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west virginia department of environmental protection

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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](http://www.dep.wv.gov)

## PERMIT MODIFICATION APPROVAL

October 01, 2015

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

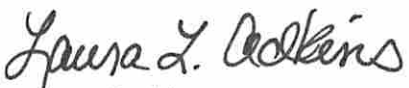
Re: Permit Modification Approval for API Number 10303130, Well #: WILLIAM RITCHEA  
WTZ 201H  
**Modified Lateral Direction and Casing Program**

Oil and Gas Operator:

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.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

  
Gene Smith  
*for* Assistant Chief of Permitting  
Office of Oil and Gas

Promoting a healthy environment.

10/02/2015

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

1) Well Operator: SWN Production Co., LLC 494512924 103-Wetzel 007-Proc 681- Wileysville  
Operator ID County District Quadrangle

2) Operator's Well Number: William Ritchea WTZ 201H Well Pad Name: William Ritchea WTZ Pad

3) Farm Name/Surface Owner: William D. & Shirley E. Ritchea Public Road Access: Harland Ridge

4) Elevation, current ground: 1563.3' Elevation, proposed post-construction: 1563.4'

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

Other \_\_\_\_\_

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

Horizontal  \_\_\_\_\_

6) Existing Pad: Yes or No yes

*DWH*  
*9-23-15*

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):  
Target Formation- Marcellus, Target Top TVD- 7530', Target Base TVD- 7577', Anticipated Thickness- 47' Associated Pressure- 4900

8) Proposed Total Vertical Depth: 7556'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14,207'

11) Proposed Horizontal Leg Length: 6882.62'

12) Approximate Fresh Water Strata Depths: 519'

13) Method to Determine Fresh Water Depths: USGS well tops data

14) Approximate Saltwater Depths: 770'

15) Approximate Coal Seam Depths: 1476'

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


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

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

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**SEP 25 2015**

18)

**CASING AND TUBING PROGRAM**

<b>TYPE</b>	<b>Size (in)</b>	<b>New or Used</b>	<b>Grade</b>	<b>Weight per ft. (lb/ft)</b>	<b>FOOTAGE: For Drilling (ft)</b>	<b>INTERVALS: Left in Well (ft)</b>	<b>CEMENT: Fill-up (Cu. Ft.)/CTS</b>
Conductor	20"	New	H-40	94#	100'	100'	CTS
Fresh Water	13 3/8"	New	J-55	54.5#	649'	649'	591 sx/CTS
Coal	9 5/8"	New	J-55	40#	2969'	2969'	1129 sx/CTS
Intermediate	7"	New	J-55	20#	If Needed	If Needed	If Needed/As Needed
Production	5 1/2"	New	HCP-110	20#	14,207'	14,207'	Lead 1050 or 1445 tall sz/100' inside 
Tubing	2 3/8"	New	P-110	4.7#	Approx. 7556'	Approx. 7556'	
Liners							

*DMH*  
*4-23-15*

<b>TYPE</b>	<b>Size (in)</b>	<b>Wellbore Diameter (in)</b>	<b>Wall Thickness (in)</b>	<b>Burst Pressure (psi)</b>	<b>Max. Associated Surface Pressure (psi)</b>	<b>Cement Type</b>	<b>Cement Yield (cu. ft./k)</b>
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							

