

State of West Virginia  
Department of Environmental Protection - Office of Oil and Gas  
Well Operator's Report of Well Work

API 47-103-03141 County WETZEL District PROCTOR  
Quad WILEYVILLE, WV Pad Name WILLIAM RITCHEA-WTZ-PAD Field/Pool Name VICTORY FIELD  
Farm name RITCHEA, WILLIAM D & SHIRLEY E Well Number WILLIAM RITCHEA WTZ 610H  
Operator (as registered with the OOG) SWN PRODUCTION COMPANY, LLC  
Address PO BOX 12359 City SPRING State TX Zip 77391-2359

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 4,391,133.156 Easting 529,247.612  
Landing Point of Curve Northing 4,391,210.392 Easting 530,288.935  
Bottom Hole Northing 4,390,543.900 Easting 531,124.781

Elevation (ft) 1563.4' GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine

Mud Type(s) and Additive(s)  
SOBM

Date permit issued 11/13/2015 Date drilling commenced 12/03/2015 Date drilling ceased 12/22/2015  
Date completion activities began 10/26/2016 Date completion activities ceased 11/29/2016  
Verbal plugging (Y/N) N Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft 523' MD Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 771' MD Void(s) encountered (Y/N) depths RECEIVED  
Coal depth(s) ft 1480' MD Cavern(s) encountered (Y/N) depths Office of Oil and Gas

Is coal being mined in area (Y/N) \_\_\_\_\_

**APPROVED**

NAME: Steve M. [Signature]  
DATE: 3-17-17

Reviewed by EEB 27 2017  
WV Department of Environmental Protection  
05/26/2017

API 47-103 - 03141 Farm name RITCHEA, WILLIAM D & SHIRLEY E Well number WILLIAM RITCHEA WTZ 610H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	28	20	126'	NEW	J-55/94#		Y
Surface	17.5	13.375	710'	NEW	J-55/54.5#		Y; 20 BBLS RETURNED
Coal	SEE INTERMEDIATE						
Intermediate 1	12.25	9.625	3012'	NEW	J-55/40#		Y; 25 BBLS RETURNED
Intermediate 2							
Intermediate 3							
Production	8.75/8.50	5.5	13792'	NEW	HCP-110/20#		Y
Tubing		2.375	8297'	NEW	L-80/4.7#		N
Packer type and depth set							N

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	CLASS A	150	17.20			SURFACE	24
Surface	CLASS A	550	15.60	1.20	660	SURFACE	8
Coal	SEE INTERMEDIATE						
Intermediate 1	CLASS A	1130	15.60	1.2	1356	SURFACE	8
Intermediate 2							
Intermediate 3							
Production	CLASS A	1035/1240	15.60	1.23/1.19	1273.05/1475.60	SURFACE	24
Tubing							

Drillers TD (ft) 13792' Loggers TD (ft) 13792'  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) 7380' \_\_\_\_\_

Check all wireline logs run  caliper  density  deviated/directional  induction  
 neutron  resistivity  gamma ray  temperature  sonic

Well cored  Yes  No Conventional Sidewall Were cuttings collected  Yes  No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

SURFACE: 7 CENTRALIZERS - EVERY THIRD JOINT OF CASING

INTERMEDIATE: 24 CENTRALIZERS - EVERY THIRD JOINT OF CASING

PRODUCTION: 181 CENTRALIZERS - EVERY THIRD JOINT FROM SURFACE TO TOP OF CURVE, THEN EVERY JOINT UNTIL TD

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

RECEIVED  
Office of Oil and Gas

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS \_\_\_\_\_

FEB 27 2017

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

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Environmental Protection



API 47- 103 - 03141 Farm name RITCHEA, WILLIAM D & SHIRLEY E Well number WILLIAM RITCHEA Wtz 610H

PRODUCING FORMATION(S)	DEPTHS		
		TVD	MD
MARCELLUS	7568.77'		8252.74'

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump  
 SHUT-IN PRESSURE Surface 1600 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST \_\_\_\_\_ hrs  
 OPEN FLOW Gas 2,817 mcfpd Oil 13 bpd NGL \_\_\_\_\_ bpd Water 46 bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP	BOTTOM	TOP	BOTTOM	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
	DEPTH IN FT NAME TVD	DEPTH IN FT TVD	DEPTH IN FT MD	DEPTH IN FT MD	
	0		0		
	SEE	ATTACHMENT	3		

Please insert additional pages as applicable.

