

west virginia department of environmental protection

Office of Oil and Gas 601 57th Street SE Charleston, WV 25304 (304) 926-0450 (304) 926-0452 fax Earl Ray Tomblin, Governor Randy C. Huffman, Cabinet Secretary www.dep.wv.gov

November 13, 2015

WELL WORK PERMIT

Horizontal 6A Well

This permit, API Well Number: 47-6900203, issued to SWN PRODUCTION COMPANY, LLC, 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 all 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 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.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-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) 926-0499 ext. 1654.

James Martin

Chie

Operator's Well No: WILLIAM RODGERS OHI 405H

Farm Name: RODGERS, WILLIAM I. & DOUGI

API Well Number: 47-6900203

Permit Type: Horizontal 6A Well

Date Issued: 11/13/2015

API Number: <u>109-00-203</u>

PERMIT CONDITIONS

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

CONDITIONS

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled *Water Well Regulations*, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 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.
- 8. 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.
- 9. 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, 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.

API NO. 47-69 - 002-03
OPERATOR WELL NO. WIlliam Rodgens OHI 4994
Well Pad Name: William Rodgens OHI Pad

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

) Well Opera							
	tor: SWN	Production C	Co., LLC	494512924	69- Ohio	3-Liberty	648- Valley Grove
				Operator ID	County	District	Quadrangle
Operator's	Well Number	er: William Ro	odgers Ol	HI 405H Well Pa	d Name: Willia	m Rodger	s OHI Pad
							mac Hill Road /R.I.
				ruone Ros	id Access: Air	IIISOII FOLO	mac Hill Road / RT
	current grow	nd: 1280		evation, proposed			
Well Type	(a) Gas	<u>x</u>	_ Oil	Und	erground Stora	ge	
	Other			· · · · · · · · · · · · · · · · · · ·		,,,,, ,,,,	
	(b)If Gas	Shallow	<u>x</u>	Deep			
Evrictina Da	J. 37 37.	Horizontal	<u>x</u>				€8 6.10.15
	d: Yes or No				_		
Proposed Target Format	arget Forma ilon-Marcellus	tion(s), Depth	(s), Antici	ipated Thickness a get Base TVD- 6564',	and Associated	Pressure(s):	
				ger base TVD- 0504, /	Anucipated I nickni	ess- 43', Assoc	ciated Pressure- 3920'
		Depth: 655					
			Viarcellus				
Proposed 7	Total Measu	red Depth: _	14,73	<u>(</u>			
Proposed I	forizontal L	eg Length: [1526 64	į t			
) Approxima	ate Fresh W	ater Strata Dep	oths:	. 300'		· · · · · · · · · · · · · · · · · · ·	
		-		rom nearby wate	r wells and off	set wells	
		r Depths: 11				001 110113	
		m Depths: 6					
				ne, karst, other):	None that we	are aware	
				_	THORE WAL WE	are aware	01.
	osed well lo	cation contain	coal sean				
) Does Propo ectly overly		STILL TO SEE SCHA	e mine!	Yes	No	<u>×</u>	
Does Proposectly	nig or adjaca						
ectly overly	ovide Mine	Info: Name:					
ectly overly		Info: Name: Depth:					,
ectly overly							,

API NO. 47-69 - 00203

OPERATOR WELL NO. William Rodgers OHI 405H
Well Pad Name: William Rodgers OHI Pad

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	H-40	94#	100'	100'	CTS
Fresh Water	13 3/8"	New	J-55	54.5#	450'	450'	418 sx/CTS
Coal	9 5/8"	New	J-55	40#	1997'	1997'	762 sx/CTS
Intermediate	7"	New	J-55	20#	If Needed	If Needed	If Needed/As Needed
Production	5 1/2"	New	HCP-110	20#	16,600'	16,600'	Lead 995sx tail 2305sx/100' inside inter-
Tubing	2 3/8'	New	P-110	4.7#	Approx. 6576'	Approx. 6576'	
Liners							

g 5/10/15

ТҮРЕ	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Max. Associated Surface Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.19/50% Excess
Fresh Water	13 3/8"	17.5"	0.380	2740	633	Class A	1.19/50% Excess
Coal	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/50% Excess
Intermediate	7"	8 3/4"	0.317	4360	3250	Class A	1.20/15% Excess
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	1.20/15% Excess
Tubing	2 3/8"	4.778"	0.190				
Liners	=		<u> </u>				

ap 6.10.15

PACKERS

Kind:	10K Arrowset AS1-X		
Sizes:	5 1/2"		
Depths Set:		RF	CEIVED Gas

Office of Old and Office of Oct of Page 2013/13/2015

Well Pad Name: William Rodgers OHI Pad

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

Drill and stimulate any potential zones between and including the Benson to Marcellus. **If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface. Run casing not less than 20' below void nor more than 50'-70' below void. (*If freshwater is encountered deeper than anticipated it must be protected, set casing 50'-70' 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. The well is produced through surface facilities consisting of high pressure production unites, vertical separation units, water and oil storage tanks. Max press and anticipated max rate- 9000 lbs @ 80 barrels a minute.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 17.356
- 22) Area to be disturbed for well pad only, less access road (acres): 11.393
- 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:

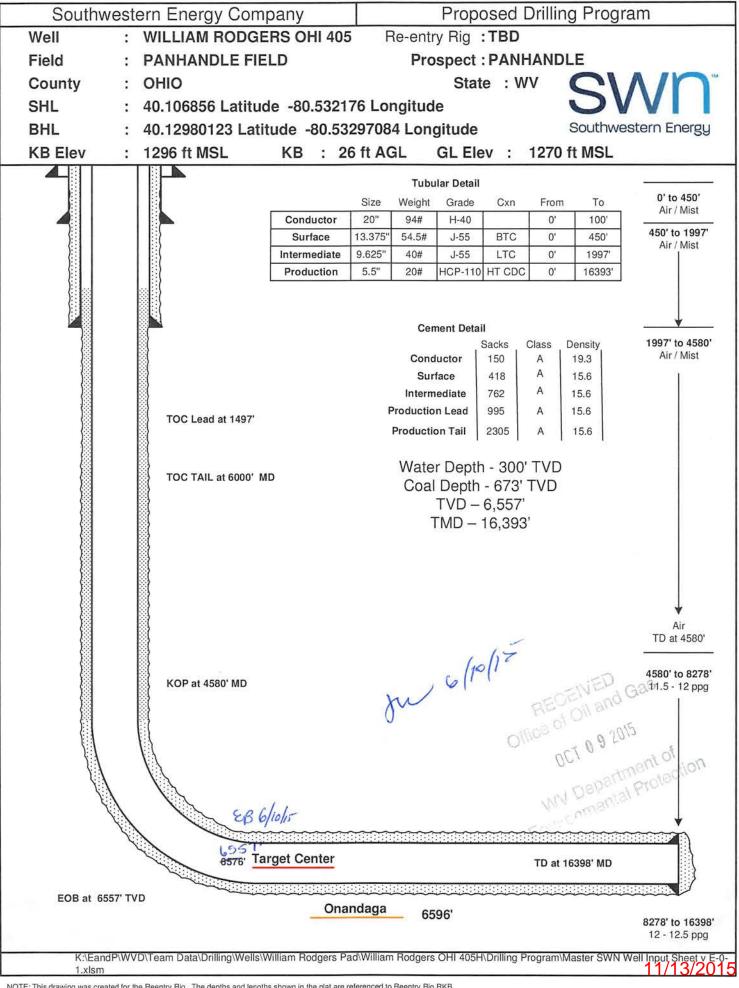
All boreholes will be conditioned with circulation and rotation for a minimum of one bottoms up and continuing until operator is satisfied with borehole conditions.

*Note: Attach additional sheets as needed.

