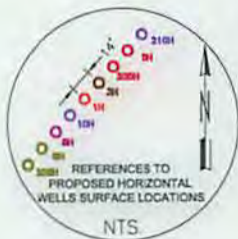


# RETTEW

RETTEW Associates, Inc.  
27 Travata Street, Suite 101  
Bridgeport, WV 26330  
Phone (800) 738-8395  
Email: rettetw@rettetw.com  
Website: www.rettetw.com



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

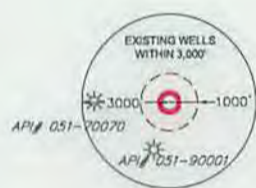
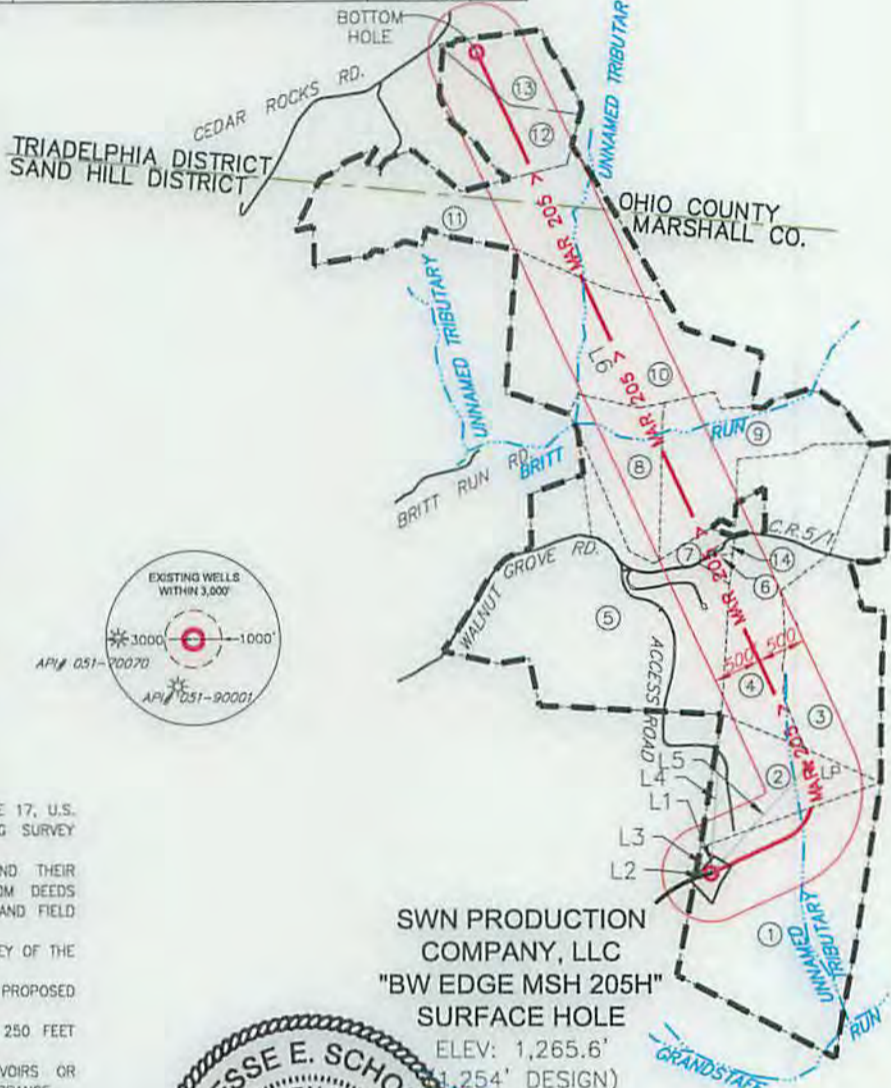
LINE	DESCRIPTION	DISTANCE	DESCRIPTION	MONUMENT
L1	N00°41'32"E	195'	SHL TO REF. PIN	IRON PIN
L2	S81°57'39"W	207'	SHL TO REF. PIN	IRON PIN
L3	S18°30'30"W	1,111'	SHL TO LANDMARK	UNIT CORNER
L4	N22°35'34"W	286'	SHL TO LANDMARK	UNIT CORNER
L5	N42°32'13"E	1,486'	SHL TO LP	
L6	N24°41'10"W	8,129'	LP TO BHL	

Latitude: N 40°02'30"

Longitude: W 80°37'30"