**PACKERS**

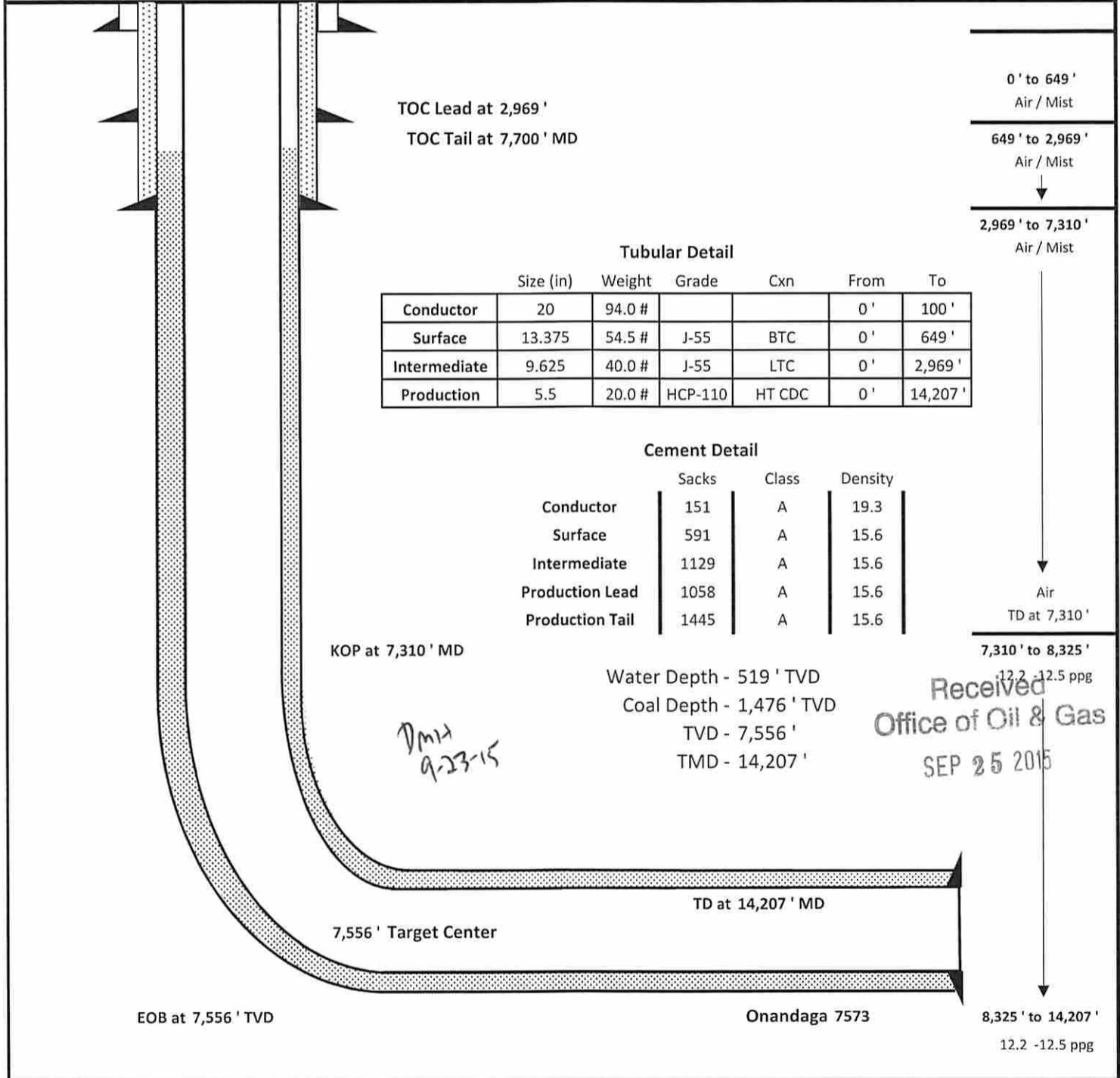
Kind:	10K Arrowset AS1-X			
Sizes:	5 1/2"			
Depths Set:				

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<b>Southwestern Energy Company</b>	<b>Proposed Drilling Program</b>
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Well: WILLIAM RITCHEA WTZ 201 Field: VICTORY FIELD County: WETZEL SHL: 39.6696 Latitude -80.65944 Longitude BHL: 39.6802 Latitude -80.68229 Longitude KB Elev: 1,586 ft MSL	Re-entry Rig: SDC 42 Prospect: VICTORY State: WV GL Elev: 1,563 ft MSL
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SWN PRODUCTION COMPANY, LLC  
 "WILLIAM RITCHEA WTZ 201H"  
 SURFACE HOLE  
 ELEV: 1563.2'