Drilling Contractor SWN DRILLING COMPANY  
 Address PO BOX 12359 City SPRING State TX Zip 77391-2359

Logging Company NINE ENERGY  
 Address 16945 NORTHCHASE DRIVE, STE 1600 City HOUSTON State TX Zip 77060

Cementing Company SCHLUMBERGER WELL SERVICES  
 Address 110 SCHLUMBERGER DRIVE City SUGAR LAND State TX Zip 77478

Stimulating Company DOWELL SCHLUMBERGER  
 Address 11111 KATY FWY #200 City HOUSTON State TX Zip 77079

Please insert additional pages as applicable.

Completed by DENISE GRANTHAM Telephone 832-796-6699  
 Signature Denise Grantham Title REGULATORY TECH  
 Office of Oil and Gas  
 Environmental Protection  
 2/21/2017  
 FEB 27 2017

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

## WILLIAM RITCHEA WTZ 610H

## Perf Stage Summary

STAGE NUM	Perf Date	Perf Top MD	Perf Bottom MD	# SHOTS PER STG
1	10/26/2016	13,463	13,663	42
2	10/26/2016	13,199	13,399	42
3	10/26/2016	12,935	13,135	42
4	10/27/2016	12,671	12,871	42
5	10/27/2016	12,407	12,607	42
6	10/27/2016	12,143	12,343	42
7	10/27/2016	11,879	12,079	42
8	10/27/2016	11,615	11,815	42
9	10/27/2016	11,351	11,551	42
10	10/28/2016	11,087	11,287	42
11	10/28/2016	10,823	11,023	42
12	10/28/2016	10,559	10,759	42
13	10/28/2016	10,295	10,495	42
14	10/28/2016	10,035	10,233	42
15	10/28/2016	9,767	9,967	42
16	10/29/2016	9,503	9,703	42
17	10/29/2016	9,239	9,439	42
18	10/29/2016	8,975	9,175	42
19	10/29/2016	8,711	8,911	42
20	10/29/2016	8,447	8,647	42

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## WILLIAM RITCHEA Wtz 610H

## Frac Stage Summary

STAGE NUM	Stim Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of water bbls	Amount of nitrogen/other
1	10/26/2016	96	8,604	8,936	4,535	501,651	9,490	
2	10/26/2016	91	8,459	8,950	4,520	499,949	7,716	
3	10/26/2016	95	8,501	8,928	5,038	499,180	7,824	
4	10/27/2016	99	8,601	8,908	4,728	500,120	7,662	
5	10/27/2016	95	8,590	9,109	4,147	505,520	8,080	
6	10/27/2016	95	8,461	9,101	4,598	499,540	8,225	
7	10/27/2016	96	8,399	8,924	4,273	494,920	8,212	
8	10/27/2016	96	8,556	9,168	5,196	497,880	7,622	
9	10/27/2016	82	8,628	9,100	4,544	444,320	8,214	
10	10/28/2016	99	8,586	9,159	5,029	500,700	7,685	
11	10/28/2016	91	8,364	9,015	4,818	500,000	8,345	
12	10/28/2016	91	8,397	9,011	4,894	495,800	8,142	
13	10/28/2016	97	8,237	9,147	4,438	502,660	7,959	
14	10/28/2016	99	8,410	9,100	4,738	499,840	7,551	
15	10/28/2016	100	8,264	8,828	4,631	497,420	7,448	
16	10/29/2016	100	8,238	9,027	5,196	496,860	7,504	
17	10/29/2016	92	8,118	9,019	4,396	490,540	7,779	
18	10/29/2016	88	7,894	9,592	6,038	507,660	9,585	
19	10/29/2016	98	8,089	9,141	4,370	497,620	7,295	
20	10/29/2016	99	7,232	8,568	4,007	492,700	7,188	

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Well Name: WILLIAM RITCHEA Wtz 610H

