

Latitude: 39°45'00"

SURFACE HOLE 7284'

Latitude: 39°45'00" BOTTOM HOLE

3,165'

# JACKSON SURVEYING INC.

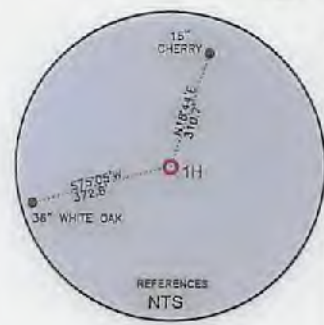
P.O. Box 1460  
677 W. Main St.  
Clarksburg, WV 26302  
304-623-5851

<b>SURFACE HOLE LOCATION (SHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,395,822.852 EASTING: 533,495.180
<b>LANDING POINT (LPL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,395,820.240 EASTING: 532,959.219
<b>AZIMUTH 1 (AZ1):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,395,841.378 EASTING: 532,934.030
<b>AZIMUTH 2 (AZ2):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,737.068 EASTING: 531,906.267
<b>AZIMUTH 3 (AZ3):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,816.883 EASTING: 531,799.571
<b>AZIMUTH 4 (AZ4):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,877.227 EASTING: 531,704.946
<b>AZIMUTH 5 (AZ5):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,396,910.405 EASTING: 531,656.370
<b>BOTTOM HOLE LOCATION (BHL):</b>
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,397,262.928 EASTING: 531,173.590

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT	
L1	S 51°18'04" W	334.68'	SHL TO LANDMARK	20" BLACK CHERRY	
L2	N 86°20'42" W	396.30'	SHL TO LANDMARK	STONE FOUND	
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION	
L3	S 69°43'15" W	1758.42'	1879.82'	SHL TO LP	
LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT	
L4	N 57°28'25" W	368.21'	AZ3 TO AZ4	N/A	
L5	N 53°51'48" W	1,961.24'	AZ5 TO BH	N/A	
CURVE	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH	DESCRIPTION
C1	N 49°59'50" W	2,911.76'	107.89'	107.88'	LPL TO AZ1
C2	N 53°12'04" W	2,934.17'	437.56'	437.15'	AZ2 TO AZ3
C3	N 55°40'01" W	3,073.03'	193.03'	193.00'	AZ4 TO AZ5

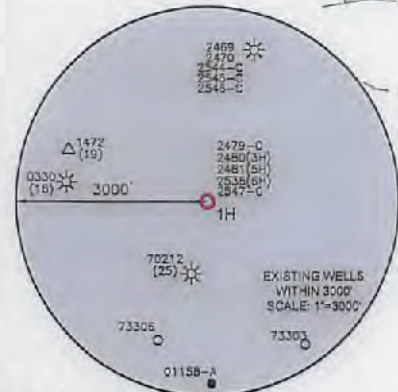


GRID NORTH  
UTM, NAD83 DATUM, ZONE 17, US FT



BOTTOM HOLE 9,225'

SURFACE HOLE 13983'



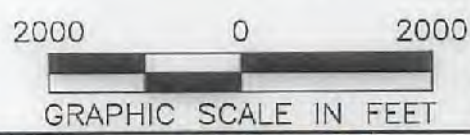
- WELL RESTRICTIONS**
- NO OCCUPIED DWELLINGS > 2500 SQ. FT. WITHIN 825 FEET OF CENTER OF PAD.
  - NO AGRICULTURE BUILDINGS > 2500 SQ. FT. WITHIN 825 FEET OF CENTER OF PAD.
  - WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
  - PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 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.

- NOTES ON SURVEY**
- 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 PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
  - ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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. 708 *David L Jackson*