WELL: WILLIAM RITCHEA WTZ 201H  
 QUAD: WILEYVILLE, WV

<b>NAME AND DISTANCE TO THE NEAREST STREAM:</b> AN UNNAMED TRIBUTARY OF RUSH RUN IS LOCATED ±0.27 MILES SOUTHWEST OF THE CENTER OF THE DRILL PAD.		<b>STREAM CROSSING COORDINATES (NAD 83):</b> NO NEW CROSSINGS.		<b>COMPANY:</b> 	
<b>WELL RESTRICTIONS:</b> WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET		<b>OPERATOR'S</b> WILLIAM RITCHEA WTZ		<b>WELL #:</b> 201H	
<b>FEMA FLOOD INFORMATION:</b> BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF WETZEL COUNTY, WEST VIRGINIA; MAP NUMBER 54103C0075C; EFFECTIVE DATE: SEPTEMBER 25, 2009.		<b>LOCATION:</b> PROCTOR DISTRICT, WETZEL COUNTY, WEST VIRGINIA		<b>SURFACE HOLE LOCATION:</b> GEOGRAPHIC (NAD83): LATITUDE: 39.669606' LONGITUDE: -80.659437'	
<b>LEGEND:</b> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ⊙ EXISTING / PRODUCING WELLHEAD ⊗ ABANDONED WELL ⊕ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR ○ (S) EXISTING SPRING ○ (W) EXISTING WATER WELL — ACCESS ROAD — ACCESS ROAD TO PREV. SITE — HIGHWAY/INTERSTATE — COUNTY ROAD		<b>BOTTOM HOLE LOCATION:</b> GEOGRAPHIC (NAD83): LATITUDE: 39.680187' LONGITUDE: -80.682302'		<b>REVISIONS:</b> △ REVISED DHP & BOTTOM HOLE AND ADDED ADJOINING OWNER INFORMATION, 09-16-2015	
				<b>DATE:</b> 09-09-2015 <b>DRAWN BY:</b> S. HUTSON <b>SCALE:</b> 1" = 2000' <b>DRAWING NO:</b> 59108 <b>TOPOGRAPHIC MAP</b>	

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103-03130 Men



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TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	BERNARD LEE DUELLEY ET AL & SUSAN HALL	12-15-25	39.75
B	ANTHONY A PITOSCIA & DAVID T PITOSCIA	12-14-26	66.58
C	RIDGETOP CAPITAL LP	12-14-25	173.00
D	JAMES RITCHEA & JORETTA RITCHEA	12-14-4	62.11
E	HIGGINS CEMETERY	12-14-5	0.31
F	LEAH M SNOW	12-14-4.3	6.92
G	RONNIE E WADE & YVONNE M WADE	12-14-4.4	5.00
H	SHERAL ALAN YOCUM	12-14-22.4	2.38
I	CHESAPEAKE APPALACHIA LLC	12-14-13	85.30
J	NORMAN E KEENEY JR & NANCY M KEENEY	12-9-45	113.36
K	JAMES S TAYLOR & TWILA M TAYLOR	12-9-39	85.75
L	VERIL JEROME BLAKE, RODNEY BLAKE & MICHAEL JEROME BLAKE	12-9-40	50.00
M	ALLEN C WOODSTUFF	12-9-44	40.00
N	WAYNE GODDARD	12-9-46	81.25
O	WAYNE GODDARD	12-9-46.3	0.01
P	WAYNE HUGGINS & SANDRA M HUGGINS	12-9-46.1	25.00
Q	WAYNE L GODDARD	12-14-9.3	0.16
R	WAYNE HUGGINS & SANDRA M HUGGINS	12-14-9.1	12.69
S	MICHAEL E LASURE & VELVA C LASURE	12-14-6	75.00
T	MICHAEL E LASURE & VELVA C LASURE	12-14-15	1.38
U	WILLIAM D RITCHEA & SHIRLEY E RITCHEA	12-14-9	88.37
V	WILLIAM D RITCHEA & SHIRLEY E RITCHEA	12-15-34	5.99
W	SCOTT J URBANEK & CHRYSYAL A URBANEK	12-15-13	12.00
X	WILLIAM D RITCHEA & SHIRLEY E RITCHEA	12-15-21	62.00
Y	H C LEMASTERS HRS & CHARLES V MANKER REVOCABLE LIVING TRUST	12-15-18	62.00
Z	BERNARD LEE DUELLEY ET AL & SUSAN HALL	12-15-22	62.00
AA	BERNARD LEE DUELLEY ET AL & SUSAN HALL	12-15-26	15.50
BB	LEMASTERS CEMETERY	12-15-20	0.35

