10/05/2018



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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Wednesday, October 3, 2018 PERMIT MODIFICATION APPROVAL Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC POST OFFICE BOX 12359

SPRING, TX 773914954

Permit Modification Approval for DALLAS HALL OHI 3H Re: 47-069-00271-00-00

Extension of TVD and Lateral

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.

James A. Martin

Chief

Operator's Well Number: DALLAS HALL OHI 3H Farm Name: HALL AGNES L U.S. WELL NUMBER: 47-069-00271-00-00 Horizontal 6A New Drill Date Modification Issued: October 3, 2018

Promoting a healthy environment.

WW-6B (04/15)

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

1) Well Operato	r: SWN Proc	duction C	o., LLC	494512924	069-Ohio	3-Liberty 247-	Bethany
				Operator ID	County	District Quad	Irangle
2) Operator's W	'ell Number: D	allas Hal	I OHI 3H	Well I	Pad Name: Dall	as Hall OHI Pad	
3) Farm Name/S	Surface Owner:	Agnes	Hall	Public R	oad Access: G	C & P Road	
4) Elevation, cu	rrent ground:	1275'	El	levation, propose	ed post-construc	tion: 1275'	
	(a) Gas X Other	_	Oil		nderground Stor		
		allow	х	Deep			
	He	orizontal	x			1 101	7
6) Existing Pad:			-		C		6.4.18
7) Proposed Tar Target Formation-1	get Formation(Marcellus Up-Dip Wel	s), Depth	(s), Antic Target Top 1	pipated Thicknes	s and Expected 1 TVD-6158', Anticipate	Pressure(s): d Thickness-46, Associate	ed Pressure- 4003
8) Proposed Tot	al Vertical Der	th: 6134	l' at the	heel (LP deepe	est TVD)		
9) Formation at	Total Vertical	Depth: 1	Marcellus	5			
10) Proposed To	tal Measured I	Depth:	6,272'				
11) Proposed Ho	orizontal Leg L	ength: 9	784.87'				
12) Approximat	e Fresh Water	Strata Dep	oths:	410'			
13) Method to D	etermine Fresl	1 Water D	epths:	nearby water w	ell		
14) Approximat	e Saltwater De	pths: 60	1' salinity	profile			
15) Approximat	e Coal Seam D	epths: 44	16'				
16) Approximat	e Depth to Pos	sible Void	l (coal mi	ine, karst, other)	Possible Void	1 446'.	
17) Does Propos	ed well locations of a second s	on contain o an activ	coal sear e mine?	ms Yes	N	o <u>×</u>	
directly overlyin							
directly overlyin (a) If Yes, prov	vide Mine Info	Name:	-				
	vide Mine Info	: Name: Depth:					
directly overlyin (a) If Yes, prov	vide Mine Info						



OCT 3 2018

Office of Oil and Gas WV Dept. of Environmental Protection

WW-6B (04/15)

18)

CASING AND TUBING PROGRAM

TYPE	Size (in)	<u>New</u> <u>or</u> <u>Used</u>	Grade	<u>Weight per ft.</u> <u>(lb/ft)</u>	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	H-40	48#	520'	520'	497 sx/CTS
Coal							
Intermediate	9 5/8"	New	J-55	36#	1920'	1920'	739 sx/CTS
Production	5 1/2"	New	HCP-110	20#	16,272'	16,272'	lead 707 sx Tali 2488 sx inside intermedia
Tubing							
Liners			1				

C-15106.4.18

TYPE	Size (in)	<u>Wellbore</u> Diameter (in)	<u>Wall</u> <u>Thickness</u> <u>(in)</u>	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Yield</u> (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	1.20/50% Excess
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	1.20/50% Excess
Tubing					1		
Liners							

PACKERS

Kind:		
Sizes:	 	
Depths Set:	 	

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Office of Oil and Gas WV Dept. of Environmental Protection 19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

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

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

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. 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 @ 100 barrels a minute.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 22.60

22) Area to be disturbed for well pad only, less access road (acres): 8.54

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.

