

## west virginia department of environmental protection

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

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

Wednesday, May 3, 2023 PERMIT MODIFICATION APPROVAL Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Re:

Permit Modification Approval for VERNON JOHNSON WTZ 401H

47-103-03520-00-00

## **REVISING 6A1**

## SWN PRODUCTION COMPANY, LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926-0450

Operator's Well Number: VERNON JOHNSON WTZ 401H

Farm Name: VERNON S JOHNSON ESTATE

U.S. WELL NUMBER: 47-103-03520-00-00

Horizontal 6A New Drill

Date Modification Issued: 05/03/2023

Promoting a healthy environment.

WW-6B (04/15) # 1073935 Expedite Mad

4/11/23 API NO. 47-009 1 0 3 0 3 5 2 0

OPERATOR WELL NO. Vernon Johnson WTZ

# 5,000.00 Well Pad Name: Vernon Johnson WTZ

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

1) Well Operato	or: SWN Pr	oduction C	o., LLC	494512924	103-Wetzel	3-Clay	438-Littleto	in
				Operator ID	County	District	Quadrangle	
2) Operator's W	/ell Number:	Vernon Joh	nson WT	Z 401H Well Page	d Name: Verno	n Johnso	n WTZ	
3) Farm Name/	Surface Own	er: Vernon S	. Johnson	Estate Public Roa	d Access: Rice	Ridge R	oad	
4) Elevation, cu	irrent ground	: 1432'	El	evation, proposed	post-construction	on: 1432'		
5) Well Type	(a) Gas 2	<	Oil _	Und	erground Storag	ge		
	Other							
	(b)If Gas	Shallow	X	Deep	-		ECEIVED of Oil and Gas	
		Horizontal	Х					
6) Existing Pad	: Yes or No	Yes			<u></u>	AP	R 192023	
7) Proposed Tar Target Formation-	rget Formation	on(s), Depth Well to the North	(s), Antic Target Top 1	ripated Thickness (TVD-7665', Target Base T	and Expected Pr VD-7713', Anticipated	ressure(s): Thickness of	Department of	me- 5013
8) Proposed To			/					
9) Formation at		management and the	viarcellus	s' *		į		
10) Proposed T	otal Measure	ed Depth:	30000' /					1
11) Proposed H			20391.67	71 / .				
12) Approxima			pths:	440' /				
13) Method to				Salinity Profile and Nea	urby Logs from Verno	on Johnson \	NTZ 10H API 47-1	103-02714
				ity Profile analysis	and nearby log	gs .		
15) Approxima			120000000000					
15 (A)				ine, karst, other):	None that we	are aware	e of.	
17) Does Propo directly overlyi	osed well loc	ation contain	coal sea			, <u>X</u>		
(a) If Yes, pro	ovide Mine I	nfo: Name	•					
		Depth	:					
		Seam:						
	(4)	Owne	r:	Adam garagi se garan keleng diskumbungan keleng keleng ang diskul mang di dalam salah di pembada pembada pembad	- 2000 Oliciani il divini proprio di Proprio			
1.								
ć.								VI TACKAMINA PARA
					_		Page 1 of 3 Stephen Mccoy	Digitally signed b Stephen Mccoy Date: 20.13.04.14 10:35:52-04'00'

API NO. 4770091 0 3 0 3 5 2 0

OPERATOR WELL NO. Vernon Johnson WTZ 401H

Well Pad Name: Vernon Johnson WTZ

18)

# **CASING AND TUBING PROGRAM**

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	136'	136'	CTS
Fresh Water	13 3/8"	New	J-55	54.4#	490'	490'	559 sx/CTS
Coal	See	Interm	Casing				
Intermediate	9 5/8"	New	J-55	36#	3089'	3089'	1191 sx/CTS
Production	6"	New	P-110 HP	24#	0'	7000'	
Production	5 1/2"	New	P-110 HP	20#	7000'	30000'ECEIV	and Gas
							0022

APR 192023

WV Department of ovironmental Protection

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

# **PACKERS**

Kind:		
Sizes:	•	
Depths Set:		

Page 2 of 3
Stephen Mcco

WW-6B (10/14) 47 10 3 0 3 5 2 0

OPERATOR WELL NO. Vernan Johnson WTZ 401H

Well Pad Name: Vernon Johnson WTZ

19	Describe 1	proposed	well	work,	including th	e drilling and	plugging	back	of any	pilot hole:
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Drill and stimulate any potential zones between and including the Benson to Marcellus. \*\*If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface or run external casing packer/cementing stage tool above void interval and perform 2 stage cementing operation dependent upon depth of void. Run casing not less than 20' below void nor more than 75' below void. (\*If freshwater is encountered deeper than anticipated it must be protected, set casing 50' below and cts.)

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

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

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 8.4
- 22) Area to be disturbed for well pad only, less access road (acres): 5.9
- 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.

RECEIVED
Office of Oil and Gas

APR 19 2023

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

See Attachment \*\*\*

WV Department of Environmental Protection

25) Proposed borehole conditioning procedures:

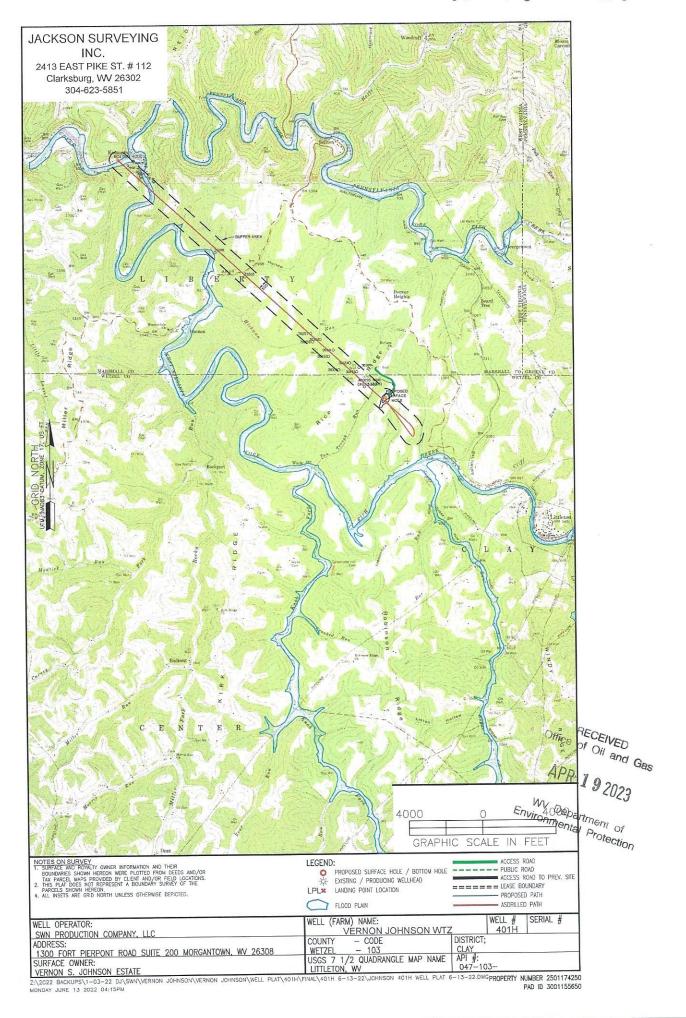
All boreholes will be conditioned with circulation and rotation for a minimum of one bottoms up and continuing until operator is satisfied with borehole conditions.