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10/02/2015

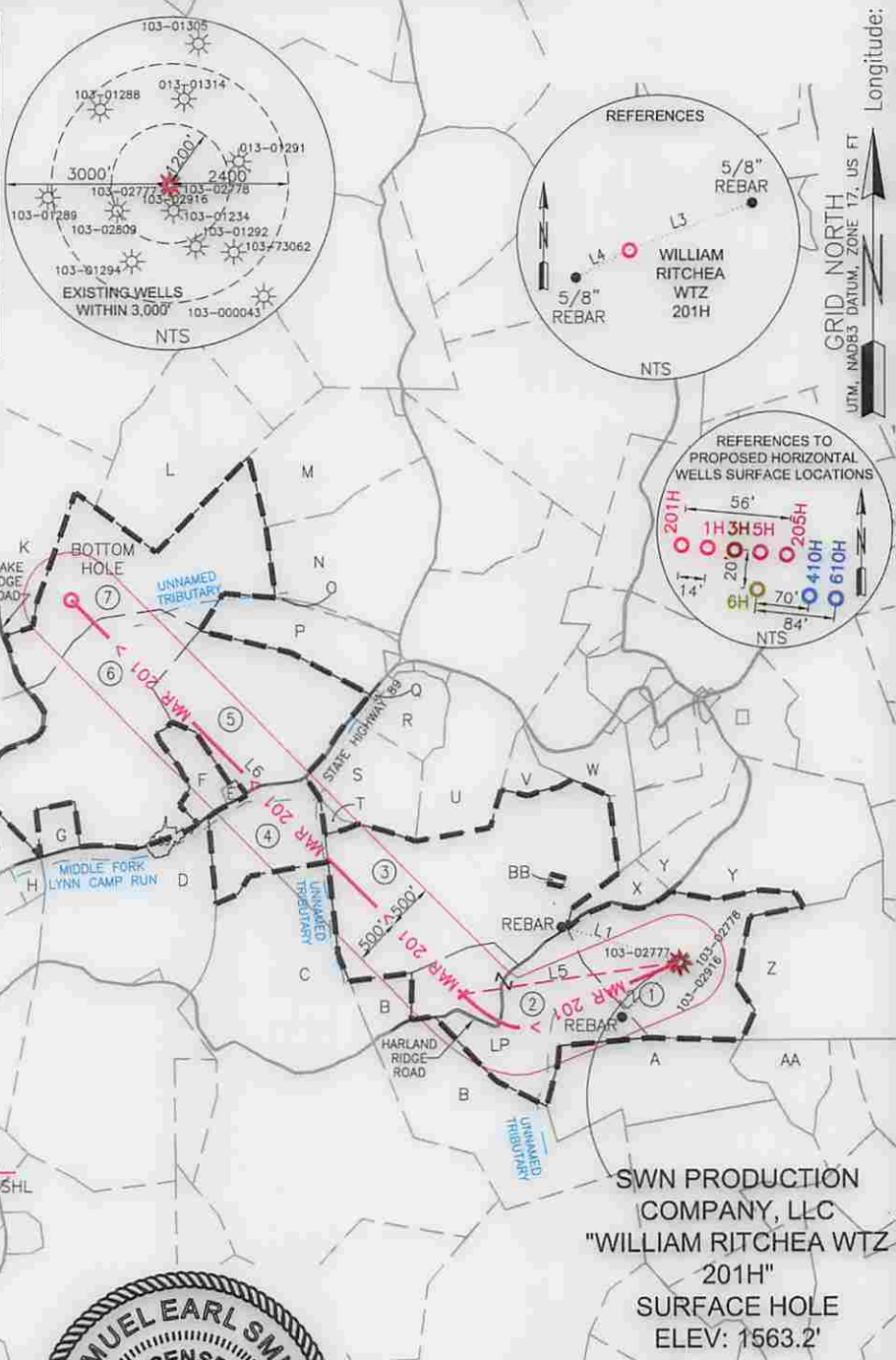
COMPANY:	
REVISIONS:	DATE: 09-09-2015
	INSET FROM SHEET 1
	DRAWN BY: S. HUTSON
	SCALE: N/A
	DRAWING NO: 59108
	WELL LOCATION PLAT