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Office of Oil and Gas WV Dept. of Environmental Protection



PAD ID 3001155646

ELK LAKE SERVICES, LLC

280 Indian Springs Road, Suite 123 Indiana, PA 15701 Phone: (724) 463-7303

	WELL BORE TABLE FOR SURFACE / ROYALTY			ADJOINING OWNERS TABLE	10/05/20
RACT	SURFACE OWNER / ROYALTY OWNER	TAX PARCEL	TRACT		4-R6-27.1
1	AGNES L HALL	3-L7-0019	B	WINDELL H II & GLADYS GOFF CRABTREE, RANDALL L & KOVALSKI CYNTHIA S	4-R6-27.1 4-R6-27.3
TOAS	SURFACE OWNER	TAX PARCEL	C	CRABTREE, RANDALL	4-R6-28.8
2	MATTHEW H GOSSETT	4-R12B-1	D	CRABTREE, RANDALL	4-R6-28.9
3 4	GEORGE STROMATOS	3-L4-24 3-L4-24-1	E	RALPH & GRACE ROBINSON	4-R6-28.2
	GEORGE STROMATOS		F	HUDSON DOUGLAS & JACQUELINE	4-R6-28.3
5	GEORGE STROMATOS	4-14-24-2	G	RALPH & GRACE ROBINSON	4-R6-27
6	DAVID & LINDA RUTHERS	3-L4-22	H	ROBERT & JENNIFER JEWELL	4-R6-40
7	TRUST FOR LILLIAN W BROWN	3-L4-1-1	1	VELMA L TAGGART	4-R9-18
8	CLAIRE M CAVENEY	4-R9-3	J	LARRY & TERRY BOYNES	4-R9-22-9
9	MARK & DAWN SWIGER	4-R9-22-15	K	CARLA DIETRICH	4-R9-21-1
10	GEORGE & CAROL WOOD	4-R9-22-16	L	JOHN C RATCLIFFE	4-R9-22-21
11	JOHN C & KATHY J RATCLIFFE	4-R9-22-20	M	PAUL & DEBORAH MCKAY	4-R9-51
12	JOHN C & KATHY J RATCLIFFE	4-R9-22-17	N	PAUL & DEBORAH MCKAY	3-L4-1
13	JEFFREY C & GINGER K TAYLOR	4-R9-22-18	0	REBECCA L BLAKE	3-L4-1-7
14	JEFFREY C & GINGER K TAYLOR	4-R9-20	P	PAUL & DEBORAH MCKAY	3-L4-10-1
15	RODNEY & RHONDA HALEY	4-R9-22-8	Q	PAUL & DEBORAH MCKAY	3-L4-10
16	JOSHUA M KLAPKA	4-R9-19	R	JAMES & ANN ROSE	3-L4-12
17	BRANDON C & CYNTHIA A GALLOWAY	4-R6-39-1	S	JAMES & ANN ROSE	3-L4-14
18	LESLIE A HUNT	4-R6-29	T	DAVID & BETH WEAVER	3-L4-13
9	NICOLE L CARENBAUER	4-R6-28-6	U	ROBERT E BROWN	3-L4-1-3
20	DOUGLAS A & JACQUELINE R HUDSON	4-R6-28-7	V	DAVID & BETH WEAVER	3-14-15
21	WINDELL H II & GLADYS GOFF	4-R6-24-3	W	YE M HLA (AKA DANIEL HLA) & EI E MYINT	3-L4-20
			X	DAVID & CATHERINE EVANS	3-14-13-1
			Y	MARY HELEN CLISER LINDA WHITAKER, TRUSTEE FOR THE	3-L7-2
			Z	WHITAKER FAMILY TRUST	3-L7-27
			AA	AGNES L HALL	3-L7-1
			AB	AGNES L HALL	3-L7-20
			AC	AGNES L HALL	3-L7-21-1
			AD	JOHN & T A PYLE	4-R12B-1-1
			AE	STEVE KELLAS	4-R12B-1-5
			AF	MARK A KOZUSNIK	4-R12B-1-8
			AG	DAVID & ESTELLA TAYLOR	4-R12B-4
			AH	DAVID & ESTELLA TAYLOR	4-R12B-1-7
			AI	PATRICIA MERCER	4-R12B-3
			AJ	LARRY & JANE BECK	4-R12B-7
			AK	ERIC BLEND	4-R12B-2
			AL	JAMES & KAREN FRIO	4-R9-47
			AM	STEPHANIE A WARREN & WILLIAM S LITMAN	4-R9-46
			AN	DAVID & TERRI SONNEFELD	4-R9-45
			AD	DAVID & TERRI SONNEFELD	4-R9-44
			AQ	TYLER P BECK	4-R9-43
			AR	MARK E & JL PISSOS	4-R9-42
			AS	GARY & CM LATOS CLARK & SHARON PAJAK	
					4-R9-41
			A	CLARK & SHARON PAJAK	4-R9-32-1
			AT	CLARK & SHARON PAJAK RCK 2 GROUP LLC KAYLEEN FITZSIMMONS	4-R9-32-1 4-R9-28
			AU	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS	4-R9-32-1 4-R9-28 4-R9-27
				RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE	4-R9-32-1 4-R9-28
			UA AV	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5
			UA AV AW	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1
			UA AV AW AX	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9
