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west virginia department of environmental protection

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

Austin Caperton, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

Friday, December 11, 2020  
WELL WORK PERMIT  
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC  
POST OFFICE BOX 12359  
SPRING, TX 773914954

Re: Permit approval for JOHN GOOD JR BRK 601H  
47-009-00324-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin  
Chief

Operator's Well Number: JOHN GOOD JR BRK 601H  
Farm Name: JOHN PRATHER GOOD JR IRF  
U.S. WELL NUMBER: 47-009-00324-00-00  
Horizontal 6A New Drill  
Date Issued: 12/11/2020

# PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

## CONDITIONS

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

API Number: \_\_\_\_\_

## PERMIT CONDITIONS

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

WW-6B  
(04/15)

API NO. 47-009  
OPERATOR WELL NO. John Good Jr. BRK 601H  
Well Pad Name: John Good Jr. BRK

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 620  
Operator ID County District Quadrangle

2) Operator's Well Number: John Good Jr. BRK 601H Well Pad Name: John Good Jr. BRK

3) Farm Name/Surface Owner: John Prather Good Jr. Irrevocable Trust Public Road Access: McAdoo Ridge Road

4) Elevation, current ground: 1154' Elevation, proposed post-construction: 1154'

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

(b) If Gas Shallow  Deep \_\_\_\_\_  
Horizontal  \_\_\_\_\_

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s): 10-15-20  
Target Formation- Marcellus, Up-Dip well to the North, Target Top TVD- 5837', Target Base TVD- 5888', Anticipated Thickness- 51', Associated Pressure- 3827

8) Proposed Total Vertical Depth: 5872' ✓

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14086.52 ✓

11) Proposed Horizontal Leg Length: 21109' ✓

12) Approximate Fresh Water Strata Depths: 326' ✓

13) Method to Determine Fresh Water Depths: Logs on pad, John Good Jr. BRK 5H API 47-009-00124 ✓

14) Approximate Saltwater Depths: 448' Salinity Profile ✓

15) Approximate Coal Seam Depths: 308' ✓

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

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

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

*E. PRO*

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WW-6B  
(04/15)

API NO. 47-009 - 00324 EXP HGA

OPERATOR WELL NO. John Good Jr. BRK 601H

Well Pad Name: John Good Jr. BRK

18)

**CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	125'	125' ✓	CTS
Fresh Water	13 3/8"	New	H-40	48#	380'	380' ✓	375 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	1660'	1660' ✓	647 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	21,109'	21,109' ✓	Lead 725x/Tail 356x/ 100 Inside #
Tubing							
Liners							

*[Handwritten Signature]*  
10-15-20

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.380	2730	633	Class A	1.20/30% Excess
Coal	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.352	3520	1768	Class A	1.19/40% Excess
Production	5 1/2"	8 3/4"-8 1/2"	0.361	14360	10500	Class A	1.19/5% Excess
Tubing							
Liners							

**PACKERS**

Kind:				
Sizes:				
Depths Set:				

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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.)

\* Make Sure Freshwater and Coal Stratas are not co-mingled with Saltwater # FW ~ 324' }  
C ~ 308' }  
SW ~ 448' }

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

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

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 21.91

22) Area to be disturbed for well pad only, less access road (acres): 8.63

23) Describe centralizer placement for each casing string:

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

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

See Attachment \*\*\*

25) Proposed borehole conditioning procedures:

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

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\*Note: Attach additional sheets as needed.

**CEMENT ADDITIVES**

INTERVAL	SCHLUMBERGER PRODUCT NAME	BJ PRODUCT NAME	NEXTIER PRODUCT NAME	PRODUCT USE	CHEMICAL NAME	CAS-Number
SURFACE (FRESHWATER) <i>up to 3%</i>	<del>XXXXXXXXXX</del>	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
COAL PROTECTION <i>up to 3%</i>	<del>XXXXXXXXXX</del>	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
INTERMEDIATE	D020	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D047	FP 28L	<del>XXXXXXXXXX</del>	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	<del>XXXXXXXXXX</del>	INTEGRA SEAL	CJ600	LOST CIRC MATERIAL	CELLOPHANE FLAKES	9005-81-6
	CemNet	<del>XXXXXXXXXX</del>	<del>XXXXXXXXXX</del>	LOST CIRC MATERIAL	COATED FIBERGLASS FIBERS	PROPRIETARY
	SUGAR	SUGAR	CJ795	CMT RETARDER	SUCROSE	57-50-1
	S001	A-7P	CJ110	ACCELERATOR	CALCIUM CHLORIDE	10043-52-4
PRODUCTION	<del>XXXXXXXXXX</del>	<del>XXXXXXXXXX</del>	CJ111	ACCELERATOR	SODIUM CHLORIDE	7440-23-5
	<del>XXXXXXXXXX</del>	SS-11W	CJ880	SURFACTANT	NONIONIC SURFACTANT	6540-99-4
	D047	FP 28L	<del>XXXXXXXXXX</del>	LIQUID ANTIFOAM AGENT	POLYPROPYLENE GLYCOL	25322-69-4
	<del>XXXXXXXXXX</del>	<del>XXXXXXXXXX</del>	CJX157011	SOLID ANTIFOAM AGENT	FULLERS EARTH(ATTAPULGITE)	8031-18-3
	<del>XXXXXXXXXX</del>	<del>XXXXXXXXXX</del>	CJ540	HP FLUID LOSS ADDITIVE	ALIPHATIC AMIDE POLYMER	PROPRIETARY
	D255	<del>XXXXXXXXXX</del>	<del>XXXXXXXXXX</del>	MED TEMP FLUID LOSS ADDITIVE	POLYACRILIC POLYMER	PROPRIETARY
	<del>XXXXXXXXXX</del>	<del>XXXXXXXXXX</del>	CJ213	RETARDER	CHRYSTALLINE SILICA	14808-60-7
	<del>XXXXXXXXXX</del>	FL-66	CJ501	LOW TEMP FLUID LOSS ADD	POWDERED POLYSACCHARIDE	PROPRIETARY
	<del>XXXXXXXXXX</del>	BENTONITE	CJ020	EXTENDER	BENTONITE	1302-78-9
	D208	ASA-301	<del>XXXXXXXXXX</del>	VISCOSIFIER/ANTI- SETTLING AGENT	REFINED POLYMER/ CHRYSTALLINE SILICA	PROPRIETARY
	D198	R-3		CEMENT RETARDER	LIGNIN	8068-51-6
SUGAR	SUGAR	CJ795	CEMENT RETARDER	SUCROSE	57-50-1	

	RUSSIAN	ENGLISH	SYMBOL	SYMBOL (ABBREVIATED)	SYMBOL (FULL)	SYMBOL (FULL)
METALS	ALUMINUM	ALUMINUM	AL	ALUM	ALUMINUM	ALUMINUM
	ANTIMONY	ANTIMONY	SB	ANTM	ANTIMONY	ANTIMONY
	ARSENIC	ARSENIC	AS	ARSN	ARSENIC	ARSENIC
	BARIUM	BARIUM	BA	BARB	BARIUM	BARIUM
	BISMUTH	BISMUTH	BI	BISM	BISMUTH	BISMUTH
	BORON	BORON	B	BORN	BORON	BORON
	BROMINE	BROMINE	BR	BROM	BROMINE	BROMINE
	CADMIUM	CADMIUM	CD	CADM	CADMIUM	CADMIUM
	CALCIUM	CALCIUM	CA	CALC	CALCIUM	CALCIUM
	COPPER	COPPER	CU	COPR	COPPER	COPPER
	COBALT	COBALT	CO	COBL	COBALT	COBALT
	CHROMIUM	CHROMIUM	CR	CHRM	CHROMIUM	CHROMIUM
NON-METALS	ANTIMONY	ANTIMONY	SB	ANTM	ANTIMONY	ANTIMONY
	ARSENIC	ARSENIC	AS	ARSN	ARSENIC	ARSENIC
	BORON	BORON	B	BORN	BORON	BORON
	BROMINE	BROMINE	BR	BROM	BROMINE	BROMINE
	CHLORINE	CHLORINE	CL	CHLR	CHLORINE	CHLORINE
	FLUORINE	FLUORINE	F	FLUR	FLUORINE	FLUORINE
	IODINE	IODINE	I	IODI	IODINE	IODINE
	NITROGEN	NITROGEN	N	NITR	NITROGEN	NITROGEN
	OXYGEN	OXYGEN	O	OXYG	OXYGEN	OXYGEN
	PHOSPHORUS	PHOSPHORUS	P	PHOS	PHOSPHORUS	PHOSPHORUS
	SULFUR	SULFUR	S	SULF	SULFUR	SULFUR
	TELLURIUM	TELLURIUM	TE	TELL	TELLURIUM	TELLURIUM
COMPOUNDS	ALUMINUM	ALUMINUM	AL	ALUM	ALUMINUM	ALUMINUM
	ANTIMONY	ANTIMONY	SB	ANTM	ANTIMONY	ANTIMONY
	ARSENIC	ARSENIC	AS	ARSN	ARSENIC	ARSENIC
	BARIUM	BARIUM	BA	BARB	BARIUM	BARIUM
	BISMUTH	BISMUTH	BI	BISM	BISMUTH	BISMUTH
	BORON	BORON	B	BORN	BORON	BORON
	BROMINE	BROMINE	BR	BROM	BROMINE	BROMINE
	CADMIUM	CADMIUM	CD	CADM	CADMIUM	CADMIUM
	CALCIUM	CALCIUM	CA	CALC	CALCIUM	CALCIUM
	COPPER	COPPER	CU	COPR	COPPER	COPPER
	COBALT	COBALT	CO	COBL	COBALT	COBALT
	CHROMIUM	CHROMIUM	CR	CHRM	CHROMIUM	CHROMIUM
GENERAL FOOTNOTES						



**Southwestern Energy Company**

**Proposed Drilling Program**

Well: JOHN GOOD JR BRK 601 Re-entry Rig: TBD  
 Field: PANHANDLE FIELD WET Prospect: PANHANDLE  
 County: BROOKE State: WV  
 SHL: 40.2238 Latitude -80.5805 Longitude  
 BHL: 40.3419 Latitude -80.5875 Longitude  
 KB Elev: 1,179 ft MSL KB: 26 ft AGL GL Elev: 1,153 ft MSL



No COAL VOID anticipated

PROD TOC Lead @ 1,880' MD  
 PROD TOC Tail @ 5,100' MD

*C. All*  
*10-15-20*

TUBULAR DETAIL

	Size (in)	Weight	Grade	From	To
Conductor:	20	94.0 #	H-40	0'	125'
Surface/Coal:	13.375	48.0 #	H-40	0'	380'
Intermediate:	9.625	36.0 #	J-55	0'	1,660'
Production:	5.5	20.0 #	HCP-110	0'	21,109'

CEMENT DETAIL

	Sacks	Class	Density
Conductor	189	A	19.3
Surface	375	A	15.6
Intermediate	647	A	15.6
Production Lead	720	A	15.6
Production Tail	3565	A	15.6

KOP at 5,786' MD

- Freshwater Depth - 326' TVD ✓
- Coal Depth - 308' TVD ✓
- Saltwater Depth - 448' TVD ✓
- TVD - 5,872' ✓
- TMD - 21,109' ✓

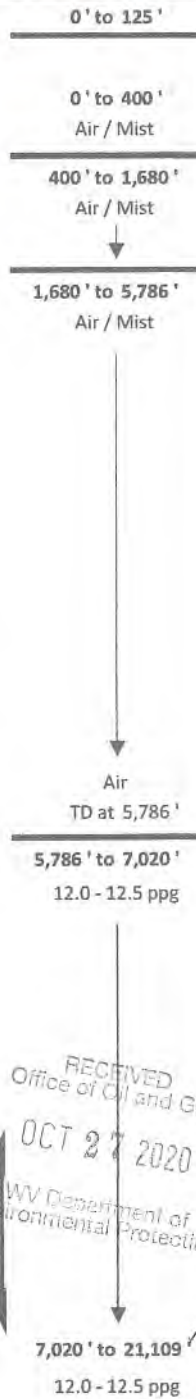
5,872' Target Center

TD at 21,109' MD  
 5,691' TVD

Onondaga 5,888' TVD

EOB at 5,872' TVD

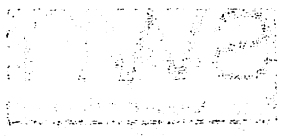
SHL Onondaga 5,917' TVD



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Processed Drilling Program

Government Energy Company



Well: JOHN GOOD JR BRN 001  
 Name: BANNABALE FIELD WEL  
 County: BAYLOR  
 State: TX  
 Elevation: 40.2413 latitude  
 Longitude: -90.2818 longitude  
 Well ID: 40.2413 latitude  
 Longitude: -90.2818 longitude

NO COAL V. 210 Indicated

INDUCED DETAIL

Well ID	Depth (ft)	Formation	Pressure (psi)	Temperature (°F)	Flow Rate (bbl/d)
40.2413	100	Washburn	1000	100	100
40.2413	200	Washburn	1000	100	100
40.2413	300	Washburn	1000	100	100
40.2413	400	Washburn	1000	100	100
40.2413	500	Washburn	1000	100	100

WELL DATA

Well ID	Depth (ft)	Formation	Pressure (psi)	Temperature (°F)	Flow Rate (bbl/d)
40.2413	100	Washburn	1000	100	100
40.2413	200	Washburn	1000	100	100
40.2413	300	Washburn	1000	100	100
40.2413	400	Washburn	1000	100	100
40.2413	500	Washburn	1000	100	100

0.1 to 0.2  
 A  
 100 to 150  
 100 to 150  
 100 to 150

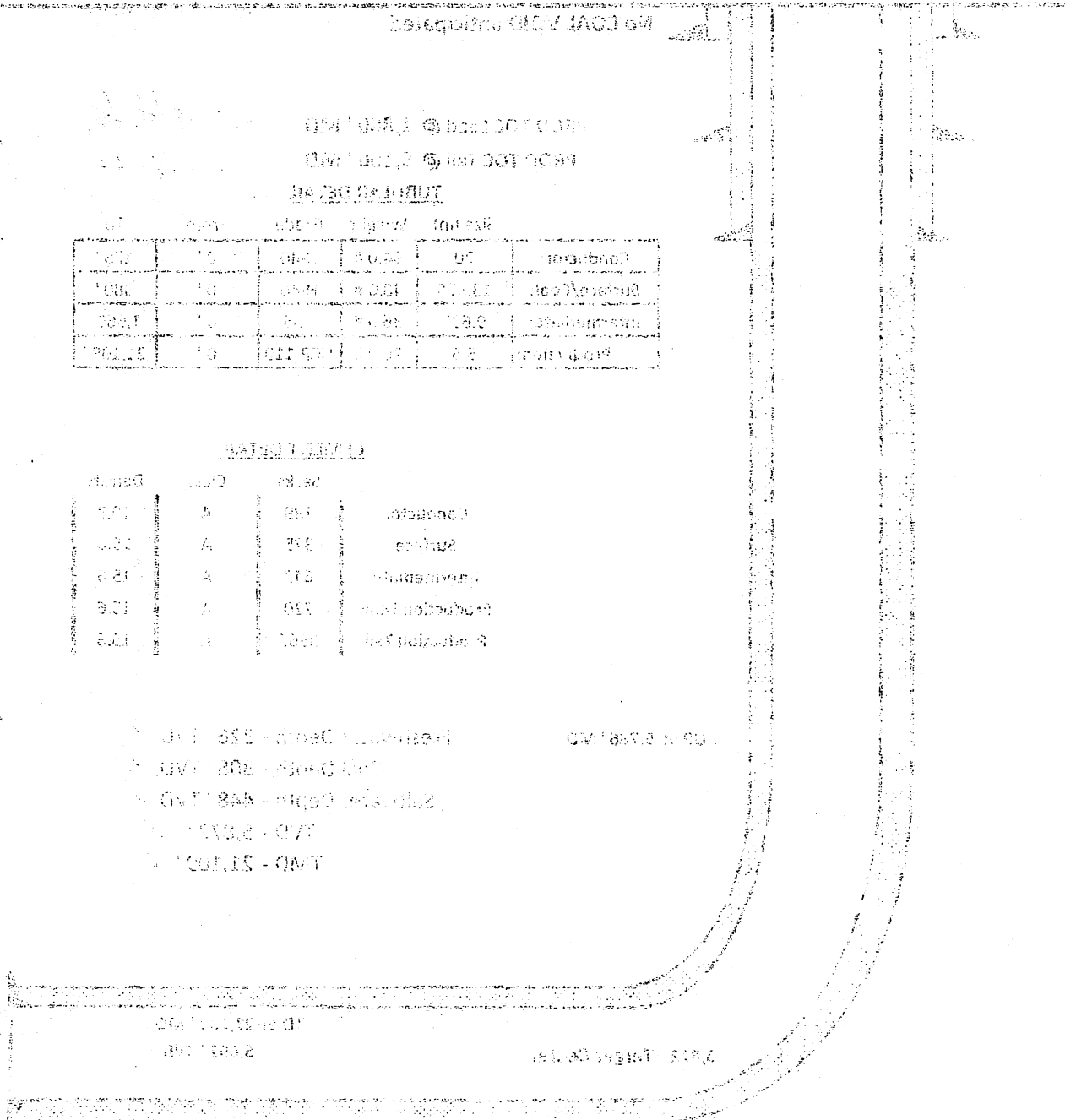
100 to 150  
 100 to 150  
 100 to 150

Production Data - 330 TWD  
 Production Data - 302 TWD  
 Production Data - 448 TWD  
 100 - 2100  
 TWD - 2100

