

SHL Latitude: 40°12'30"

10,991'

BHL Latitude: 40°15'00"

3,365'

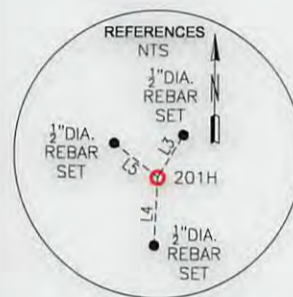
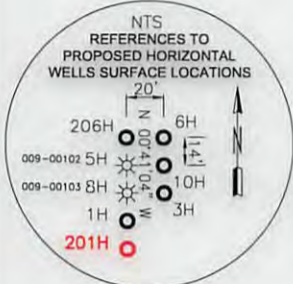
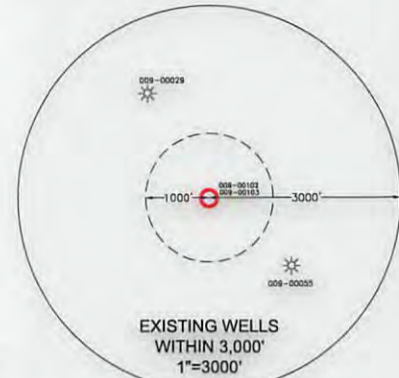
RETTEW

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

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,449,168.933 EASTING: 532,116.747
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,449,092.815 EASTING: 531,703.955
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,451,077.521 EASTING: 530,886.358

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

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 00°31'54" E	1,140.08'	SHL TO LANDMARK	
L2	N 51°03'27" E	673.22'	SHL TO LANDMARK	
L3	N 28°00'33" E	211.24'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L4	S 01°00'58" E	251.76'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L5	N 36°59'11" W	220.65'	SHL TO REF. PNT.	1/2"Ø REBAR SET
L6	S 16°17'29" W	506.67'	SHL TO HOME	CORNER HOME
L7	N 79°33'08" W	1,377.13'	SHL TO LP	
LB	N 22°23'21" W	7,042.36'	LP TO BHL	

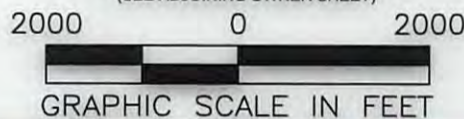
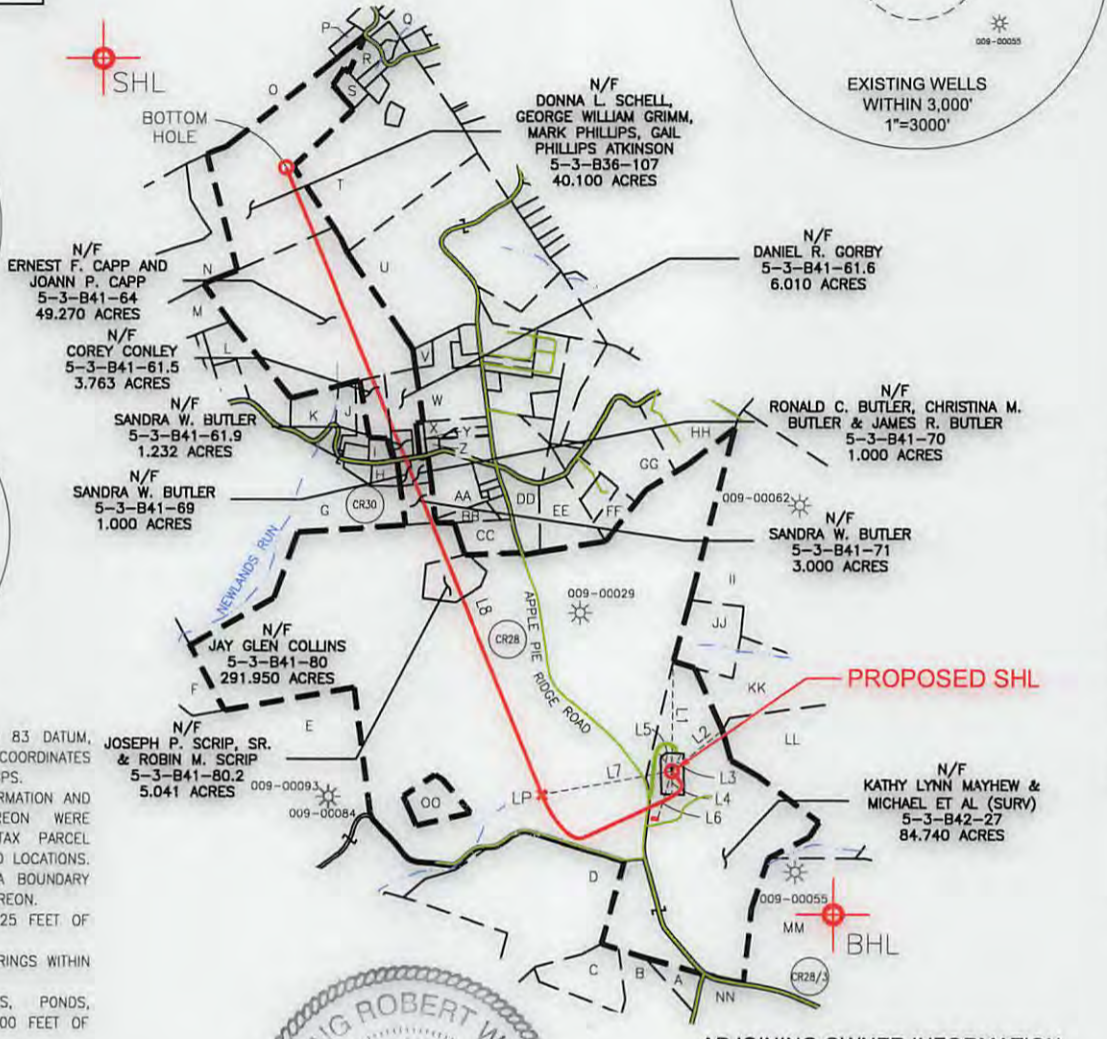