\*Note: Attach additional sheets as needed.

Page 3 of 3

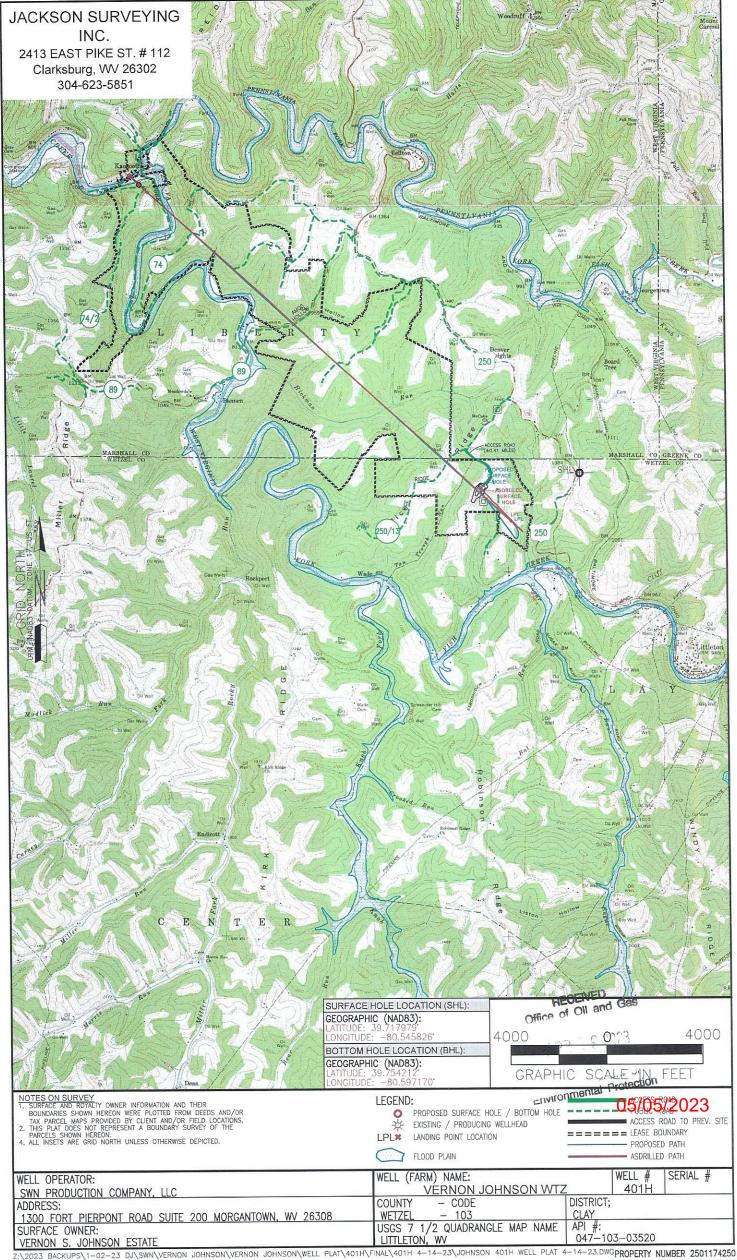
## **Proposed Drilling Program Southwestern Energy Company VERNON JOHNSON WTZ 401** Re-entry Rig: SDC 40 Well: Prospect: Marcellus Shale **VICTORY FIELD WET** Field: WV Southwestern Energy® State: WETZEL County: -80.545826 Longitude 39.717979 Latitude SHL (NAD83): -80.597170 Longitude BHL (NAD83): 39.754212 Latitude **GL Elev:** 1,432 ft MSL 1,458 ft MSL KB: 26 ft AGL **KB Elev:** 136 ' to 510 ' NO COAL VOID EXPECTED Air/Mist 510 ' to 3,109 ' PROD TOC @ 3,089 ' MD Air/Mist **TUBULAR DETAIL** Planned Interval Casing Size Weight Grade **Casing String** (Min) (in) (Min) From 3,109 ' to 7,128 ' 1-55 136 ' 94.0# Conductor Air/Mist 490 ' J-55 0 Surface 13.375 54.4# 0' 3,089 ' 36.0# J-55 Intermediate/Coal 9.625 0 ' 7,000 ' 24.0# P-110 HP Production 30,000 ' 5.5 20.0# P-110 HP 7,000 ' Production **CEMENT DETAIL** Class Density Conductor 173 19.3 15.6 Surface 559 A 15.6 Intermediate 1191 Α 14.5-15.0 Production 5230 Α TD at 7,128 ' Freshwater Depth - 440 ' TVD 7,128 ' to 8,596 ' KOP at 7,128 ' MD Coal Depth - 1,277 'TVD 12.0-12.5 ppg Saltwater Depth - 1,795 ' TVD RECEIVED TVD - 7,678 1 Office of Oil and Gas TMD - 30,000 1 APR 1 9 2023 artment of Environme Ital Protection TD at 30,000 ' MD 7,678 'TVD 7,678 ' TVD Target Center Onondaga 7,719 'TVD 8,596 ' to 30,000 ' LP at 8,596 ' MD 12.5-13.5 ppg SHL Onondaga 7,719 'TVD Created by: Sebastian Ziaja on 04/13/2023