Production Data - 330 TWD  
 Production Data - 302 TWD  
 Production Data - 448 TWD  
 100 - 2100  
 TWD - 2100

100 to 150  
 100 to 150

100 to 150  
 100 to 150



9-00324

John Good Jr. BRK 601H AOR

API	Operator	Status	Latitude	Longitude	Vertical TD	Producing Formation	Producing Zones Not Perforated
47-09-00113	SWN PRODUCTION COMPANY, LLC	ACTIVE	40.223907	-80.580720		MARCELLUS	
47-09-00124	SWN PRODUCTION COMPANY, LLC	ACTIVE	40.223944	-80.580734		MARCELLUS	
47-09-00188	SWN PRODUCTION COMPANY, LLC	ACTIVE	40.223796	-80.580680		MARCELLUS	
47-09-00189	SWN PRODUCTION COMPANY, LLC	ACTIVE	40.223811	-80.580611		MARCELLUS	
47-09-00196	SWN PRODUCTION COMPANY, LLC	ACTIVE	40.223833	-80.580693		MARCELLUS	
47-09-00197	SWN PRODUCTION COMPANY, LLC	ACTIVE	40.223848	-80.580624		MARCELLUS	
47-09-00198	SWN PRODUCTION COMPANY, LLC	ACTIVE	40.223870	-80.580707		MARCELLUS	

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WW-9  
(4/16)

API Number 47 - 009 - 00324  
Operator's Well No. John Good Jr. BRK 801H

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 & Steubenville East

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

Will a pit be used? Yes  No

If so, please describe anticipated pit waste: \_\_\_\_\_

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

Proposed Disposal Method For Treated Pit Wastes:

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

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

Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air drill to KOP, fluid drill with 30BM from KOP to TD

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

Additives to be used in drilling medium? Attachment 3B

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

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

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

Apex Sanitary Landfill U6-U8438, Brooke Co SWF-1013,

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

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

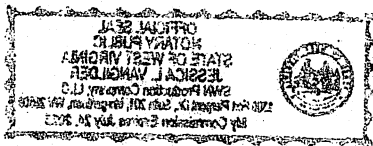
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is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

Company Official Signature Brittany Woody  
Company Official (Typed Name) Brittany Woody  
Company Official Title Senior Regulatory Analyst



Subscribed and sworn before me this 31<sup>st</sup> day of August, 20 20  
Jessica L. Vangilder Notary Public  
My commission expires 7-24-25

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Return to

**SWN Production Co., LLC**

Proposed Revegetation Treatment: Acres Disturbed 21.91 Prevegetation pH \_\_\_\_\_

Lime as determined by pH test min.2 Tons/acre or to correct to pH 8.63

Fertilizer type 10-20-20

Fertilizer amount 600/500 lbs/acre

Mulch Hay/Straw Tons/acre

Seed Mixtures

**Temporary**

**Permanent**

Seed Type lbs/acre

Seed Type lbs/acre

**Attachment 3C**

**Attach:**

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

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: \_\_\_\_\_ ✓

*[Signature]* 10-15-20

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

Title: Oil & Gas Inspector

Date: 10-15-20

Field Reviewed?  Yes

No

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Environmental Protection

## Attachment 3A

### CLOSED LOOP SYSTEM

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

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

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

### AIR DRILLING INTERVALS

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

### LIQUIDS DRILLING (FRESHWATER, BRINE, SOBM)

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

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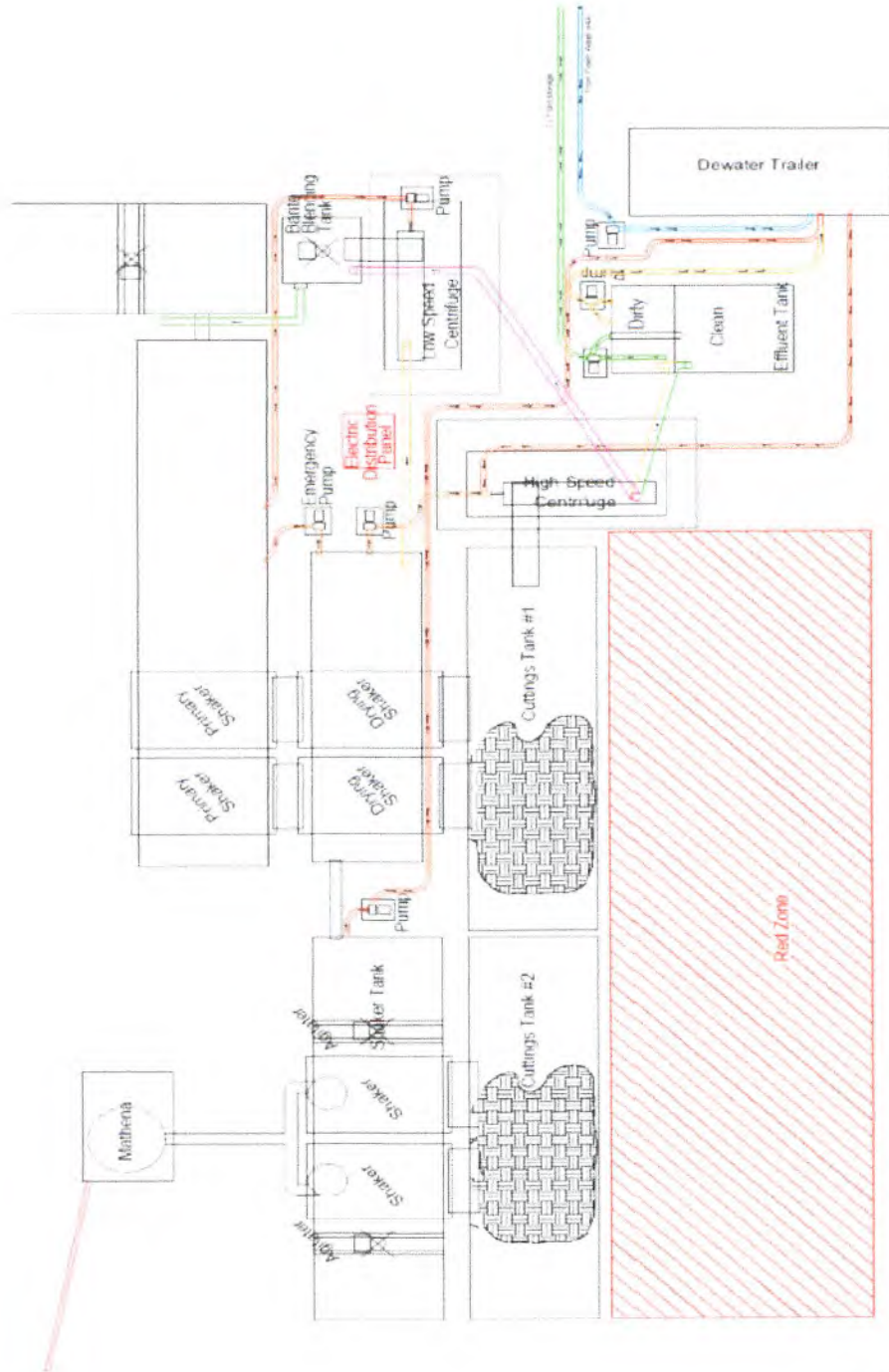
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EXAMPLE SCHEMATIC FOR CLOSED LOOP SOLIDS CONTROL SYSTEM



Solids Control Layout



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# **Attachment 3B**

## **Drilling Mediums**

### **Surface/Coal(if present)/Freshwater Intervals:**

Air

Freshwater (if needed based on conditions)

### **Intermediate/Coal (if present):**

Air

### **Production Hole:**

Air

Synthetic Oil (Base Fluid for mud system)

Barite

Calcium Chloride

Lime

Organophilic Bentonite

Primary and Secondary Emulsifiers

Gilsonite

Calcium Carbonate

Friction Reducers

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OCT 27 2020  
WV Department of  
Environmental Protection

R<sup>2</sup> → V<sup>+</sup>  
A



## WVD Seeding Specification

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

NON-ORGANIC PROPERTIES	
Seed Mixture: ROW Mix	SWN Supplied
Orchardgrass	40%
Timothy	15%
Annual Ryegrass	15%
Brown Top Millet	5%
Red Top	5%
Medium Red Clover	5%
White Clover	5%
Birdsfoot Trefoil	5%
Rough Bluegrass	5%
All legumes are innoculated at 5x normal rate	
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; color: red;">                     Apply @ 100lbs per acre April 16th- Oct. 14th                 </div> <div style="width: 45%; color: red;">                     Apply @ 200lbs per acre Oct. 15th- April 15th PLUS 50lbs per acre of Winter Wheat                 </div> </div>	

SOIL AMENDMENTS	
10-20-20 Fertilizer	*Apply @ 500lbs per Acre
Pelletized Lime	Apply @ 2 Tons per Acre
*unless otherwise dictated by soil test results	

Seeding Calculation Information:
1452' of 30' ROW/LOD is One Acre
871' of 50' ROW/LOD is One Acre
622' of 70' ROW/LOD is One Acre

Synopsis:
Every 622 linear feet in a 70' ROW/LOD, you should be using (2) 50lb bags of seed, (4) 50lb bags of fertilizer and (80) 50lb bags of Lime (2x seed in winter months + 50lb Winter Wheat/ac).

Special Considerations:
Landowner Special Considerations including CREP program participants require additional guidance that is not given here. Discuss these requirements with SWN supervision at the beginning of the project to allow time for special seed delivery.

ORGANIC PROPERTIES	
Seed Mixture: SWN Production Organic Mix	SWN Supplied
Organic Timothy	50%
Organic Red or White Clover	50%
OR	
Organic Perennial Ryegrass	50%
Organic Red or White Clover	50%
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; color: red;">                     Apply @ 100lbs per acre April 16th- Oct. 14th                 </div> <div style="width: 45%; color: red;">                     Apply @ 200lbs per acre Oct. 15th- April 15th                 </div> </div>	
Organic Fertilizer @ 200lbs per Acre	Pelletized Lime @ 2 Tons per Acre

WETLANDS (delineated as jurisdictional wetlands)	
Seed Mixture: Wetland Mix	SWN Supplied
VA Wild Ryegrass	20%
Annual Ryegrass	20%
Fowl Bluegrass	20%
Cosmos 'Sensation'	10%
Redtop	5%
Golden Tickseed	5%
Maryland Senna	5%
Showy Tickseed	5%
Fox Sedge	2.5%
Soft Rush	2.5%
Woolgrass	2.5%
Swamp Verbena	2.5%
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; color: red;">                     Apply @ 25lbs per acre April 16th- Oct. 14th                 </div> <div style="width: 45%; color: red;">                     Apply @ 50lbs per acre Oct. 15th- April 15th                 </div> </div>	
NO FERTILIZER OR LIME INSIDE WETLAND LIMITS	

Qualification of the applicant is reported under the heading "Qualification".  
 The applicant's name, address, telephone number, and date of birth are reported under the heading "Personal Data".  
 The applicant's education, training, and experience are reported under the heading "Education and Experience".  
 The applicant's physical characteristics are reported under the heading "Physical Characteristics".  
 The applicant's personality and social characteristics are reported under the heading "Personality and Social Characteristics".  
 The applicant's references are reported under the heading "References".

1. Name: [Name]  
 2. Address: [Address]  
 3. Telephone: [Telephone]  
 4. Date of Birth: [Date]  
 5. Education: [Education]  
 6. Training: [Training]  
 7. Experience: [Experience]  
 8. Physical Characteristics: [Physical Characteristics]  
 9. Personality and Social Characteristics: [Personality and Social Characteristics]  
 10. References: [References]

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 150. References: [References]

Attachment 30

# MARCELLUS WELL DRILLING PROCEDURES AND WELL SITE SAFETY PLAN



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

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Environmental Protection

**API NO. 47-XXX-XXXXX**  
**WELL NAME: John Good Jr. BRK 601H**  
**Bethany & Steubenville East QUAD**  
**Buffalo DISTRICT**  
**Brooke COUNTY, WEST VIRGINIA**

Submitted by:

Name: Brittany Woody

*Brittany Woody*

Date: 8/31/2020

Title: Senior Regulatory Analyst

SWN Production Co., LLC

Approved by:

Name: *Eric PLO*

Date: *10-15-20*

Title: *Oil & Gas Inspector*

Approved by:

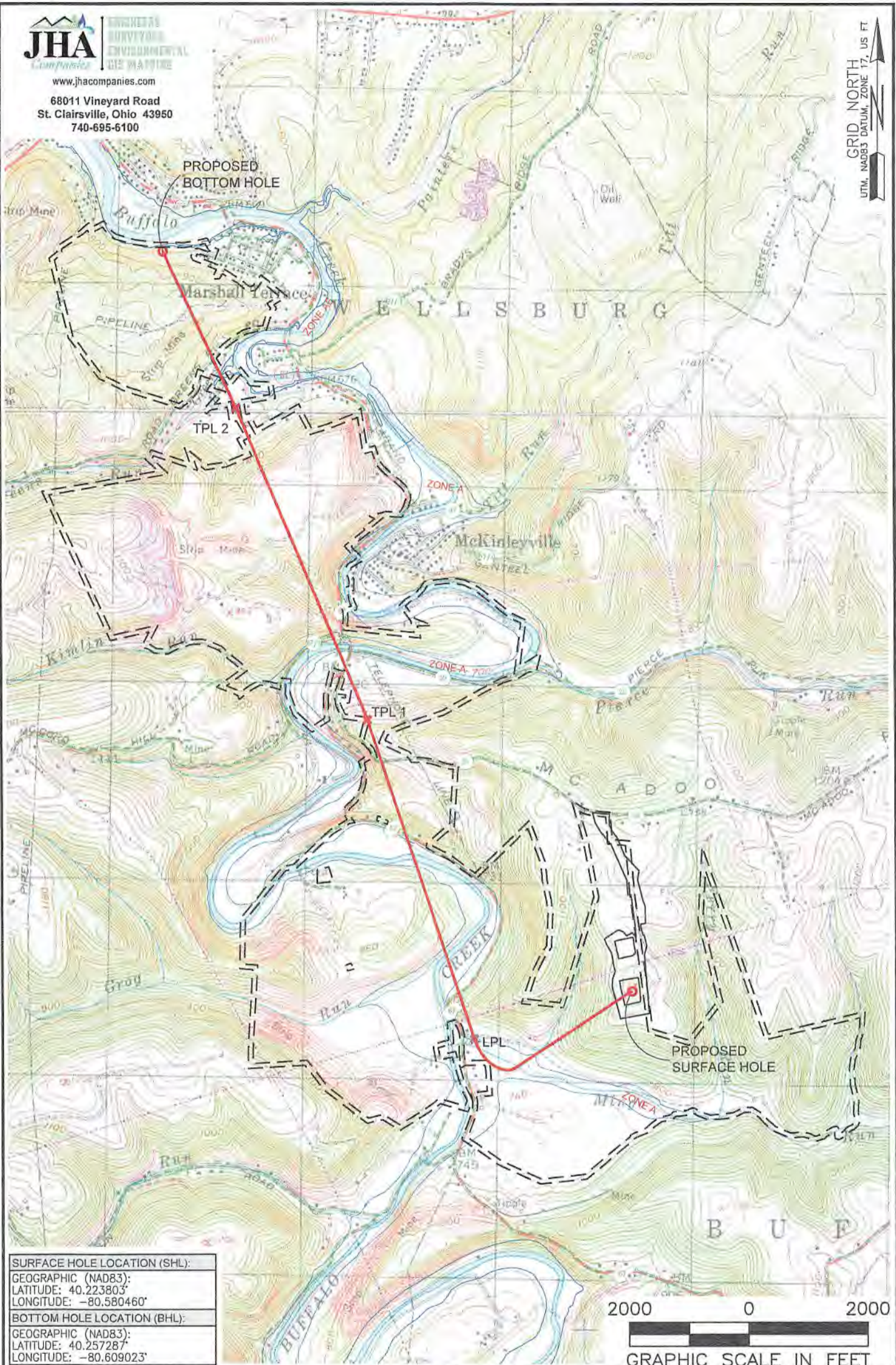
Name: *Wattley*

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

Title: *ERS3-Perm. Hing WUDEP*

**JHA**  
 COMPANIES  
 ENVIRONMENTAL  
 GEOSPATIAL  
 www.jhacompanies.com  
 68011 Vineyard Road  
 St. Clairsville, Ohio 43950  
 740-695-6100

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



<b>SURFACE HOLE LOCATION (SHL):</b>
GEOGRAPHIC (NAD83):
LATITUDE: 40.223803°
LONGITUDE: -80.580460°
<b>BOTTOM HOLE LOCATION (BHL):</b>
GEOGRAPHIC (NAD83):
LATITUDE: 40.257287°
LONGITUDE: -80.609023°



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

<b>LEGEND:</b>	PROPOSED SURFACE HOLE / BOTTOM HOLE	NATURAL WATERWAY
EXISTING / PRODUCING WELLHEAD	ACCESS ROAD	PUBLIC ROAD
LPL LANDING POINT LOCATION	ACCESS ROAD TO PREV. SITE	LEASE BOUNDARY
FLOOD PLAIN	PROPOSED PATH	

<b>WELL OPERATOR:</b> SWN PRODUCTION COMPANY, LLC	<b>WELL (FARM) NAME:</b> JOHN GOOD JR BRK	<b>WELL #</b> 601H	<b>SERIAL #</b> XXXX
<b>ADDRESS:</b> 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	<b>COUNTY:</b> BROOKE	<b>CODE:</b> 9	<b>DISTRICT:</b> BUFFALO
<b>SURFACE OWNER:</b> JOHN PRATHER GOOD JR IRREVOCABLE TRUST	<b>USGS 7 1/2 QUADRANGLE MAP NAME:</b> WILEYVILLE, WV		
<b>API #</b> 47-009-XXXX			

LATITUDE: 40°15'00" SURFACE HOLE (2000' SCALE)

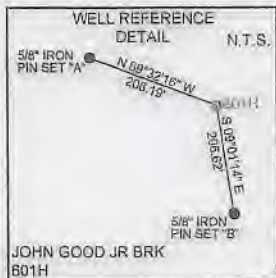
10889'

LATITUDE: 40°17'30" BOTTOM HOLE (2000' SCALE)



www.jhacompanies.com

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



NOTES ON SURVEY

- 1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
5. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
6. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
7. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.

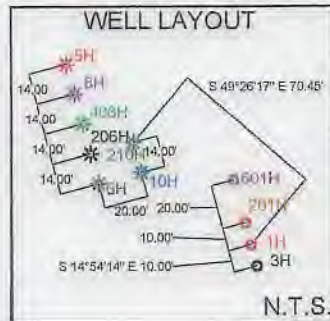


Table with 3 columns: LINE, BEARING, DISTANCE. Rows include L1 (N20°55'09"W, 1673.34') and L2 (S24°51'44"E, 724.59').

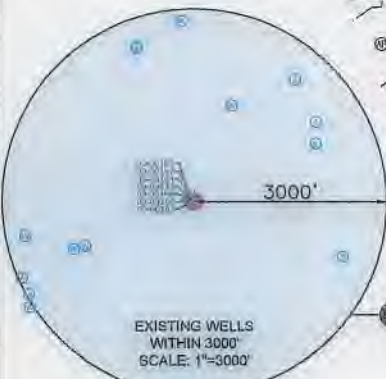
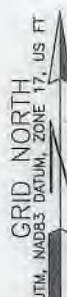


Table with 4 rows: SURFACE HOLE LOCATION (SHL), LANDING POINT LOCATION (LPL), TURNING POINT LOCATION 1 (TPL 1), TURNING POINT LOCATION 2 (TPL 2), BOTTOM HOLE LOCATION (BHL). Each row includes UTM coordinates.



COMPANY: SWN Production Company, LLC

Table with 3 columns: Regulatory info (West Virginia seal, WVDEP address), Accuracy (1/200), and Well info (Operator's Well # 601H, API Well # 47-009-00324).

Form with fields for Well Type (Production checked), Watershed (Upper Ohio South), District (Buffalo), County (Brooke), Surface Owner (John Prather Good Jr Irrevocable Trust), Oil & Gas Royalty Owner (John Prather Good Jr Irrevocable Trust), Drill type (Drill checked), Target Formation (Marcellus), and Estimated Depth (5,872' TVD).

Table with 2 columns: Well Operator (SWN Production Company, LLC) and Designated Agent (Brittany Woody), including addresses and zip codes.

Table with 2 columns: Legend (Proposed Surface Hole, Existing Wellhead, LPL, Existing Water Well, Existing Spring, Natural Waterway, Surveyed Boundary, Lease Boundary, Proposed Path, Public Road) and Revisions/Date info.

<input type="checkbox"/> EXISTING SWIMMING <input type="checkbox"/> EXISTING WATER WETT <input checked="" type="checkbox"/> FUNDING POINT LOCATION <input type="checkbox"/> EXISTING \ PROPOSED METHUEN <input type="checkbox"/> PROPOSED SURFACE HOLE \ BOTTOM HOLE	<input type="checkbox"/> EXISTING ROAD <input type="checkbox"/> PROPOSED ROAD <input type="checkbox"/> FENCE BOUNDARY <input type="checkbox"/> SURVEYED BOUNDARY <input type="checkbox"/> MULTIPLE WATERWAYS	METT LOCATION PLAN DRAWING NO: 2020-0114 SCALE: 1" = 3000' DRAWN BY: B. CHINEZ VBY NO: 43-008-XXXXX DATE: 10-01-2020
REGION: MOHAWKI STATE: MA ZIP CODE: 02028 ADDRESS: 1300 FORT BERRYON DRIVE SUITE 301 METT OPERATOR: ZMI PRODUCTION COMPANY, LLC	REGION: MOHAWKI STATE: MA ZIP CODE: 02028 ADDRESS: 1300 FORT BERRYON DRIVE SUITE 301 DESIGNATED AGENT: BRITANNY MOODY	

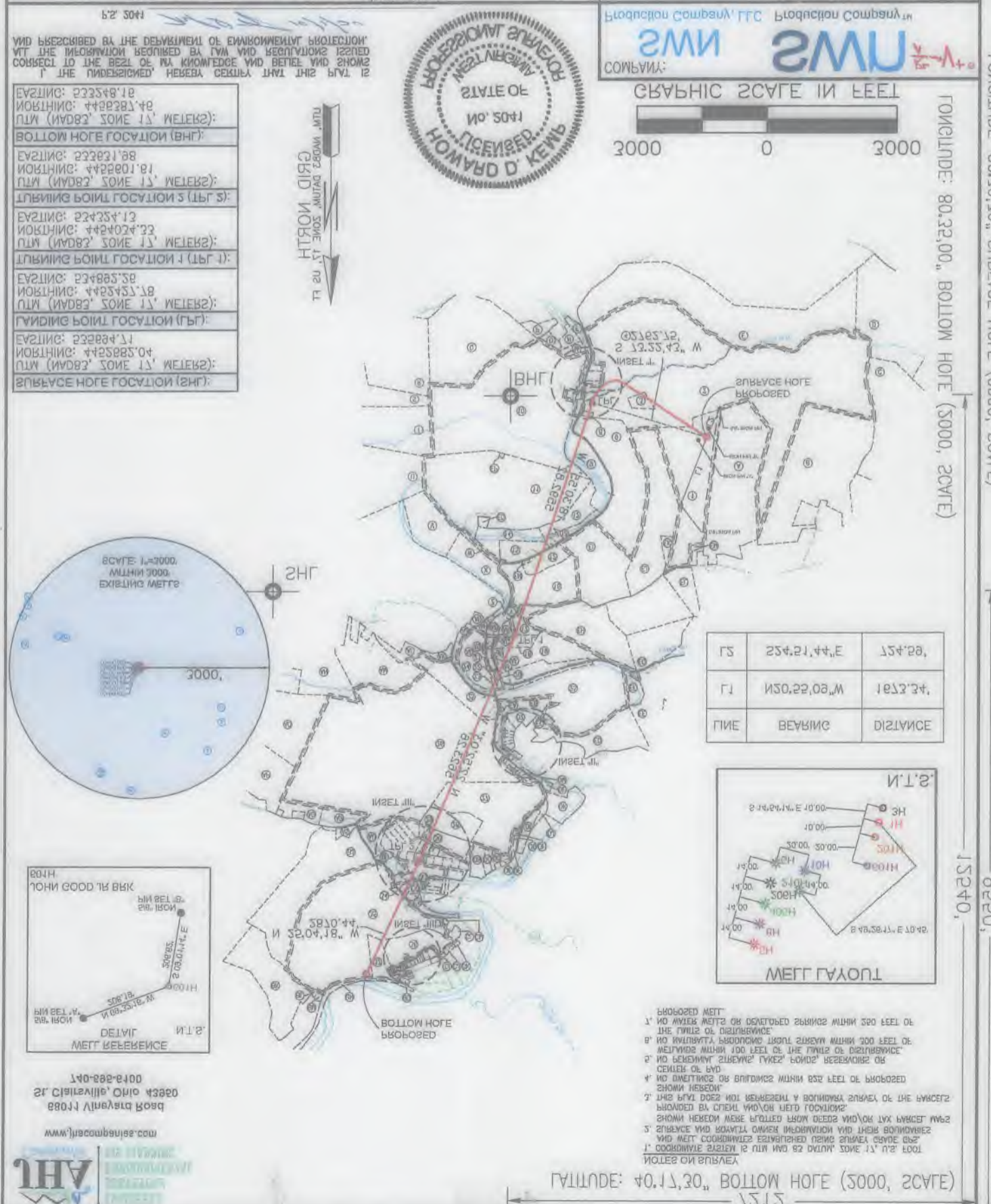
TARGET FORMATION: MWSCTT2 ESTIMATED DEPTH: 2'825, LAD 51'108, LMD

COLLAR  BITE & VANDON  STEIN OUT & BERTS  OTHER CHANGE (SPECIFY)

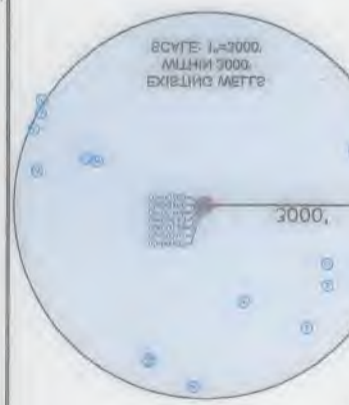
DRIFT  DRIFT DEEPEX  BEDDING  FRACTURE OR SLIPSLIDE  BITE OFF OLD FORMATION  BERRYONATE NEW FORMATION

OIG & C&S BOUNDARY OWNERS: JOHN BRYANER GOOD JR IRRIGATION/IRIGATION  
 SURFACE OWNERS: JOHN BRYANER GOOD JR IRRIGATION/IRIGATION  
 DISTRICT: WILFORD COUNTY: BROOKS  
 WATERSHED: NEEBES OHIO SOUTH  
 METT TYPE: OIG  WASTE DISPOSAL  PRODUCTION  DEEP  C&S  POND INFLECTION  STORAGE  SHUTTOW

CHARTERED MA 1780 601 STATE STREET OFFICE OF OIG & C&S MADEB UNITED STATES TOPOGRAPHIC MAPS (+) DENOTES LOCATION OF METT ON	ELEVATION: (NAD 83 U.S. FT) SOURCE OF GRADE OR SURVEY ACCURACY: 1/500 DEGREE OF MINIMUM	STATE COUNTY PERMIT VBY METT #: 18 008 02500 OPERATOR'S METT #: 0101 JOHN GOOD JR BVC
	PRODUCTION COMPANY, LLC PRODUCTION COMPANY, LLC COMPANY: ZMI ZMI	GRAPHIC SCALE IN FEET 3000 0 3000 LONGITUDE: 80.32.00, BOTTOM HOLE (5000, SCALE) 9220, 15240, 9220

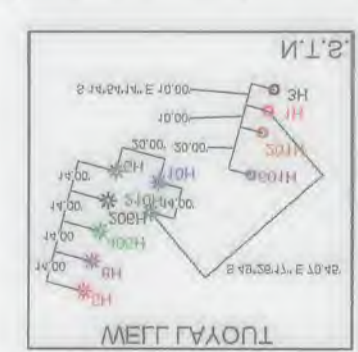


ELEVATION: 232548.18 NORTHING: 4422281.48 UTM (NAD83) ZONE 18 QUD METERS:
BOTTOM HOLE LOCATION (BHG): ELEVATION: 232031.88 NORTHING: 4422001.81 UTM (NAD83) ZONE 18 QUD METERS:
FUNDING POINT LOCATION 3 (FBG 3): ELEVATION: 232425.13 NORTHING: 4424024.23 UTM (NAD83) ZONE 18 QUD METERS:
FUNDING POINT LOCATION 1 (FBG 1): ELEVATION: 234885.38 NORTHING: 4425423.18 UTM (NAD83) ZONE 18 QUD METERS:
GUIDING POINT LOCATION (GPT): ELEVATION: 232884.11 NORTHING: 4425085.04 UTM (NAD83) ZONE 18 QUD METERS:
SURFACE HOLE LOCATION (SHG):



