprietary
		Hydrotreated light petroleum distillate	64742-47-8
FLOJET DR900 LPP (SWN Well Services)	Friction Reducer	Distillates (petroleum) hydrotreated light	64674-47-8
		Ethylene Glycol	107-21-1
		Alcohols, C12-16, Exoxylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	
		Water	Proprietary
FLOJET DRP 1130X (SWN Well Services)	Eristian Reduces	Proprietary	7732-18-5
	Friction Reducer		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)	Hydrocholic Acid	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
LP-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary
		Ammonium Chloride	12125-02-9
OPTI-FLEX (U.S. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
Plexslick 930	Friction Reducer	Copolymer of 2-propenamide	
TEASIER 330	Triction Reduces	Hydrotreated Distillate	Proprietary
			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	Oleic Acid Diethanolamide	93-83-4 12125-02-9
Plexslick 953	Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride	93-83-4
Plexslick 953	Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride	93-83-4 12125-02-9 64742-47-8
Plexslick 953	Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride	93-83-4 12125-02-9 64742-47-8 7647-14-5
	Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4
		Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8
		Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9
		Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4
		Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2
Plexslick 957	Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5
Plexslick 957		Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5
Plexslick 957	Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5
Plexslick 957	Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water  Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 *********
Plexslick 957 Plexslick V996	Friction Reducer  no data available	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride  Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957 Plexslick V996	Friction Reducer  no data available	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum)	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957 Plexslick V996 WFRA-2000 (U.S. Well Services)	Friction Reducer  no data available  Anionic Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid)	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)	Friction Reducer  no data available  Anionic Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water  Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid)	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water  Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexslick 922	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor  no data available	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexslick 922	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexslick 922	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor  no data available	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexslick 922	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor  no data available	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water  Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonlum, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor  no data available	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water  Copolymer of 2-Propenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides  Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 ********* 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac	Friction Reducer  no data available  Anionic Friction Reducer  Scale inhibitor no data available  Mixture  Biocidal product	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 ********* 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 55566-30-8 68424-85-1
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac	Friction Reducer  no data available  Anionic Friction Reducer  Scale inhibitor no data available  Mixture  Biocidal product	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac	Friction Reducer  no data available  Anionic Friction Reducer  Scale inhibitor no data available  Mixture  Biocidal product	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  NFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac  Folcide PS50A	Friction Reducer  no data available  Anionic Friction Reducer  Scale inhibitor no data available  Mixture  Biocidal product	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 ********* 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 555566-30-8 68424-85-1 64-17-5 55566-30-8
Plexslick 957  Plexslick V996  NFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac  Folcide PS50A	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture  Biocidal product  Friction Reducer	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides  Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alpha-tridecylomega-hydroxy-, branched	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 ********* 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 923-83-4 55566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary 69011-36-5 67-56-1
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexslick 922  Folcide 4Frac  Folcide PS50A  D-2950	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture  Biocidal product  Friction Reducer  Scale Control	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched Methanol Phosphonic Acid Salt	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 953  Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexslick 922  Folcide 4Frac  Folcide P550A  D-2950  Legend LD-7750W  MC MX 8-4743 Ferriplex 80	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture  Biocidal product  Friction Reducer  Scale Control  Specialty Product	Oleic Acid Diethanolamide Ammonium Chloride Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride N,N-bis (2-hydroxyethyl) oleamide Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)Cl) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched Methanol Phosphonic Acid Salt Sodium Nitrate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 ********* 64742-47-8 9003-06 9 15827-30-8 69418-26-4 64742-47-8 12125-02-9 93-83-4 555566-30-8 68424-85-1 64-17-5 55566-30-8 397256-50-7 64742-47-8 Proprietary 6901-36-5 67-56-1 Proprietary 7631-99-4
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac  Folcide PS50A  D-2950  Legend LD-7750W  MC MX 8-4743  Ferriplex 80	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture  Biocidal product  Friction Reducer  Scale Control  Specialty Product Iron Control	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides  Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched Methanol Phosphonic Acid Salt Sodium Pythorbate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  NFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac  Folcide PS50A  D-2950  Regend LD-7750W  MC MX 8-4743  Ferriplex 80	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture  Biocidal product  Friction Reducer  Scale Control  Specialty Product	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched Methanol Phosphonic Acid Salt Sodium Nitrate Sodium erythorbate Glycerine	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 68751-12-2 7732-15-5 **********************************
Plexslick 957  Plexslick V996  WFRA-2000 (U.S. Well Services)  Plexaid 655 NM  Plexslick 922  Folcide 4Frac  Folcide PS50A  D-2950  Legend LD-7750W  MC MX 8-4743	Friction Reducer  no data available  Anionic Friction Reducer  Scale Inhibitor no data available  Mixture  Biocidal product  Friction Reducer  Scale Control  Specialty Product Iron Control	Oleic Acid Diethanolamide Ammonium Chloride  Petroleum Distillate Sodium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Ammonium Chloride Petroleum Distillate Ammonium Chloride Oleic Acid Diethanolamide Alcohols, C12-16, Exoxylated Water Copolymer of 2-Propeenamide Distillates (petroleum), hydotreated light Alcohol Ethoxylate Surfactant Hydrotreated light distillate (petroleum) Propenoic acid, polymer with propenamide Diethylenetriamine penta (methylene phosphonic acid) Copolymer of 2-propenaminde Distillates (petroleum), hydotreated light Ammonium chloride ((NH4)CI) Oleic Acid Diethnolamide Phosphonium, tetrakis (hydroxymethyl), Sulfate Quaternary ammonium Compounds, Benzyl-C12-16-Alkyldimethyl, Chlorides  Ethanol Tetrakis (hydroxymethyl) phosphonium sulphate Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups Hydrotreated light petroleum distillate Ethoxylated alcohol Poly (oxy-1.2-ethanediyl) alphatridecylomegahydroxy-, branched Methanol Phosphonic Acid Salt Sodium Pythorbate	93-83-4 12125-02-9 64742-47-8 7647-14-5 12125-02-9 93-83-4 64742-47-8 12125-02-9 93-83-4 68551-12-2 7732-15-5 **********************************