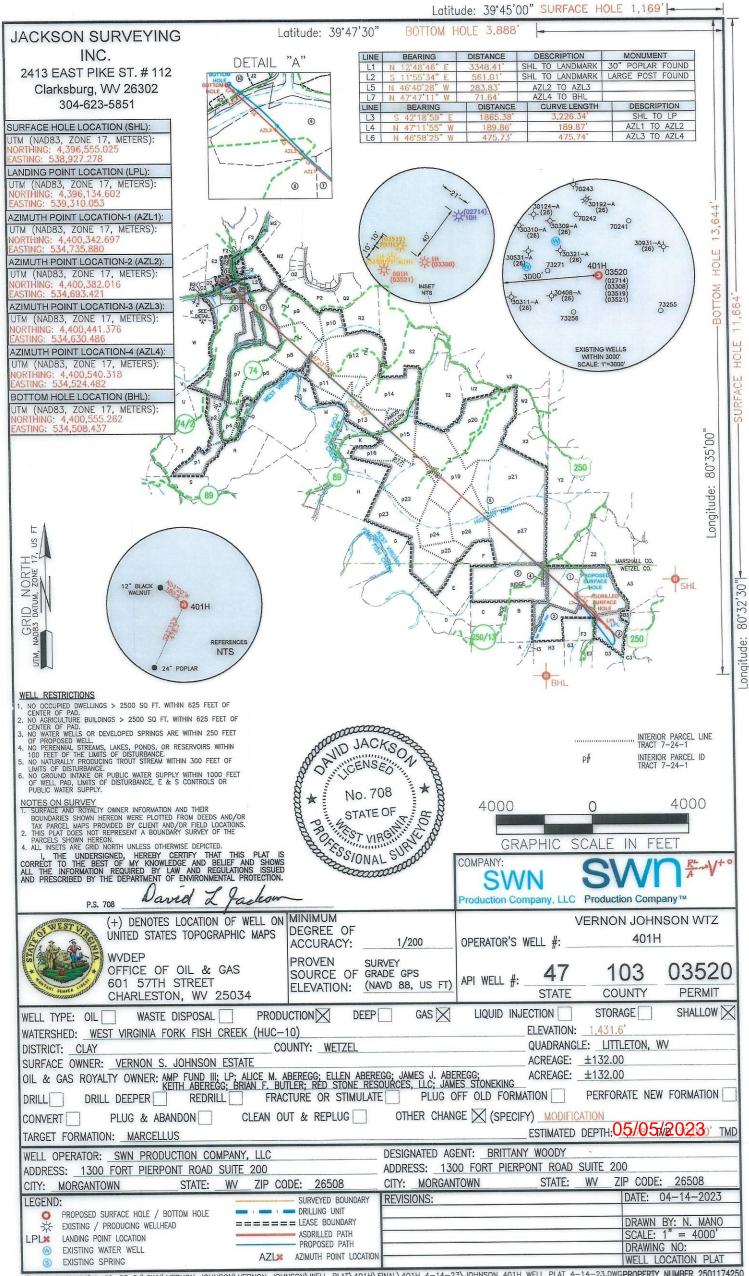
Stephen Mccoy



Unkrown   Makrown   *** ***   ***   ***	ΔĐΙ	Operator	Status	Latitude	Longitude	Vertical TD	Producing Formation	- Todaciilo Editori
Unknown         Unknown         ****         ****           Unknown         Unknown         Unknown         ****         ****           Columbia Gas Transmission, LLC (Storage Weil)         Unknown         Unknown         ****         ****           Unknown         Unknown         Unknown	20271	Unknown	Unknown	* *	* *	Unknown	Unknown	202
Unknown         Unknown         ****         ****           Unknown         Unknown         ****	20106	Unknown	Unknown	* *		Unknown	Unknown	/2
Unknown         Unknown         ***         ***           Unknown         Plugged         ***         ***           Unknown         Plugged         ***         ***           Unknown         ***         ***         ***           Unknown         Plugged         ***         ***           Unknown         ***         ***         ***           Unknown         ***         ***         ***           Unknown         ***         ***         ***           Unknown         ***	20209	Unknown	Unknown	* *		Unknown	1	05
Unknown         Unknown         ****         ****           Unknown         Unknown         ****         ****         ****           Unknown         Unknown         ****         ****         ****           Unknown         Unknown         Unknown         ****         ****           Unknown         Unknown         Unknown         ****         ****           Columbia Gas Transmission, LLC (Storage Well)         Unknown         ****         ****           Unknown         Plugged         ****         ****           Unknown         **** <td>30310</td> <td>Unknown</td> <td>Unknown</td> <td>: * : *</td> <td></td> <td>Whknown 200</td> <td>of Ctio Unknown</td> <td>5/</td>	30310	Unknown	Unknown	: * : *		Whknown 200	of Ctio Unknown	5/
Unknown         Unknown         ***         ***           Unknown         Active         ***         ***           Unknown         Unknown         ***         ***           Unknown         Plugged         ***         ***           Unknown         Plugged         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***	20174	Unknown	Unknown	**		ED Winknow		0;
Unknown         Unknown         ***         ***           Columbia Gas Transmission, LLC (Storage Well)         Unknown         ***         ***           Unknown         Unknown         ***         ***           Unknown         Unknown         ***         ***           Unknown         Plugged         ***         ***           ***         ***         ***           ***         ***         ***           Unknown         Plugged         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***           ***         ***         ***	120760	Unknown	Unknown	* * *		Unknown		
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	00100	מאַסמלמן	Plugged	* *	* *	N/A	N/A	
	0							

V. Johnson 500' Offset





# JACKSON SURVEYING INC.

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

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,396,555.081
EASTING: 538,927.379

LANDING POINT LOCATION (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,396,133.715
EASTING: 539,310.251

AZIMUTH POINT LOCATION-1 (AZL1):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,400,343.350
EASTING: 534,739.199

AZIMUTH POINT LOCATION-2 (AZL2):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,400,385.812
EASTING: 534,696.183

AZIMUTH POINT LOCATION-3 (AZL3):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,400,450.966
EASTING: 534,634.595

AZIMUTH POINT LOCATION-4 (AZL4):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,400,539.166
EASTING: 534,537.690

BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,400,557.917
EASTING: 534,513.687

	WELL BORE TRACTS	
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	JOHNSON VERNON S EST (S)/ AMP FUND III; LP; ALICE M. ABEREGG; ELLEN ABEREGG; JAMES J. ABEREGG; KEITH ABEREGG, BRIAN F. BUTLER; RED STONE RESOURCES, LLC; JAMES STONEKING (R)	3-1-1
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	DRAHEIM HERBERT P ET AL (S)	3-1-6
3	MILLIKEN KEVIN R ETAL (S)	3-1-4
4	LONG LONNY DAVID & LINDA SUE (S)	1-3-2.1
5	JAMES J ABEREGG ET AL (S)	1-3-2
6	W VA WILDLIFE RESOURCES SECTION (S)	7-24-1
7	FROMHART BRAD ET UX - LIFE (S)	7-20-41
8	GRIBBEN M PEGGY REVOCABLE LIVING TRUST (S)	7-19-28
9	UNDERDONK ALAN (S)	7-16-25.1
10	CUMPSTON GAIL (S)	7-19-20