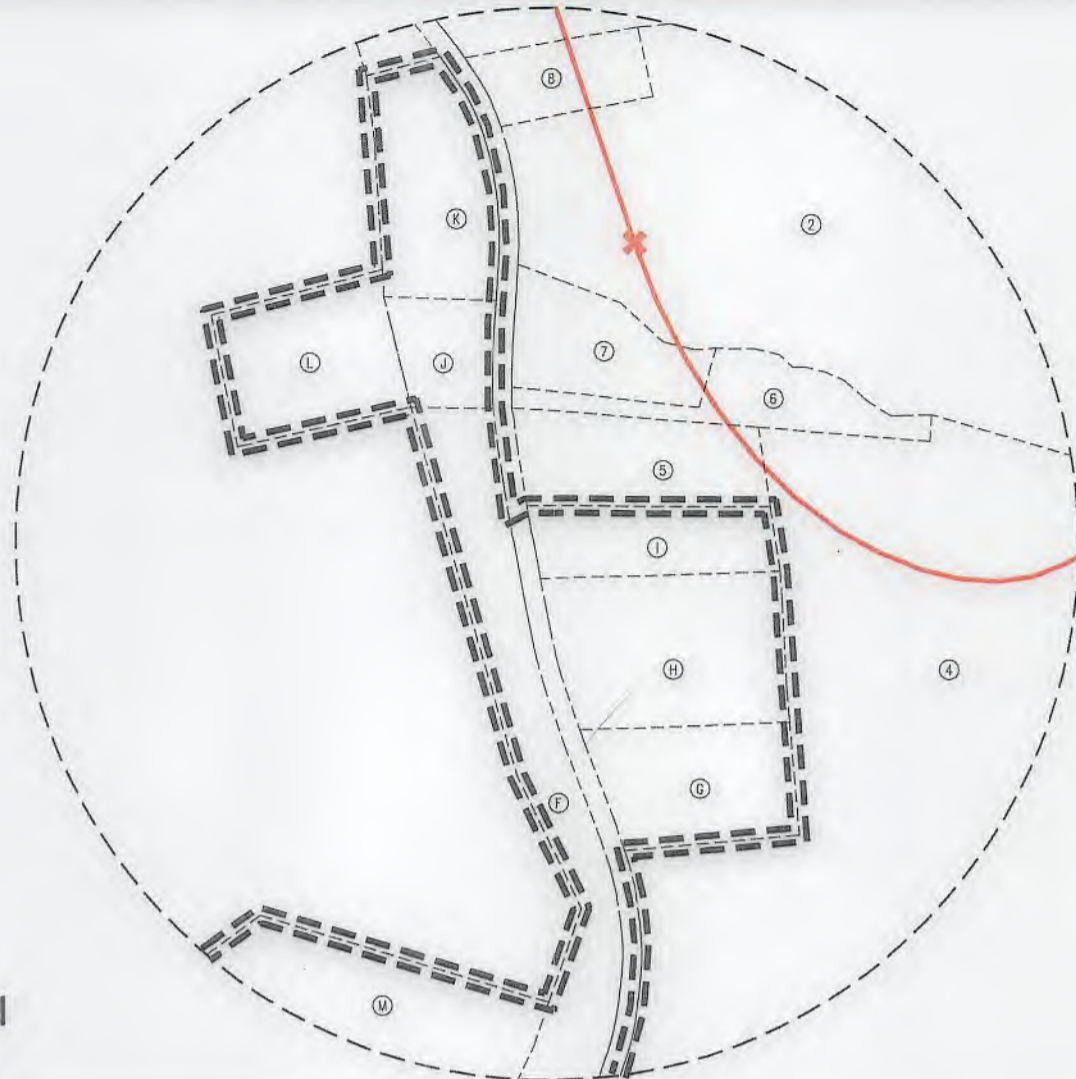
140-892-8100  
 21 Stateville, Ohio 43060  
 89011 Vineyard Road  
 www.jrc.com/ma/18q

GS	254.21, 44.2E	154.28,
LI	120.22, 08.2W	182.23,
LINE	BEARING	DISTANCE

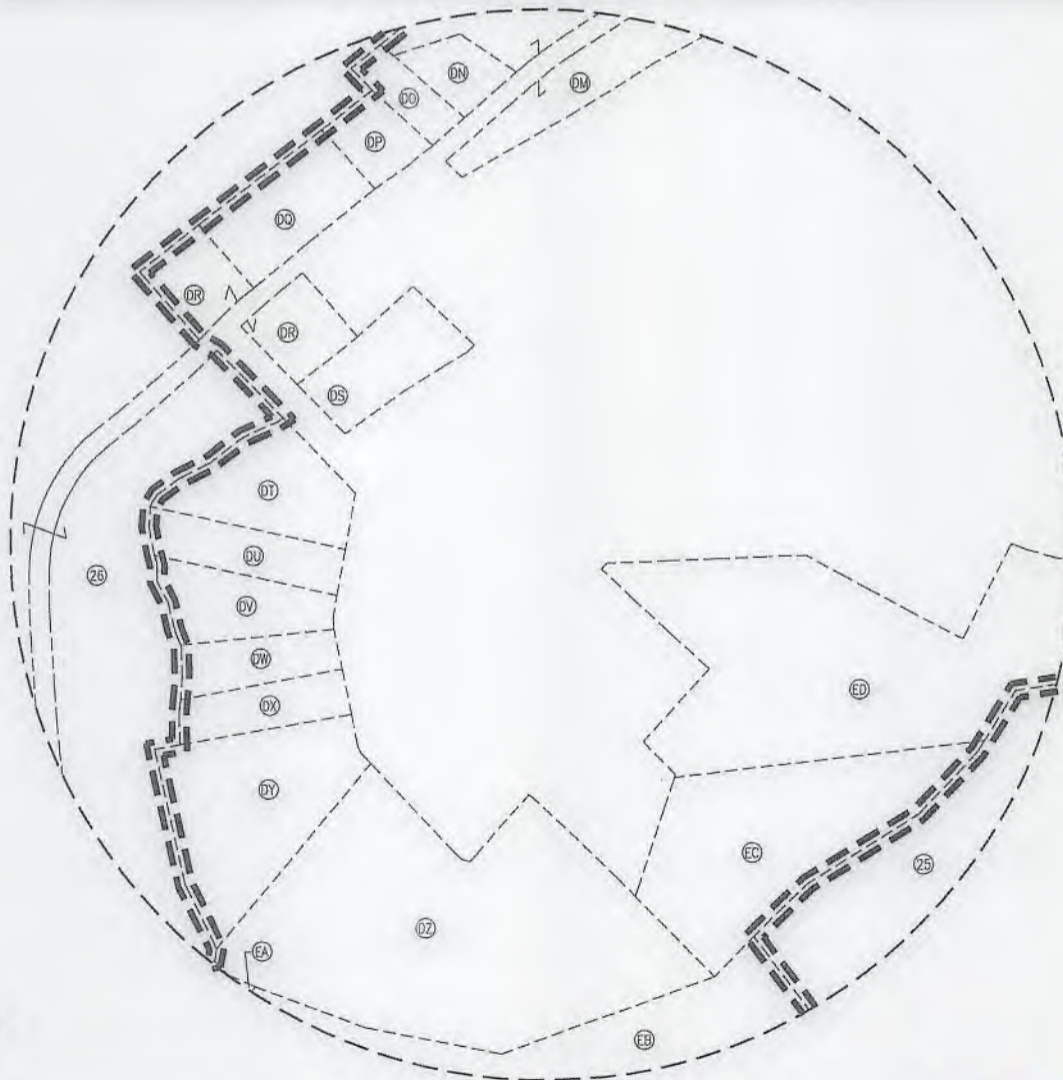


- PROPOSED METT
- NO WATER WETTS OR DEVELOPED SWIMMS WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
  - NO MULTIPLE PROPOSED SWIMMS WITHIN 300 FEET OF METT WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
  - NO EXISTING SWIMMS, LAKE, POND, RESERVOIR OR CENTER OF SWIM.
  - NO SWIMMS OR SWIMMS WITHIN 250 FEET OF PROPOSED SWIMM HEREON.
  - THE PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
  - SWIMM HEREON WERE PLOTTED FROM DEEDS AND/OR TAX MAPS.
  - SURFACE AND BOUNDARY OWNERS INFORMATION AND THEIR BOUNDARIES AND METT COORDINATES ESTABLISHED USING SURVEY GRADE OR 1" COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 18 QUD, FOOT NOTES ON SURVEY.

LATITUDE: 40.12.00, SURFACE HOLE (3000, SCALE) 10889, 1515, 9220, 15240, 9220



INSET I  
N.T.S.



INSET II  
N.T.S.

REVISIONS:

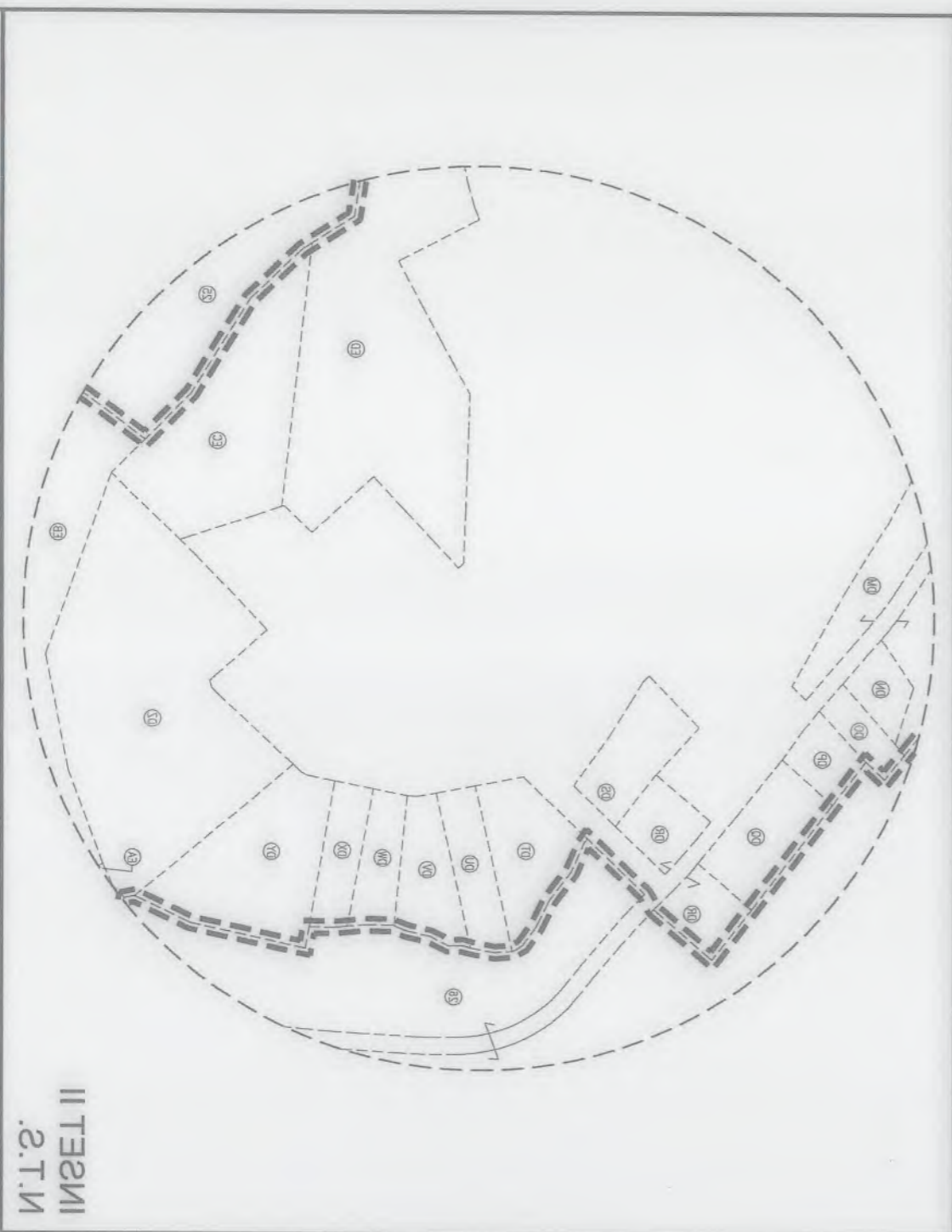

COMPANY: <b>SWN</b> Production Company, LLC		<b>swn</b> <sup>R-V+0</sup> Production Company™	
OPERATOR'S JOHN GOOD JR BRK		DATE: 10-01-2020	
WELL #: 47-009-00324 HGA 601H		API NO: 47-009-XXXXX	
DISTRICT: BUFFALO		SCALE: N/A	
COUNTY: BROOKE		DRAWING NO: 2020-0714	
STATE: WV		WELL LOCATION PLAT	



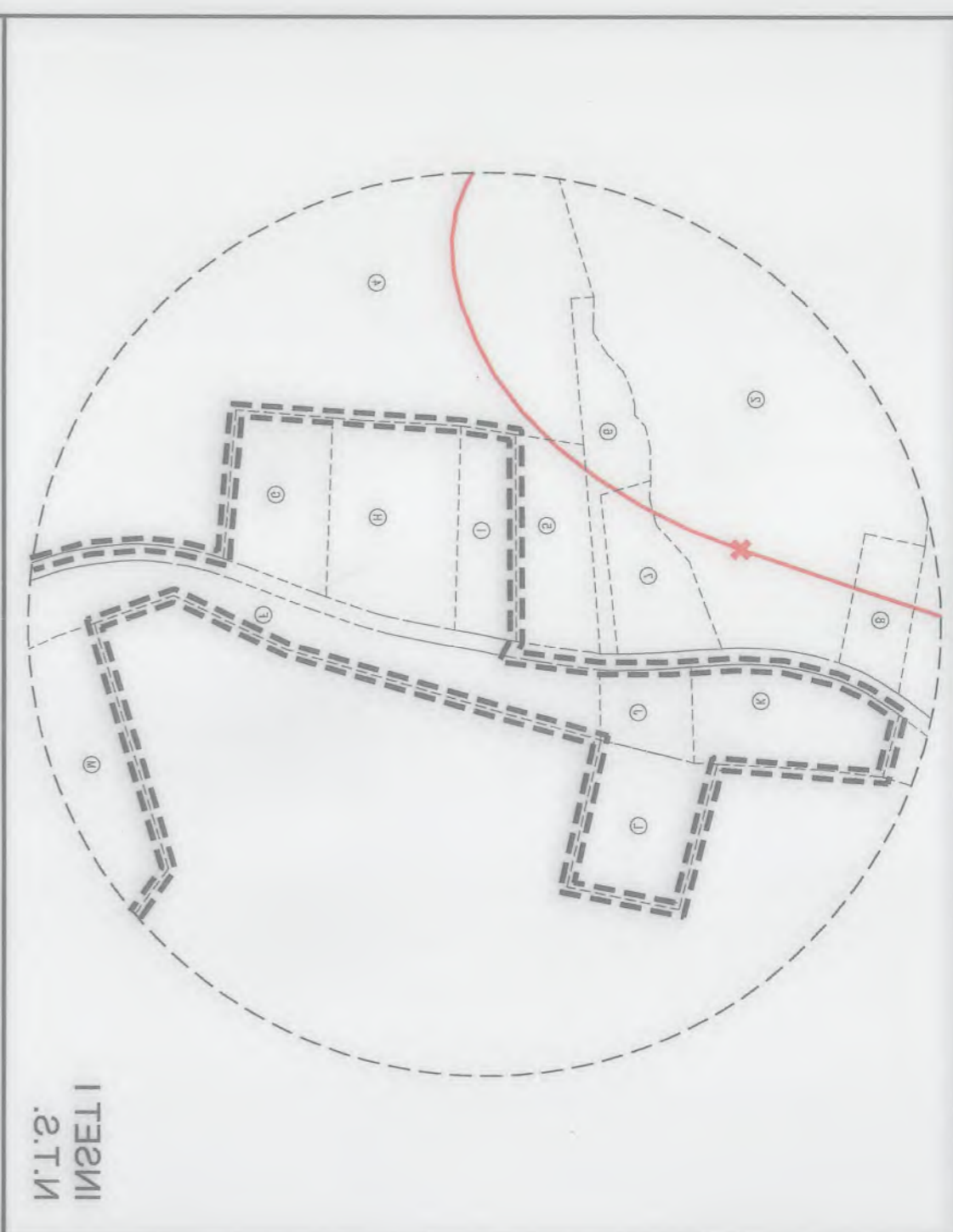
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 ΣΚΑΛΗ 1:100  
 ΔΙΑΜΕΤΡΟΣ 10000-0114  
 ΗΜΕΡΑ 10-01-2020