Page 3 of 3 11/13/2015

Schlumberger Cement Additives

	Product Name	Product Use	Chemical Name	CAS Number
Surface	S001	accelerator	calcium chloride	10043-52-4
ntermediate Surface	S001	accelerator	calcium chloride	10043-52-4
	D080	dispersant	sodium polynaphthalene sulfonate	9008-63-3
Q I	D801	retarder	aromatic polymer derivative	propriatary
Kick Off Plug	D047	antifoam	polypropylene glycol	25322-69-4
	D167	fluid loss	aliphatic amide polymer	propriatary
	D154	extender	non-crystalline silica	7631-86-9
	D400	gas migration	boric acid	10043-35-3
			polypropylene glycol	25322-69-4
ad	D046	antifoam	fullers earth (attapulgite)	8031-18-3
Production-Lead			chrystalline silica	14808-60-7
ţį	D201	retarder	metal oxide	propriatary
gnc			sulphonated synthetic polymer	propriatary
Pro	D202	dispersant	formaldehyde (impurity)	propriatary
			polypropylene glycol	25322-69-4
	D046	antifoam	fullers earth (attapulgite)	8031-18-3
	D167	fluid loss	aliphatic amide polymer	propriatary
<u> </u>			sodium polynaphthalene sulfonate	9008-63-3
T-C	D065	dispersant	sodium sulfate	7757-82-6
Production-Tail			chrystalline silica	14808-60-7
Jnp	D201	retarder	metal oxide	propriatary
Pro	D153	anti-settling	chrystalline silica	14808-60-7



API Number 47 -	69	. 00205
Operator's	Well No.	William Rodgers OHI 405H

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) Little Wheeling Creek	Quadrangle 648- Valley Grove
Elevation 1280 County 69- Ohio	District 3- Liberty
Do you anticipate using more than 5,000 bbls of water to complete the Will a pit be used? Yes No Vo	tem in place at this time- cuttings will be taken to a permitted landfill.
11 50, pieuse deserroe antierpateu pit waste.	If so, what ml.?
Proposed Disposal Method For Treated Pit Wastes:	11 SO, What Hill.?
Reuse (at API Number_at next anticipated well Off Site Disposal (Supply form WW-9 for	nber 2D0072539/ 2D0413175/ 2D0610306/ 2D0610317 I, API# will be included with the WR-34/DDMR &/or permit addendum. or disposal location) In steel tanks and reused or taken to a permitted disposal facility.
Will closed loop system be used? If so, describe: Yes	
Drilling medium anticipated for this well (vertical and horizontal)?	Air, freshwater, oil based, etc. Air drill to KOP, fluid drill with SOBM from KOP to TD
-If oil based, what type? Synthetic, petroleum, etc. Synthetic	Dil Base
Additives to be used in drilling medium? see attached sheets	
Drill cuttings disposal method? Leave in pit, landfill, removed offsit	e, etc. landfill
-If left in pit and plan to solidify what medium will be used	? (cement, lime, sawdust)
on August 1, 2005, by the Office of Oil and Gas of the West Virginia provisions of the permit are enforceable by law. Violations of any law or regulation can lead to enforcement action.	viole 38390/CID38390, Pine Grove 13688 ions of the GENERAL WATER POLLUTION PERMIT issued a Department of Environmental Protection. I understand that the term or condition of the general permit and/or other applicable mined and am familiar with the information submitted on this my inquiry of those individuals immediately responsible for accurate, and complete. I am aware that there are significant
Company Official Title Regulatory Supervisor	WV Departmental Protection
1	Environmental Protes
Subscribed and sworn before me this 3rd day of 400 day of 400 day	Notary Public. State of West Virginia BRITTANY R WOODY 3302 Old Elkins Road Buckhannon, WV 26201

Form WW-9 William Rodgers OHI 405H Operator's Well No. SWN Production Co., LLC Proposed Revegetation Treatment: Acres Disturbea Prevegetation pH as determined by pH test min. 2 Tons/acre or to correct to pH $\frac{6.5}{}$ 10-20-20 Fertilizer type Fertilizer amount 600 lbs/acre Mulch Hay/Straw 2.5 Tons/acre Seed Mixtures Temporary Permanent Seed Type lbs/acre Seed Type lbs/acre White Grove 15 White Grove 15 Red Top Red Top 15 15 **Orchard Grass** 20 **Orchard Grass** 20 Attach: Drawing(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided) Photocopied section of involved 7.5' topographic sheet. Comments: Title: Oil and Gas Inspector Date: 6.10-15) Yes

Field Reviewed?

Marcellus Well Drilling Procedures And Site Safety Plan

SWN Production Co., LLC

47 - 051 Well name: William Rodgers OHI 405H
Valley Grove, Quad
Liberty, District
Ohio County, West Virginia

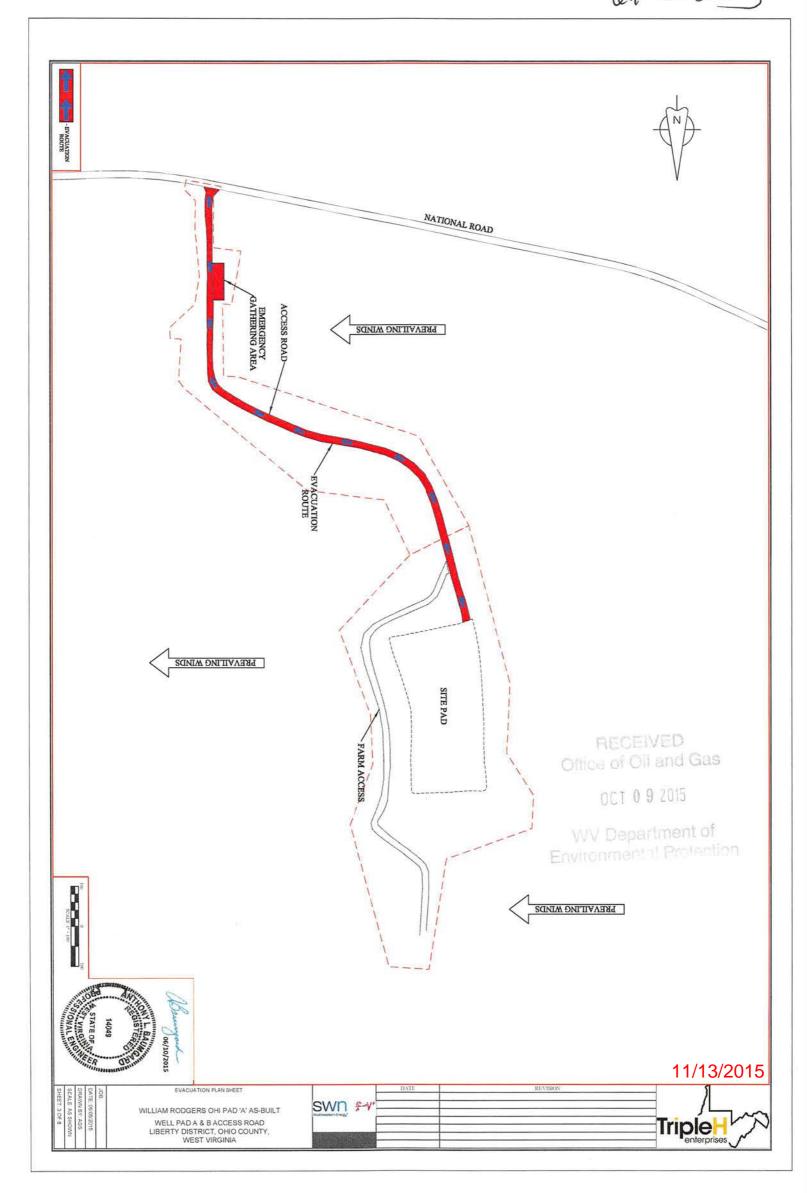
S.A. ittad bur		
Submitted by: Danielle Southall	Date:	6/3/2015
Title Regulatory Supervisor	SWN Produ	action Co., LLC
Approved by:	Date:	6.16.15
Title: O:1 + Gas Inspector	- 5	
Approved by:		
	Date:	
Title:		
SWN Production Co., LLC - Confidential		