	ADJOINING OWNERS TABLE	TAV DADOE
RACT	SURFACE OWNER	TAX PARCEL
Α	MCGUFFIE ARCH	1-6-5
В	WILLIAMS JOHN EDWARD	1-3-9
C	WILLIAMS LONNIE L	1-3-7
D	SEIDLER EARL DALE & NETTIE	1-2-6.1
E	WILLIAMS KATHERINE E TRUST	1-3-1
F	WADE MICHAEL CLAY & MCCELLAND LAWRENCE W - TOD ET AL	7-24-6
G	VELLEKOOP PETER B ET UX - TOD	7-27-13
Н	VELLEKOOP PETER B ET UX - TOD	7-27-11
1	VELLEKOOP PETER B ET UX - TOD	7-27-10.1
1	VELLEKOOP PETER B ET UX - TOD	7-26-6.2
K	VELLEKOOP PETER B ET UX - TOD	7-26-6.1
L	GEDEON DANIEL D ET UX	7-26-6
M	YOCUM JOSEPH LEE & MICHAEL D	7-26-9
N	CONSOLIDATED GAS SUPPLY CORP	7-26-8
	BUZZARD COLIN R	7-26-3
0	HUNDRED RESOURCES INC	7-26-11
P		7-26-11.1
Q	BUTLER JOHN M & LISA A	7-26-10
R	HORNER DELORSE A	7-27-2
S	RIGGS JOHN EJR & DELANA	7-26-14
T	MORGAN JAMES E - LIFE	
U	ROMACK VICTOR A	7-19-38
٧	HORNER DELORSE A - LIFE	7-19-30
W	GRIBBEN M PEGGY REVOCABLE LIVING TRUST	7-19-29
X	ZELIC NICK ET UX	7-19-27
Y	HORNER DELORSE A - LIFE	7-19-26
Z	CHURCH OF CHRIST TRUSTEES	7-19-25
A2	COLLINS BRIAN & PAMELA J	7-19-24
B2	COLLINS BRIAN & PAMELA J	7-19-23.1
C2	COLLINS BRIAN & PAMELA J	7-19-23.2
D2	DRUSCHELJAMES F & JAMIE ANN ET AL	7-19-23
EZ	CUMPSTON GEORGE R ET AL	7-16-24
F2	BUTLER JOHN MATTHEW	7-16-39
G2	BURGE JUDITH A & VIRGINIA L BAILEY	7-20-4
	CONNELLY CHAS E	7-20-5
H2	MARLING SUELLEN	7-20-3
12	SHARPENBERG DALTON & DEREK (5)	7-19-21
12		7-19-22
K2	VUCELICK CHARLES EST	7-20-01
L2	FROMHART BRAD ET UX - LIFE	7-16-40
M2	BURGE JUDITH A & VIRGINIA L BAILEY ET AL	The state of the s
N2	BURGE JUDITH A & VIRGINIA L BAILEY ET AL	7-20-6
02	GEHO ANNIE L EST	7-20-11
P2	BURLEY AMMON ET UX	7-20-12
QZ	BURLEY AMMON	7-20-18
R2	BURLEY AMMON A	7-20-24
52	BURLEY AMON A	7-20-37
T2	GRESHAW JASON M & MARY L	7-25-2
U2	BROWN ANDREW C III	7-25-6
V2	HARRINGTON CLYDE F	7-25-7
W2	The second secon	7-25-9
X2	CONAWAY THOMAS EARLIR & CAROLYN K STOWE	7-25-12
Y2	CONAWAY THOMAS E	7-23-1
Z2	PRENDERGAST MICHAEL J & SUELLEN LEMLEY	7-23-26
-		3-1-2
A3		3-1-3
B3	TO STATE OF THE PARTY OF THE PA	3-1-35
C3	A MANAGEMENT AND DESCRIPTION OF THE PARTY OF	3-1-13
D3	The second secon	3-1-13
E3	THE PERSON NAMED OF TAXABLE PARTY OF TAX	-
F3		3-1-5
G3		3-1-10
НЗ		3-1-9
13	CBC HOLDINGS LLC	3-1-8.1

REVISIONS:	COMPANY:	SWN Production Company, LLC	SWI Production Compar	05/05/2023 P+ V+°
	OPERATOR'S WELL #:	VERNON JOHNSON WTZ 401H	API #: 047-103-03520	DATE: 04-14-2023  DRAWN BY: N. MANO
	DISTRICT: CLAY	COUNTY: WETZEL	STATE: WV	SCALE: N/A DRAWING NO: WELL LOCATION PLAT