ΒΡΟΧΙΚΗ ΣΥΜΠΛΗΡΩΣΗ  
 ΜΕΤΡ 11-004-00334 ΗΛΥ  
 ΟΜΟΙΟΤΗΤΑ ΤΟΠΙΟΝ ΚΑΛΩΣ ΤΟΠΙΟΝ ΚΑΛΩΣ  
 ΟΜΟΙΟΤΗΤΑ ΤΟΠΙΟΝ ΚΑΛΩΣ

ΣΥΜΠΛΗΡΩΣΗ ΤΟΠΙΟΝ ΚΑΛΩΣ  
 ΣΥΜΠΛΗΡΩΣΗ ΤΟΠΙΟΝ ΚΑΛΩΣ  
 ΣΥΜΠΛΗΡΩΣΗ ΤΟΠΙΟΝ ΚΑΛΩΣ



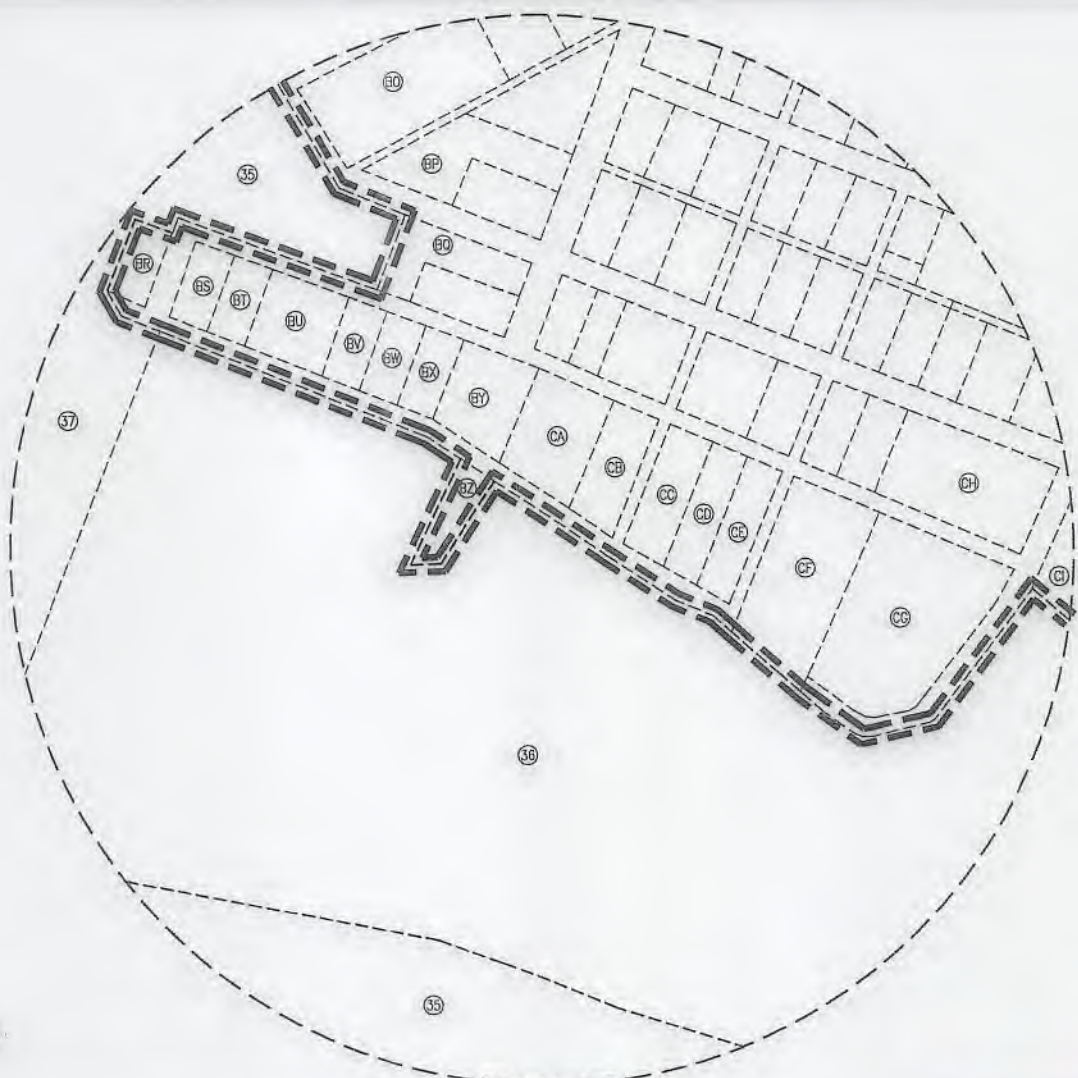
ΙΙ ΤΣΕΝΙ  
 .Σ.Τ.Ι.Π





Ι ΤΣΕΝΙ  
 .Σ.Τ.Ι.Π



INSET III  
N.T.S.

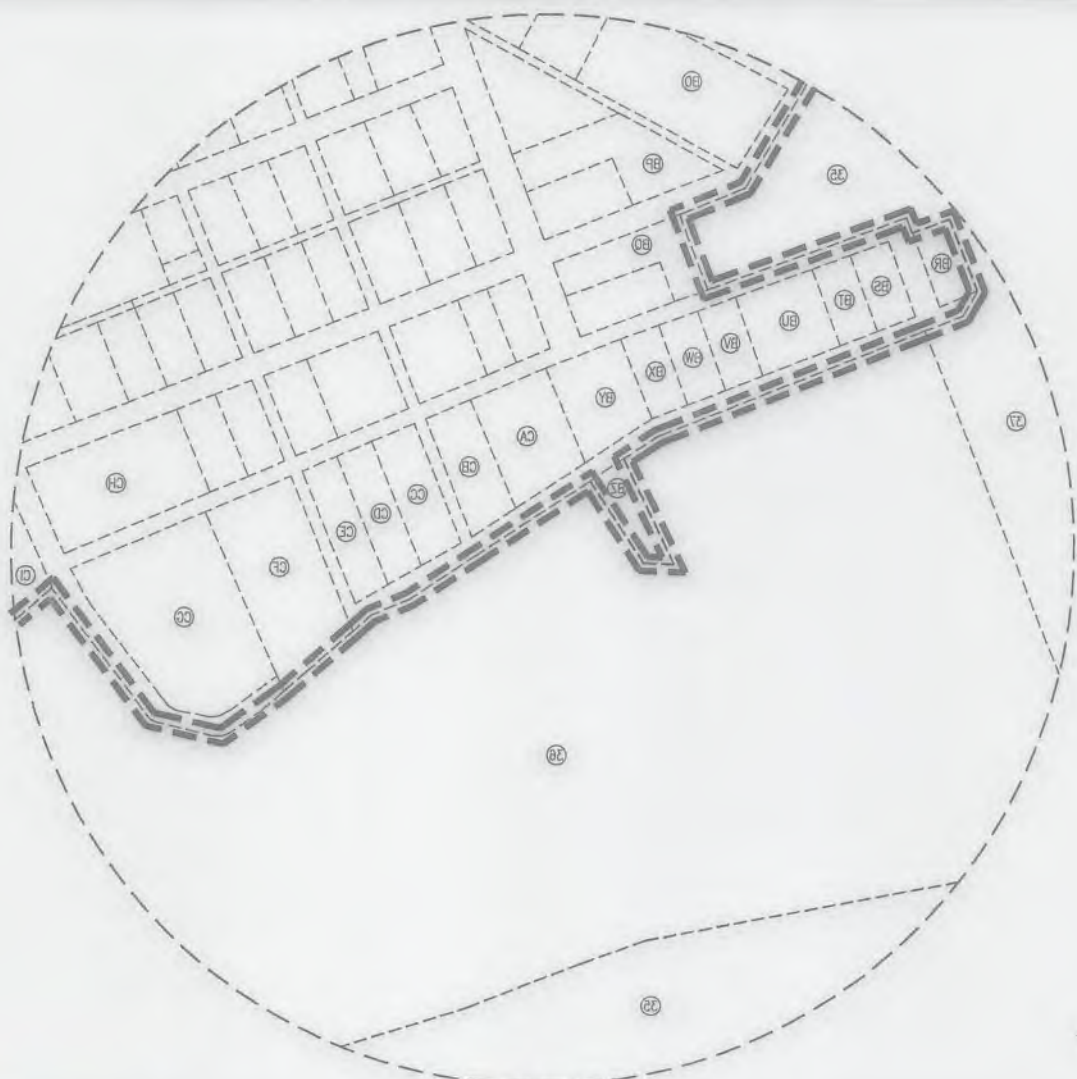


INSET IIII  
N.T.S.



REVISIONS:	 		DATE: 10-01-2020
			OPERATOR'S JOHN GOOD JR BRK
	WELL #: 47-009-00324 HGA 601H	DRAWN BY: R.GRIMES	SCALE: N/A
	DISTRICT: BUFFALO	COUNTY: BROOKE	STATE: WV
			WELL LOCATION PLAT



INSET III  
N.T.S.



INSET III  
N.T.S.

				COMPANY:		REVISIONS:	
DATE: 10-01-2020		JOHN GOOD JR BRK		OPERATOR'S			
API NO: 47-009-XXXXX		801H		WELL # 41-004-00254 HWY			
DRAWN BY: R.GRIMES		STATE:		COUNTY:			
SCALE: N/A		WM		BROOKE			
DRAWING NO: 2020-0714				DISTRICT:			
WELL LOCATION PLAN				BUFFALO			



WELLBORE LABEL FOR SURFACE OWNERS		WELLBORE LABEL FOR SURFACE OWNERS	
TRACT	SURFACE OWNER (S) & ACQUAINT OWNERS (A)	TRACT	SURFACE OWNER
1	GOOD JOHN PRATHER IRREVOCABLE TR DTD 4/11 (2)(P)	1	JACKRETT JEFFREY P
2	SURFACE OWNER	2	RECK JAY D & KAREN SUE (ITWS)
3	STARVAGGI INDUSTRIES INC	3	RECK JAY D & KAREN SUE (ITWS)
4	CRAWFORD MARIN G SR & JOY H (SURV)	4	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
5	IRPLEY JOHN E & SHERILL J (SURV) (EST-WILDA RIPLEY)	5	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
6	JEFFREY D LOY AND KATHEN M LOY (SURV)	6	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
7	CRAWFORD MARIN G SR & JOY (SURV)	7	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
8	SMITH LAWRENCE PAUL SR	8	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
9	USA MARIE BLACK	9	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
10	RODGERS RICHARD; SHARR CHERRI; DYER EDWARD ETAL	10	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
11	JOHNSTON WILLIAM E & HAZEL E (SURV)	11	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
12	CHRISTMAN MARK A	12	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
13	VENURI DWARKA NATH DBA AMERICAN HEART ASSOCIATES	13	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
14	LUKACEN, BONNIE CEE; SCHEUTNER, SHAWN; SCHEUTNER, SHANDI; CARRELL, SHELBY; SCHEUTNER, SHELBY	14	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
15	MASZELLA WELDING & FABRICATION INC	15	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
16	MASZELLA WELDING & FABRICATION INC	16	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
17	GEORGETTI ROWDY T	17	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
18	TOMSHACK MATTHEW P	18	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
19	PAMELA S, MERCER	19	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
20	FEDAK MARK & GEORGIA	20	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
21	STATE OF WEST VIRGINIA DEPARTMENT OF TRANSPORTATION	21	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
22	FEDAK MARK & GEORGIA (SURV)	22	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
23	FEDAK MARK A & GEORGIA M	23	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
24	STATE OF WEST VIRGINIA DEPARTMENT OF TRANSPORTATION	24	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
25	ICKER HARVEY & LINDA (SURV)	25	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
26	HUBBARD SAMUEL HERVEY	26	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
27	SCHIAPPA & COMPANY INC	27	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
28	MCGOWAN HERBERT	28	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
29	RECK JAY D & KAREN S (SURV)	29	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
30	JACKRETT JEFFREY P	30	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
31	MARTINO STEVE D & MARY CHRISTINE	31	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
32	JACKRETT JEFFREY P	32	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
33	JACKRETT JEFFREY P	33	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
34	SIODERLY CHRISTOPHER B JACQUELINE (SURV)	34	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
35	PETRUCCIJO RONALD (LE ROBERT & MARIE ELIZABETH)	35	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
36	ROBIE GERTRUDE LOUISE MCSHANE	36	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
37	LUKSHIN LUCINDA	37	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
38	MACIAK EDWARD	38	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
39	ROCKEY DEBRA K (TOD LISA MARIE ROCKEY-MCCINE AND MATTHEW JAMES ROCKEY)	39	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
40	MARLIN G CRAWFORD	40	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
41	MARLIN G CRAWFORD	41	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
42	JACKRETT JEFFREY P	42	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
43	JACKRETT JEFFREY P	43	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
44	JACKRETT JEFFREY P	44	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
45	JACKRETT JEFFREY P	45	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
46	JACKRETT JEFFREY P	46	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
47	MARTINO STEVE D & MARY CHRISTINE (SURV)	47	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
48	STEVEN D, MARTINO AND MARY C, MARTINO	48	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
49	PRATZ GARY LEB HANNAH JANE	49	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
50	WOODRUH ERIC I	50	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
51	OHIER LESLIE R JOSEPHINE I (TOD) OHIER JAMIE	51	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
52	COLLEY MELVIN A & ABERNATHY M	52	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
53	SMITH TONY	53	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
54	BLACK KEITH	54	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
55	BLACK CINDY LEE	55	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
56	TAYLOR SYLVIA	56	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
57	TAYLOR WAYNE R SYLVIA (SURV)	57	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
58	STEWART TERRY STEWART CHARLOTTE M (ITWS)	58	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
59	MCGOWAN HERBERT	59	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
60	VENURI HOME & GARDENS LLC	60	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
61	OHIER DIXIE LEE	61	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
62	JAMES SCOTT GEAR	62	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
63	JAMES SCOTT GEAR	63	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
64	REED LARRY MICHAEL DEBORAH REINE (ITWS)	64	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
65	REED LARRY M & DEBORAH R (SURV)	65	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
66	UNKNOWN	66	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
67	OHIER ROBERT F & ANNA	67	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
68	FOX JOHN H	68	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
69	BEST JAMES E ANNETTE M ITWS	69	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
70	BEST JAMES E ANNETTE M ITWS	70	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
71	TOMSHACK MATTHEW PATRICK	71	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
72	TOMSHACK MATTHEW PATRICK	72	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
73	FODOR PAUL W & SUSAN A	73	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
74	HUBBARD SAMUEL HERVEY	74	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
75	HUBBARD SAMUEL HERVEY	75	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
76	SEREVIC MICHAEL AND DELIA (ITWS)	76	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
77	BEST JAMES E & ANNETTE M (SURV)	77	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
78	STEWART ALBERT & LOTTIE	78	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
79	STARVAGGI IND	79	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
80	HUBBARD SAMUEL HERVEY	80	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
81	MATTHEW P. TOMSHACK AND APRIL D. ELLINGHAM (SURV)	81	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
82	OHIER JAMIE I & LESLIE (SURV)	82	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
83	GOOD JOHN P III JOHNSTON KENNETH D (SURV)	83	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
84	MARSH LIVING TRUST 1/2873 (TRUS-PHYLLIS MARSH)	84	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
85	GOOD JOHN PRATHER III THOMAS LAMIRE (SURV)	85	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
86	BIRDSEAL BRIAN	86	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
87	GOOD JOHN PRATHER IR REVOCABLE TR DTD 4/11	87	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
88	MARKEE PHYLLIS; MARKEE-SCHWELL PATRICIA (SURV)	88	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
89	MASZELLA DOMINA A	89	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
90	HAMMOND PUBLIC SERVICE DISTRICT	90	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
91	JACKRETT JEFFREY P	91	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
92	JACKRETT JEFFREY P	92	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
93	RECK JAY D & KAREN SUE (ITWS)	93	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
94	RECK JAY D & KAREN SUE (ITWS)	94	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
95	RECK JAY D & KAREN SUE (ITWS)	95	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
96	RECK JAY D & KAREN SUE (ITWS)	96	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
97	RECK JAY D & KAREN SUE (ITWS)	97	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
98	RECK JAY D & KAREN SUE (ITWS)	98	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
99	RECK JAY D & KAREN SUE (ITWS)	99	WHEAT WILLIAM & HIGGS CARRIE (ITWS)
100	RECK JAY D & KAREN SUE (ITWS)	100	WHEAT WILLIAM & HIGGS CARRIE (ITWS)