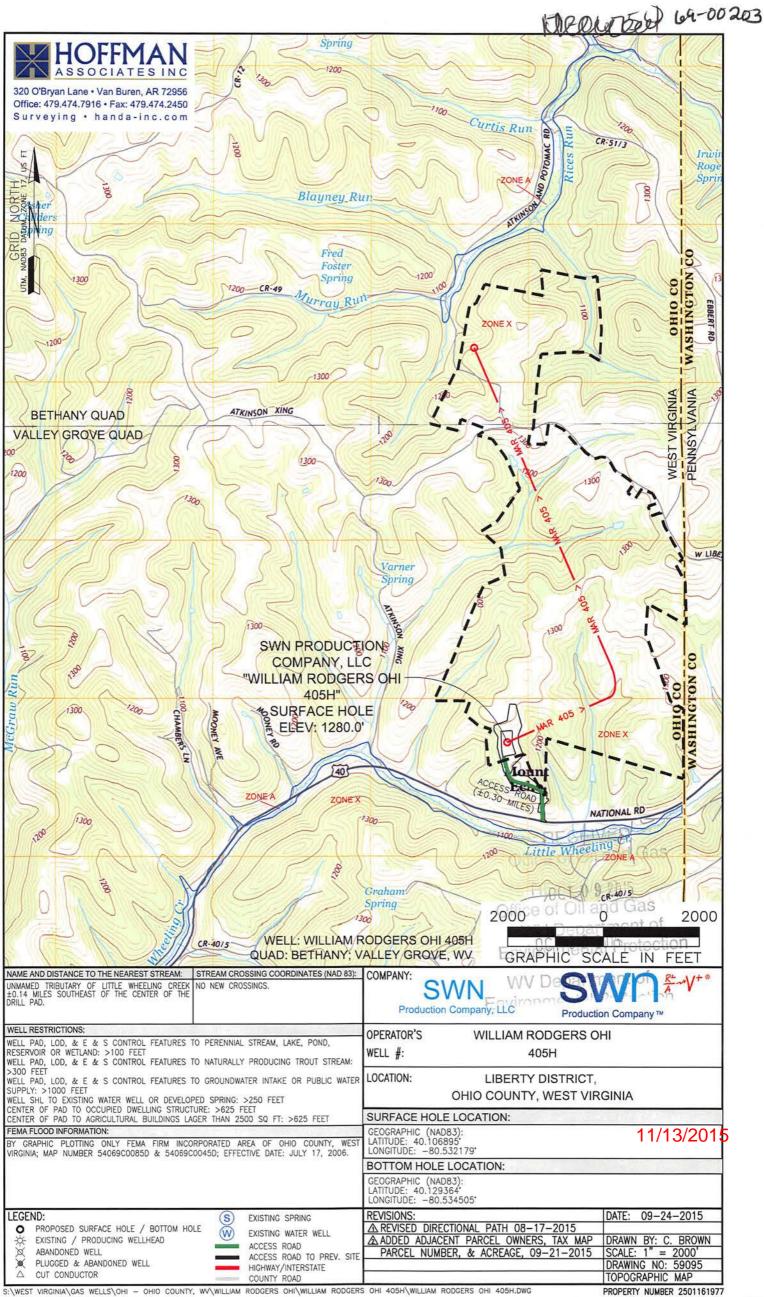
Office of Oil and Gas

OCT 0 9 2015

WV Department of
Environmental Protection

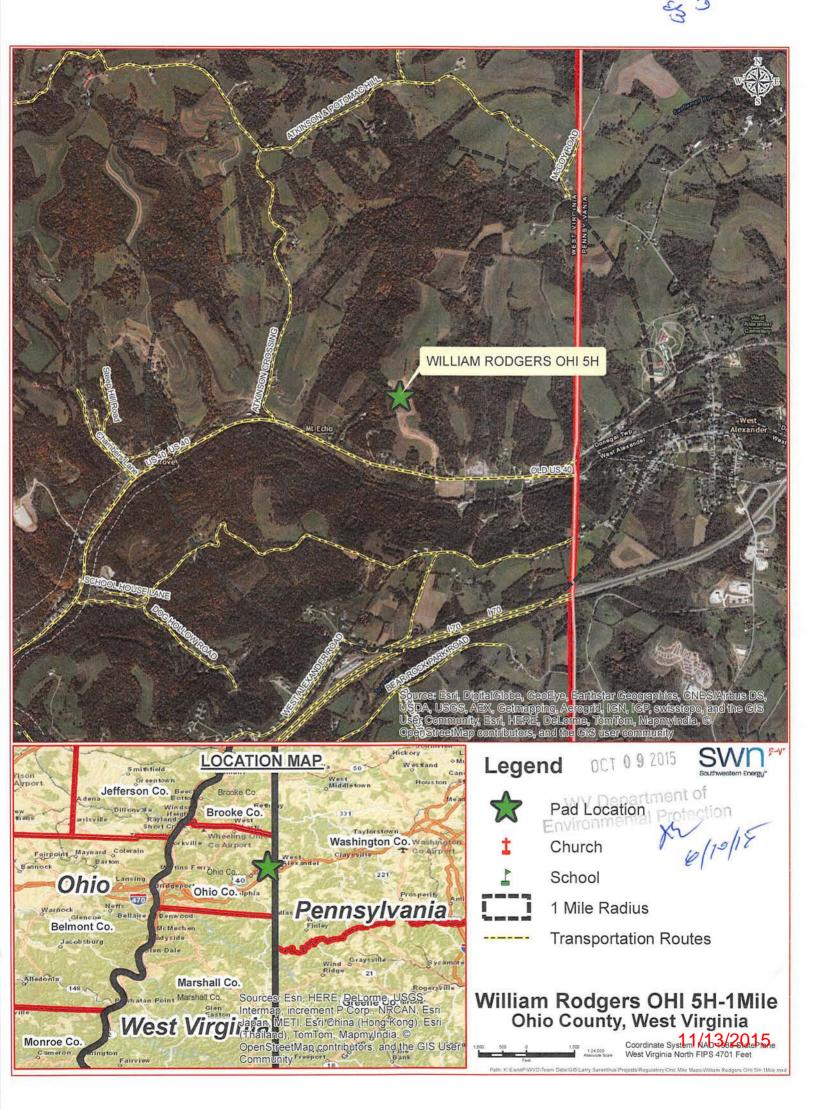


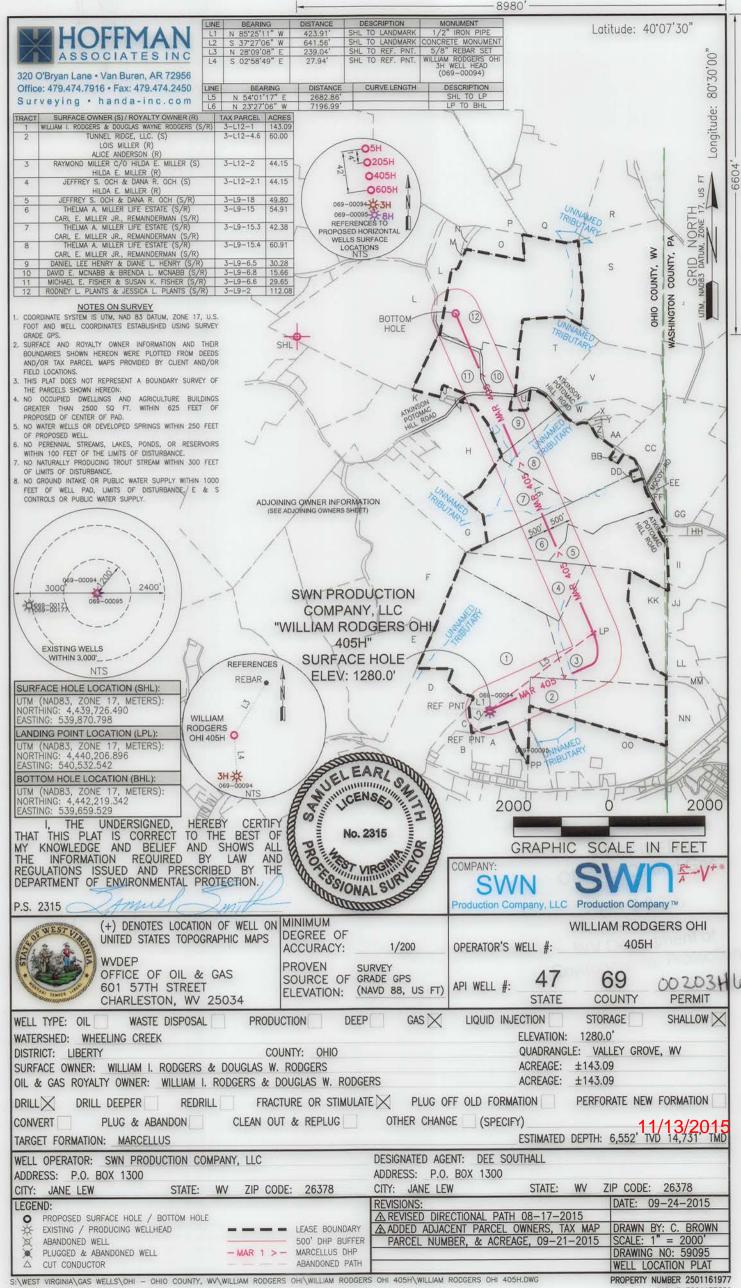




Atlachment #4

69-00203







320 O'Bryan Lane • Van Buren, AR 72956 Office: 479.474.7916 • Fax: 479.474.2450 Surveying • handa-inc.com

ADJOINING OWNERS

TRACT	SURFACE OWNER	TAX PARCEL	ACRES
Α	WILLIAM I RODGERS	3-L12-5.1	17.16
В	TODD M MAXWELL	3-L12-27	11.74
С	CATHY J CALDWELL & JERRY W CALDWELL	3-L12-6	5.52
D	MARION S MAZGAJ & WILDRED J MAZGAJ	3-L11-62	52.63
Е	JAMES R CREIGHTON & MARTHA E CREIGHTON	3-L11-29	70.05
F	TIMMY B MINCH & AMY LYNN MINCH	3-L9-12	109.75
G	WILLIAM H BALL & LARRY G BALL	3-L9-11	44.69
Н	WILLIAM E NOBLE	3-L9-14	47.28
1	DOROTHY BALL	3-L9-6.2	0.24
J	WILLIAM H BALL & DOROTHY M BALL	3-L9-6.3	2.01
K	LARRY G BALL	3-L8-42	51.77
L	ROBERT F REASS & N C REASS	3-L9-1	173.90
М	RODNEY G PLANTS & JESSICA J PLANTS	3-L9-2.3	0.44
N	RODNEY G PLANTS & JESSICA J PLANTS	3-L9-2.2	1.20
0	RODNEY G PLANTS & JESSICA J PLANTS	3-L9-2.1	12.80
Р	DELMAR K LOEW & V G LOEW	3-L6-19	143.49
Q	DELMAR K LOEW & V G LOEW	3-L6-18.2	77.07
R	MICHAEL WILHELM & JULIA E WILHELM	3-L6-20	55.89
S	DAVID J HALL & C J HALL	3-L9-3	92.18
Т	MARK S MIKESINOVICH	3-L9-6.9	44.33
U	DONALD L HENRY & J A HENRY	3-L9-6.7	2.99
V	JOHN A SCHULTZ	3-L9-6.10	53.71
W	ROBERT L COOK & FLORENCE A COOK	3-L9-6	13.28
Х	NANCY C BALL	3-L9-6.12	0.02
Υ	NANCY C BALL	3-L9-6.1	0.81
Z	NANCY C BALL	3-L9-16	1.26
AA	NANCY C BALL	3-L9-6.11	6.43
BB	MARTHA E M SHALER	3-L9-15.1	1.09
CC	LEWIS E NICHOLSON & SUSAN L NICHOLSON	3-L9-17	20.38
DD	CARL MILLER JR & CARL E MILLER III	3-L9-15.2	1.00
EE	KEVIN R WURTZBACHER & J A WURTZBACHER	3-L9-17.3	1.09
FF	WILLIAM R WURTZBACHER & JEAN W WURTZBACHER	3-L9-17.1	4.25
GG	WILLIAM R WURTZBACHER & JEAN W WURTZBACHER	230-008-00-00-0001-00	70.32
HH	JOHN C DAVIS & ANNA M DAVIS	230-008-00-00-0003-00	2.50
11	LARRY LEE RODGERS	230-008-00-00-0004-03	21.26
JJ	ROBERT E RODGERS	230-008-00-00-0004-00	42.74
KK	TUNNEL RIDGE LLC	3-L12-3	23.59
LL	TUNNEL RIDGE LLC	230-007-00-00-0011-01	11.58
MM	TUNNEL RIDGE LLC	230-007-00-00-0012-05	7.55
NN	HILDA E MILLER	230-007-00-00-0012-00	24.35
00	JOSEPH TANKOVITS & ANITA M TANKOVITS	3-L12-4	63.37
PP	JACK M DILLIE & J DILLIE	3-L12-4.1	9.63

ECEIVED of Oil and Gas

CT 0 9 2015

WV Department of

11/13/2015

REVISIONS:	COMPANY:	SWN Production Company, LLC	SWIP Production Company	A TM
	OPERATOR'S	WILLIAM RODGERS OHI		DATE: 09-24-2015
	WELL #:	405H		DRAWN BY: C. BROWN
	LOCATION:	LIBERTY DISTRICT, OHIO COUNTY, WEST VIRGII	NIA	SCALE: N/A DRAWING NO: 59095 ADJOINING OWNERS