1	1	Lois J. Bellaire a/k/a Lois Bellaire, a widow	SWN Production Company, LLC	17.00%	185A/17	1	I
		Mark A. Kraus a/k/a Mark Albert Kraus, a single	Chesapeake Appalachia, L.L.C.	17.00%	128A/553	-	
		man Chesapeake Appalachia, L.L.C.	CMM Deadustics Comment II C		4574/540		
		Melissa Campbell	SWN Production Company, LLC SWN Production Compony, LLC	17.00%	157A/540 186A/505	-	l
1	1	Merle Donna Wright a/k/a Merle Oates a/k/a Merle		14.00%	184A/407	1	I
		Donna Oates and Norman L. Wright, her husband	5000 5000		100000000		1
		Patrice Strachan, married dealing in her sole and separate property	SWN Production Company, LLC	15.00%	204A/925		
		Patricia Ann McCann a/k/a Patty McCann, a/k/a Patricia A. McCann, a single woman	Chesapeake Appalachia, L.L.C.	17.00%	127A/367		
1		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	a l	157A/540		
1		Robert A. Petitte, Jr. a/k/a Robert Petitte, Jr. and Anita F. Petitte, his wife	Chesapeake Appalachia, L.L.C.	12.50%	100A/858		
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540		
		Ronald T. Frederickson and Jeanette Frederickson, his wife	Chesapeake Appalachia, L.L.C.	17.00%	127A/372		
1		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540		
1		Suzanne Rexroad, a married woman daling in her sole and separate property	Chesapeake Appalachia, L.L.C.	12.50%	109A/29		
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540		
	15	Silvia Phillips a/k/a Sylvia Phillips, a widow	Chesapeake Appalachia, L.L.C.	17.00%	134A/3		
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540		
		Terri Barrow, a married woman dealing in her sole	SWN Production Company, LLC	15.00%	204A/776		
		and separate property William F. Vieweg a/k/a William Francis Vieweg and	SWN Production Company, LLC	17.50%	186A/507		1
4	1-3-2.1	Susan Vieweg, his wife  Royalty Owners	N/A	N/A	N/A	0.6944%	
		Alan R. Bradley	SWN Production Company, LLC	12.50%	187A/685	0.034476	
		Black Bear Oil & Gas, LLC	Chesapeake Appalachia, LLC	17.00%	156A/482		
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		165A/673		
		Chesapeake Appalachia, L.L.C.  DJK Oil & Gas Sugar Run, LLC	SWN Production Company, LLC Chesapeake Appalachia, LLC	12.50%	167A/9 128A/659	l i	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	12.50%	157A/540		
		Donna McGlone	SWN Production Company, LLC	12.50%	186A/258		
		Dwight D. Hall and Patti Jo Hall, husband and wife	SWN Production Company, LLC	16.00%	200A/7		
		Faye Anne Gore	SWN Production Company, LLC	16.00%	187A/689		
		James L. Hall James Smith Jr., a single man	SWN Production Company, LLC SWN Production Company, LLC	18.00% 12.50%	201A/572 199A/924		
		Jan Rose Smallwood	SWN Production Company, LLC	15.00%	199A/924 188A/880		
		Creta G. Kilcoyne, widow, by her attorney-in-fact	Chesapeake Appalachia, LLC	12.50%	90A/78		
		Barbara J. Kilcoyne Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540		
		Karen Sue Measley, f/k/a Karen Sue Francis Hall and	SWN Production Company, LLC	16,00%	200A/1		
		Ross Edwin Measley, Jr., her husband					
		Lana B. Kuhl Anna L. Buzzard	SWN Production Company, LLC Chesapeake Appalachia, LLC	12.50%	188A/482		
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	12.50%	90A/1 157A/540		
		Marlene Kay Musgrave and Wayne T. Musgrave,	SWN Production Company, LLC	12.50%	202A/30		
		wife and husband Max Hinerman and Loretta Hinerman, his wife	SWN Production Company, LLC	16.00%	187A/687		
		Patricia Wheeler Castelli a/k/a Patricia Ann Hall	SWN Production Company, LLC	12.50%	198A/155		
		Wheeler a/k/a Patricia Ann Hall Smith, married,	SWITT TO GOLDEN COMPANY, LLC	12.30%	1307/133		
		dealing in sole and separate property					
		Sue Carol Anglin	SWN Production Company, LLC	15.00%	199A/943		
		Thomas G. Hall, a married man dealing in his sole and separate peroperty	SWN Production Company, LLC	16.00%	199A/938		
5	1-3-2	Royalty Owners	N/A	N/A	N/A	0.6944%	
		Alan R. Bradley Black Bear Oil & Gas, LLC	SWN Production Company, LLC Chesapeake Appalachia, LLC	12.50%	187A/685 156A/482		
		The state of the s	SWN Production Company, LLC	17.00%	156A/482 165A/673		
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		167A/9		
		DJK Oil & Gas Sugar Run, LLC Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, LLC	12.50%	128A/659	RECEIV	ED
		Donna McGlone	SWN Production Company, LLC SWN Production Company, LLC	12.50%	157A/540 186A/258	Office of Oil	and Gas
		Dwight D. Hall and Patti Jo Hall, husband and wife	SWN Production Company, LLC	16.00%	200A/7	Omoo =	
		Faye Anne Gore	SWN Production Company, LLC	16.00%	187A/689		2022
			SWN Production Company, LLC	18.00%	201A/572	APR 1	1 7072
		James Smith Jr., a single man	SWN Production Company, LLC	12.50%	199A/924		
		Jan Rose Smallwood Creta G. Kilcoyne, widow, by her attorney-in-fact	SWN Production Company, LLC	15.00%	188A/880		comeans (N
		Barbara J. Kilcoyne	Chesapeake Appalachia, LLC	12.50%	90A/78	WV Depar	n iPartiblication
		Chesapeake Appalachia, L.L.C. Karen Sue Measley, f/k/a Karen Sue Francis Hall and	SWN Production Company, LLC	16.00%	157A/540 200A/1	Eunitourusura MA Debrii	H d Hypersylvania
		Ross Edwin Measley, Jr., her husband	o roudenon company, etc	10.00%	200A/1		
		Lana B. Kuhl	SWN Production Company, LLC	12.50%	188A/482		
		Anna L. Buzzard	Chesapeake Appalachia, LLC	12.50%	90A/1		
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		157A/540		
		Marlene Kay Musgrave and Wayne T. Musgrave, wife and husband	SWN Production Company, LLC	12.50%	202A/30		
		Max Hinerman and Loretta Hinerman, his wife	SWN Production Company, LLC	16.00%	187A/687		
				12.50%	198A/155		
		Patricia Wheeler Castelli a/k/a Patricia Ann Hall	SWN Production Company, LLC				
		Wheeler a/k/a Patricia Ann Hall Smith, married,	SWN Production Company, LLC				
		Wheeler a/k/a Patricia Ann Hall Smith, married, dealing in sole and separate property					
П		Wheeler a/k/a Patricia Ann Hall Smith, married,	SWN Production Company, LLC SWN Production Company, LLC SWN Production Company, LLC	16.00% 16.00%	199A/943 199A/938		
6	7-24.1 1 27	Wheeler a/V/a Patricia Ann Hall Smith, married, dealing in sole and separate property  Sue Carol Anglin  Thomas G. Hall, a married man dealing in his sole and separate peroperty	SWN Production Company, LLC SWN Production Company, LLC	16.00% 16.00%	199A/943 199A/938	p. 00004	
6	7-24-1 pt. 27	Wheeler a/K/a Patricia Ann Hall Smith, married, dealing in sole and separate property  Sue Carol Anglin  Thomas G. Hall, a married man dealing in his sole and separate peroperty  Hayhurst Company, a Florida General Partnership	SWN Production Company, LLC SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	16.00%	199A/943 199A/938 723/624	0.0000%	
6	7-24-1 pt. 27	Wheeler a/V/a Patricia Ann Hall Smith, married, dealing in sole and separate property  Sue Carol Anglin  Thomas G. Hall, a married man dealing in his sole and separate peroperty	SWN Production Company, LLC SWN Production Company, LLC	16.00% 16.00%	199A/943 199A/938	0.0000%	