LITHOLOGY/FORMATION	TOP DEPTH, MD (FT)	TOP DEPTH, TVD (FT)	BOTTOM DEPTH, MD (FT)	BOTTOM DEPTH, TVD (FT)	QUANTITY AND TYPE OF FLUID
Base of Fresh Water	N. A.	N. A.	523.00	523.00	
Top of Salt Water	771.00	771.00	N. A.	N. A.	
Pittsburgh Coal	1480.00	1479.95	2924.00	2923.00	
Big Injun (ss)	2924.00	2923.00	3262.35	3262.00	
Berea (siltstone)	3262.35	3262.00	6842.71	6569.47	
Rhinestreet (shale)	6842.71	6569.47	7598.13	7228.66	
Cashaqua (shale)	7598.13	7228.66	7761.12	7343.98	
Middlesex (shale)	7761.12	7343.98	7877.00	7419.01	
Burket (shale)	7877.00	7419.01	7918.72	7443.86	
Tully (ls)	7918.72	7443.86	7969.90	7470.84	
Mahantango (shale)	7969.90	7470.84	8252.74	7568.77	
Marcellus (shale)	8252.74	7568.77	N. A.	N. A.	Gas

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# Hydraulic Fracturing Fluid Product Component Information Disclosure



Job Start Date:	10/26/2016
Job End Date:	10/30/2016
State:	West Virginia
County:	Wetzel
API Number:	47-103-03141-00-00
Operator Name:	Southwestern Energy
Well Name and Number:	William Ritchea WTZ 610H
Latitude:	39.66951600
Longitude:	-80.65899900
Datum:	NAD27
Federal Well:	NO
Indian Well:	NO
True Vertical Depth:	7,650
Total Base Water Volume (gal):	6,519,455
Total Base Non Water Volume:	0

## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
	Schlumberger	N/A					
	Schlumberger	Water (Including Mix Water Supplied by Client)*		7732-18-5		84.37529	
	Schlumberger	Fluid Loss Additive		Listed Below			

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05/26/2017









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

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 73°32'39" W	1420.83'	SHL TO LANDMARK	5/8" REBAR
L2	S 53°10'40" W	910.32'	SHL TO LANDMARK	5/8" REBAR
L3	N 50°05'37" E	232.61'	SHL TO REF. PNT.	5/8" REBAR
L4	S 78°07'45" W	321.48'	SHL TO REF. PNT.	5/8" REBAR
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L5	N 85°45'29" E	3427.39'		SHL TO LPL
L6	S 51°25'54" E	3508.98'		LPL TO BHL

Latitude: 39°42'30"

Longitude: 80°37'30"

TRACT	SURFACE OWNER (S)/ROYALTY OWNER (R)	TAX PARCEL	ACRES	TRACT	SURFACE OWNER (S)/ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	WILLIAM D RITCHEA & SHIRLEY E RITCHEA (S/R)	12-15-21	62.00	4	IRENE DONMICK (R)		