69-00003

Million Indegin ond Design Whyten March Design Mayor Bedgen March Lack		The second second second second					
William Rodgens and Douglat Whyres SAR2025 2-26330-000 William Rodgen and Douglat Whyres SAR2025 SAR	224/162	SWY Production Company, LLC					
Million Indepton and Design (Written) MAZINES 2-35130-000 Willion Indepton (Written) MAZINES Constant in Apparent Li. C.		Chosapeate Appellatita, LL.C.	Rodney L. Plants and Jessica L. Plants		117.08	HOWING C. PARTS and Jensey L. Prints	7
### 1942-14 William Indegen and Decign Weight Weight Decign See Dec	635/638	SWN Exchange Titleholder, LLLC.					1
### 1912-14. William Indegen and Design Weight Weight Design and Design Weight Weight Design and Design Weight Weight Design and Design Weight Design and Design Weight Design and Design Weight Design and Design Weight Weight Design and Design Weight	880/539	SWN Production Company, L.L.C.					
### 121-14 William i Rodgem and Dougle i Whyme ####################################	822/K33	Statell USA Orations Properties Inc.					
### 12-12.1 Willen i Redgen and Dougle i Whyter #### 12-20 Willen i Redgen and Dougle i Whyter ###################################		Cherapante Appetochie, L.L.C.					
### 141-14.0 Willen i Redgen and Dougle i Wayne 9 140 Willen i Rodgen and Dougle i Wayne Redgen 1 150-sept Mage Re		Barriera Barrieraren	Michael E. Fisher and Suzan K. Fisher	-	29,65	Affrica E. Fisher and Susan E. Fisher	13 3-19-EL
### 1942-14 William Rodgen and Danglat Weryen 14,0275 2-55,030-000 William Rodgen and Danglat Waysen Bodgen Tribung Nodes Tribung		Carl Seaturates Commerce 110	CONTRACTOR STATE CARRIED IN SACLEDO		1		
Millon Redges	i	SWN Production Company, LLC	TH Shergy Holding, LLC.	1		Savid E. Methybh and Regards 1. savenship	3.00
### 1412-14 William Indepters and Desight Weights 140,2000 1-20,0000-000 William Recigns and Desight Weights 1-20,0000-000-000 1-20,0000-000-000 1-20,0000-000-000 1-20,0000-000-000-000 1-20,0000-000-000-000 1-20,0000-000-000-000 1-20,0000-000-000-000 1-20,0000-000-000-000 1-20,0000-000-000-000-000-000-000-000-000		4					
Hallani I. Indepen and Dasgist Wayren 1402-255 Bergen Bergen Bergen Friencey Holden, LLC Bergen Bergen Friencey Holden, LLC Bergen Bergen Friencey Holden, LLC Bergen Ber	TECNOS -	THE SACRY Hotelbra, LL.C.	Daniel Lee Henry and Diane L. Henry	1-385511-000	30.278	Deaded Lee Heary and Dispe L. Heary	2,8-61-6
### 19-13-14 Willem Redgens and Danglat Weylers 19-13-14-15 Willem Redgens and Danglat Weylers and Danglat Weylers Redgens to Bengjens Verylers Redgens Telescopy Lick Construction on Prophetics	14,752	SWN Exchange The holder, L.L.C.					
### 12-2.1 Willem: Redgens and Designs Weigher ####################################	1,000	SWN Production Commany, 14.C.					
### 1412-13 William Modgan and Daugd v Wypra		Consultation of the Consul	Ord E. Miller Jr. Remoind roman	A-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	***************************************	Carl E. Miller Jr. Remelectermen	
### 143-23 William i. Rodgen and Daugis i Wayne (Anders) 1-35108-000 William i. Rodgen and Daugis i Wayne Redgen (Tribung) Midde (LLC 1438) ###################################	l	SALI CONTRACT RESIDENCY CONTRACT	The state of the s	THE PARTY OF	STEP CO	Thelma A. Miller Life Estato	PSTON
### 1942-14 William Modgan and Daugd v Wypra 144,0575 1-25,050-000 William Red-gave and Daugdu Wypra Red-gave Tribings/ Modgan LLC Modgan Red-gave and Daugdu Wypra Red-gave Tribings/ Modgan LLC Modgan Red-gave and Daugdu Red-gave and Daugdu Red-gave and Daugdu Red-gave and	2002	The production residents from					
### 143-24 William i. Rodgen and Daugis i Wayne Magne Redgen (Pfilmagy) Milliam i. Rodgen Redgen (Pfil	42//23	States of the state of the state of the states of the stat	Carlot and Decimentalization				
### ##################################		Coerspeans Apparatus, LLC,	Court of the Court	Avenanthemark		Carl E. Miller &, Rememberrasen	
### 12-2.5 William Rodgen and Daugist Whyten \$4,0005 2-35,000 William Rodgen and Daugist Whyten Rodgen Rifferey/bioling LLC 12.95	l	The second second second	Theken A Miller Planta	WC738E1E1	48.00	Theims A. Miller Life Estate	CTICH
#125-21 William Rodgens and Daug & Whyten \$4,0205 2,35,030 400 William Rodgens and Daug & Whyten Rodgen \$1,000 killiam Rodgens and Daug & Whyten Rodgen \$1,000 killiam Rodgens Rodgen \$1,000 killiam Rodgens Rodgen \$1,000 killiam Rodgens Rodgen \$1,000 killiam Rodgens Rodgen \$1,000 killiam \$1,000 killiam Rodgens Rodgen \$1,000 killiam Rodgens Rodgens \$1,000 killiam	4,000	SMM Sydney The bolder 1 C					
#122-1.0 William I. Rodgens and Daugis I Wayner (1400ge) 100 William I. Rodgens and Daugis I Wayner Rodgen (1700ge) 100 Register Rod	20,000	State Brooker has Company 1 1 C					
#125-21 William Rodgen and Daugs's Wirpms 143275 2-35108-000 William Rodgen and Daugs's William Rodgen and Daugs's Wirpms 143275 2-35108-000 William Rodgen and Daugs's Wirpms 14328-100 14328			Cart E. Willer Ir. Paraeladerman			Carl E, Miller is, Remeladerman	
#122-13 William I. Rodgens and Daugis i Wayner (Magne Rodgen) (Milliam I. Rodgens Rodgen) (Milliam I. Rodgen) (Milliam I. Rodgens			Teelma A. Miller Ufa Cristo	1-913/259-000	1615	Thekma A. Miller Life Estato	3-19-35
#125-21 William Rodgen and Daugist Whyten 143275 2-35108-000 William Rodgen and Daugist Whyten Rodgen 17th angly Moding LLC 1235 #125-4.6 Increase Malgaritic 20 1-27285-000 Lds Milliam Rodgen and Daugist Mysteriam LLC 1235 #125-4.6 Increase Malgaritic 20 1-27285-000 Lds Milliam Rodgen and Rodgen a	CE2/288	SAM Exchange Title habiter, LLC.					
#122-1 William I. Rodgens and Daugist Whyten 144205 1-35308-000 William I. Rodgens Rodgen Tribings/Moding, LLC. 1445 Redges Rodgen IIC. 1445 Redges Rodges Rodgen IIC. 1445 Redges Rodges Rodge	8457745	SWN Production Comments, LLC					
#125-21 Willam Redgens and Design Weylers 145.0005 3-35.000-000 Willam Redges and Redges Wayne Redges Tribusgy Modes LLC. 15.0% Chromate Redges Redge		State USA Orshoon Properties Inc.					
#122-1 William I. Rodgens and Daugis i Wayner (1400g) 1400g	1	Characterine Appropriate C. C.	Jeffrey S. Och and Dana R. Och	47-402153-000	Per	Jeffrey S. Och and Dana R. Och	Wishe ts
#122-21 William Rodgen and Daugist Whyten 143275 2-35308-000 William Rodgen and Daugist Whyten Rodgen 17th angly Modes, LLC 1235	247,678	SWE Protested Tipehaday, C. C.					
#12-2.1 William I. Rodgens and Daugist Whyters 14.0005 1.450.004 William I. Rodgens Rodgen Tribings/Modes_LLC. 18.005 Rodgen Rodgen Tribings/Modes_LLC. 18.005 Rodgen Rodgen Rodgen Tribings/Modes_LLC. 18.005 Rodgen Rodge		SWIS Production Company LLC					