1	T	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	E	1 22/110	
		Ernest N. Keller a/k/a Ernest M. Keller and Pearl H.	Chesapeake Appalachia, L.L.C.	12.50%	33/110 683/390	1 1
		Keller, his wife Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
	1	Robert Lee Keller and Mary Kay Keller, his wife	Chesapeake Appalachia, L.L.C.	12.50%	683/349	1
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	1	22/140	
		Carolyn Joyce Daugherty, single	Chesapeake Appalachia, L.L.C.	12.50%	33/110 684/1	1 1
		Chesapeake Appalachia, L.L.C. Neva E. Keller, a widow	SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	12.50%	33/110	
1		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	12.50%	688/127 33/110	
1		Donna J. Savage, a married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C.	12.50%	684/117	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
6	7-24-1 pt. 26	Christopher G. Adams and Frica Adams, his wife	Chesapeake Appalachia, L.L.C.	17.00%	761/402	0.0000%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Derrick H. Adams and Suzanne Adams, his wife	Chesapeake Appalachia, L.L.C.	17.00%	761/395	1
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Paul Charles Adams, a single man	Chesapeake Appalachia, L.L.C.	17.00%	750/169	
	1	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
	1	Bruce D. Bonar and Sandra C. Bonar, his wife	Chesapeake Appalachia, L.L.C.	17.00%	751/608	
1		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
1		Lee D. Bonar and Bonnie M. Bonar, his wife	Chesapeake Appalachia, L.L.C.	17.00%	747/270	
1		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles W. Bonar and Charlotte L. Bonar, his wife	Chesapeake Appalachia, L.L.C.	17.00%	755/109	
1						
		Chesapeake Appalachia, L.L.C. Brian Harris Bonar, Power of Attorney for Katherine	SWN Production Company, LLC SWN Production Company, L.L.C.	16.00%	33/110 951/337	
		L. Bonar, a widow	No. 1915 September 2010 September 1915 September 19	28.50 (85.50)		
		Ronald E. Bonar, a single man	Chesapeake Appalachia, L.L.C.	17.00%	754/616	
1		Chesapeake Appalachia, L.L.C. The Estate of Richard L. Bonar, by Saundra J. Bonar,	SWN Production Company, LLC	17 009/	33/110	
		acting as Executor and Saundra J. Bonar, a widow	Chesapeake Appalachia, L.L.C.	17.00%	751/167	
			SWM Dradustion Com U.C.		22/	
- 10		Chesapeake Appalachia, L.L.C. William D. Bonar and Gloria A. Bonar, his wife	SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	17.00%	33/110 746/271	
			10. (1.5 of many many many many many many many many	17.00/6	700	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Arnell Elizabeth Bowser and Glen F. Bowser, her husband	Chesapeake Appalachia, L.L.C.	17.00%	778/28	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Cornelia C. Browne, widow	SWN Production Company, L.L.C.	16.00%	955/350	
		Clyde W. Caseman and Alicia L. Caseman, his wife	Chesapeake Appalachia, L.L.C.	17.00%	748/401	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Joseph W. Caseman and Gretchen V. Caseman, his	Chesapeake Appalachia, L.L.C.	17.00%	747/600	
		wife Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Nelda S. Clark, widow	SWN Production Company, L.L.C.	16.00%	955/243	
		Robert Clark Adams and Charlotte A. Adams, his wife	Chesapeake Appalachia, L.L.C.	17.00%	749/622	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		David Edwards, single	SWN Production Company, L.L.C.	17.00%	1046/565	l l
		Richard Cunliffe Edwards, a/k/a Richard Cunliff Edwards, a widower	Chesapeake Appalachia, L.L.C.	17.00%	775/409	1
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Richard Edwards, married dealing in his sole and	SWN Production Company, L.L.C.	17.00%	961/213	
1		separate property Thomas Edwards, married dealing in his sole and	SWN Production Company, L.L.C.	17.00%	962/430	
1		separate property	10 100		- 20	
		Roberta M. Snyder, a/k/a Roberta Mary Clark, a widow	Chesapeake Appalachia, L.L.C.	17.00%	749/96	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Sandra K. Groux and Harry W. Groux, her husband	Chesapeake Appalachia, L.L.C.	17.00%	748/503	RECEIVED
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	Office of Oil and Gas
1		Edward Martin Sedor, a widower, by his Attorney-In-		17.00%	890/158	
1		Fact, Mark A. Sedor William L. McCutcheon, a widower	Chesapeake Appalachia, L.L.C.	17.00%	751/602	ADD & Adda
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	17,00%	33/110	APR 1 9 2023
		Patricia Austin Meyer, married dealing in her sole	SWN Production Company, L.L.C.	17.00%	957/589	
		and separate property The Estate of John William Orr, Sr., by Linda O.	Chesaneake Annalachia III C	17.000	769/454	
		Morgan, a/k/a Linda Orr Morgan, acting as	Chesapeake Appalachia, L.L.C.	17.00%	768/154	WV Department of
1 1		Executrix, Linda o. Morgan, a/k/a Linda Orr Morgan			E	nvironmental Protection
		and Gary D. Morgan, her husband, and John W. Orr, Jr., a/k/a John William Orr, Jr. and Susan J. Orr, his				
		wife				
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	40.000	33/110	1
		Susan Diane Clark Neidlinger, divorced Suzanne Patrick, f/k/a Suzanne Edwards, married	SWN Production Company, L.L.C. SWN Production Company, L.L.C.	18.00% 17.00%	963/70 964/66	
		dealing in her sole and separate property		17,00%	304/00	1
		Dorothy Patterson, a single woman	Charanaska Annalashia III C	17.00%	777/404	
		Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	17.00%	777/481 33/110	
		The Mary Kathryn Ray Revocable Trust, dated	Chesapeake Appalachia, L.L.C.	17.00%	750/118	1
		December 18, 1988, by Mary Kathryn Ray, acting as Trustee	2000 Commence (2000)	1,000,000,00		1
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	1
1 1		Nancy L. Rodgers, f/k/a Nancy Matthews and	Chesapeake Appalachia, L.L.C.	17.00%	748/527	
		William I. Rodgers, her husband Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	1
		Cliff Sligar, a married man dealing in his sole and	SWN Production Company, L.L.C.	17.00%	956/244	
		separate property	2000-0-100000-100000117-1000-1007-1000012-0-0000-2-0-000000-2-0-000000-2-0-000000	2000.000		
		David B. Sligar, a married man dealing in his sole and separate property	SWN Production Company, L.L.C.	17.00%	956/248	
		George Leroy Smith and Evelyn F. Smith, his wife	Chesapeake Appalachia, L.L.C.	17.00%	748/442	1
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	ı
		John Bernard Smith and Ethel Rose Smith, his wife	Chesapeake Appalachia, L.L.C.	17.00%	748/436	
		Chesapeake Appalachia, L.L.C.	40-00/10/35/30/00/20/4/APO00006/10/2004/9/2000002/30/00/00/			1
1	I	and a property of the state of	SWN Production Company, LLC		33/110	1