NOTES ON SURVEY

- 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.
- 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.

P.S. 2241

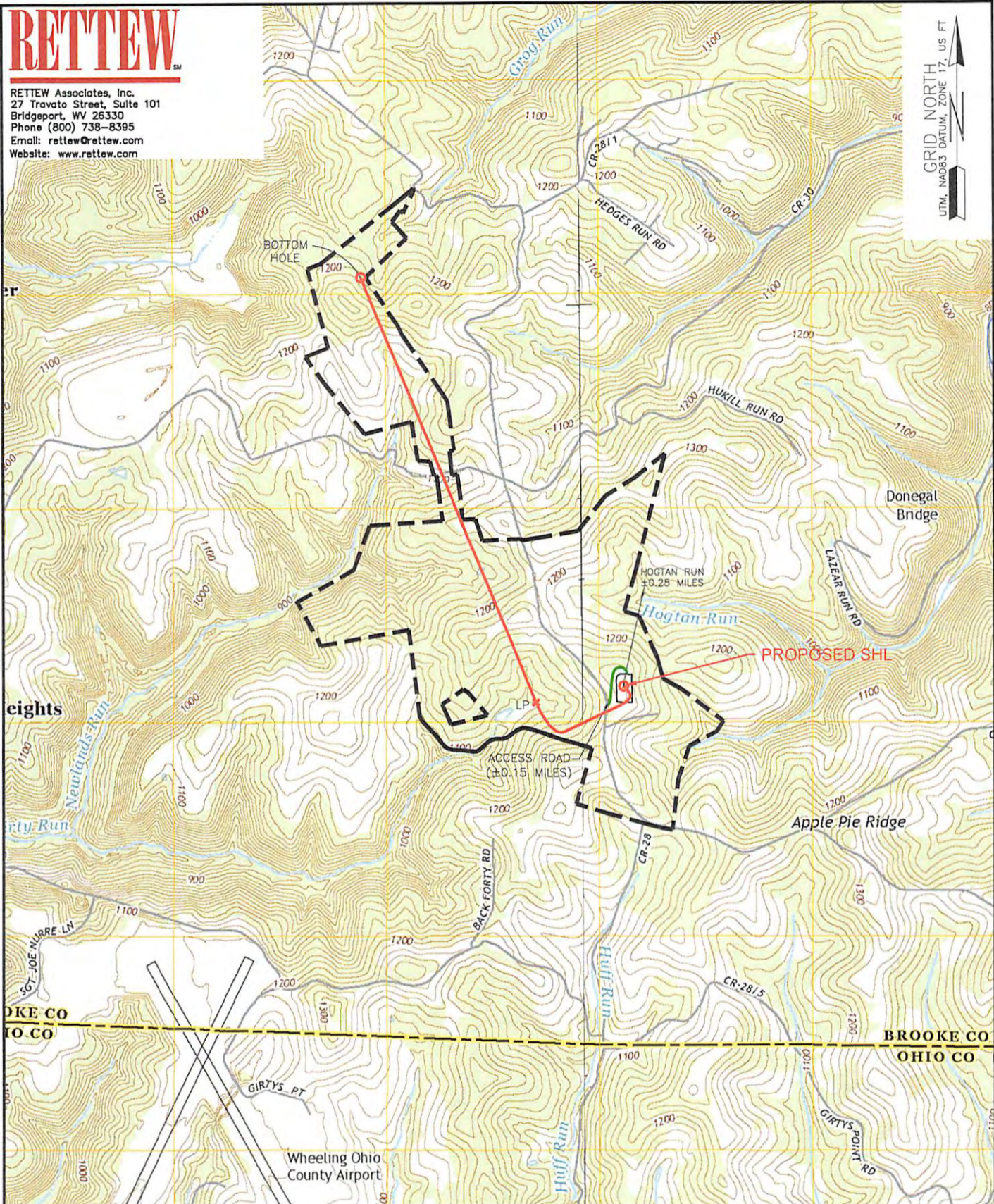


<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	<p>MINIMUM DEGREE OF ACCURACY: 1/200</p> <p>PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)</p>	<p>KATHY MAYHEW BRK</p> <p>OPERATOR'S WELL #: 201H</p> <p>API WELL #: 47 09 00208 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 WHEELING ELEVATION: 1281.1± (AS-BUILT)</p> <p>DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: BETHANY, WV-PA & TILTONSVILLE, OH-WV</p> <p>SURFACE OWNER: MAYHEW, KATHY LYNN & MICHAEL, ETAL ACREAGE: ±84.74</p> <p>OIL & GAS ROYALTY OWNER: MAYHEW, KATHY LYNN & MICHAEL, ETAL ACREAGE: ±84.74</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) 09/15/2017</p> <p>TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,038' TVD 13,704' TMD</p>	<p>WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL</p> <p>ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300</p> <p>CITY: JANE LEW STATE: WV ZIP CODE: 26378 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 ✕ ABANDONED WELL ✕ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR ----- TIE LINE ----- LEASE BOUNDARY ----- MARCELLUS DHP ----- ABANDONED PATH 	<p>REVISIONS:</p> <table border="1"> <tr><td> </td><td>DATE: 05-12-2017</td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>		DATE: 05-12-2017							<p>DRAWN BY: W. MCCLEAF</p> <p>SCALE: 1" = 2000'</p> <p>DRAWING NO: 087569047</p> <p>WELL LOCATION PLAT</p>