#122-21 William Rodgen and Daugist Winjam Rodgen Rodge	200	Stated this content branching in					
#12-2.1 William I. Rodgam and Daugis i Wayner 148208 148208 148208 148209 187209 148209 187209 148209 187209 148209 187209 148209 187209		Chesanoshe danadarida 11.0					
#122-1 William Rodgens and Daugist Whyten 1442075 1-35108-000 William Rodgens and Daugist Whyten Rodgen Rifflangy Moding LLC 1428 Refgens Rodgens and Daugist Whyten and Daugist Whyten Rodgens Rifflangy Moding Representation Language Rodgens Rifflangy Moding Representation Language Rodgens Rifflangy Moding Representation Language Rodgens Rifflangy Moding Representation LLC SHIP Rodgens Rifflangy Moding Rifflangy LLC SHIP Rodgens Rifflangy Moding Rifflangy LLC SHIP Rodgens Rifflangy LLC SHIP Rodgens Rifflangy LLC SHIP Rodgens LLC SHIP Language Rodgens LLC SHIP Language Rodgens LLC SHIP Language Rodgens LLC SHIP Language LLC SHIP Language LLC SHIP Language LLC SHIP LLC SHI		Triffe o trave the belongs of the C	HERO E, MITHER	DCD-65ZDDDAAA	47.145	Jeffrey S. Och and Dags R. Och	d armen
William I. Rodgers and Dougles Whyters 143.000 1-385.000-000 William I. Rodgers and Dougles Whyter Redgers (Relating) Midday, LLC. Gestelast Aspessible, LLC. France Redgers (Redgers (Redgers)) France Redgers (Redgers) France Redgers (Redger	549/257	SWN Endunge Thishelder, LL.C.					
William I. Rodgers and Doegles Whylers 1451075 1-85108-900 William I. Rodgers and Doegles Whylers Refregers Conspicial support (LLC See See Language Line Conspicial support (LLC See See Language Line See Language See Language See Lan	\$65/776	SWII Production Company, L.L.C.					
William I. Rodgers and Doegles Whyper 243.000 1-385.008-000 William I. Rodgers and Doegles Wayne Redgers Titlescay Joulday, L.L.C. 1828 Consessable Aspectation. L.L.C. Consessable Aspectation. L.L.C. Consessable Aspectation. L.L.C. Consessable Aspectation. L.L.C. 1828 Consessable Aspectation. L.L.C. 1828 Consessable Aspectation. L.L.C. 1828 Consessable Aspectation. L.L.C. 1828 Consessable Aspectation. L.L.C. 1829 C	834/437	Status USA Contacts Properties Inc.					
William I. Rodgers and Dougles Whyters 255.0025 1-055.000-000 William I. Rodgers and Dougles Whyters Redgers Trificangy Joséday, LL.C. Stand Josépas Mayaba Applicable, LL.C. STAN Production Company, LL.C. STAN STAN Production Company, LL.C. STAN STAN STAN STAN STAN STAN STAN STAN	Ma/TES	Chesspeake Appalathia, LL.C.					
William I. Rodgers and Doegles Whyter 243.000 1-385.000-000 William I. Rodgers and Doegles Wayne Redgers Titlescay Joulday, L.L.C. Gestpass depails by the Rodgers and Congress depails and the Rodgers and Rodge		Tritaergy Haldings, LLC	ISION L. Miller	CCO-6STOODBAN	44,345	substitute mosts the totals of united	1
William I. Rodgers and Doegles Whylers 1451075 3-85108-900 William I. Rodgers and Doegles Wayers Redgers II.C. 14585 Geriges Redgers R							
William I. Rodgers and Dougles Whyters 253.0025 1-053.000-000 William I. Rodgers and Dougles Wayner Redgers (Tribungy) John LLC. State July Consessable Appeloid LLC. State July Consessable Appeloi	881/280	SWIN Production Company, LLC.					
William I. Rodgers and Doegles Whylere 14329725 3-355108-900 William I. Rodgers and Doegles Wayers Redgers Midney Midney Midney Redgers and Doegles Wayers Redgers LLC. Statistical Authority Statistical Authorit		SWN Duchtries Titleholder, LLC					
William I. Rodgers and Douglas Whyters 14850025 1-885008-000 William I. Rodgers and Douglas Wayne Rodgers Titlescay) Askdarg, LL.C. Stand U.S. Consessable Appelator, LL.C. STAN Production Company, LL.C. STAN Production Company, LL.C. 1000446 U.S. Companie Report Titlescale, LL.C. STAN Production Company, LL.C.		Charageabo Appaladda, LLC	Allos Anderson	3-268339-000	8	Tunnel Ridge LLC	37-27-6
William I. Rodgers and Doegles Whyters 2505025 3-050000-000 William I. Rodgers and Doegles Wayne Redgers Titlescay Joulday, L.L.C. 36255 Gestgers Consequent Appelois to Consequent Appelois to Consequent Appelois to SIRR Prediction Congests, L.L.C. 1989 Treased Redge LLC. 2509 Treased Redge LLC. 2509 Treased Redge LLC. 3509 Treased Redge LLC	267/260	SAM Electrodol cambras, FFC					
William I. Rodgers and Doegles Whypre 255.0002 1-055.000-000 William I. Rodgers and Doegles Wagnes Rodgers Triffengy Johdang, L.L.C. 255.000 General Mayer Rodgers L.L.C. Steel Use of American Language Mayer Rodgers L.C. Steel Use of American Company, L.L.C. 5989 Production Company, L.L	111/201	State Consulta (Brandons), CCC					
William I. Rodgers and Doegles Whyters 1505/075 3-05/000-000 William I. Rodgers and Doegles Wayne Redgers Refinency Joudes, LLC. 162/05 Georges Constant Application LLC Constant Application LLC Georges Constant Application LLC Georges Constant Application Constant Applicati		Contract of the last of the la					
William I. Rodgers and Desglas Whyters 14551918-000 William I. Rodgers and Desglas Wayner Rodgers Tritisangy Johdeng, LLC, 18255 Bardgers Gressest Apparatus Apparatus LC, Standillas Onders Properties of SYM Production Company, LLC, 1874 Productio		Charles Annabally 110	tot Miller	1-272655-000	8	Tunnei Sidge LLC	9.4.CL
Willen I. Rodgens and Doegla Weylne 160,0075 3-951089-000 William I. Rodgens and Doeglas Wayne Rodgens of Telescopy Modes, LLC. 120% Redgens Consessat Aspainable, LLC. 1800 UNLO General Respects to the Consessat Aspainable, LLC. 1800 UNLO General Respects to the Consessat Aspainable, LLC. 1800 UNLO General Respects to the Consessat Aspainable Consessat C							
Willen I Rodgen and Doegle Wayne 140.0075 1-00.008-000 Willen I Rodgen and Doegles Wayne Rodgen Tatheney) Holding LLC, 160.05 Redgen and Doegles Wayne Rodgen and Doegles Wayne Rodgen LLC, 160.05 Redgen and Doegles Wayne Rodgen LLC, 160.05 Redgen and Doegles Wayne Rodgen LLC, 160.05 Redgen and Doegles Wayne Rodgen Tatheney Holding LLC, 160.05 Redgen and Doegles Wayne Rodgen LLC, 160.05 Redgen Rodgen Rodge	118/23	SHAN PROGRESSON COMPANY, LLCC.					
Willem I Bodgan and Douglai Weipre 160,0075 3-051309-000 William I Rodgan and Douglai Weipre Bodgan Trifesery Modes LLC, 30.0% Redgen Chausata Applicata, LLC,	244/220	a terem care controller troperates rac					
William I. Rodgues and Dengler Weigne 150.0075 1-35.1169-000 William I. Rodgors and Dengles Weigner Redgers Trittengy Holding LLC, 18.076	20/00	Christian apparette, Line					
William I. Rodgan and Designs Whythe 182000 1-351089-000 William I. Rodgan and Designs What Desi		turnetal second rive	Service and the service and th			Bodgers	
	١		William L Sodinors and Doubles Washin Badana	1-351089-000	143,0975	William I. Rodgers and Dongles Wayne	Table 1