	1					
		Malcolm V. Smith, Jr., a widower Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	17.00%	777/487	
		Russell Lee Smith and Marybelle Smith, his wife	Chesapeake Appalachia, L.L.C.	17.00%	33/110 747/623	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Donna R. Walker, a widow Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	17.00%	777/475	
	1	Dorothy E. Wheeler, a widow	SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	17.00%	33/110	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	17.00%	750/111 33/110	
		Mary T. Zito, f/k/a Mary T. Nesbitt, f/k/a Mary	Chesapeake Appalachia, L.L.C.	17.00%	764/201	
		Bonar Nesbitt, a widow				
6	7-24-1 pt. 19	Chesapeake Appalachia, L.L.C.  Mary Frances Anderson, a single woman	SWN Production Company, LLC	42 500/	33/110	
		Dominion Energy Transmission, Inc.	SWN Production Company, L.L.C. SWN Production Company, L.L.C.	12.50%	1040/237 977/487	0.0000%
		Frank C. McCuskey and Neva C. McCuskey Trust, dated March 27, 1979, by Dan F. McCuskey, a/k/a Dan Frederick McCuskey, acting as Trustee	Chesapeake Appalachia, L.L.C.	12.50%	690/556	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Johanna Helffrich Greenwood, married dealing in her sole and separate property Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.	12.50%	715/313	
		Richard Helffrich, a married man dealing in his sole	SWN Production Company, LLC Chesapeake Appalachia, L.L.C.	12.50%	33/110 715/321	
		and separate property		12.50%	713/321	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Charles F. McCuskey, Jr., a married man dealing in his sole and separate property Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	17.00%	716/1	
		Michael McCuskey, a/k/a Michael Paul McCuskey, a married man dealing in his sole and separate		12.50%	1065/82	
		property  Bill McCuskey, a/k/a William Charles McCuskey and	SWN Production Company, L.L.C.	12.50%	1064/309	
		Deena L. McCuskey, husband and wife  Reliant Holdings, LLC, a West Virginia Company, by	SWN Production Company, L.L.C.	12.50%	1063/645	
		Peter McCuskey, Managing Member		USSIVATOORING	EUROSSANONI.	
		Gretchen Helffrich Zavala, a married woman dealing in her sole and separate property	3.000 (0.0	12.50%	715/316	
6	7-24-1 pt. 18	Chesapeake Appalachia, L.L.C.  Christopher Claude Baughman, a/k/a Christopher C.	SWN Production Company, LLC	46.000	33/110	
	72429520	Baughman, a married man dealing in his sole and separate property TH Exploration, LLC	SWN Production Company, LLC and Statoil USA	18.00%	879/320 41/299	0.0000%
			Onshore Properties Inc.		44000000	
		Nelson G. Baughman, III, a/k/a Nelson G. Baughman, a married man dealing in his sole and separate property	TH Exploration, LLC	18.00%	876/183	
		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA Onshore Properties Inc.		41/299	
		Voncile W. Baughman, a widow TH Exploration, LLC	TH Exploration, LLC SWN Production Company, LLC and Statoil USA	18.00%	878/292 41/299	
		Harry Reid Cummings and Joyce M. Cummings, a/k/a Joyce Marie Cummings, Trustees of the Harry Reid Cummings and Joyce M. Cummings Living Trust	Onshore Properties Inc. TH Exploration, LLC	18.00%	874/321	
		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA		41/299	
		Sarah C. McLaughlin, a/k/a Sarah Cummings McLaughlin and John W. McLaughlin, Co-Trustees of the Sarah C. McLaughlin Revocable Trust	Onshore Properties Inc. TH Exploration, LLC	18.00%	873/71	
		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA		41/299	
		Dorothy Sullivan, a/k/a Dorothy E. Sullivan, a/k/a Dorothy Elizabeth Sullivan, a widow; appearing herein by and through James Rein Sullivan, her Agent and Attorney-in-Fact by Durable Power of Attorney date April 27th 1998, and unrecorded in Marshall County, West Virginia	Onshore Properties Inc. TH Exploration, LLC	18.00%	876/43	
		TH Exploration, LLC	SWN Production Company, LLC and Statoii USA		41/299	
6	7-24-1 pt. 22	Christopher Claude Baughman, a/k/a Christopher C.	Onshore Properties Inc. TH Exploration, LLC	18.00%	879/320	0.0000%
40.40	F-10-10-10-10-10-10-10-10-10-10-10-10-10-	Baughman, a married man dealing in his sole and separate property		10.00%		0.0000%
		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA Onshore Properties Inc.		41/299	
		Nelson G. Baughman, III, a/k/a Nelson G. Baughman, a married man dealing in his sole and	TH Exploration, LLC	18.00%	876/183	
		separate property TH Exploration, LLC	SWN Production Company, LLC and Statoil USA Onshore Properties Inc.		41/299	
		Voncile W. Baughman, a widow	TH Exploration, LLC	18.00%	878/292	
		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA Onshore Properties Inc.		41/299	RECEIVED
		Harry Reid Cummings and Joyce M. Cummings, a/k/a Joyce Marie Cummings, Trustees of the Harry Reid Cummings and Joyce M. Cummings Living Trust	TH Exploration, LLC	18.00%	Off 874/321	of Oil and
		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA		41/299 <b>A</b>	PR 19202.
		Sarah C. McLaughlin, a/k/a Sarah Cummings McLaughlin and John W. McLaughlin, Co-Trustees of the Sarah C. McLaughlin Revocable Trust	Onshore Properties Inc. TH Exploration, LLC	18.00%	100	~
		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA Onshore Properties Inc.		Envisor	Departmeni o mental Proteci
		Dorothy Sullivan, a/k/a Dorothy E. Sullivan, a/k/a Dorothy Elizabeth Sullivan, a widow; appearing herein by and through James Rein Sullivan, her Agent and Attorney-in-Fact by Durable Power of Attorney dated April 27th 1998, and unrecorded in Marshall County, West Vigriin 4	Unanore Properties Inc. TH Exploration, LLC	18.00%	876/43	rrotec

		TH Exploration, LLC	SWN Production Company, LLC and Statoil USA Onshore Properties Inc.		41/299	
6	7-24-1 pt. 15	Royalty Owners  The Security Trust Company, a Corporation, as Attorney-in-Fact for Judith M. Blue, Josephine C. Blue, Ellen D. Hoge, Virginia H. Randolph, Agusta L. Randolph, Agusta Hoge Evans, Joan B. Hoge, Mary W. Wright, Lucius H. Wilson, Mary Ellen Mumford, Richard H. Hoge, George H. Hoge, Audrey May Meyer, Elizabeth N. Wild and Elizabeth Wood; and the Estate of Mary C. Walker	N/A  The Manufacturers Light and Heat Company	N/A 12.50%	N/A 353/111	2.0833%
		The Manufacturers Light and Heat Company	Columbia Gas Transmission Corporation		422/204	
		Columbia Gas Transmission Corporation	Columbia Natural Resources, LLC		642/281	
		Columbia Gas Transmission Corporation	Chesapeake Appalachia, L.L.C.		662/322	
_		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
6	7-24-1 pt. 13	Richard E. Walker and Roberta Walker; Mary Hoge Lea and Warren J. Lea; Richard E. Walker, as Executor of the Estate of Edward C. Walker; for the Heirs at Law of Isaac Hoge The Manufacturers Light and Heat Company	The Manufacturers Light and Heat Company  Columbia Gas Transmission Corporation	12.50%	363/195 422/204	0.0000%
		Columbia Gas Transmission Corporation	Columbia Natural Resources, LLC		642/281	
		Columbia Gas Transmission Corporation	Chesapeake Appalachia, L.L.C.		662/322	
6	7-24-1 pt. 11	Chesapeake Appalachia, L.L.C.  Royalty Owners	SWN Production Company, LLC N/A	11/0	33/110	
	7-24-1 pt. 11	Franklin Thomas Barrett, a married man dealing in	SWN Production Company, LLC	N/A 18.00%	N/A 1010/272	16.4683%
		his sole and separate property  Ammon A. Burley and Flora J. Burley, husband and	SWN Production Company, L.L.C.	15.00%	919/345	
		wife Timothy N. Burley and Connie Burley, husband and	SWN Production Company, LLC	18.00%	974/325	
		wife Krystal K. Camp and Tom Camp, wife and husband	SWN Production Company, LLC	18.00%	967/117	
		Donald Scott Conaway, a single man	SWN Production Company, L.L.C.	16.00%	932/629	
		Robert W Conaway, Jr., a single man Ronald W. Conaway, a/k/a Ronald Wayne Conaway, a married man dealing in his sole and separate	SWN Production Company, L.L.C. SWN Production Company, LLC	16.00% 17.00%	932/636 1046/269	
		property  David S. Dever, a married man dealing in his sole and separate property	SWN Production Company, LLC	17.00%	1052/444	
		Gregory T. Dever, a married man dealing in his sole and separate property	SWN Production Company, LLC	16.00%	1010/621	
		John A. Dever, a widower Annette Mary Dever, Trustee of the Annette and Larry Dever Revocable Trust, dated April 22, 2016	SWN Production Company, LLC SWN Production Company, LLC	17.00% 17.00%	1052/439 1052/81	
		Jeffrey L. Fish, a married man dealing in his sole and	SWN Production Company, LLC	18.00%	976/113	
		separate property Michael A. Fish and Debra L. Fish, husband and wife	SWN Production Company, LLC	18.00%	967/125	
		Charles Wayne Geho, a married man dealing in his sole and separate property	SWN Production Company, LLC	16.00%	966/408	
		Vanita and Cordova Holding Company, LLC, William H. Gaston, Managing Member	SWN Production Company, L.L.C.	17.00%	1097/361	
		Kathy Watkins Hoopes, a/k/a Kathy Jo Watkins and David E. Hoopes, wife and husband	SWN Production Company, L.L.C.	15.00%	925/539	
		Bernadette F. Livingston, Trustee of the Margaret J. Kaczorowski Revocable Trust Agreement, dated the 21st day of November, 2006	SWN Production Company, LLC	16.00%	966/421	
		Andrea M. Davis, Agent and Attorney-in-Facdt for Deborah K. Kincaid, a single woman	SWN Production Company, LLC	17.00%	1052/76	
		Annette Aldine Lloyd, a widow Beulah Kathleen Mackey, a widow	SWN Production Company, LLC SWN Production Company, LLC	18.00%	969/288	
		Donald Marlin Watkins, a/k/a Marlin Watkins and Myra L. Watkins, husband and wife	SWN Production Company, L.L.C.	17.00% 15.00%	965/31 919/161	
		Barrett Zeppernick, a married woman dealing in her	SWN Production Company	18.00%	1010/268	RECEIVED Office of Cil and
		sole and separate property  Robert L. Burley, a married man dealing in his sole	SWN Production Company, LLC	15.00%	1135/347	
		and separate property			200	APR 1 9 202
		Wayne E. Burley, a single man Elizabeth Ann Cain, a widow	SWN Production Company, LLC SWN Production Company, LLC	15.00% 18.00%	1135/330 1135/319	
		First Assembly of God Church George L. Hale, Jr., a married man dealing in his sole	SWN Production Company, LLC	17.00% 18.00%	1135/352 966/438	1401
		and separate property				WV Department
		Barbara J. Burley, a single woman Roger Lee Cain	SWN Production Company, LLC SWN Production Company, LLC	15.00% 18.00%	1136/49 1135/341	Environmental Prote
		Robert Carlton Cain	SWN Production Company, LLC	18.00%	1135/335	
5	7-24-1 pt. 08	Edward C. Walker, widower; Richard E. Walker and Roberta Walker, his wife; Edna Whitlatch and J. B. Whitlatch, her husband; and Security Trust	The Manufacturers Light and Heat Company	12.50%	326/505	0.0000%
		Attorney in Fact for those heirs at law of Isaac Hoge, herinafter named, under the signature of said Attorney in Fact for those heirs at law of Isaac Hoge, herinafter named, under the signature of said Attorney in Fact				
		The Manufacturers Light and Heat Company	Columbia Gas Transmission Corporation		422/204	
		Columbia Gas Transmission Corporation	Columbia Natural Resources, LLC		642/281	
		Columbia Gas Transmission Corporation  Chesapeake Appalachia, L.L.C.	Chesapeake Appalachia, L.L.C.		662/322	
		Chesapeake Appalachia, L.L.C. Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC SWN Production Company, LLC		33/110 36/422	
		Edna Whitlatch and J. B. Whitlatch, her husband	The Manufacturers Light and Heat Company	12.50%	375/223	
		The Manufacturers Light and Heat Company	Columbia Gas Transmission Corporation		422/204	
		ACTION OF THE STATE OF THE STAT	The state of the s			1
		Columbia Gas Transmission Corporation	Columbia Natural Resources, LLC Chesapeake Appalachia, L.L.C.		642/281 662/322	
		ACTION OF THE STATE OF THE STAT	Columbia Natural Resources, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	,	642/281 662/322 33/110	