2	H C LEMASTERS HEIRS & CHARLES V MANKER REVOCABLE LIVING TRUST (S)	12-15-18	62.00	(cont.)	JEAN WARNER & DONALD WARNER, MABEL GORBY, RALPH G GORBY & WILMA GORBY, VERNA MARIE LEWIS & DALE LEAS, PATRICK C THOMAS & R WAYNE THOMAS, ROBERT R GORBY & SHELVA L GORBY (R)		
3	ALTA O HORNER (R) ALFRED HORNER & DELORES HORNER (R) JESSIE O FREELAND (R) JUDITH ANN KEANE & MICHAEL KEANE (R) MARLENE DUNN & ALFRED DUNN (R) SHIRLEY GERBER (R) ISLETA M HORNER (R) JOSEPH LEMASTERS & GRETA LEMASTERS (R) CHRISTINA DAVIS (R) DELA LEMASTERS (R) CATHERINE MAE THOBURN & ARTHUR THOBURN (R)	12-15-19	122.00	4A	JOHN R GORBY & LINDA GORBY, JAMES SHAMGACH & MRYTLE SHAMGACH, LEWIS J ALLEN & JULIA ALLEN, FRANCIS A EMMERT & MARGAN E EMMERT, CRAIG GORBY & CLAUDIA GORBY (R) KATHY L GYRANTI & MICHAEL S GYRANTI, ROBERT J GORBY, RUTH ANN NOVACK & GLENN A NOVACK (R) LENA M COWAN, NORMAN R. GORBY, PAUL F GORBY & DOROTHY L GORBY, GREGORY E GORBY, ALICE ESTHER GORBY, BRONDA K DEVES & CRAIG DEVES (R) PAUL PALMER & MARION W PALMER (R) THERESA M CATES (R) THOMAS M DOUGLAS & MAUDE C DOUGLAS (R)	12-15-29	44.875
4	MANHAR R EDGELL (S) CARL M GORBY AND MARGARET LEONA GORBY, AUSTIE LEITHA FRIZZELL & FRANK FRIZZELL, VERNA D LANE, RYAN L KING & NANCY J KING, ORVEL A GORBY & MARY M GORBY (R) DARREL C GORBY & MARGARET L GORBY, MARGARET D GORBY, AN GORBY, SAMUEL LAWRENCE HAINES, DAVID L HAINES, HERBERT HAWKINS & PATTY HAWKINS (R) EDNA SHOWN & RALPH SHOWN (R) HELEN M FORSHEE & KERMIT FORSHEE, MARY ETTA GORBY, HARRIET L WAKEMAN & MORRIS C WAKEMAN, LORRETTA MAE GILLIS & STANLEY GILLIS, LOOES M GORBY (R) JOHN D HENDERSON & CORNELIA HENDERSON AND DAVID L HENDERSON & VICTORIA J HENDERSON (R)	12-15-24	48.00	5	KIMBERLY ANN YOHIO & KEITH ALLEN YOHIO (S)	12-15-29	44.875
				6	GLENN WOOD & TAMELA P WOOD (S)	1-10-9	32.00
					LINDA ALLEN (R) WILLIAM J JACOBS (R) GARY A JACOBS (R) ANDREW J JOHNSON (R) ROSALIE B HENRY (R) JANET JOHNSON (R) GREGORY F JOHNSON (R) BRC APPALACHIAN MINERALS LLC (R)		
					TERREL L MELOTT (S) SHIRLEY GREATHOUSE (S) VANESSA BARD & LLOYD BARD (S) SHARON J MCMILLIN (S) EAST RESOURCES INC. (R) HADAD & BROOKLYN INC. (R)	P/O 1-10-10	28.50
						1-10-11	62.944
						P/O 1-10-25	21.79