dhaif to and a sale a pail of the State of Wast Vagishia Olas and Hall Yay.
William Delayer Herchard (Marchal Olas delayer Herchard) a cost.
William Delayer Herchard (Marchal) a cost.
William Delayer Herchard (Marchal) a cost.



Jane Lew, WV 26378 PHONE: (832) 796-1610

June 3, 2015

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

RE: SWN's proposed William Rodgers OHI 5H, William Rodgers OHI 205H, William Rodgers OHI 405H & William Rodgers OHI 605H in Ohio County, West Virginia, Drilling under Atkinson Potomac Hill Road

Dear Ms. Adkins:

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

Thank you.

Sincerely,

n-C

Robert Walter Senior Landman SWN Production Company, LLC 10000 Energy Drive Spring, Texas 77389

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

WV Department of Environmental Protection

11/13/2015

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

	<u>NOTICE</u>	CERTIFICAT	<u>ION</u>		
Date of Notic	ce Certification: WILL		•	Well No	- 00203 0. William Rodgers OHI 405H
NY-42 1 1			Well Pad N	Name: _	William Rodgers OHI Pad
	neen given: the provisions in West Virginia Code § 22-6A, the tract of land as follows:	ne Operator has pro	vided the rec	luired pa	rties with the Notice Forms listed
State:	WV		Easting:	539870.7	98
County:	69- Ohio	UTM NAD 83	Northing:	4439726.	490
District:	3- Liberty	Public Road Acc	_	Atkinson	Potomac Hill Road
Quadrangle:				William R	odgers
Watershed: Little Wheeling Creek					
information re of giving the requirements Virginia Code	ed the owners of the surface described in sub- equired by subsections (b) and (c), section sixte surface owner notice of entry to survey purse of subsection (b), section sixteen of this artice & § 22-6A-11(b), the applicant shall tender prochave been completed by the applicant.	en of this article; (in ant to subsection the were waived in	ii) that the real (a), section to writing by	quiremer ten of th the surfa	nt was deemed satisfied as a result is article six-a; or (iii) the notice ace owner; and Pursuant to West
that the Ope	West Virginia Code § 22-6A, the Operator has rator has properly served the required parties vecK ALL THAT APPLY		this Notice C	ertificati	OOG OFFICE USE ONLY
☐ 1. NO	FICE OF SEISMIC ACTIVITY OF NOT SEISMIC	TICE NOT REQUI			RECEIVED/NOT REQUIRED
☐ 2. NO	TICE OF ENTRY FOR PLAT SURVEY or 🔳	NO PLAT SURV	EY WAS CO	ONDUC	TED RECEIVED

SEISMIC ACTIVITY WAS CONDUCTED 2. NOTICE OF ENTRY FOR PLAT SURVEY or NO PLAT SURVEY WAS CONDUCTED 3. NOTICE OF INTENT TO DRILL or NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH) 4. NOTICE OF PLANNED OPERATION 5. PUBLIC NOTICE NOT REQUIRED RECEIVED RECEIVED RECEIVED RECEIVED

Required Attachments:

■ 6. NOTICE OF APPLICATION

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.

Very Corport against of Environment of Profession

☐ RECEIVED

WW-6AC (1/12)

69-00203

Certification of Notice is hereby given:

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

Well Operator: SWN Production Co., LLC

By:

Dee Southall

Its:

Regulatory Supervis

Telephone:

832-796-1614

Address:

P.O. Box 12359

304-471-2497

Spring, TX 77391-4954

Facsimile:

Email:

Dee_Southall@swn.com

NOTARY SEAL

OFFICIAL SEAL Notary Public, State of West Virginia BRITTANY R WOODY 3302 Old Elkins Road

Buckhannon, WV 26201 mission expires November 27, 2022 Subscribed and sworn before me this 3

Notary Public

My Commission Expires

Oil and Gas Privacy Notice:

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

Office of Oil and Gas

OCT 0 9 2015

Environmental Protection

API NO. 47- 69 - 60003
OPERATOR WELL NO. William Rodgers OHI 405H
Well Pad Name: William Rodgers OHI Pad

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

Notice Time Requirement: notice shall be provided no later that	in the filing date of permit application.
Date of Notice: Date Permit Application Filed:	9/15
PERMIT FOR ANY WELL WORK CONSTRUCTION OF A	PROVAL FOR THE AN IMPOUNDMENT OR PIT
Delivery method pursuant to West Virginia Code § 22-6A-10	(b)
	OD OF DELIVERY THAT REQUIRES A IPT OR SIGNATURE CONFIRMATION
sediment control plan required by section seven of this article, and the surface of the tract on which the well is or is proposed to be located and gas leasehold being developed by the proposed well work, it described in the erosion and sediment control plan submitted pursual operator or lessee, in the event the tract of land on which the well proposed well work, if the surface tract or tract well work, if the surface tract is to be used for the placement, constraint work, if the surface tract is to be used for the placement, constraint impoundment or pit as described in section nine of this article; (5) A have a water well, spring or water supply source located within one provide water for consumption by humans or domestic animals; and proposed well work activity is to take place. (c)(1) If more than three subsection (b) of this section hold interests in the lands, the applicant records of the sheriff required to be maintained pursuant to section provision of this article to the contrary, notice to a lien holder is not	or signature confirmation, copies of the application, the erosion and the well plat to each of the following persons: (1) The owners of record of ated; (2) The owners of record of the surface tract or tracts overlying the of the surface tract is to be used for roads or other land disturbance as ant to subsection (c), section seven of this article; (3) The coal owner, proposed to be drilled is located [sic] is known to be underlain by one or acts overlying the oil and gas leasehold being developed by the proposed function, enlargement, alteration, repair, removal or abandonment of any any surface owner or water purveyor who is known to the applicant to thousand five hundred feet of the center of the well pad which is used to a (6) The operator of any natural gas storage field within which the elements in common or other co-owners of interests described in the eight, article one, chapter eleven-a of this code. (2) Notwithstanding any notice to a landowner, unless the lien holder is the landowner. W. Va. rovide the Well Site Safety Plan ("WSSP") to the surface owner and any
☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice	☑ Well Plat Notice is hereby provided to:
☑ SURFACE OWNER(s) Name: William I. Rodgers & Douglas W. Rodgers	☑ COAL OWNER OR LESSEE Name: Alliance Resources GP, LLC %Christine St. John
Address: 94 McCoy Road	Address: 2596 Battle Run Road
Valley Grove, WV 26060	Triadelphia, WV 26059
Name: Jack Dillie	COAL OPERATOR
Address: PO Box 4	
Valley Grove, WV 26060	Name:Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)	Address.
	☑ SURFACE OWNER OF WATER WELL
Name:	AND/OR WATER PURVEYOR(s)
Address:	Name: *** See Attachment #1
N	
Name:	Address:
Address:	DODED A TOD OF ANY NATURAL CAS STORAGE FIELD
- CLIDE LOE ONNIED (-) (I	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
SURFACE OWNER(s) (Impoundments or Pits)	Name: Office of Oil and Gas
Name:	Address:
Address:	*DI W I IEC IC OCT A A ZIME
	*Please attach additional forms if necessary 9 ZU15