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LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 73°23'43" W	1293.15'	SHL TO LANDMARK	5/8" REBAR
L2	S 46°17'43" W	837.31'	SHL TO LANDMARK	5/8" REBAR
L3	N 68°55'54" E	323.47'	SHL TO REF. PNT.	5/8" REBAR
L4	S 62°37'48" W	215.31'	SHL TO REF. PNT.	5/8" REBAR
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L5	S 81°47'27" W	2312.07'		SHL TO LP
L6	N 45°00'01" W	5882.26'		LP TO BHL

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	WILLIAM D RITCHEA & SHIRLEY E RITCHEA (S/R)	12-15-21	62.00
2	WILLIAM R PITOCIA (S) TASA CORPORATION (R)	12-14-27	57.00
3	WILLIAM R PITOCIA (S) TASA CORPORATION (R) HERBERT W LINDSAY & MARIE LINDSAY (R) RUSSELL RAND & GWENDOLYN RAND (R)	12-14-16	104.01
4	MICHAEL E LASURE & VELVA C LASURE (S/R)	12-14-14	25.00
5	MICHAEL E LASURE & VELVA C LASURE (S) RAY C HERMAN & ROSE M HERMAN & DAIL A HERMAN (R)	12-14-6	52.89
6	RAY C HERMAN & DAIL A HERMAN (R) RONNIE E WADE & YVONNE M WADE (S) HAROLD H BLAKE & DONNA M BLAKE (R)	12-14-4.1	94.37
7	NORMAN E KEENEY JR & NANCY M KEENEY (S) OTIS SIMMONS & MABEL SIMMONS, ETHEL RAMSEY & ELMER RAMSEY, & HAROLD SIMMONS & ROXIE SIMMONS (R)	12-9-45	100.00



NOTES ON SURVEY

- COORDINATE SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO OCCUPIED DWELLINGS AND AGRICULTURE BUILDINGS GREATER THAN 2500 SQ FT. WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
- NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,391,143.194 EASTING: 529,210.013
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,391,042.570 EASTING: 528,512.513
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,392,310.348 EASTING: 527,244.722

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 2315

*Samuel Earl Smith*



COMPANY: **SWN** Production Company, LLC **SWN** Production Company™

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)	COMPANY: WILLIAM RITCHEA WTZ OPERATOR'S WELL #: 201H API WELL #: 47 103 03130md
	WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>	WATERSHED: LITTLE FISHING CREEK DISTRICT: PROCTOR COUNTY: WETZEL SURFACE OWNER: WILLIAM D & SHIRLEY E RITCHEA OIL & GAS ROYALTY OWNER: WILLIAM D & SHIRLEY E RITCHEA

DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION   
 CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY)  
 TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,556' RD 14,207' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: P.O. BOX 1300 CITY: JANE LEW STATE: WV ZIP CODE: 26378  
 DESIGNATED AGENT: DEE SOUTHALL ADDRESS: P.O. BOX 1300 CITY: JANE LEW STATE: WV ZIP CODE: 26378

<b>LEGEND:</b> ○ PROPOSED SURFACE HOLE / BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD ⊗ ABANDONED WELL ⊕ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR --- LEASE BOUNDARY --- 500' DHP BUFFER - MAR 1 > - MARCELLUS DHP --- ABANDONED PATH	<b>REVISIONS:</b> △ REVISED DHP & BOTTOM HOLE AND ADDED ADJOINING OWNER INFORMATION, 09-16-2015	DATE: 09-09-2015 DRAWN BY: S. HUTSON SCALE: 1" = 2000' DRAWING NO: 59108 WELL LOCATION PLAT
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**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE**  
Chapter 22, Article 6A, Section 5(a)(5)  
**IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

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

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
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SEE EXHIBIT

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

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

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

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

Well Operator: SWN Production Company, LLC.  
 By: Caleb Weaver *CW*  
 Its: Landman