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.

REFERENCES TO PROPOSED HORIZONTAL WELLS SURFACE LOCATIONS

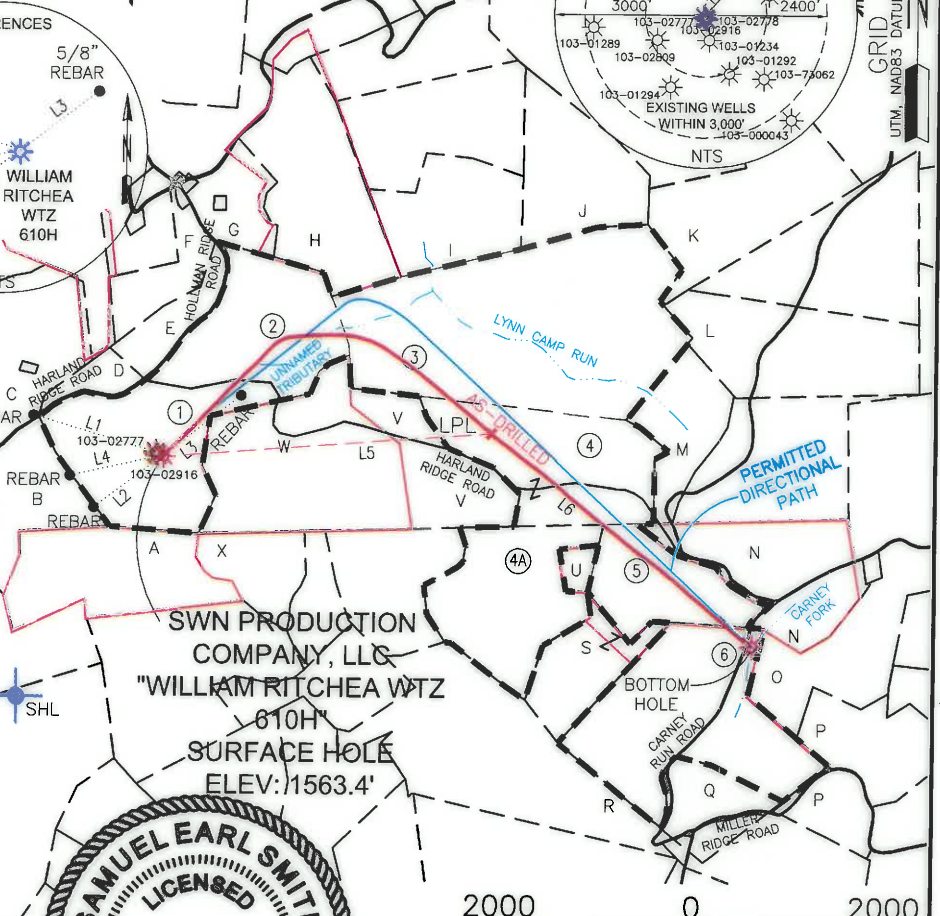
REFERENCES

UTM (NAD83, ZONE 17, METERS):  
NORTHING: 4,391,133.156  
EASTING: 529,247.612

LANDING POINT LOCATION (LPL):  
UTM (NAD83, ZONE 17, METERS):  
NORTHING: 4,391,210.392  
EASTING: 530,288.935

BOTTOM HOLE LOCATION (BHL):  
UTM (NAD83, ZONE 17, METERS):  
NORTHING: 4,390,543.900  
EASTING: 531,124.781

TRACT	SURFACE OWNER	TAX PARCEL	ACRES
A	BERNARD LEE DUELLEY ET AL	12-15-25	39.75
B	WILLIAM R PITOSCIA	12-14-27	57.00
C	WILLIAM R PITOSCIA	12-14-16	104.01
D	WILLIAM D RITCHEA & SHIRLEY E RITCHEA	12-15-21	62.00
E	H C LEMASTERS HEIRS & CHARLES V MANKER REVOCABLE LIVING TRUST	12-15-18	62.00
F	GARY A RITCHEA & ALICIA L RITCHEA	12-15-15	13.70
G	HAESSLY LAND & TIMBER LLC	12-15-17	16.00
H	HAESSLY LAND & TIMBER LLC	12-15-5	51.10
I	HAESSLY LAND & TIMBER LLC	12-15-3	34.00
J	VERNA E LONG DREYER	12-15-8	34.00
K	HAESSLY LAND & TIMBER LLC	12-15-10	52.00
L	ERIC D WYKERT & CEE JAE WYKERT AND JAMES G WOOD & TAMELA P WOOD	1-7-21	48.20
M	HANNAH R EDGELL	1-7-29	27.80
N	WAYNE WYKERT & ASHLEY WYKERT	1-10-14	36.53
O	BONNIE SUE COLLINS & JUNIOR B COLLINS	1-1-4	87.00
P	BONNIE SUE COLLINS & JUNIOR B COLLINS	1-1-12	41.50
Q	VANESSA BARD & LLOYD BARD	P/O 1-10-11	14.016
R	TERREL L MELOTT	1-10-22	63.55
S	TERREL L MELOTT	1-10-10	28.75
T	NOT USED	12-15-29	44.875
U	DAVID PAUL HANSEN	12-15-30	4.00
V	HAROLD HEETER JR ET AL	12-15-23	26.00
W	BERNARD LEE DUELLEY ET AL	12-15-22	62.00
X	BERNARD LEE DUELLEY ET AL	12-15-26	15.50



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* 02-23-17

COMPANY: **SWN** Production Company, LLC

(+) 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)	WILLIAM RITCHEA Wtz OPERATOR'S WELL #: 610H API WELL #: 47 103 03141 STATE COUNTY PERMIT
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WELL TYPE: OIL  WASTE DISPOSAL  PRODUCTION  DEEP  GAS  LIQUID INJECTION  STORAGE  SHALLOW