			AU AV AW AX AY AZ BA	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LIM MAIN DAVID B & LISA M MAIN	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2
			AU AV AW AX AZ BA BB	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID B & LISA M MAIN DAVID & LM MAIN	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2 4-R9-10
			AU AV AW AX AZ BA BB BC	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MÄRY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LISA M MAIN DAVID & LM MAIN DAVID & LM MAIN CLAIRE CAVENEY	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2 4-R9-10 4-R9-3-6
			AU AV AW AX AY AZ BA BB BC BD	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID & LM MAIN CLAIRE CAVENEY CARE CAVENEY CARE CAVENEY CLAIRE CAVENEY CLAIRE CAVENEY CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2 4-R9-10-2 4-R9-10-1 4-R9-3-6 4-R9-10-1 4-R9-10-3 4-R9-22-13
			AU AV AW AX AY AZ BA BB BC BD BE	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LIM MAIN DAVID & LIM MAIN CLAIRE CAVENEY DAVID & LIM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2 4-R9-10-2 4-R9-10-1 4-R9-10-1 4-R9-10-3 4-R9-22-13 4-R9-22-14
			AU AV AW AX AY AZ BA BB BC BD BE BF	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID & LISA M MAIN DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLLS KELLAM	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2 4-R9-10-2 4-R9-10-2 4-R9-3-6 4-R9-10-1 4-R9-10-3 4-R9-22-13 4-R9-22-14 4-R9-22-11
			AU AV AW AX AZ BA BB BC BD BE BF BG	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID & LISA M MAIN DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLLS KELLAM JAMES & KATHY WEST	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2 4-R9-10-2 4-R9-10-1 4-R9-3-6 4-R9-10-3 4-R9-22-14 4-R9-22-14 4-R9-22-11 4-R9-22-7
			AU AV AW AX AZ BA BB BC BD BC BD BE BF BG BH	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LISA M MAIN DAVID & LISA M MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLSS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 4-R9-9 4-R9-10-2 4-R9-10-2 4-R9-10-1 4-R9-10-1 4-R9-10-3 4-R9-22-13 4-R9-22-14 4-R9-22-11 4-R9-22-7 4-R6-39-2
			AU AV AW AX AZ BA BB BC BD BE BF BC BH BI	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LIM MAIN DAVID & LISA M MAIN DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLISS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY EDWARD SMITH	4-R9-32-1 4-R9-28 4-R9-27 4-R9-3-5 4-R9-16-1 - - - - - - - - - - - - - - - - -
			AU AV AW AX AZ BA BB BC BD BC BC BC BC BC BC BC BC BC BC BC BC BC	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LIM MAIN DAVID & LISA M MAIN DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLISS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY EDWARD SMITH ROBERT OCHSENBEIN	$\begin{array}{r} 4-R9-32-1\\ 4-R9-28\\ 4-R9-27\\ 4-R9-3-5\\ 4-R9-16-1\\ \end{array}\\ \begin{array}{r} 4-R9-9\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-10-1\\ 4-R9-3-6\\ 4-R9-10-1\\ 4-R9-22-13\\ 4-R9-22-13\\ 4-R9-22-14\\ 4-R9-22-14\\ 4-R9-22-1\\ 4-R9-22-1\\ 4-R6-39-2\\ 4-R6-39-3\\ \end{array}$