7	7-20-41	Onward E. Burge, Sarah L. Burge and Stephen W. Burge, Trustees of the Onward E. Burge Trust dated June 21, 2010	Chesapeake Appalachia, L.L.C.	12.50%	676/438	0.0000%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
		Nancy B. Divita	Chesapeake Appalachia, L.L.C.	12.50%	677/51	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	12.50%	33/110	
6	7-24-1 pt. 7	W. J. Booher and Virginia H. Booher, his wife	The Manufacturers Light and Heat Company	12.50%	401/473	0.0000%
		The Manufacturers Light and Heat Company	Columbia Gas Transmission Corporation		422/204	
		Columbia Gas Transmission Corporation	Columbia Natural Resources, LLC		642/281	
		Columbia Gas Transmission Corporation	Chesapeake Appalachia, L.L.C.		662/322	
	- Committee of the State of	Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
8	7-19-28	James W. Whipkey, single	Chesapeake Appalachia, L.L.C.	12.50%	655/5	0.0000%
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC	22.50%	35/32	0.000076
		O. E. Burge, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	12.50%	654/382	
		Chesapeake Appalachia, L.L.C.	SWN Production Company, LLC		33/110	
9	7-16-25-1	Clare Connelly	Guy B. Patterson and A.G. Patterson	12.50%	227/254	0.0000%
		Guy B. Patterson and A. G. Patterson, husband and wife	The Manufacturers Light and Heat Company		2/281	0.0000/0
		The Manufacturers Light and Heat Company	Columbia Gas Transmission Corporation		422/204	
		Columbia Gas Transmission Corporation	Columbia Natural Resources, LLC		642/281	
		Columbia Gas Transmission Corporation	Chesapeake Appalachia, L.L.C.	1	662/322	
			SWN Production Company, LLC		33/110	
10	7-19-20		Chesapeake Appalachia, L.L.C.	17.00%	707/124	0.0000%
			SWN Production Company, LLC		22/440	
		Martha Kaye Hill	Chesapeake Appalachia, L.L.C.	12.50%	33/110	
		The state of the s	SWN Production Company, LLC	12.50%	658/277	
			Chesapeake Appalachia, L.L.C.	12.50%	33/110 658/280	
		sole and separate property		12.50%	658/280	
			SWN Production Company, LLC	distance and the same	33/110	
		Sandra C. Koontz, a widow	SWN Production Company, L.L.C.	16,00%	895/204	

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WV Department of Environmental Protection



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

SWN Production Company, LLC

June 27, 2022

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

**RE:** SWN's proposed New Well: Vernon Johnson WTZ 401H in Wetzel County, West Virginia, Drilling under CO 74, CO 74/2, Amos Hollow Road, Rice Ridge Road, Burley Lane, and US-250.

Dear Mr Brewer:

SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under CO 74, CO 74/2, Amos Hollow Road, Rice Ridge Road, Burley Lane, and US-250. 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,

Bradley Wilson Senior Landman

SWN Production Company, LLC

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Office of Oil and Gas

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R2 W+

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



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

April 18, 2023

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

RE: Proposed Revisions:

Vernon Johnson WTZ 201H Vernon Johnson WTZ 401H

Dear Mr. Brewer:

Enclosed please find the required documents to modify this well. We would like to modify these wells due to removing parcels from the 6A1 that we did not penetrate during drilling. These wells are situated on the Johnson's property, in Clay District, Wetzel County, West Virginia.

Enclosed you will find:

-6B

-WBD

The state of the s

-Mylar

-6A1

Office of Oil and Gas

APR 1 9 2023

WV Department of Environmental Protection

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

Thank you.

Sincerely,

Buttary Moody

Brittany Woody

Staff Regulatory Specialist

Southwestern Energy Production Company, LLC

A WY

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