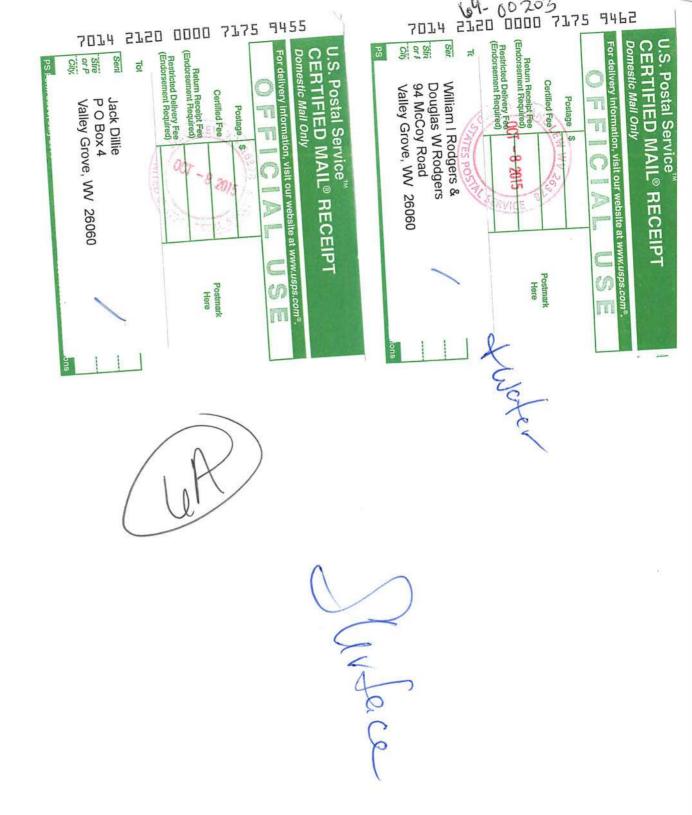
69-00203

Map	Parcel #	Landowner Name	Landowner Address	
L11	62	Mildred & Marion Mazgaj	PO Box 206, Valley Grove, WV 26060	
L12	1	William & Douglas Rodgers	94 McCoy Road, Valley Grove, WV 26060	
L12	4	Joseph & Anita Tankovits	11519 National Road, Valley Grove, WV 26060	9
L12	5.1	William & Douglas Rodgers	94 McCoy Road, Valley Grove, WV 26060	
_12	6	Cathy & Jerry Caldwell	182 Caldwell Lane, Valley Grove, WV 26060	
L12	27	Todd Maxwell	11149 National Road, Valley Grove, WV 26060	
L12J	5.2	William & Douglas Rodgers	94 McCoy Road, Valley Grove, WV 26060	1

Office of Oil and Gas

OCT 0 9 2015

WV Department of





(John)

47-069-00203 405H

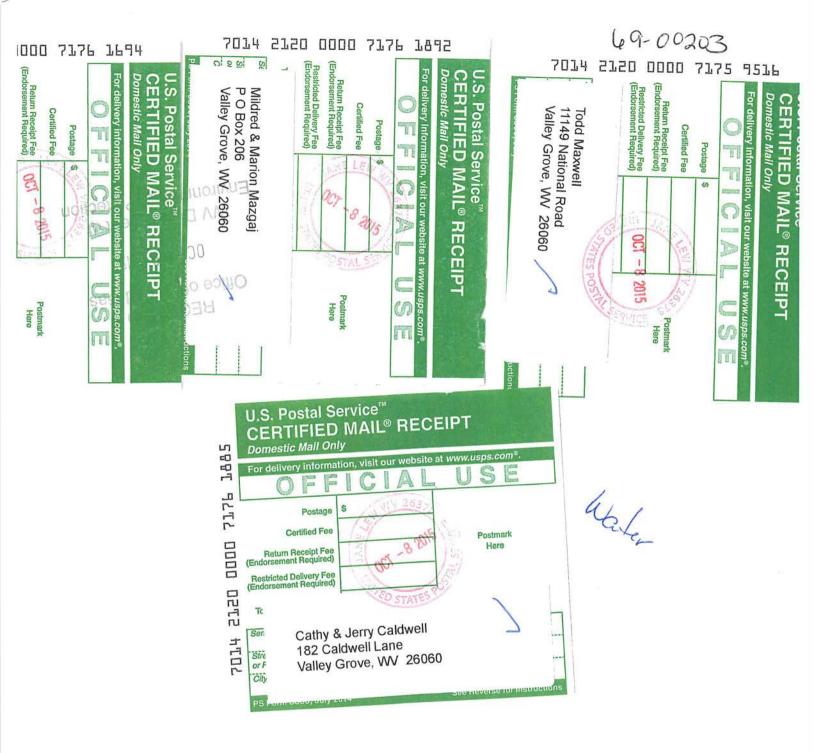


Water

RECEIVED
Office of Oil and Gas

OCT 1 3 2015

WV Department of Environmental Protection



API NO. 47- 69 - 00203
OPERATOR WELL NO. William Rodgers OHI 405H
Well Pad Name: William Rodgers OHI Pad

Notice is hereby given:

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

This Notice Shall Include

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

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

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

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

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

Well Location Restrictions

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

API NO. 47-69 OPERATOR WELL NO. William Rodgers OHI 405H Well Pad Name: William Rodgers OHI Pad

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

Water Well Testing:

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

Water Testing Laboratories:

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

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

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

Written Comment:

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

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

MEDRIVED Office or Cult and Gas

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. V/V Department of Environment of Patronian 11/13/2015

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.

Office of Oil and Gas

OCT 0 9 2015

API NO. 47-69 - 60 203

OPERATOR WELL NO. William Rodgers OHI 405H

Well Pad Name: William Rodgers OHI Pad

Notice is hereby given by:

Well Operator: SWN Production Co. LLC

Telephone: 304-884-1613
Email: Dee_Southall@swn.com

Address: P.O. Box 1300

Jane Lew, WV 26378

Facsimile: 304-471-2497

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.

OFFICIAL SEAL
Notary Public, State of West Virginia
BRITTANY R WOODY
3302 Old Elkins Road
Buckhannon, WV 26201
My commission expires November 27, 2022

Subscribed and sworn before me this

__day of_

Notary Public

My Commission Expires

RECEIVED
Office of Oil and Gas

OCT 0 9 2015

WV Department of

11/13/2015

69-60203

Operator Well No. William Rodgers OHI 405H

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 Ro Date of Notice:	equirement: Notice shall be provi	ded at least TEN (10) days prior to filing a te Permit Application Filed:	permit application.
Delivery metho	od pursuant to West Virginia Co	de § 22-6A-16(b)	
☐ HAND DELIVER	CERTIFIED MAIL Y RETURN RECEIP	T REQUESTED	
receipt requeste drilling a horize of this subsection subsection may and if available,	d or hand delivery, give the surface ontal well: <i>Provided</i> , That notice on as of the date the notice was pro- be waived in writing by the surface	ten days prior to filing a permit application, the owner notice of its intent to enter upon the given pursuant to subsection (a), section the ovided to the surface owner: <i>Provided, how</i> the owner. The notice, if required, shall inclinated address of the operator and the operator.	ne surface owner's land for the purpose of en of this article satisfies the requirements vever, That the notice requirements of this ude the name, address, telephone number,
	odgers & Douglas W. Rodgers	Name:	
Address: 94 McC		Address:	
Valley Grove, WV 26	060		
the surface own State: County: County: District: Quadrangle:		otice is hereby given that the undersigned g a horizontal well on the tract of land as fo UTM NAD 83 Basting: Northing: Public Road Access: Generally used farm name:	
facsimile numb related to horize	est Virginia Code § 22-6A-16(b) er and electronic mail address of contal drilling may be obtained fro	this notice shall include the name, addr f the operator and the operator's authorize om the Secretary, at the WV Department of 304 (304-926-0450) or by visiting www.de	ed representative. Additional information f Environmental Protection headquarters,
Notice is here	by given by:		DECEIVED GAS
	SWN Production Co, LLC	Authorized Representative:	Danielle Southall and Gas
Address:	PO Box 1300, 179 Innovation Drive	Address:	PO Box 1300, 179 Innovation Drive
	Jane Lew, WV 26378	TELEFORM STATES	Jane Lew, WV 26378
Telephone:	304-884-1615	Telephone:	304-884-1614
Email:	Steve_Perkins@swn.com	Email:	Danielle_Southall@swn.com
Facsimile:		Facsimile:	MN Dehan Bloreom
			Environmental

Oil and Gas Privacy Notice:

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

WW-6A5 (1/12)