			AU AV AW AX AY AZ BA BB BC BD BE BF BC BF BG BH BI BJ BK	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLLIS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY EDWARD SMITH ROBERT OCHSENBEIN JUSTINE D CRUPE	$\begin{array}{c} 4-R9-32-1\\ 4-R9-28\\ 4-R9-27\\ 4-R9-3-5\\ 4-R9-16-1\\ \end{array}\\ \begin{array}{c} 4-R9-9\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-3-6\\ 4-R9-10-1\\ 4-R9-3-6\\ 4-R9-10-1\\ 4-R9-22-13\\ 4-R9-22-13\\ 4-R9-22-14\\ 4-R9-22-14\\ 4-R9-22-1\\ 4-R9-22-7\\ 4-R6-39-2\\ 4-R6-39-3\\ 4-R6-39-3\\ 4-R6-38\\ \end{array}$
			AU AV AW AX AZ BA BB BC BD BE BF BC BD BE BF BC BD BE BF BC BH BI BJ BK BL	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLLIS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY EDWARD SMITH ROBERT OCHSENBEIN JUSTINE D CRUPE RANDALL LEE CRABTREE	$\begin{array}{c} 4-R9-32-1\\ 4-R9-28\\ 4-R9-27\\ 4-R9-3-5\\ 4-R9-16-1\\ 4-R9-9\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-3-6\\ 4-R9-10-1\\ 4-R9-3-6\\ 4-R9-10-1\\ 4-R9-22-13\\ 4-R9-22-13\\ 4-R9-22-13\\ 4-R9-22-14\\ 4-R9-22-1\\ 4-R9-39-2\\ 4-R6-39-2\\ 4-R6-39-3\\ 4-R6-38\\ 4-R6-24\\ \end{array}$
			AU AV AW AX AZ BA BB BC BD BE BF BC BD BE BF BG BH BI BJ BK BL BM	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID & LISA M MAIN CLAIRE CAVENEY CLAIRE CAVENEY DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLISS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY EDWARD SMITH ROBERT OCHSENBEIN JUSTINE D CRUPE RANDALL LEE CRABTREE WOOD, RICHARD A JR	$\begin{array}{c} 4-R9-32-1\\ 4-R9-28\\ 4-R9-27\\ 4-R9-3-5\\ 4-R9-16-1\\ \hline\\ 4-R9-9\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-10-3\\ 4-R9-20-13\\ 4-R9-22-13\\ 4-R9-22-13\\ 4-R9-22-14\\ 4-R9-22-14\\ 4-R9-22-7\\ 4-R6-39-2\\ 4-R6-39-3\\ 4-R6-38\\ 4-R6-24\\ 4-R6-24.6\\ \end{array}$
			AU AV AW AX AZ BA BB BC BD BE BF BC BD BE BF BC BF BC BH BI BJ BK BN BN	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LIM MAIN DAVID & LISA M MAIN CLAIRE CAVENEY DAVID & LIM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLLIS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY EDWARD SMITH ROBERT OCHSENBEIN JUSTINE D CRUPE RANDALL LEE CRABTREE WOOD, RICHARD A JR WINDSOR COAL COMPANY	$\begin{array}{r} 4-R9-32-1\\ 4-R9-28\\ 4-R9-27\\ 4-R9-3-5\\ 4-R9-16-1\\ \hline\\ 4-R9-9\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-10-3\\ 4-R9-20-13\\ 4-R9-22-13\\ 4-R9-22-13\\ 4-R9-22-14\\ 4-R9-22-14\\ 4-R9-22-7\\ 4-R6-39-2\\ 4-R6-39-3\\ 4-R6-38\\ 4-R6-24\\ 4-R6-24.6\\ 4-R6-25\\ \end{array}$
			AU AV AW AX AZ BA BB BC BD BE BF BC BD BE BF BG BH BI BJ BK BL BM	RCK 2 GROUP LLC KAYLEEN FITZSIMMONS STACEY D EVANS WESBANCO TRUST & INVESTMENT SERVICE, TRUSTEE OF THE MARY JACQUELINE CARENBAUER TRUST JORDAN & GAYLE WEBER CLAIRE M CAVENEY DAVID & LM MAIN DAVID & LISA M MAIN CLAIRE CAVENEY CLAIRE CAVENEY DAVID & LM MAIN CLAIRE CAVENEY CHARLES & PHYLLIS KELLAM MARK & DAWN SWIGER CHARLES & PHYLISS KELLAM JAMES & KATHY WEST BRANDON & CYNTHIA GALLOWAY EDWARD SMITH ROBERT OCHSENBEIN JUSTINE D CRUPE RANDALL LEE CRABTREE WOOD, RICHARD A JR	$\begin{array}{c} 4-R9-32-1\\ 4-R9-28\\ 4-R9-27\\ 4-R9-3-5\\ 4-R9-16-1\\ \hline \\ 4-R9-9\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-10-2\\ 4-R9-10-3\\ 4-R9-20-13\\ 4-R9-22-13\\ 4-R9-22-14\\ 4-R9-22-14\\ 4-R9-22-14\\ 4-R9-22-7\\ 4-R6-39-2\\ 4-R6-39-3\\ 4-R6-38\\ 4-R6-24\\ 4-R6-24.6\\ \end{array}$