REVISIONS:		COMPANY:	
OPERATOR'S:		JOHN GOOD JR BRK	
WELL #:		47-009-0024 HFA	
DISTRICT:		BROOKE	
STATE:		WV	
DATE:		10-01-2020	
DRAWING NO:		2020-074	
SCALE:		N/A	
DRAWN BY:		R. GRIMES	
API NO:		47-009-XXXX	

COMPLETION ID 2501171128  
PAD ID 300112644

**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
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SEE EXHIBIT "A"

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

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

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

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: *John D. Startz*  
 Its: John D. Startz, CPL, Technical Expert Landman

**EXHIBIT "A"**

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator  
John Good Jr. BRK 601H  
Brooke County, West Virginia

#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG
1)	03-B38-1 ✓	John Prather Good, Jr.	Range Resources - Appalachia, L.L.C. SWN Production Company, LLC	12.50%	10/274 30/480
2)	03-B37-53 ✓	Starvaggi Industries, Incorporated	Fortuna Energy Inc. Range Resources - Appalachia, L.L.C. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	9/532 10/226 10/541 30/480
3)	3-B37-53.2 ✓	Starvaggi Industries, Incorporated	Fortuna Energy Inc. Range Resources - Appalachia, L.L.C. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	9/532 10/226 10/541 30/480
4)	3-B37-62 ✓	John R. Ripley and Sherrill J. Ripley, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	14/575 30/480
5)	3-B37-56 ✓	Wilda L. Ripley, widow, Life Estate	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	17/18 30/480
6)	3-B37-55 ✓	Marlin G. Crawford, Sr. and Joy Crawford, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	17/13 30/480
7)	3-B37-54 ✓	Vernon E. Smith Sr., widower	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/439 30/480
		Rebecca Hall F/K/A Rebecca Lynn McNeely, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	17/179 30/480
		Lawrence Paul Smith and Sheron Smith, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	17/711 30/480
		Linda Darlene Carey, a single woman	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	17/74 30/480

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John Good Jr. BRK 601H  
Brooke County, West Virginia

		Vernon Eugene Smith, Jr., a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	17/79 30/480
8)	3-B37-52 ✓	Cleo Klages, a single woman	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	11/211 30/480
9)	3-B37-48 ✓	Bonnie Lukacena, married	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/634 30/480
		Shayne Schuetzner, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/669 30/480
		Shanon Schuetzner, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/665 30/480
		Shey Schuetzner, a single woman	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/673 30/480
		Shelby Carrell, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	11/123 30/480
		John Thomas Rodgers, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	17/298 30/480
		Paige Elizabeth Rollins, single	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	21/506 30/480
		Cheri A. Sharpe, a married woman acting in her own rights	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	21/511 30/480
10)	3-B37-50 ✓	John L. Latimer and Angela Latimer, Husband and Wife, and Deborah S. Starr, single	Great Lakes Energy Partners, L.L.C. Chesapeake Appalachia, L.L.C.	14.00%	9/713 10/552
		William E. Johnston and Hazel E. Johnston, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	12/298 30/480
11)	3-B37-45 ✓	Mary Schiappa '74 Trust, fbo Teresa Schiappa, JPMorgan Chase Bank, N.A., Trustee	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	20.00%	10/469 30/480



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John Good Jr. BRK 601H  
Brooke County, West Virginia

		Mary Schiappa '74 Trust, fbo Huberto Siciliano, JPMorgan Chase Bank, N.A., Trustee	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	20.00%	10/470 30/480
12)	3-B37-47 ✓	Gary T. Bucey & Linda T. Bucey, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/317 30/480
		Jeffrey M. Bucey & Mary Patricia Bucey, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/307 30/480
		Timothy K. Bucey & Trudy Jo Bucey, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/328 30/480
		Shirley Ann Johnson, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/338 30/480
		Lynn Wells Dodd, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/84 30/480
		Rebecca Wells Rocca & Frank H. Rocca, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/323 30/480
		Keith Dodd & Rose M. Dodd, husband & wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/333 30/480
		Dwarka Nath Vemuri, d/b/a American Heart Associates	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	14/767 30/480
		Henry R. Wells & Raynel Wells, husband & wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	16/697 30/480
13)	3-B37-49 ✓	Bonnie Lukacena, married	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/638 30/480
		Shayne Schuetzner, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/678 30/480
		Shanon Schuetzner, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/682 30/480

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John Good Jr. BRK 601H  
Brooke County, West Virginia

		Shelby Carrell, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	11/25 30/480
		Shey Schuetzner, a single woman	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/660 30/480
14)	3-B37-46 ✓	Vivian Mazzella, widow	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	14/730 30/480
15)	3-B37-46.1 ✓	Mazella Welding and Fabrication, Inc.	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	14/737 30/480
16)	3-B32-116 ✓	George Markley Lewis, III, a married man	SWN Production Company, LLC	16.00%	34/577
		Margaret Lewis Stevens, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	16.00%	34/573
		James P. Lewis Revocable Trust	SWN Production Company, LLC	16.00%	34/592
		David Markely Lewis, single	SWN Production Company, LLC	16.00%	34/636
		Peery Brittain Lewis, Jr., a married man	SWN Production Company, LLC	16.00%	34/640
		Rebecca Lewis Binder, single	SWN Production Company, LLC	16.00%	34/644
		Golden Eagle Resources II, LLC	SWN Production Company, LLC	18.00%	40/586
17)	3-B32-99.4 ✓	George Markley Lewis, III, a married man	SWN Production Company, LLC	16.00%	34/577
		Margaret Lewis Stevens, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	16.00%	34/573

**EXHIBIT "A"**

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John Good Jr. BRK 601H  
Brooke County, West Virginia

		James P. Lewis Revocable Trust	SWN Production Company, LLC	16.00%	34/592
		David Markely Lewis, single	SWN Production Company, LLC	16.00%	34/636
		Peery Brittain Lewis, Jr., a married man	SWN Production Company, LLC	16.00%	34/640
		Rebecca Lewis Binder, single	SWN Production Company, LLC	16.00%	34/644
		Golden Eagle Resources II, LLC	SWN Production Company, LLC	18.00%	40/586
18)	3-B32-99.3 ✓	George Markley Lewis, III, a married man	SWN Production Company, LLC	16.00%	34/577
		Margaret Lewis Stevens, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	16.00%	34/573
		James P. Lewis Revocable Trust	SWN Production Company, LLC	16.00%	34/592
		David Markely Lewis, single	SWN Production Company, LLC	16.00%	34/636
		Peery Brittain Lewis, Jr., a married man	SWN Production Company, LLC	16.00%	34/640
		Rebecca Lewis Binder, single	SWN Production Company, LLC	16.00%	34/644
		Golden Eagle Resources II, LLC	SWN Production Company, LLC	18.00%	40/586
19)	3-B32-99 ✓	George Markley Lewis, III, a married man	SWN Production Company, LLC	16.00%	34/577

**EXHIBIT "A"**

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator  
John Good Jr. BRK 601H  
Brooke County, West Virginia

	Margaret Lewis Stevens, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	16.00%	34/573
	James P. Lewis Revocable Trust	SWN Production Company, LLC	16.00%	34/592
	David Markely Lewis, single	SWN Production Company, LLC	16.00%	34/636
	Peery Brittain Lewis, Jr., a married man	SWN Production Company, LLC	16.00%	34/640
	Rebecca Lewis Binder, single	SWN Production Company, LLC	16.00%	34/644
	Golden Eagle Resources II, LLC	SWN Production Company, LLC	18.00%	40/586
20)	Pierce Run Road West Virginia Department of Transportation, Division of Highways	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	15.00%	18/723 30/480
21)	3-B32-103 ✓ Mark A. Fedak and Georgia M. Fedak, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	12/595 30/480
22)	3-B32-200 ✓ Mark A. Fedak and Georgia M. Fedak, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	12/595 30/480
23)	Bethany Pike ✓ West Virginia Department of Transportation, Division of Highways	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	15.00%	18/723 30/480
24)	3-B32-133 ✓ George Markley Lewis, III, a married man	SWN Production Company, LLC	16.00%	34/577
	Margaret Lewis Stevens, a married woman, dealing in her sole and separate property	SWN Production Company, LLC	16.00%	34/573
	James P. Lewis Revocable Trust	SWN Production Company, LLC	16.00%	34/592

**EXHIBIT "A"**

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator  
John Good Jr. BRK 601H  
Brooke County, West Virginia

		David Markely Lewis, single	SWN Production Company, LLC	16.00%	34/636
		Peery Brittain Lewis, Jr., a married man	SWN Production Company, LLC	16.00%	34/640
		Rebecca Lewis Binder, single	SWN Production Company, LLC	16.00%	34/644
		Golden Eagle Resources II, LLC	SWN Production Company, LLC	18.00%	40/586
25)	3-B32-96 ✓	Samuel Hubbard and Shelba Hubbard, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	11/720 30/480
26)	3-B32-9 ✓	Schiappa and Company, Inc.	SWN Production Company, LLC	15.50%	33/356
27)	3-B32G-67 ✓	Schiappa and Company, Inc.	SWN Production Company, LLC	18.00%	39/605
28)	3-B32G-67.1 ✓	Schiappa and Company, Inc.	SWN Production Company, LLC	18.00%	39/605
29)	3-B32-66 ✓	Joseph Jackfert, a widower, appearing herein by and through Jeffrey P. Jackfert, his Agent and Attorney in Fact, by Power of Attorney dated January 9, 2004 Jeffrey P. Jackfert, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC  Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/408 30/480  22/413 30/480
30)	3-B32-64 ✓	Steve D. Martino and Mary Christine Martino, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/302 30/480
31)	3-B32-62 ✓	Joseph Jackfert, a widower, appearing herein by and through Jeffrey P. Jackfert, his Agent and Attorney in Fact, by Power of Attorney dated January 9, 2004	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/408 30/480

**EXHIBIT "A"**

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator  
John Good Jr. BRK 601H  
Brooke County, West Virginia

		Jeffrey P. Jackfert, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/413 30/480
32)	3-B32-57 ✓	Joseph Jackfert, a widower, appearing herein by and through Jeffrey P. Jackfert, his Agent and Attorney in Fact, by Power of Attorney dated January 9, 2004 Jeffrey P. Jackfert, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/408 30/480
			Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/413 30/480
33)	3-B32-52 ✓	Christopher Snoderly and Jacqueline Snoderly, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/403 30/480
34)	3-B32-3 ✓	Robert A. Petruccioli and Marie Elizabeth Petruccioli, husband and wife (Life Tenants), and Ronald A. Petruccioli, divorced and unremarried (Remainderman)	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	25/326 30/480
35)	3-B27P-30 ✓	Gertrude Louise McShane Robie, a married woman dealing herein with her separate property, and Richard Robert Robie, her husband	SWN Production Company, LLC	18.00%	33/605
36)	3-B27R-50 ✓	William Kisner, a single man	SWN Production Company, LLC	18.00%	42/452
37)	3-B27P-31 ✓	William Kisner, a single man	SWN Production Company, LLC	18.00%	42/452



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

October 19, 2020

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



**RE:** SWN's proposed New Well: John Good Jr. BRK 601H in Brooke County, West Virginia, Drilling under Greens Run Road, McCord Hill Road, McAdoo Ridge Road, Pierce Run Road, Irish Estates, and Bethany Pike.

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 Greens Run Road, McCord Hill Road, McAdoo Ridge Road, Pierce Run Road, Irish Estates, and Bethany Pike. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Thank you.