RECEIVED
Office of Oil and Gas

MAY 0 3 2023

WV Department of Environmental Protection

06/09/2023

WW-6A7 (6-12)

OPERATOR: SWN Production Co., LLC	WELL NO: Samuel Jones BRK 8H
PAD NAME: Samuel Jones Pad	_
REVIEWED BY:	SIGNATURE:
WELL RESTRICTI	ONS CHECKLIST
HORIZONTA	AL 6A WELL
Well Restrictions	*Pad Birt 10/21/19
At Least 100 Feet from Pad and LOD ( Perennial Stream, Lake, Pond, Reservo	including any E&S Control Feature) to any oir or Wetland; OR
DEP Waiver and Permit Condition	ions
At Least 300 Feet from Pad and LOD ( Naturally Producing Trout Stream; OR	including any E&S Control Feature) to any
DEP Waiver and Permit Conditi	ions
At Least 1000 Feet from Pad and LOD Groundwater Intake or Public Water St	(including any E&S Control Feature) to any apply; OR
DEP Waiver and Permit Condit	ions
At Least 250 Feet from an Existing Wa Drilled; OR	ter Well or Developed Spring to Well Being
Surface Owner Waiver and Rec	orded with County Clerk, OR
DEP Variance and Permit Cond	litions
At Least 625 Feet from an Occupied D	RECEIVED welling Structure to Center of the Pad; ORice of Oil and Gas
Surface Owner Waiver and Rec	orded with County Clerk, OR MAY 0 3 2023
DEP Variance and Permit Cond	WV Department of Environmental Protection

At Least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

of the Pad; OR

1. THIS PLAN IS FOR GRADING, STORMWATER SYSTEMS, AND EROSION AND SEDIMENT CONTROL PURPOSES ONLY.

2. PROPERTY INFORMATION SHOWN HEREON IS FROM GIS DATA PROVIDED BY SOUTHWESTERN ENERGY PRODUCTION COMPANY AND HAS NOT BEEN FIELD VERIFIED.

3. THE CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS SET FOR OTHER PERTINEAUT INFORMATION. IT IS NOT THE ENGINEERS INTENT THAT ANY SINGLE PLAN SET FULLY DEPICTS ALL WORK ASSOCIATED WITH THIS PROJECT.

4. SOIL TYPE BOUNDARY, AND CHARACTERISTICS SHOWN HEREON WERE ACQUIRED FROM NRCS WEB SOIL SURVEY.

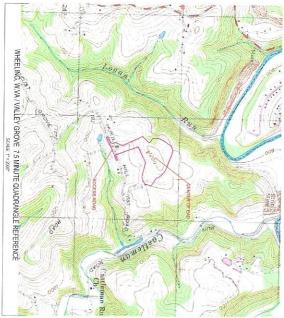
THE TOPOGRAPHIC SURVEY USED FOR THIS BASE MAPPING INSIDE THE LOD WAS PERFORMED BY JHA, COMPANIES FROM JUNE 01, 2018 TO JUNE 04, 2018. TOPOGRAPHIC MAPPING OUTSIDE OF THE LOD IS FROM LIDAR DATA FROM WV GIS TECHNICAL CENTER.