	DATE: 05-12-2017									

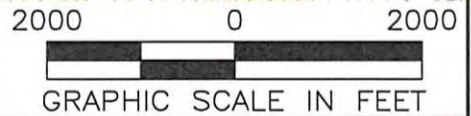
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GRID NORTH
 UTM, NAD83 DATUM, ZONE 17, US FT



WELL: KATHY MAYHEW BRK 201H
 QUAD: BETHANY, WV-PA &
 TILTONSVILLE, OH-WV



NAME AND DISTANCE TO THE NEAREST STREAM: HOGTAN RUN IS LOCATED ±0.25 MILES NE OF THE CENTER OF THE DRILL PAD.
 STREAM CROSSING COORDINATES (NAD 83): NO NEW CROSSINGS.

COMPANY: **SWN** Production Company, LLC
SWN ^R/_A ^V/₊

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: KATHY MAYHEW BRK
 WELL #: 201H
 LOCATION: BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRGINIA

FEMA FLOOD INFORMATION:
 BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF BROOKE COUNTY, WEST VIRGINIA; MAP NUMBERS 54009C0130D & 54009C0140D; EFFECTIVE DATE: APRIL 19, 2010.
 NO FLOOD ZONES ARE SITUATED WITHIN THE UNIT.

SURFACE HOLE LOCATION:
 GEOGRAPHIC (NAD83):
 LATITUDE: 40.192297°
 LONGITUDE: -80.622688°
 BOTTOM HOLE LOCATION:
 GEOGRAPHIC (NAD83):
 LATITUDE: 40.209539°
 LONGITUDE: -80.637051°

09/15/2017

LEGEND:
 ○ 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

REVISIONS:
 DATE: 05-12-2017
 DRAWN BY: W. MCCLEAF
 SCALE: 1" = 2000'
 DRAWING NO: 087569047
 TOPOGRAPHIC MAP