Sincerely,

John D. Startz, CPL  
Technical Expert Landman  
SWN Production Company, LLC



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

OCT 27 2020

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

Date of Notice Certification: 10/20

API No. 47- 009 - \_\_\_\_\_  
Operator's Well No. John Good Jr. BRK 601H  
Well Pad Name: John Good Jr. BRK

**Notice has been given:**

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

State:	<u>West Virginia</u>	UTM NAD 83	Easting:	<u>535694.710</u>
County:	<u>009- Brooke</u>		Northing:	<u>4452682.043</u>
District:	<u>Buffalo</u>	Public Road Access:	<u>McAdoo Ridge Road</u>	
Quadrangle:	<u>Bethany &amp; Steubenville East</u>	Generally used farm name:	<u>John Good Jr.</u>	
Watershed:	<u>Upper Ohio South</u>			

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

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

**Required Attachments:**

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

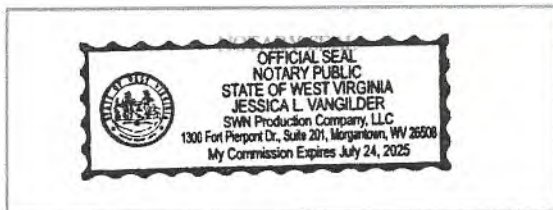


**Certification of Notice is hereby given:**

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

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

*Brittany Woody*



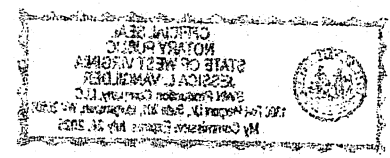
Subscribed and sworn before me this 31<sup>st</sup> day of Aug, 2020  
Jessica L. Vangilder Notary Public  
 My Commission Expires 7-24-25

**Oil and Gas Privacy Notice:**

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

17000007A

RECEIVED



My Commission Expires May 23, 2011  
 Jeffery M. Henson, M.D., M.P.H.  
 State Health Commissioner  
 1500 Kanawha Blvd. S.E.  
 Charleston, West Virginia 25304  
 304.526.3000  
 www.wvdhhs.gov

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

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

Date of Notice: 10/20/11 Date Permit Application Filed: 10/20/11  
Notice of:

- PERMIT FOR ANY WELL WORK       CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

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

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice    WSSP Notice    E&S Plan Notice    Well Plat Notice is hereby provided to:

SURFACE OWNER(s)  
Name: John P. Good Jr. Irrevocable Trust  
Address: 1204 McAdoo Ridge Road  
Wellsburg, WV 26070  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Road and/or Other Disturbance)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER(s) (Impoundments or Pits)  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

COAL OWNER OR LESSEE  
Name: Consolidation Coal Company Attn: Casey Saunders  
Address: 1000 Consol Energy Drive  
Canonsburg, PA 15317

COAL OPERATOR  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

SURFACE OWNER OF WATER WELL AND/OR WATER PURVEYOR(s)  
Name: None  
Address: \_\_\_\_\_

OPERATOR OF ANY NATURAL GAS STORAGE FIELD  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

\*Please attach additional forms if necessary



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

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

Date of Notice: 10/26/11 Date Permit Application Filed: 10/26/11

Notice of:

- PERMIT FOR ANY WELL WORK
- CERTIFICATE OF APPROVAL FOR THE CONSTRUCTION OF AN IMPOUNDMENT OR PIT

**Delivery method pursuant to West Virginia Code § 22-6A-10(b)**

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

Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Application Notice  WSSP Notice  E&S Plan Notice  Well Plat Notice is hereby provided to:

SURFACE OWNER(s)

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

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

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

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

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

SURFACE OWNER(s) (Impoundments or Pits)

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

COAL OWNER OR LESSEE

Name: Starvaggi Industries, Inc.  
Address: 401 Pennsylvania Ave  
Weirton, WV 26062

COAL OPERATOR

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

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

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

OPERATOR OF ANY NATURAL GAS STORAGE FIELD

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

\*Please attach additional forms if necessary



**Notice is hereby given:**

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

**This Notice Shall Include:**

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

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

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

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

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

**Well Location Restrictions**

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

Notice is hereby given that the undersigned well operator has applied for a permit for  
drilling of a well in accordance with the provisions of the Act.

The following shall include: (1) location of the well; (2) the location and section of the  
land on which the well is to be drilled.

Section 12-2-2 of the Act provides that the operator shall provide the Well and Water Rights  
operator with a copy of the application and the location of the well.

Section 12-2-3 of the Act provides that the operator shall provide the Well and Water Rights  
operator with a copy of the application and the location of the well.

Section 12-2-4 of the Act provides that the operator shall provide the Well and Water Rights  
operator with a copy of the application and the location of the well.

Section 12-2-5 of the Act provides that the operator shall provide the Well and Water Rights  
operator with a copy of the application and the location of the well.

Section 12-2-6 of the Act provides that the operator shall provide the Well and Water Rights  
operator with a copy of the application and the location of the well.

Section 12-2-7 of the Act provides that the operator shall provide the Well and Water Rights  
operator with a copy of the application and the location of the well.



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

#### **Water Well Testing:**

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

#### **Water Testing Laboratories:**

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

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

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

#### **Written Comment:**

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

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

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.**

...the applicant shall be held responsible for the maintenance of the well and for the payment of the cost of the water supply...

Water Well Testing

...the applicant shall be held responsible for the maintenance of the well and for the payment of the cost of the water supply...

Water Testing Laboratory

...the applicant shall be held responsible for the maintenance of the well and for the payment of the cost of the water supply...

Requirements for Construction of a Water Well

...the applicant shall be held responsible for the maintenance of the well and for the payment of the cost of the water supply...

Water Quantity

...the applicant shall be held responsible for the maintenance of the well and for the payment of the cost of the water supply...

Department of Environment Protection  
100 Victoria Street  
Melbourne VIC 3000

...the applicant shall be held responsible for the maintenance of the well and for the payment of the cost of the water supply...

### **Time Limits and Methods for Filing Comments.**

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

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

### **Comment Requirements**

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

Disclaimer: All comments received will be placed on our web site <http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx> and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

### **Permit Denial or Condition**

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Time Limits and Methods for Filing Complaints

The law requires that complaints be filed in person at the office of the operator. You have 30 days from the date of the violation to file a complaint. If you have been contacted by the well operator and you have signed a voluntary statement of consent to the proposed work, you must file a complaint within 10 days of the date of the proposed work.

Any objection of an affected well owner and lessor shall be addressed during the process of the proposed work. The written consent filed by the parties shall be a condition of the proposed work. The written consent shall be considered by the operator in the proposed process but the operator is not required to honor the consent. The operator shall file a copy of the consent with the appropriate regulatory agency.

Operator's Responsibility

The operator shall be responsible for the safety of the well and the surrounding area. The operator shall provide a safe working environment for all personnel on the well site.

The operator shall provide a copy of the proposed work to the appropriate regulatory agency. The operator shall also provide a copy of the proposed work to the affected well owner and lessor.

Operator's Liability

The operator shall be liable for any damages caused by the proposed work. The operator shall also be liable for any injuries to personnel on the well site.

The operator shall be liable for any environmental damage caused by the proposed work. The operator shall also be liable for any costs incurred by the affected well owner and lessor.

The operator shall be liable for any costs incurred by the affected well owner and lessor. The operator shall also be liable for any costs incurred by the affected well owner and lessor.

WW-6A  
(8-13)

API NO. 47-009  
OPERATOR WELL NO. John Good Jr. BRK 801H  
Well Pad Name: John Good Jr. BRK

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

*Brittany Woody*

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

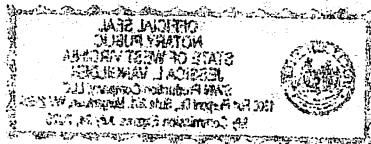
**Oil and Gas Privacy Notice:**

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



Subscribed and sworn before me this 31<sup>st</sup> day of Aug., 2020  
Jessica L. VanGilder Notary Public  
My Commission Expires 7-24-25

*Handwritten signature*



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

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

**Date of Notice:** 5/13/2020      **Date of Planned Entry:** 5/20/2020

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

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

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

**Notice is hereby provided to:**

SURFACE OWNER(s)

Name: John P. Good Jr. Irrevocable Trust

Address: 1204 McAdoo Ridge Road  
Wellsburg, WV 26070

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

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

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

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

COAL OWNER OR LESSEE

Name: Consolidation Coal Company Attn: Casey Saunders

Address: 1000 Consol Energy Drive  
Canonsburg, PA 15317

MINERAL OWNER(s)

Name: John P. Good Jr. Irrevocable Trust

Address: 1204 McAdoo Ridge Road  
Wellsburg, WV 26070

\*please attach additional forms if necessary

**Notice is hereby given:**

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

State: <u>West Virginia</u>	Approx. Latitude & Longitude: <u>40.223798, -80.580551</u>
County: <u>Brooke</u>	Public Road Access: <u>McAdoo Ridge Road</u>
District: <u>Buffalo</u>	Watershed: <u>Middle Buffalo Creek</u>
Quadrangle: <u>Bethany</u>	Generally used farm name: <u>John Good Jr.</u>

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

RECEIVED  
Office of Oil and Gas

OCT 27 2020

**Notice is hereby given by:**

Well Operator: SWN PRODUCTION COMPANY, LLC

Telephone: 304-884-1610

Email: Brittany\_Woody@swn.com

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

Facsimile: 304-884-1690

WV Department of  
Environmental Protection

**Oil and Gas Privacy Notice:**

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

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL POLICE  
BUREAU OF ENVIRONMENTAL POLICE

Notice of Intent to Issue a Permit for the Construction of a New or Expanded Facility

Notice of Intent to Issue a Permit for the Construction of a New or Expanded Facility (see application to the Department of Environmental Police, Bureau of Environmental Police, 1000 Kanawha Blvd. S., Charleston, WV 25304)

PERSONAL  REGISTERED  METHOD OF DELIVERY THAT REQUIRES A PERMIT FOR SIGNATURE CONFIRMATION

To be used for the construction of a new or expanded facility, the applicant shall provide notice of intent to the Department of Environmental Police, Bureau of Environmental Police, 1000 Kanawha Blvd. S., Charleston, WV 25304, at least 30 days before the start of construction. The notice shall include a description of the proposed facility, including the location, size, and capacity, and a description of the proposed construction schedule. The notice shall also include a description of the proposed mitigation measures to be implemented to avoid, minimize, and compensate for any adverse effects of the proposed facility on the environment. The notice shall be submitted in triplicate, with one copy retained by the applicant and two copies submitted to the Department of Environmental Police, Bureau of Environmental Police, 1000 Kanawha Blvd. S., Charleston, WV 25304.

Notice is hereby provided for

COAL OWNER OR LESSEE  
ADDRESS  
GENERAL OWNER  
ADDRESS

Notice is hereby given that the undersigned well operator is planning to construct a new or expanded facility at the following location:

County	_____
Location	_____
General Name of the Facility	_____
Proposed Capacity	_____

Notice is hereby given that the undersigned well operator is planning to construct a new or expanded facility at the following location:

Notice is hereby given for  
Well Operator  
Address  
County

Notice is hereby given that the undersigned well operator is planning to construct a new or expanded facility at the following location:



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

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

**Date of Notice:** 5/13/2020      **Date of Planned Entry:** 5/20/2020

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

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

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

**Notice is hereby provided to:**

SURFACE OWNER(s)

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

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

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

COAL OWNER OR LESSEE

Name: Starvaggi Industries, Inc.  
Address: 401 Pennsylvania Avenue  
Weirton, WV 26062

MINERAL OWNER(s)

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

\*please attach additional forms if necessary

**Notice is hereby given:**

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

State: West Virginia  
County: Brooke  
District: Buffalo  
Quadrangle: Bethany

Approx. Latitude & Longitude: 40.223798, -80.580551  
Public Road Access: McAdoo Ridge Road  
Watershed: Middle Buffalo Creek  
Generally used farm name: John Good Jr.

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

**Notice is hereby given by:**

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

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

RECEIVED  
Office of Oil and Gas

OCT 27 2020

WV Department of  
Environmental Protection

**Oil and Gas Privacy Notice:**

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

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

Notice: This document is provided in accordance with the provisions of the Freedom of Information Act (5 U.S.C. 552) and the West Virginia Freedom of Information Act (WV Code § 20-2-2).

Date of Notice: \_\_\_\_\_

This notice is provided pursuant to West Virginia Code § 20-2-2.

- PERSONAL
- PRIVATE
- REGISTERED
- EITHER OR BOTH BY THE APPLICANT
- EITHER OR BOTH BY THE APPLICANT AND ANOTHER PARTY

Persons who are required to file this notice shall provide notice of planned entry to the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry. The notice shall include a description of the proposed entry, the location of the entry, the type of entry, the estimated date of entry, and the estimated duration of the entry. The notice shall also include a copy of the entry plan and a copy of the entry permit. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry.

Notice is hereby given for:

<input type="checkbox"/> LOCAL OWNER OR LESSEE	<input type="checkbox"/> MINERAL OWNER(S)
Name: _____	Name: _____
Address: _____	Address: _____
City: _____	City: _____
State: _____	State: _____
Zip: _____	Zip: _____
Please provide a copy of this notice to the following persons:	

Notice is hereby given that the undersigned well owner is planning entry to conduct operations on the above described land.

Name	Address	City	State	Zip
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Copies of this notice and the entry plan and the permit shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry.

Name: _____	Address: _____
City: _____	State: _____
Zip: _____	Telephone: _____
_____	_____

This notice is hereby given for the purpose of providing notice to the public of the planned entry to conduct operations on the above described land. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry. The notice shall be filed with the Office of Oil and Gas, Department of Environmental Protection, 1500 Kanawha Street, Charleston, West Virginia 25304, at least 30 days before the planned entry.

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

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

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

**Date of Notice:** 09/01/2020 **Date Permit Application Filed:** 10/10

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

- HAND DELIVERY
- CERTIFIED MAIL RETURN RECEIPT REQUESTED

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

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

Name: John P. Good Jr. Irrevocable Trust  
Address: 1204 McAadoo Ridge Road  
Wellsburg, WV 26070

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

**Notice is hereby given:**

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

State: West Virginia	UTM NAD 83	Easting: 535,694.710
County: Brooke		Northing: 4,452,682.043
District: Buffalo	Public Road Access: McAadoo Ridge Road	
Quadrangle: Bethany WV & Steubenville East OH	Generally used farm name: John P. Good Jr BRK	
Watershed: Upper Ohio South		

**This Notice Shall Include:**

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

**Notice is hereby given by:**

Well Operator: SWN Production Company, LLC  
Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Telephone: 304-231-8329  
Email: Reid\_Croft@SWN.com  
Facsimile: \_\_\_\_\_

Authorized Representative: Reid Croft  
Address: 1300 Fort Pierpont Dr., Suite 201  
Morgantown, WV 26508  
Telephone: 304-231-8329  
Email: Reid\_Croft@SWN.com  
Facsimile: \_\_\_\_\_

**Oil and Gas Privacy Notice:**

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

OCT 27 2020

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

Notice of Intent to Drill is hereby given to the public that the proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia. The proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.

The proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia. The proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.

Notice of Intent to Drill is hereby given to the public that the proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.

OIL AND GAS  
 OIL AND GAS WITH SURFACE MINING  
SEE CHECK RECEIPT REQUESTED

The proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia. The proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.

Notice is hereby given to the public that the proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip: \_\_\_\_\_

Notice is hereby given to the public that the proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.

Property	Owner	Address	City	State	Zip
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Notice is hereby given to the public that the proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.

Authorized Representative	Name	Address	City	State	Zip
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Notice is hereby given to the public that the proposed drilling operation is being conducted in accordance with the provisions of the Oil and Gas Act, Chapter 22, Article 2, of the Code of West Virginia.



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

Notice: This instrument shall be provided to the surface owner of the land in question.

Delivery method pursuant to West Virginia Code § 22-2A-10(c)

REGISTERED MAIL  
 HAND DELIVERY

Notice is hereby provided to the surface owner of the land in question that the surface owner's land is being drilled for the purpose of drilling a horizontal well on the land as follows:

Notice is hereby given that the designated well owner has developed a plan for the surface owner's land for the purpose of drilling a horizontal well on the land as follows:

State	County	Location	Well Name	Well Type	Well Status
West Virginia	Putnam	Public Road Access	Public Road Access	Public Road Access	Public Road Access
West Virginia	Putnam	Public Road Access	Public Road Access	Public Road Access	Public Road Access

Notice is hereby given that the designated well owner has developed a plan for the surface owner's land for the purpose of drilling a horizontal well on the land as follows:

Notice is hereby given that the designated well owner has developed a plan for the surface owner's land for the purpose of drilling a horizontal well on the land as follows:

Notice is hereby given that the designated well owner has developed a plan for the surface owner's land for the purpose of drilling a horizontal well on the land as follows:



4700900324

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION  
**Division of Highways**

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

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

September 2, 2020

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

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 John Good Jr Pad, Brooke County  
John Good Jr BRK 601H Well Site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2011-0595 which has been issued to Southwestern Energy for access to the State Road for a well site located off Brooke County Route 24 SLS.