47-0 69-00271 MOD

REVISIONS:	COMPANY:	SWN Production Company, LLC	SN Production Ca	/n ^F →V ⁺ ° ompany™
	OPERATOR'S WELL #:	DALLAS HALL 3H		DATE: 06-14-2018 FILE NO: 17-033 DRAWN BY: N. LASSAK
	DISTRICT: LIBERTY	COUNTY: OHIO COUNTY	STATE: WV	SCALE: N/A DRAWING NO: 1 WELL LOCATION PLAT 1
J:\OELS\SWN_WV_17-0033_DALLAS HU THURSDAY JUNE 14 2018 07:36AM	ALL\PLATS\3H\3H DALLAS HALL 06-14-2018	.DWG		PROPERTY NUMBER 250116615 PAD ID 300115564





PROPERTY NUMBER 2501166155 PAD ID 3001155646



SWN Production Company, LLC P O Box 12559 Spring, Texas 77391-2359 www.swn.com

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June 14, 2018

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

RE: SWN's proposed New Well: Dallas Hall OHI 3H in Ohio County, West Virginia, Drilling under RT9 N Fork Road, Boone Hedge Road, and RT 88 Oglebay 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 RT9 N Fork Road, Boone Hedge Road, and RT 88 Oglebay 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,

Bradley Wilson Landman SWN Production Company, LLC PO Box 12359 Spring, TX 77391-2359

Received WV Dept. Office of Oil and Gas or Environmental Protection

69-00271 HOD 10/05/2018

10000 Energy Drive Spring, TX 77389-4954

69-0027140D 10/05/2018

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WW-6A1 (5/13)

Operator's Well No. Dallas Hall OHI 3H

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE Chapter 22, Article 6A, Section 5(3)(5) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;

(2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number

Grantor, Lessor, etc. Grantee, Lessee, etc. Royalty Book/Page See Exhibit

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

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

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

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

Well Operator:	SWN Production Company, LLC.
By:	KOSI
Its:	Landman

Page 1 of

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EXH	в		-A.	

Attached to and made a part of the State of West Virginia Oll and Gas Permit Form, WW-6A1, by SWN Production Company, LLC., Operator

#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG
1)	3-L7-19	Dallas J. Hall and Agnes L. Hall, husband and wife	Chesapeake Appalachia, L.L.C.	18.5%	811/34
			SWN Production Company, LLC		884/61
2)	4-R12B-1	Matthew Harry Gossett, a married man dealing in his sole and	Chesapeake Appalachia, L.L.C.	18.0%	811/261
		separate property	SWN Production Company, LLC		884/169
3)	3-L4-24	Anna Mae Miller, a widow	Chesapeake Appalachia, L.L.C.	18.0%	818/568
			SWN Production Company, LLC		885/632
4)	3-L4-24-1	Anna Mae Miller, a widow	Chesapeake Appalachia, L.L.C.	18.0%	818/568
_			SWN Production Company, LLC		885/632
5)	3-L4-24-2	Anna Mae Miller, a widow	Chesapeake Appalachia, L.L.C.	18.0%	818/568
			SWN Production Company, LLC		885/632
6)	3-L4-22	David Glenn Ruthers and Linda F. Ruthers, husband and wife	Chesapeake Appalachia, L.L.C.	18.0%	815/718
	_		SWN Production Company, LLC		883/587
7)	3-L4-1-1	Rome H. Brown and Lillian W. Brown, his wife	Great Lakes Energy Partners, LLC	15.5%	768/508
			Chesapeake Appalachia, L.L.C.		808/434
			SWN Production Company, LLC		883/527
		Robert O. Rogers, married man dealing in his sole and separate property	SWN Production Company, LLC	18.0%	902/502
		Wheeling Young Men's Christian Association	SWN Production Company, LLC	18.0%	926/299
		Ohio Valley Medical Center, Inc.; The Parks System Trust Fund of	SWN Production Company, LLC	18.0%	908/708
		Wheeling; Children's Home of Wheeling, Inc.; Elmhurst, the House			
		of Friendship, Inc., Vance Memorial Presbyterian Church; Young			
		Women's Christian Association of Wheeling, W. Va., Inc.			