103-03130 MOD

EXHIBIT "A"  
Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, L.L.C., Operator  
Ritchea North 201H  
Wetzel County, West Virginia

Tract #	TMP	LEASE #	LESSOR	LESSEE	ROYALTY	BK/PG
1	<u>12-0015-0021-0000</u>	WV0000113-000	William D. Ritchea and Shirley E. Ritchea, husband and wife	Mobay Chemical Corporation Wescap Oil and Gas Company Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>60A/59</u> <u>63A/34</u> <u>66A/547</u> <u>102A/302</u> <u>157A/540</u>
2	<u>12-0014-0027-0000</u>	WV0000109-001	TASA Corporation, formerly TASA Coal Company	J&J Enterprises, formerly TASA Coal Company Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>65A/313</u> <u>103A/350</u> <u>157A/540</u>
2	<u>12-0014-0027-0000</u>	WV0000109-002	Herbert W. Lindsay and Marie Lindsay, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>64A/423</u> <u>102A/302</u> <u>157A/540</u>
2	<u>12-0014-0027-0000</u>	WV0000109-003	Russell Rand and Gwendolyn Rand, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>64A/425</u> <u>103A/302</u> <u>157A/540</u>
3	<u>12-0014-0016-0000</u>	WV0000109-001	TASA Corporation, formerly TASA Coal Company	J&J Enterprises, formerly TASA Coal Company Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>65A/313</u> <u>103A/350</u> <u>157A/540</u>
3	<u>12-0014-0016-0000</u>	WV0000109-002	Herbert W. Lindsay and Marie Lindsay, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>64A/423</u> <u>102A/302</u> <u>157A/540</u>

10/01/2015

EXHIBIT "A"  
Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, L.L.C., Operator  
Ritchea North 201H  
Wetzel County, West Virginia

Tract #	TMP	LEASE #	LESSOR	LESSEE	ROYALTY	BK/PG
3	<u>12-0014-0016-0000</u>	WV0000109-003	Russell Rand and Gwendolyn Rand, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>64A/425</u> <u>103A/302</u> <u>157A/540</u>
4	<u>12-0014-0014-0000</u>	WV0000164-001	Michael E. Lasure and Velva C. Lasure, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>79A/192</u> <u>104A/230</u> <u>157A/540</u>
5	<u>12-0014-0006-0000</u>	WV0000128-000	Ray C. Herman and Rose M. Herman, his wife, and Dail A. Herman, single	Mobay Chemical Corporation Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>60A/143</u> <u>65A/67</u> <u>120A/109</u> <u>157A/540</u>
5	<u>12-0014-0006-0000</u>	1-254831-000	Ray C. Herman and Dail A. Herman	The Manufacturers Light and Heat Company Columbia Gas Transmission Corporation Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>45A/314</u> <u>84A/129</u> <u>90A/242</u> <u>157A/540</u>
6	<u>12-0014-0004-0001</u>	WV0000150-001	Harold H. Blake and Donna M. Blake, his wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>82A/105</u> <u>104A/230</u> <u>157A/540</u>
7	<u>12-0009-0045-0000</u>	1-254812-000	Otis Simmons and Mabel Simmons, his wife, Ethel Ramsey and Elmer Ramsey, her husband, and Harold Simmons and Roxie Simmons, his wife	The Manufacturers Light and Heat Company Columbia Gas Transmission Corporation Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%	<u>52A/263</u> <u>84A/129</u> <u>90A/242</u> <u>157A/540</u>

10/02/2015

103-83130



PO Box 1300  
Jane Lew, WV 26378  
PHONE: (832) 796-1610

September 24, 2015

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

**RE:** Modification to William Ritchea WTZ 201H

Dear Ms. Adkins:

Enclosed please find a revised WW-6B, mylar, WW-6A1 and revised casing program. We would like to slightly move our lateral and revise the casing. This well is situated on the Ritchea's property, in Wetzel County, West Virginia.

If you have any questions or desire additional information, please me at 304-884-1614.

Thank you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dee Southall". The signature is stylized and somewhat illegible due to the cursive nature of the writing.