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

Very Truly Yours,

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

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

RECEIVED  
Office of Oil and Gas  
OCT 27 2020  
WV Department of  
Environmental Protection

OPERATOR: SWN Production Co., LLC

WELL NO: John Good Jr. BRK 601H

PAD NAME: John Good Jr. BRK

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

SIGNATURE: Brittany Woody

### WELL RESTRICTIONS CHECKLIST

#### HORIZONTAL 6A WELL

*\* Pad Built 3/20/12*

#### Well Restrictions

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

DEP Waiver and Permit Conditions

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

DEP Waiver and Permit Conditions

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

DEP Waiver and Permit Conditions

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

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

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

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

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

Surface Owner Waiver and Recorded with County Clerk, OR

DEP Variance and Permit Conditions

RECEIVED  
Office of Oil and Gas  
OCT 27 2020  
WV Department of  
Environmental Protection



17409002

OPERATOR: EVAN PRODUCTION CO., LLC WELL NO: 10TH STREET UTILITY BOOTH

PAID NAME: JOHN R. BARKER

SIGNATURE: [Signature] DATE: 10/1/17

WELL RESTRICTIONS CHECKLIST

HORIZONTAL CA WELL

*Handwritten notes:* 1. 100' from bed and IOD (including any BSS Control Features) to any

Well Restrictions

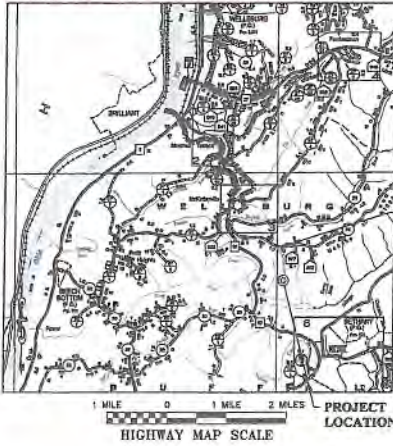
- At least 100 Feet from Bed and IOD (including any BSS Control Features) to any Horizontal Stream, Lake, Pond, Reservoir or Wetland. OR  
DEP Waiver and Permit Conditions
- At least 300 Feet from Bed and IOD (including any BSS Control Features) to any Naturally Flowing Land Stream. OR  
DEP Waiver and Permit Conditions
- At least 1000 Feet from Bed and IOD (including any BSS Control Features) to any Groundwater Intake of Public Water Supply. OR  
DEP Waiver and Permit Conditions
- At least 250 Feet from an Existing Water Well or Developed Spring to Well Being Drilled. OR  
Surface Owner Waiver and Recorded with County Clerk. OR  
DEP Waiver and Permit Conditions
- At least 625 Feet from an Occupied Dwelling Structure to Center of the Pad. OR  
Surface Owner Waiver and Recorded with County Clerk. OR  
DEP Waiver and Permit Conditions
- At least 625 Feet from Agricultural Buildings Larger than 2500 Square Feet to the Center of the Pad. OR  
Surface Owner Waiver and Recorded with County Clerk. OR  
DEP Waiver and Permit Conditions

## Attachment VI Frac Additives

4700900324

Product Name	Product Use	Chemical Name	CAS Number
AI-303 (U.S. Well Services)	Mixture	Ethylene glycol	107-21-1
		Cinnamaldehyde	104-55-2
		Butyl cellosolve	111-76-2
		Formic acid	64-18-6
		Polyether	Proprietary
		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
		Oxyalkylated fatty acid	68951-67-7
		Fatty acids	61790-12-3
		Modified thiourea polymer	68527-49-1
		Water	7732-18-5
		Hydrochloric acid	7647-01-0
		Potassium acetate	127-08-2
Formaldehyde	50-00-0		
Ecopol-FEAC (SWN Well Services)	Iron Control	Acetic Acid	64-19-7
		Citric Acid	77-92-9
		Water	7732-18-5
FDP-S1176-15 (Halliburton)	Friction Reducer	Polyacrylate	Proprietary
		Hydrotreated light petroleum distillate	64742-47-8
FLOJET DR900 LPP (SWN Well Services)	Friction Reducer	Distillates (petroleum) hydrotreated light	64674-47-8
		Ethylene Glycol	107-21-1
		Alcohols, C12-16, Exoalkylated propoxylated	68213-24-1
		Fatty Alcohols ethoxylated	Proprietary
		Water	7732-18-5
FLOJET DRP 1130X (SWN Well Services)	Friction Reducer	Proprietary	Proprietary
FR-76 (Halliburton)	Friction Reducer	Hydrotreated light petroleum distillate	64742-47-8
		Inorganic Salt	Proprietary
GYPTRON T-390 (Champion Technologies)	Scale Inhibitor	Methanol	67-56-1
		Nonylphenol Ethoxylate	Proprietary
HAI-150E (Halliburton)	Corrosion Inhibitor	No hazardous substance	N/A
HCL (SWN Well Services)	Hydrochloric Acid	Hydrochloric Acid	7647-01-0
		Water	7732-18-5
IP-65 MC (Halliburton)	Scale Inhibitor	Organic phosphonate	Proprietary
		Ammonium Chloride	12125-02-9
OPTI-FLEX (U.S. Well Services)	Viscosifying Agent	Distillates, petroleum, hydrotreated light	64742-47-8
Plexslick 930	Friction Reducer	Copolymer of 2-propenamide	Proprietary
		Hydrotreated Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Alcohols, C12-16, Exoalkylated	68551-12-2
		Oleic Acid Diethanolamide	93-83-4
		Ammonium Chloride	12125-02-9
Plexslick 953	Friction Reducer	Petroleum Distillate	64742-47-8
		Sodium Chloride	7647-14-5
		Ammonium Chloride	12125-02-9
		N,N-bis (2-hydroxyethyl) oleamide	93-83-4
Plexslick 957	Friction Reducer	Petroleum Distillate	64742-47-8
		Ammonium Chloride	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
		Alcohols, C12-16, Exoalkylated	68551-12-2
		Water	7732-15-5
WFR-2000 (U.S. Well Services)	Anionic Friction Reducer	Hydrotreated light distillate (petroleum)	64742-47-8
		Propenoic acid, polymer with propenamide	9003-06-9
Plexaid 655 NM	Scale Inhibitor	Diethylenetriamine penta (methylene phosphonic acid)	15827-30-8
Plexslick 922	no data available	Copolymer of 2-propenamide	69418-26-4
		Distillates (petroleum), hydrotreated light	64742-47-8
		Ammonium chloride ((NH4)Cl)	12125-02-9
		Oleic Acid Diethanolamide	93-83-4
Tolcide PS50A	Biocidal product	Tetrakis (hydroxymethyl) phosphonium sulphate	55566-30-8
LD-2950	Friction Reducer	Acrylic acid terpolymer containing carboxylate phosphonate and sulfonate groups	397256-50-7
		Hydrotreated light petroleum distillate	64742-47-8
Legend LD-7750W	Scale Control	Ethoxylated alcohol	Proprietary
		Poly (oxy-1,2-ethanediyl) alpha.-tridecyl-.omega.-hydroxy-, branched	69011-36-5
		Methanol	67-56-1
MC MX 8-4743	Specialty Product	Phosphonic Acid Salt	Proprietary
		Sodium Nitrate	7631-99-4

BROOKE COUNTY, WV HIGHWAY MAP



ENTRANCE LOCATION

# SOUTHWESTERN ENERGY

## AS-BUILT PLANS FOR THE JOHN GOOD JR. BRK PAD "A" BROOKE COUNTY, WV JANUARY 2016



SOUTHWESTERN ENERGY  
179 Chesapeake Drive  
Jane Lew, WV 26378  
(304) 884-1610

**SHEET INDEX**

SHEET	DESCRIPTION
1	TITLE SHEET
2-3	EVACUATION ROUTE/PREVAILING WINDS
4	AS-BUILT OVERVIEW
5-7	AS-BUILT ACCESS ROAD PLAN & PROFILE
8	AS-BUILT WELL PAD PLAN
9	AS-BUILT WELL PAD PROFILE & SECTIONS
10	RECLAMATION PLAN
11	RECLAMATION GENERAL NOTES
12	RECLAMATION DETAILS
13	DETAILS

**PROJECT COORDINATES**

**AS-BUILT ACCESS ROAD BEGINNING**  
WV83-N Latitude = N 40.231833°  
WV83-N Longitude = W 80.592250°  
UTM 83-17 Northing = 14611429.470 ft.  
UTM 83-17 Easting = 1757011.518 ft.

DISTURBANCE SUMMARY	
Disturbance Location	Total Disturbance (Acres)
Access Road	13.28
Well Pad	8.83
<b>Total Disturbance</b>	<b>21.91</b>

**AS-BUILT CENTER OF WELL PAD**  
WV83-N Latitude = N 40.229444°  
WV83-N Longitude = W 80.580722°  
UTM 83-17 Northing = 14608558.632 ft.  
UTM 83-17 Easting = 1757451.564 ft.

**JOHN GOOD JR BRK PAD "A" WELLS**

EXISTING WELL 5H: AP1H 47-009-00124  
EXISTING WELL 8H: AP1H 47-009-00113

STEUBENVILLE EAST OHIO QUAD MAP



ENTRANCE LOCATION

PROJECT LOCATION



**PROJECT NOTES**

- PORTIONS OF THE ORIGINAL AS-BUILT SURVEY OF THIS SITE PROVIDED BY BOORD, BENCHECK & ASSOCIATES, INC (BBA) TO CHESAPEAKE APPALACHIA, L.L.C. IN JUNE 2012 HAVE BEEN INCORPORATED INTO THESE PLANS. THE BBA AS-BUILT SURVEY WAS PROVIDED TO THRASHER BY SOUTHWESTERN ENERGY IN JANUARY 2016 AND INCLUDED CONTOURS, ROAD EDGES, WELL HEAD LOCATIONS, EROSION AND SEDIMENT CONTROLS, ETC.
- EXISTING ROAD EDGES, WELL PAD EDGE, GAS PRODUCTION EQUIPMENT, ABOVE GROUND PIPING, STORM WATER FEATURES, ETC. WERE VERIFIED AND AS-BUILT BY THRASHER IN DECEMBER 2015 AND JANUARY 2016.
- THE COORDINATE SYSTEM USED FOR THIS PROJECT IS UTM WITH NAD83 DATUM, ZONE 17, US FOOT; CENTRAL MERIDIAN 816W.



**WVDEP OOG  
ACCEPTED AS-BUILT**  
1/31 7/31/2020

REVISION NUMBER	REVISED SHEETS	BY	DATE	DESCRIPTION
1	1, 8, & 13	JFW	2/8/17	ADDRESSED AS-BUILT COMMENTS PER WVDEP OFFICE OF OIL & GAS: ADDED WELL PAD BERM & SUMP LABELS, NOTES & DETAILS. ADDED DISTURBANCE SUMMARY.

**ONE CALL UTILITY SYSTEM CONTACT INFO**



CONTRACTOR SHALL NOTIFY THE ONE-CALL SYSTEM OF THE INTENDED EXCAVATION OR DEMOLITION NOT LESS THAN FORTY-EIGHT (48) HOURS, EXCLUDING SATURDAYS, SUNDAYS AND LEGAL FEDERAL OR STATE HOLIDAYS, NOR MORE THAN TEN (10) WORK DAYS PRIOR TO THE BEGINNING OF SUCH WORK.

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THE THRASHER GROUP, INC.  
600 WHITE OAKS BOULEVARD - BRIDGEPORT, WV 26330  
PHONE (304) 624-4108 • FAX (304) 624-7831

CAD FILE: B:\2020-2024\2020-0000 - B Bro - 2020\WESTVIRGINIA - 0000\1712C - 0000 - 0000.dwg PLOT DATE/TIME: 2/8/2017 1:41 PM

**PLAN LEGEND**

- PRE-CONSTRUCTION CONTOURS
- CONSTRUCTION CONTOURS
- BRA AS-BUILT PROJECT BOUNDARY
- BRA AS-BUILT PROJECT STOCKPILE EDGE
- TTC AS-BUILT ROAD EDGE
- TTC AS-BUILT ROAD CENTERLINE
- TTC AS-BUILT ROAD EDGE
- TTC AS-BUILT FENCE
- TTC AS-BUILT ROCK LINED DITCH
- TTC AS-BUILT CULVERT
- TTC AS-BUILT CONTAINMENT AREA
- TTC AS-BUILT CONTAINMENT AREA
- TTC AS-BUILT OVERHEAD UTIL. LINE AND POLE
- TTC AS-BUILT OVERHEAD UTIL. LINE AND POLE
- AS-BUILT BRG (AS-BUILT TEXT)

JOHN GOOD JR BRK PAD "X" WELLS

WELL NAME	API NUMBER	CELLAR DIMETER	CELLAR DEPTH	CELAR MATERIAL
AS-BUILT SH	47-209-00124	8 FT	8 FT	COMP
AS-BUILT SH	47-209-00124	8 FT	8 FT	COMP
PROPOSED WELL 26H		8 FT	8 FT	COMP
PROPOSED WELL 26H		8 FT	8 FT	COMP
PROPOSED WELL 26H		8 FT	8 FT	COMP

NOTES:  
 \*CIP = CORRUGATED METAL PIPE

**NOTES**

1. ALL WELL PAD OUTLET PIPES SHOWN THAT ARE NOT SCREENED SHALL BE AS-BUILT AND CHECK VALVE SHALL BE INSTALLED AT THE WELL PAD POINT OF DISCHARGE FROM THE WELL PAD DURING DRILLING OPERATIONS. IN AREAS WHERE THE PIPES ARE REMOVED, EARTHWORK EXCAVATION AND COMPACTION FOR THE DETAILS CONTAINED WITHIN THESE PLANS. CONTRACTOR SHALL STOP AND MULCH DISTURBED AREAS AS SOON AS POSSIBLE. SEE GENERAL NOTES AND DETAILS CONTAINED WITHIN THESE PLANS.

**WVDEP 00G**  
**ACCEPTED AS-BUILT**  
 7/31/2020



SHEET NO. SOUTHWESTERN ENERGY

MARY JANE JACKSON  
 TAX MAP AND PARCEL  
 B33-60

PROJECT  
 BOUNDARY

SEE AS-BUILT ACCESS ROAD PLAN SHEETS

JOHN FRATHER GOOD JR  
 TAX MAP AND PARCEL  
 B33-1

PHASE No.

DATE

SCALE



DATE

DATE

BROOKE COUNTY, WV HIGHWAY MAP



ENTRANCE LOCATION

# SOUTHWESTERN ENERGY

## AS-BUILT PLANS FOR THE JOHN GOOD JR. BRK PAD "A" BROOKE COUNTY, WV JANUARY 2016

RECEIVED  
Office of Oil and Gas  
OCT 27 2020



SOUTHWESTERN ENERGY  
179 Chesapeake Drive  
Jane Lew, WV 26378  
(304) 884-1610

WV Department of  
Environmental Protection

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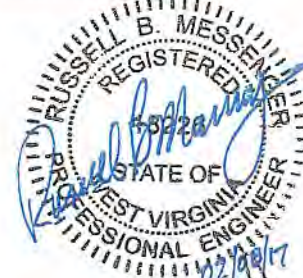
**JOHN GOOD JR BRK PAD "A" WELLS**

EXISTING WELL 5H: API# 47-009-00124  
EXISTING WELL 8H: API# 47-009-00113

STUBENVILLE EAST OHIO QUAD MAP



ENTRANCE LOCATION



*Handwritten signatures and dates:*  
7-10-20  
10-15-20



REVISION NUMBER	REVISED SHEETS	BY	DATE	DESCRIPTION
1	1, 8, & 13	JFW	2/8/17	ADDRESSED AS-BUILT COMMENTS PER WVDEP OFFICE OF OIL & GAS: ADDED WELL PAD BERM & SUMP LABELS, NOTES & DETAILS. ADDED DISTURBANCE SUMMARY.

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WV Department of Environmental Protection

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