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) AS-DRILLED

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,639 TVD 15,769 IMD

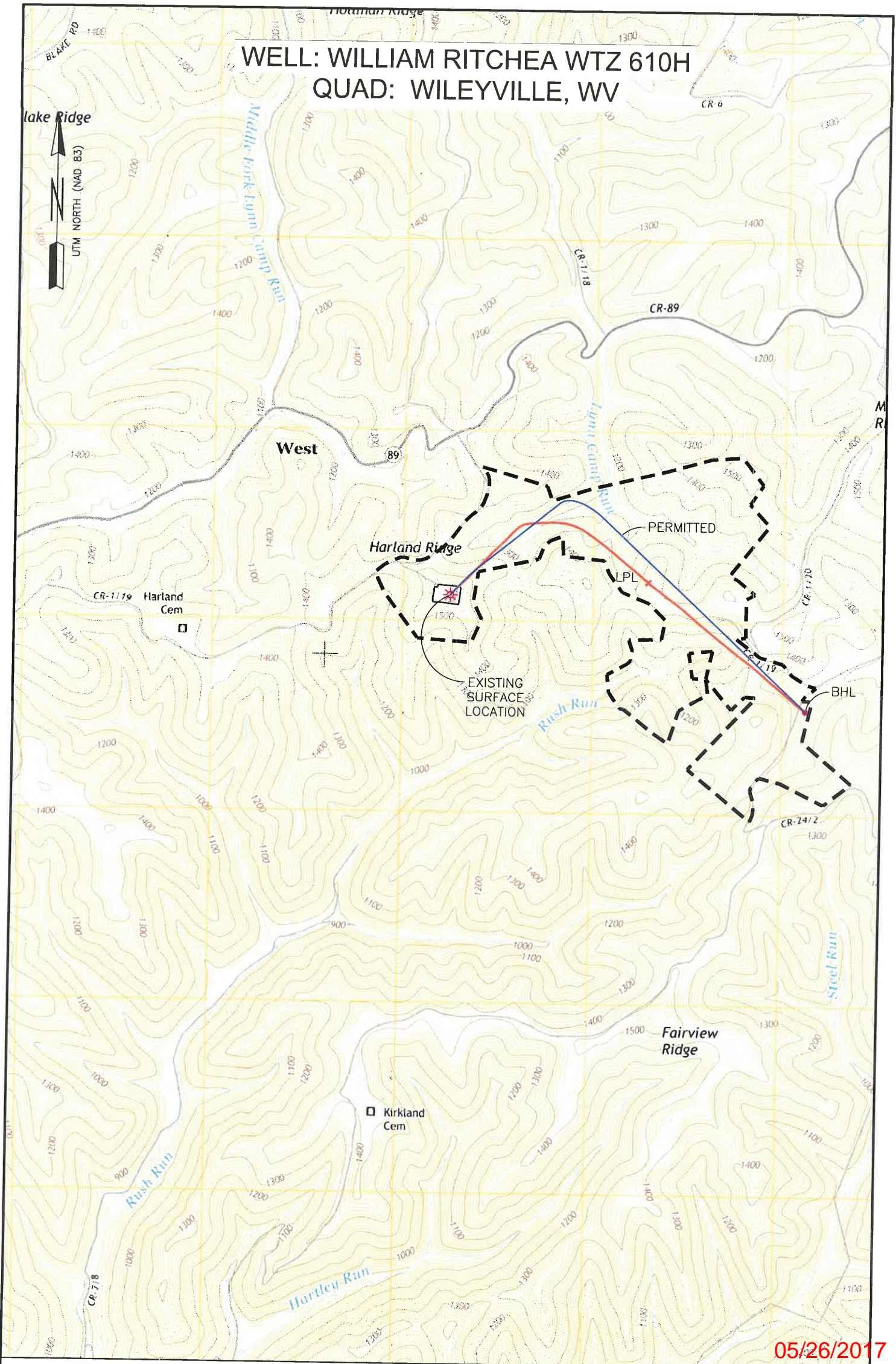
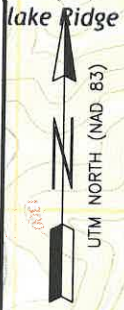
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC  
 ADDRESS: P.O. BOX 1300  
 CITY: JANE LEW STATE: WV ZIP CODE: 26378

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 --- AS-DRILLED PATH --- PERMITTED DIRECTIONAL PATH	<b>REVISIONS:</b> 02-23-2017 REVISED API WELL # DATE: 07-22-2016 DRAWN BY: S SMITH SCALE: 1" = 2000' DRAWING NO: 59481 WELL LOCATION PLAT
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**WELL: WILLIAM RITCHEA WTZ 610H**  
**QUAD: WILEYVILLE, WV**



05/26/2017

**NOTE:**  
 THE PROPOSE OF THIS PLAT IS FOR THE LOCATION OF PROPOSED GAS WELLS AND DOES NOT REPRESENT A CLOSED BOUNDARY SURVEY. PROPERTY LINE AND OWNERS WERE OBTAINED FROM VARIOUS FIELD EVIDENCE, TAX RECORDS AND AERIAL MAPPING.

**LEGEND**  
 - - - - - EXTERNAL LEASE LINE

Applicant / Well Operator Name SWN PRODUCTION COMPANY, LLC		Well (Farm) Name WILLIAM RITCHEA WTZ		Well # 610H	Serial #
Address PO BOX 1300, JANE LEW, WV 76378		County - Code WETZEL - 103	District PROCTOR		
Surface Landowner / Lessor WILLIAM D & SHIRLEY E RITCHEA		USGS 7 1/2 Quadrangle Map Name WILEYVILLE, WV			