NO TOPSOIL REMOVAL BETWEEN LIMIT OF CONSTRUCTION AND LIMIT OF DISTURBANCE. VEGETATIVE BUFFER TO REMAIN.

7. FILL WILL BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY (ASTM-888), FILL LIFT THICKNESS WILL BE NO GREATER THAN 12", NOTHING FROZEN OR TOO WET WILL BE PLACED IN FILL AREAS, PARTICLE SIZE OF THE FILL WILL BE NO GREATER THAN 8" AND FREE OF OBJECTIONABLE MATERIAL.

# **EROSION AND SEDIMENT CONTROL PLAN** SAMUEL JONES PAD AND ACCESS ROAD FOR

BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRGINIA



(NAD 83) LAT: 40.190412° LONG: -80.560719° COORDINATES: CENTER OF PAD

SCALE: 1" = 1 MILE

BRO

GENERA

LAT: 40.186715° LONG: -80.561672° (NAD 83)

PROJECT MARRATIVE
PRODUSED CONSTRUCTION TO BE PERFORMED IN
ACCOPDANCE WITH THIS DRAWING SET (17 PAGE SHEET SET,
DATED 2019-05-29, WHICH ARE COMPLEMENTARY AND HAVE THE
SAME FORCE JEFECT IN DEFINING THE REQUIREMENTS FOR
THE PROJECT, IN THE EVENT OF DISCREPANCIES, IT IS
REQUIRED TO IMMEDIATELY CONTACT THE ENGINEER (AGENT)
FOR INTERPRETATION.

PROJECT CONTACTS
OPERATOR:
SOUTHWESTERN ENERGY, LLC
1300 FORT PIERPONT DRIVE
MORGANTOWN, WV 26508
PHONE; (304) 884-1666 WWW.SWN.COM

## PROJECT COORDINATOR: KALAB TAYLOR,

PHONE: (304) 884-1650 EMAIL: KALAB\_TAYLOR@SWN.COM SOUTHWESTERN ENERGY, LLC
FIELD PLANNING SUPERVISOR - WV DIV.
1300 FORT PIERPONT DRIVE
MORGANTOWN, WV 26508

JHA COMPANIES 68011 VINEYARD ROAD 5T. CLAIRSVILLE, OHIO 43950 PHONE: (740) 285-6898

PROJECT MANAGER:
CHRIS WADDELL
TOPOGRAPHIC INFORMATION:
GROUND SURVEY DATED JUNE 4, 2018
DATUM: HORZ, MAD 83 WEST VIRGINA NORTH
VERT, NAVD 88

AC

LIMIT OF DISTURBANCE = 4.94 LANDS N/F OF JONES SAMUEL TMP # (05-03-B43-0060) ANN M. NORDEN (05-03-B48-0022

ACRES

C.501 - C.521 DETAILS	C.401 - C.409 PROFILES	C.3.01 ACCESS ROAD PROFILE	C.201 - C.203 GRADING / ERO	C.101 - C.102 EXISTING CONDITIONS	C.002 - C.003 EVACUATION F	C.001 COVER SHEET	DWG, NO DRAWING DESCRIPTION	
		PROFILE	GRADING / EROSION AND SITE PLANS / PROFILES	DITIONS	EVACUATION ROUTE / PREVAILING WINDS	7	SCRIPTION	

ST. CLAIRSVILLE, OH 43950
(740) 695-6100
PA OH NY WV
PROJECT D. 2019-0265 | Downson
SAMUEL, JONES PAD AND ROAD
DATE:

SAMUEL, JONES PAD AND ROAD
DOWNSON

www.jhacompanies.com 68011 VINEYARD ROAD

GIS MAPPING

SAMUEL JONES PAD AND ROAD BROOKE COUNTY, WEST VIRGINIA

FINAL COVER SHEET

C.001

CONSTRUCTION PLAN

06/01/2023 CHECKED:

CLW CLW LWC

DESIGN

6/5/2023	WVDEP OOG		=	L HIGHWAY MAP	Company ou	Bethaming A TON
-		SEAL SO CORE	delle	8		ATT.
H	The state of the s	C A	MISSU	DATE		
ENVIRONMENTAL ENVIRONMENTAL	STATE OF THE STATE	Southwestern Energy*	2 WORKING DAYS BEFORE YOU DIG CALL TOLL FREE 800-245-4488 MISS UTILITY OF WEST URGINA	DESCRIPTION	LOCATION MAP NOTTO SCALE	06/09/2023