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	EDGE, WILLIAM F. JR. & BARBARA (S)/FLETCHER, JOSEPHINE (R)	12-9-8	87.8±
2	EDGE, WILLIAM F. JR. & BARBARA (S)/FLETCHER, JOSEPHINE (R)	12-9-8.1	28.0±
3	GZA, CHESTER A. (S)/GZ	12-1-16	53.1±
4	GZA, CHESTER A. (S)/GZ	12-1-15	53.4±
5	SCHELLHASE, MARK A. & ANDREA K. (S)/GZ	12-1-18	93.8±
6	SCHELLHASE, MARK A. & ANDREA K. (S)/GZ	12-1-18.5	0.9±
7	MILLER, WILET S. (S)/GZ	12-1-18.3	8.0±
8	MANIARSKI, PETE E. & SUSAN K. (S)/GZ	12-1-12	29.4±
9	MORRIS, KENNETH L. (S)/GZ	12-1-14	39.0±
9	HOLMES, CAROL ANN (S)/GZ	12-1-14	39.0±
10	OFFIELD, MICHAEL L. & TYLER R. (S)/GZ	12-1-13	71.6±
11	HARTMAN, WALTER LEWIS & GLORIA LOUISE (S)/GZ	12-1-10.1	47.8±
12	BEALL, GREGORY W. & JILL ANN (S)/GZ	T17-9.3	20.0±
13	BEALL, GREGORY W. & JILL ANN (S)/GZ	T17-9.1	17.6±
14	SMITH, CHESTER L. & AMEN S. (S)/GZ	12-1-18.2	0.5±

SURFACE HOLE LOCATION (SHL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.006578°
	LONGITUDE: -80.627476°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,529,346.805'
	EASTING: 1,744,732.483'
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,428,553.763
	EASTING: 531,795.524
"LANDING POINT" LOCATION (LPL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.009573°
	LONGITUDE: -80.623871°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,530,441.810'
	EASTING: 1,745,737.350'
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,428,887.521
	EASTING: 532,101.808
BOTTOM HOLE LOCATION (BHL):	
GEOGRAPHIC (NAD83):	LATITUDE: 40.029894°
	LONGITUDE: -80.635887°
UTM (NAD83, ZONE 17, FEET):	NORTHING: 14,537,827.590'
	EASTING: 1,742,342.430'
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,431,138.712
	EASTING: 531,067.035



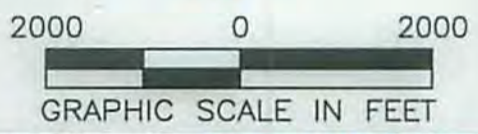
**NOTES ON SURVEY**

- 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 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.



SWN PRODUCTION COMPANY, LLC  
"BW EDGE MSH 205H"  
SURFACE HOLE  
ELEV: 1,265.6'  
(1,254' DESIGN)

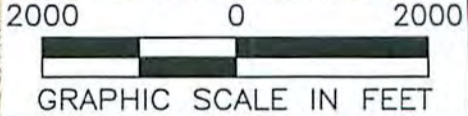
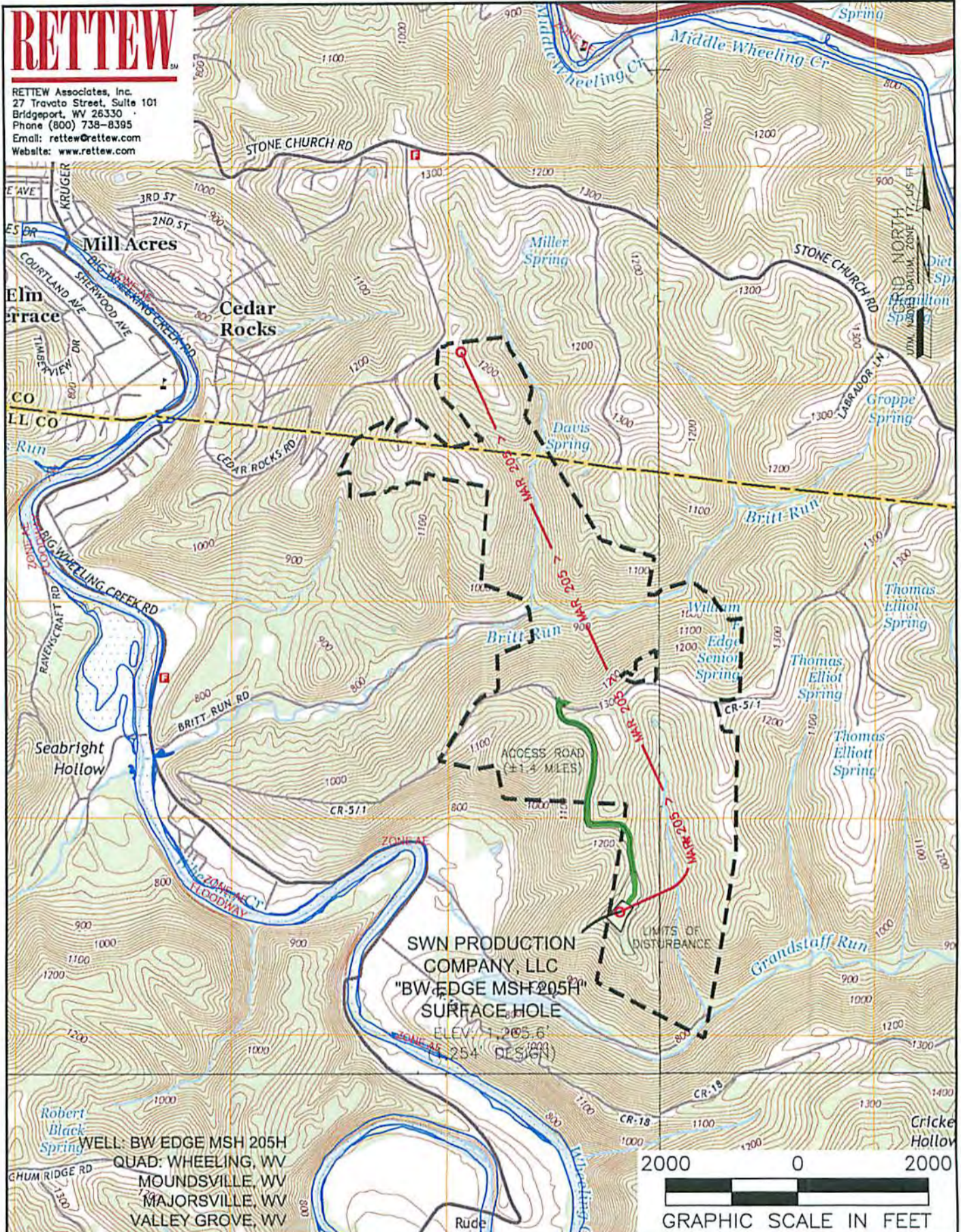