Dee Southall  
Regulatory Supervisor  
Southwestern Energy Production Company, LLC  
PO Box 1300  
Jane Lew, WV 26378

Received  
Office of Oil & Gas

SEP 25 2015



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

10/02/2015

EXHIBIT "A"  
Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, L.L.C., Operator  
Ritchea North 201H  
Wetzel County, West Virginia

**VOID**

BK/P/G
<u>60A/143</u>
<u>65A/67</u>
<u>120A/109</u>
<u>157A/540</u>
<u>45A/314</u>
<u>84A/129</u>
<u>90A/242</u>
<u>157A/540</u>
<u>82A/105</u>
<u>104A/230</u>
<u>157A/540</u>
<u>52A/263</u>
<u>84A/129</u>
<u>90A/242</u>
<u>157A/540</u>

103-03130

320648  
2012

**VOID**

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, L.L.C., Operator,  
Ritchea North 201H  
Wetzel County, West Virginia

Received  
Office of Oil & Gas  
SEP 25 2015

Tract #	TMP	LEASE #	LESSOR	LESSEE	ROYALTY
1	<u>12-0015-0021-0000</u>	WV0000113-000	William D. Ritchea and Shirley E. Ritchea, husband and wife	Mobay Chemical Corporation Wescap Oil and Gas Company Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
2	<u>12-0014-0027-0000</u>	WV0000109-001	TASA Corporation, formerly TASA Coal Company	J&J Enterprises, formerly TASA Coal Company Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
2	<u>12-0014-0027-0000</u>	WV0000109-002	Herbert W. Lindsay and Marie Lindsay, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
2	<u>12-0014-0027-0000</u>	WV0000109-003	Russell Rand and Gwendolyn Rand, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
3	<u>12-0014-0016-0000</u>	WV0000109-001	TASA Corporation, formerly TASA Coal Company	J&J Enterprises, formerly TASA Coal Company Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
3	<u>12-0014-0016-0000</u>	WV0000109-002	Herbert W. Lindsay and Marie Lindsay, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
3	<u>12-0014-0016-0000</u>	WV0000109-003	Russell Rand and Gwendolyn Rand, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
4	<u>12-0014-0014-0000</u>	WV0000164-001	Michael E. Lasure and Velva C. Lasure, husband and wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%

10/02/2015

163-03136

**VOID**

EXHIBIT "A"

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 Ritchea North 201H  
 Wetzel County, West Virginia

Tract #	TMP	LEASE #	LESSOR	LESSEE	ROYALTY
5	<a href="#">12-0014-0006-0000</a>	WV0000128-000	Ray C. Herman and Rose M. Herman, his wife, and Dail A. Herman, single	Mobay Chemical Corporation Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
5	<a href="#">12-0014-0006-0000</a>	1-254831-000	Ray C. Herman and Dail A. Herman	The Manufacturers Light and Heat Company Columbia Gas Transmission Corporation Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
6	<a href="#">12-0014-0004-0001</a>	WV0000150-001	Harold H. Blake and Donna M. Blake, his wife	Haddad and Brooks, Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%
7	<a href="#">12-0009-0045-0000</a>	1-254812-000	Otis Simmons and Mabel Simmons, his wife, Ethel Ramsey and Elmer Ramsey, her husband, and Harold Simmons and Roxie Simmons, his wife	The Manufacturers Light and Heat Company Columbia Gas Transmission Corporation Chesapeake Appalachia, L.L.C. SWN Production Company, L.L.C.	12.50%

10/02/2015

103-03130

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Ritchea North 201H  
Wetzel County, West Virginia



BK/PG
<u>60A/59</u>
<u>63A/34</u>
<u>66A/547</u>
<u>102A/302</u>
<u>157A/540</u>
<u>65A/313</u>
<u>103A/350</u>
<u>157A/540</u>
<u>64A/423</u>
<u>102A/302</u>
<u>157A/540</u>
<u>64A/425</u>
<u>103A/302</u>
<u>157A/540</u>
<u>65A/313</u>
<u>103A/350</u>
<u>157A/540</u>
<u>64A/423</u>
<u>102A/302</u>
<u>157A/540</u>
<u>64A/425</u>
<u>103A/302</u>
<u>157A/540</u>
<u>79A/192</u>
<u>104A/230</u>
<u>157A/540</u>

10/02/2015