Operator Well No. William Poolgers OH 405H

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

Notice Time Date of Notic	Requirement: notice shall be provided no later te: 06/04/2015 Date Permit Application	r than the filing ation Filed:	date of permit	application.
Delivery met	hod pursuant to West Virginia Code § 22-6A	A-16(c)	1	2 1
	FIED MAIL HATER RECEIPT REQUESTED DEI	ND LIVERY		
return receipt the planned of required to be drilling of a l damages to th	V. Va. Code § 22-6A-16(c), no later than the requested or hand delivery, give the surface of peration. The notice required by this subsect provided by subsection (b), section ten of this norizontal well; and (3) A proposed surface use surface affected by oil and gas operations to the serious provided by this section shall be given to the	wner whose land tion shall include article to a surface se and compense the extent the da	I will be used for de: (1) A copy ace owner whos ation agreemen amages are comp	or the drilling of a horizontal well notice of of this code section; (2) The information we land will be used in conjunction with the at containing an offer of compensation for pensable under article six-b of this chapter.
(at the address Name: William I.	by provided to the SURFACE OWNER(s) is listed in the records of the sheriff at the time of Rodgers & Douglas W. Rodgers	Name:		
Address: 94 Mo Valley Grove, WV		Address	s:	
	Vest Virginia Code § 22-6A-16(c), notice is here the surface owner's land for the purpose of dril West Virginia	lling a horizonta	I well on the tra	
County:	Ohio	UTM NAD 8	Northing:	4,439,726.490
District:	Liberty	Public Road		National Rd.
Quadrangle:	Valley Grove	Generally use	ed farm name:	
Watershed:	Wheeling Creek			
to be provide horizontal we surface affect information r	Vest Virginia Code § 22-6A-16(c), this notice sold by W. Va. Code § 22-6A-10(b) to a surface ll; and (3) A proposed surface use and compered by oil and gas operations to the extent the elated to horizontal drilling may be obtained located at 601 57th Street, SE, Charleston	ce owner whose isation agreement damages are confrom the Secret	e land will be unt containing an ompensable und ary, at the WV	ased in conjunction with the drilling of a offer of compensation for damages to the der article six-b of this chapter. Additional Department of Environmental Protection
Well Operato	: SWN Production Company, LLC	Address:	PO Box 1300, 179 li	nnovation Drive
Telephone:	304-884-1614		Jane Lew, WV 2637	**************************************
Email:	Danielle Southall@swn.com	Facsimile:	304-472-4225	· · · · · · · · · · · · · · · · · · ·
Oil and Gas	Privacy Notice:			RECEIVED Gas

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.

U.S. Postal ServiceTM CERTIFIED MAILT RECEIPT 2040 유노명 2015 Postage Certified Fee 0007 Postmark Return Receipt Fee (Endorsement Required) Here Restricted Delivery Fee (Endorsement Required) 01.50 Total Postage & Fees \$ William Rodgers & Douglas Rodgers 7074 Street, Apt. No.; 94 Mc Coy Rd. City, State, ZIP+4 Cley Grove, WV 26060
PS Form 3800, August 2006
See Reverse for Instructions

69-00203

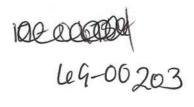


RECEIVED Office of Oil and Gas

OCT 0 9 2015

WV Department of Environmental Protection





WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways 1900 Kanawha Boulevard East • Building Five • Room 110

Charleston, West Virginia 25305-0430 • (304) 558-3505

Paul A. Mattox, Jr., P. E. Secretary of Transportation/ Commissioner of Highways

June 25, 2015

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

Subject: DOH Permit for the William Rodgers Pad, Ohio County William Rodgers OHI 405H

Dear Mr. Martin,

Earl Ray Tomblin

Governor

The West Virginia Division of Highways has transferred Permit #06-2011-0443 for the subject site to Southwestern Energy for access to the State Road for the well site located off of US 40 F in Ohio County.

The operator has signed an 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 January 3, 2012.

Very Truly Yours,

Dany K. Clayton

Gary K. Clayton, P.E.and Gas Regional Maintenance Engineer

Central Office Oil &Gas Coordinator

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

File

Wy Department of - antal Protection



Supplier Name	Product Name	Product Use	Chemical Name	CAS Number
		Ammonium Chlo Ethanol Biocide Glutaraldehyde (Pentanediol)	Didecyl Dimethyl Ammonium Chloride	007173-51-1
			Ethanol	000064-17-5
	ALPHA 1427			000111-30-8
			Quaternary Ammonium Compound	068424-85-1
			Water	007732-18-5
	BF-7L	Buffer	Potassium Carbonate	000584-08-7
	01.0	0, 0, 13	Choline Chloride	000067-48-1
	ClayCare	Clay Stabilizer	Water	007732-18-5
BAKER HUGHES	Enzyme G-I	Breaker	Breaker No Hazardous Components	
	ENZYME G-NE	Breaker	No Hazardous Components	NONE
	FRW-18	Friction Reducer	Petroleum Distillate Hydrotreated Light	064742-47-8
	GW-3LDF	Gel	Petroleum Distillate Blend	N/A-014
			Polysaccharide Blend	N/A-021
	SCALETROL 720	Scale Inhibitor	Diethylene Glycol	000111-46-6
			Ethylene Glycol	000107-21-1
		Crosslinker	Boric Acid	010043-35-3
	XLW-32		Methanol (Methyl Alcohol)	000067-56-1
	APB01 (AMMONIUM PERSUFATE BREAKER)	Breaker	Ammonium Persulfate	007727-54-0
	B05 (LOW PH BUFFER)	Buffer	Acetic acid	000064-19-7
FRAC TECH SERVICES	BXL03 Borate XL Delayed High Temp	Crosslinker	No Hazardous Components	NONE
	FRW-200	Friction Reducer	No Hazardous Components	NONE
	HVG01 (TURQUOISE-1 BULK)	Gelling Agent	Petroleum Distillate Hydrotreated Light	064742-47-8
	KCLS-4	Clay Stabilizer	No Hazardous Components	I GNONE
	LTB-1	Breaker	Ammonium Persulfate () 9 2)15 N/A

V/V Department of Environmental Protection



Supplier Name	Product Name	Product Use	Chemical Name	CAS Number	
NALCO ONESOURCE	EC6110A	Biocide	Ethanol	000064-17-5	
			Glutaraldehyde (Pentanediol)	000111-30-8	
			Quaternary Ammonium Compounds	N/A-063	
	EC6629A	Biocide	No Hazardous Components	NONE	
	WBK-133 OXIDIZER	Breaker	Ammonium Persulfate	007727-54-0	
			Ammonium Persulfate	007727-54-0	
	WBK-134	Breaker	Crystalline Silica (Quartz Sand, Silicon Dioxide)	014808-60-7	
	Woo sell o	01 01 131	Proprietary Non Hazardous Salt	N/A-229	
	WCS-631LC	Clay Stabilizer	Water	007732-18-5	
	WFR-55LA	Friction Reducer	No Hazardous Components	NONE	
	WGA-15L	Gel	Petroleum Distillate Hydrotreated Light	064742-47-8	
WEATHERFORD	WASCING SOCIETY		Potassium Carbonate	000584-08-7	
	WPB-584-L	Buffer	Potassium Hydroxide	001310-58-3	
	WXL-101LE	Corsslinker	No Hazardous Components	NONE	
	WXL-101LM	Crosslinker	Petroleum Distillate Hydrotreated Light	064742-47-8	
		Crosslinker	Water	007732-18-5	
			Ethylene Glycol	000107-21-1	
	WXL-105L		Boric Acid	010043-35-3	
			Ethanolamine	000141-43-5	
	B244 Green-Cide 25G	Biocide	Glutaraldehyde	111-30-8	
	L071 Temporary Clay Stabilizer	Clay Stabilizer	Cholinium Chloride	67-48-1	
SCHLUMBERGER	Breaker J218		Diammonium Peroxidisulphate	7727-54-0	
	EB-Clean* J475 Breaker	Breaker	Diammonium Peroxidisulphate	7727-54-0	
			Distillates (petroleum),	64742-47-8	
	Friction Reducer B315	Friction Reducer	Hydrotreated light Aliphatic Alcohol Glycol Ether	Proprietary	
	Friction Reducer J609		Ammonium Sulfate and Ga	7783-20-2	
Supplier Name	Product Name	Product Use	Chemical Name	CAS Number	

69-00203

SCHLUMBERGER	Water Gelling Agent J580	ling Agent J580 Gel Carbohydrate Polymer		Proprietary
	Scale Inhibitor B317	Scale Inhibitor	Trisodium ortho phosphate Ethane-1, 2-diol	7601-54-9 107-21-1
	Borate Crosslinker J532	Crosslinker	Aliphatic polyol Sodium tetraborate decahydrate	Proprietary 1303- 96-4
	Crosslinker J610		Aliphatic polyol Potassium hydroxide	Proprietary 1310- 58-3

RECEIVED
Office of Oil and Gas

OCT 0 9 2015

WW Department of