P.S. 2313

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL &amp; GAS 601 57TH STREET CHARLESTON, WV 25034</p>	<p>MINIMUM DEGREE OF ACCURACY: 1/200</p> <p>PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)</p>	<p>COMPANY: <b>SWN</b> Production Company, LLC</p> <p>OPERATOR'S WELL #: BW EDGE MSH 205H</p> <p>API WELL #: 47 051 01843 H6A - MOD</p>
	<p>WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input checked="" 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 SOUTH</p> <p>DISTRICT: SAND HILL COUNTY: MARSHALL</p> <p>SURFACE OWNER: EDGE, WILLIAM F. JR. &amp; BARBARA</p> <p>OIL &amp; GAS ROYALTY OWNER: FLETCHER, JOSEPHINE</p> <p>DRILL <input checked="" type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input checked="" type="checkbox"/></p> <p>CONVERT <input type="checkbox"/> PLUG &amp; ABANDON <input type="checkbox"/> CLEAN OUT &amp; REPLUG <input type="checkbox"/> OTHER CHANGE <input type="checkbox"/> (SPECIFY)</p> <p>TARGET FORMATION: MARCELLUS</p>	<p>ELEVATION: 1,265.6' (1,254' DESIGN)</p> <p>QUADRANGLE: WHEELING, W.VA-OHIO</p> <p>ACREAGE: 87.8±</p> <p>ACREAGE: 115.8±</p>
<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>	<p>LEGEND:</p> <ul style="list-style-type: none"> <li>○ PROPOSED SURFACE HOLE / BOTTOM HOLE</li> <li>⊗ EXISTING / PRODUCING WELLHEAD</li> <li>⊘ ABANDONED WELL</li> <li>⊗⊘ PLUGGED &amp; ABANDONED WELL</li> <li>△ CUT CONDUCTOR</li> <li>--- LEASE BOUNDARY</li> <li>--- 500' DHP BUFFER</li> <li>-MAR 205- MARCELLUS DHP</li> <li>--- ABANDONED PATH</li> </ul>

**RETTEW**

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<b>NAME AND DISTANCE TO THE NEAREST STREAM:</b> UNNAMED TRIBUTARY TO GRANDSTAFF RUN IS LOCATED ±0.17 MILES SE 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: >25 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >60 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 6000 SQ FT: >625 FEET		<b>OPERATOR'S</b> BW EDGE MSH		<b>WELL #:</b> 205H	
<b>FEMA FLOOD INFORMATION:</b> BY GRAPHIC PLOTTING ONLY FEMA FIRM UNINCORPORATED AREA OF MARSHALL COUNTY, WEST VIRGINIA; MAP NUMBER 54051C0019E, EFFECTIVE DATE SEPTEMBER 25, 2009.		<b>LOCATION:</b> SAND HILL DISTRICT, MARSHALL COUNTY, WEST VIRGINIA		<b>SURFACE HOLE LOCATION:</b> GEOGRAPHIC (NAD83): LATITUDE: 40.006578° LONGITUDE: -80.627476°	
<b>LEGEND:</b> ○ PROPOSED SURFACE HOLE / WELLHEAD ⊗ EXISTING / PRODUCING WELLHEAD ⊘ ABANDONED WELL ⊙ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR		<b>BOTTOM HOLE LOCATION:</b> GEOGRAPHIC (NAD83): LATITUDE: 40.029894° LONGITUDE: -80.635887°		10/09/2015	
<b>REVISIONS:</b>		<b>DATE:</b> 07-26-2015		<b>DRAWN BY:</b> J. AIKEN <b>SCALE:</b> 1" = 2000' <b>DRAWING NO:</b> 087569005 <b>TOPOGRAPHIC MAP</b>	