49-00271 HOD

		Ohio County, West Vir	ginta		
8)	4-R9-3	Claire M. Caveney, married woman dealing in her sole and separate property	Chesapeake Appalachia, L.L.C.	18.0%	826/773
			SWN Production Company, LLC		884/717
		Robert O. Rogers, married man dealing in his sole and separate property	SWN Production Company, LLC	18.0%	902/502
		Ohio Valley Medical Center, Inc.; The Parks System Trust Fund of Wheeling; Children's Home of Wheeling, Inc.; Elmhurst, the House of Friendship, Inc., Vance Memorial Presbyterian Church; Young Women's Christian Association of Wheeling, W. Va., Inc.	SWN Production Company, LLC	18.0%	908/708
		Wheeling Young Men's Christian Association	SWN Production Company, LLC	18.0%	926/299
9)	4-R9-22-15	Mark J. Swiger and Dawn S. Swiger, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.0%	817/395 884/529
(0)	4-R9-22-16		Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.0%	828/338 884/717
1)	4-R9-22-20		Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.0%	814/650 884/205
2)	4-R9-22-17		Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.0%	814/662 884/205
3)	4-R9-22-18	Jeffrey C. Taylor and Ginger K. Taylor, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.0%	815/124 884/373

EXHIBIT "A"
Attached to and made a part of the State of West Virginia Oli and Gas Permit Form, WW-6A1, by SWN Production Company, LL.C., Operator
Dailas Hail OHI 3H

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Dallas Hall OHI 3H Ohlo County, West Virginia					
14)	4-R9-20	Jeffrey C. Taylor and Ginger K. Taylor, husband and wife	Chesapeake Appalachia, L.L.C.	18.0%	815/158
_			SWN Production Company, LLC		884/373
15)	4-R9-22-8	Rodney W. Haley and Rhonda L. Haley, husband and wife	Chesapeake Appalachia, L.L.C.	18.0%	812/254
_			SWN Production Company, LLC		884/181
16)	4-R9-19	Kenneth R. Barnes a/k/a Kenneth Robert Barnes and Judith D. Barnes a/k/a Judith Darlene Barnes, husband and wife	Chesapeake Appalachia, L.L.C.	15.0%	827/671
-			SWN Production Company, LLC		844/717
17)	4-R6-39-1	Danlel J. Strnad and Amanda A. Strnad, husband and wife	Chesapeake Appalachia, L.L.C.	18.0%	829/140
			SWN Production Company, LLC		884/717
18)	4-R6-29	Leslie A. Hunt, a widower	Chesapeake Appalachia, L.L.C.	12.5%	829/759
			SWN Production Company, LLC		884/729
19)	4-R6-28-6	Nicole L. Carenbauer, a single woman	SWN Production Company, LLC	18.0%	929/79
20)	4-R6-28-7	Douglas A. Hudson and Jacqueline R. Hudson, husband and wife	SWN Production Company, LLC	16.0%	927/655
21)	4-R6-24-3	Windell Goff and Gladys Goff, husband and wife	Chesapeake Appalachia, L.L.C.	18.0%	813/682
			SWN Production Company, LLC		884/421

EXHIBIT "A" Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-5A1, by SWN Production Company, LL.C., Operator Dallas Hall OHI 3H Ohio County Markela

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681-00271/MSD



Leg-002-71 8 SWN Production Comp 179 Innovation Drive Jane Lew, WV 26378 Tet 304 884 1610 Fax: 304 471 2497 www.swn.com

June 15, 2018

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

RE: Modification: Dallas Hall OHI 3H

Dear Ms. Adkins

AP1#47-069-00271

Enclosed please find the new 6B, WBD, plat, and 6A1 for the above captioned well. We are extending the lateral. These wells are situated on the Hall's property, in Ohio County, West Virginia.

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

Thank you.

Sincerely,

Attany

Brittany Woody Regulatory Analyst Southwestern Energy Production Company, LLC

OCT 3 2018

Office of Oil and Gas WV Dept. of Environmental Protection

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