

SHL Latitude: 40°12'30" L 7,890'

BHL Latitude: 40°10'00" 6,430'

RETTEW

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SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,447,426.461
EASTING: 536,703.728

LANDING POINT LOCATION (LPL):

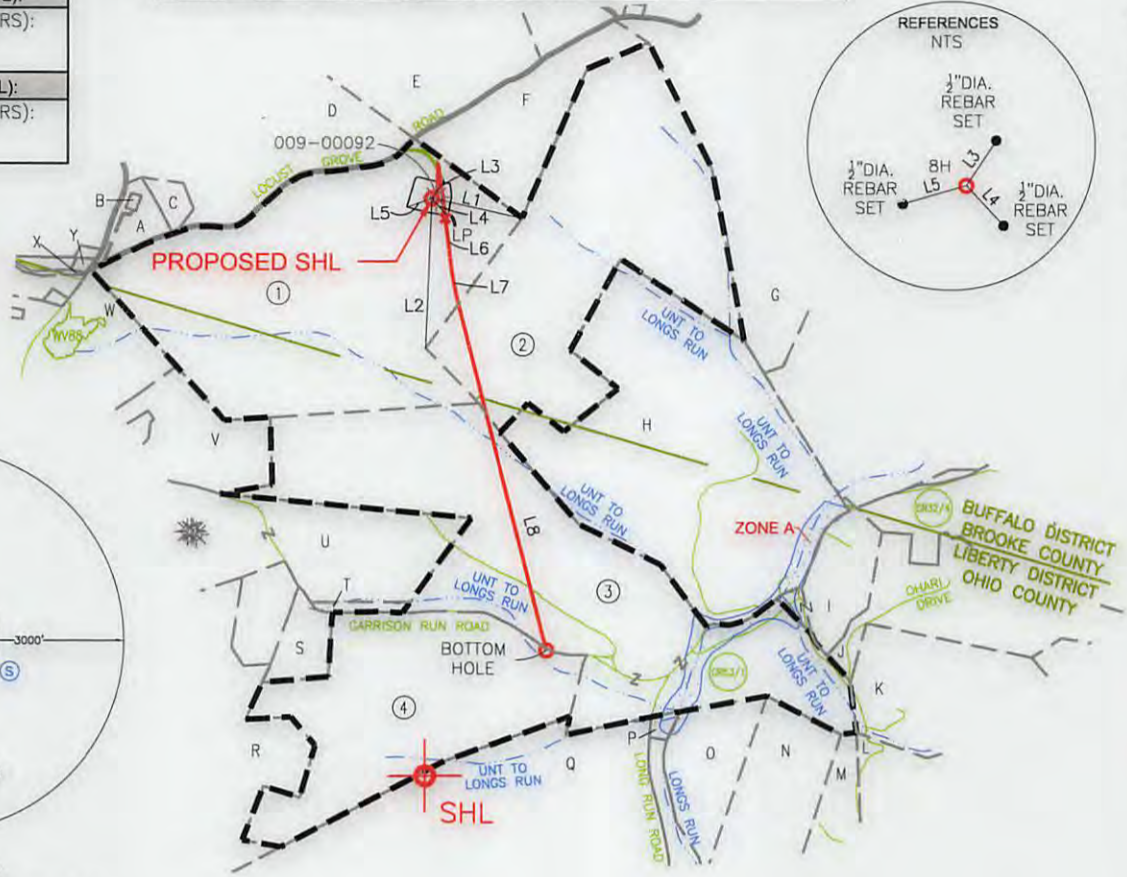
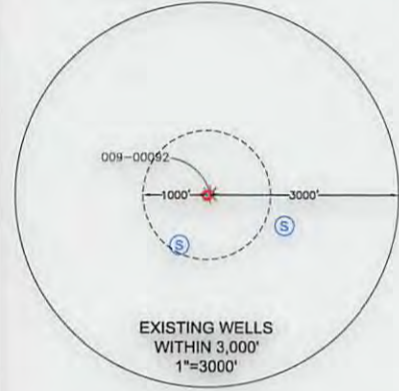
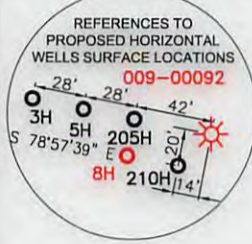
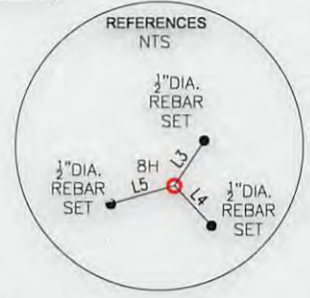
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,447,364.550
EASTING: 536,746.659

BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,445,997.891
EASTING: 537,069.894

GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	S 78°12'55" E	964.16'	SHL TO LANDMARK	
L2	S 02°16'07" W	1,549.85'	SHL TO LANDMARK	
L3	N 35°52'54" E	219.27'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L4	S 41°45'44" E	238.90'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L5	S 71°27'56" W	275.75'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L6	S 06°59'58" E	499.75'	LP TO END OF TAN.	
L7	S 10°42'10" E	369.76'	END OF TAN. TO ARC	
L8	S 14°24'17" E	3,742.06'	ARC TO BHL	



NOTES ON SURVEY

- COORDINATES 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 FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.

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.

Craig Robert West 9/6/17



ADJOINING OWNER INFORMATION
(SEE ADJOINING OWNER SHEET)



P.S. 2241

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	<p>MINIMUM DEGREE OF ACCURACY: 1/200</p> <p>PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)</p>	<p>COMPANY: SWN Production Company, LLC</p> <p>OPERATOR'S WELL #: JOHN HUPP BRK 8H</p> <p>API WELL #: 47 009 00215</p> <p>STATE COUNTY PERMIT</p>
	<p>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"/></p> <p>WATERSHED: UPPER OHIO NORTH ELEVATION: 1,275.5± (AS-BUILT)</p> <p>DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: BETHANY, WV-PA</p> <p>SURFACE OWNER: JOHN W. HUPP & LINDA H. DOUBLE ACREAGE: 184.46±</p> <p>OIL & GAS ROYALTY OWNER: JOHN W. HUPP & LINDA H. DOUBLE ACREAGE: 184.46±</p> <p>DRILL <input checked="" type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/></p> <p>CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input type="checkbox"/> (SPECIFY) 10/06/2017</p> <p>TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,290' TVD 11,172' TMD</p>	<p>DESIGNATED AGENT: DEE SOUTHALL</p> <p>ADDRESS: P.O. BOX 1300</p> <p>CITY: JANE LEW STATE: WV ZIP CODE: 26378</p>

<p>LEGEND:</p> <ul style="list-style-type: none"> PROPOSED SURFACE HOLE / BOTTOM HOLE EXISTING / PRODUCING WELLHEAD EXISTING SPRING EXISTING WATER WELL ACCESS ROAD TIE LINE LEASE BOUNDARY MARCELLUS DHP 	<p>REVISIONS:</p> <p>DATE: 05-25-2017</p> <p>DRAWN BY: W. MCCLEAF</p> <p>SCALE: 1" = 2000'</p> <p>DRAWING NO: 087569048</p> <p>WELL LOCATION PLAT</p>
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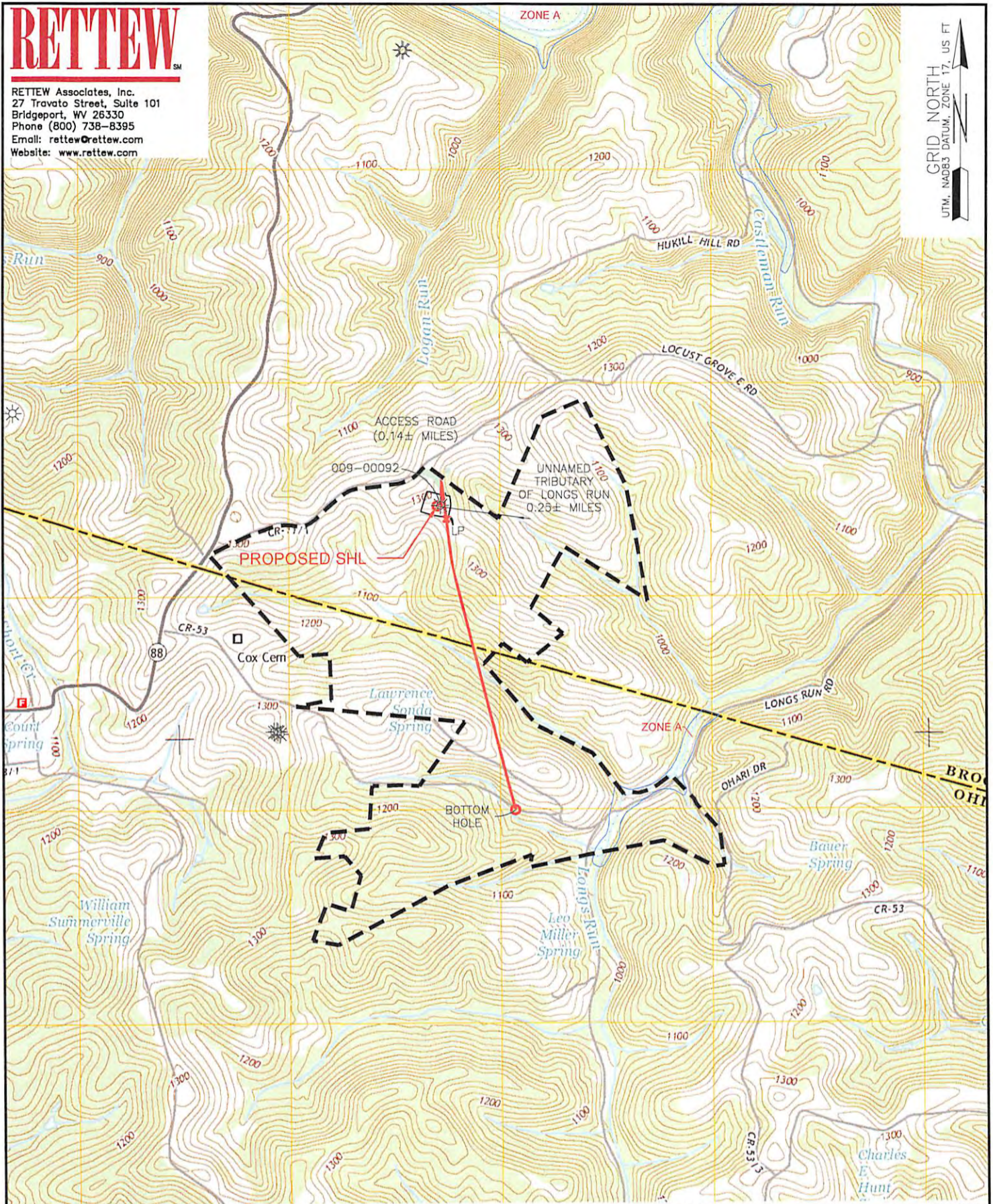
<p>WELL OPERATOR: SWN PRODUCTION COMPANY, LLC</p> <p>ADDRESS: P.O. BOX 1300</p> <p>CITY: JANE LEW STATE: WV ZIP CODE: 26378</p>	<p>DESIGNATED AGENT: DEE SOUTHALL</p> <p>ADDRESS: P.O. BOX 1300</p> <p>CITY: JANE LEW STATE: WV ZIP CODE: 26378</p>
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GRID NORTH
 UTM, NAD83 DATUM, ZONE 17, US FT



WELL: JOHN HUPP BRK 8H
 QUAD: BETHANY, WV-PA

NAME AND DISTANCE TO THE NEAREST STREAM: UN-NAMED TRIBUTARY TO LONGS RUN IS LOCATED ±0.25 MILES SOUTH EAST OF THE CENTER OF THE DRILL PAD.		STREAM CROSSING COORDINATES (NAD 83): NO NEW CROSSINGS.		COMPANY: SWN Production Company, LLC		SWN Production Company™	
WELL RESTRICTIONS: 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				OPERATOR'S JOHN HUPP BRK		WELL #: 8H	
FEMA FLOOD INFORMATION: BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF BROOKE COUNTY, WEST VIRGINIA; MAP NUMBERS 54009C0130D, 54009C0135D, 54009C0140D, 54009C0141D, 54009C0145D; EFFECTIVE DATE: APRIL 19, 2010, OHIO COUNTY, WEST VIRGINIA; MAP NUMBER 54069C0045D; EFFECTIVE DATE JULY 17, 2006.				LOCATION: BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRGINIA		SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.176411° LONGITUDE: -80.568900°	
LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ☼ EXISTING / PRODUCING WELLHEAD (S) EXISTING SPRING (W) EXISTING WATER WELL				BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.163524° LONGITUDE: -80.564682°		REVISIONS: DATE: 05-25-2017	
LEASE BOUNDARY ACCESS ROAD MARCELLUS DHP HIGHWAY/INTERSTATE COUNTY ROAD				DRAWN BY: W. MCCLEAF SCALE: 1" = 2000' DRAWING NO: 087569048 TOPOGRAPHIC MAP		COMPLETION ID 2501166323 PAD ID 3001156337	