COMPANY: **SWN** Production Company, LLC

<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>	MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	COMPANY: <b>SWN</b> Production Company, LLC OPERATOR'S WELL #: RINE WTZ 1H API WELL #: 47 STATE 103 COUNTY 03220 PERMIT
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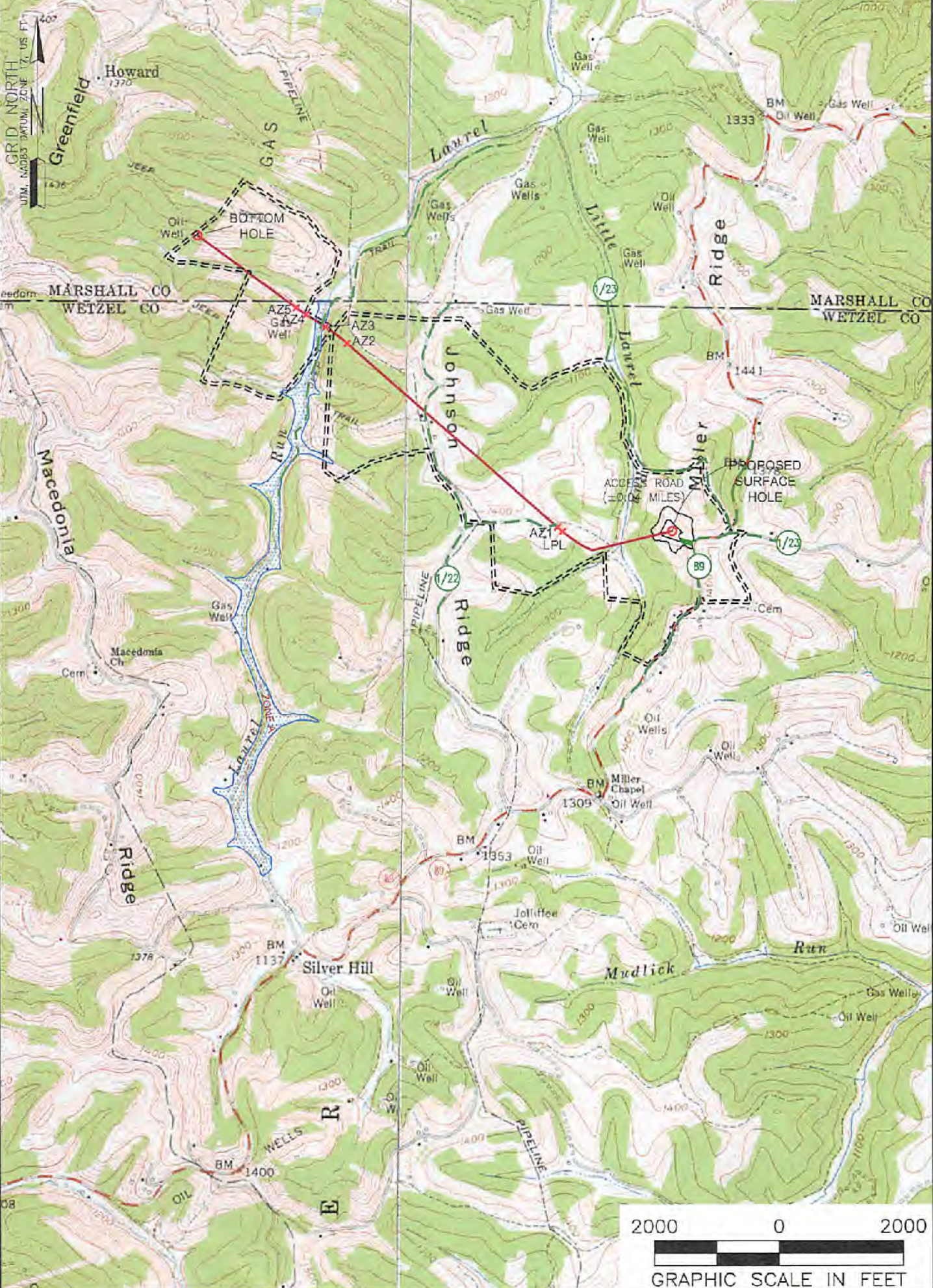
WELL TYPE: OIL <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> PRODUCTION <input checked="" type="checkbox"/> DEEP <input type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> STORAGE <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>	WATERSHED: LITTLE LAURAL RUN OF FISH CREEK (HUC-10) ELEVATION: 1327.8'
DISTRICT: CENTER COUNTY: WETZEL QUADRANGLE: LITTLETON, WV	SURFACE OWNER: LARRY G. RINE & JANA L. RINE ACREAGE: ±60.80
OIL & GAS ROYALTY OWNER: VERN STANSBURY & BESSIE L. STANSBERRY, (SHIRLEY A. PARKER; HOWARD G. STANSBERRY) ACREAGE: ±60.80	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"/>
CONVERT <input type="checkbox"/> PLUG & ABANDON <input type="checkbox"/> CLEAN OUT & REPLUG <input type="checkbox"/> OTHER CHANGE <input type="checkbox"/> (SPECIFY)	TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,303 TO 15,343 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
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<b>LEGEND:</b> PROPOSED SURFACE HOLE / BOTTOM HOLE EXISTING / PRODUCING WELLHEAD LPL: LANDING POINT LOCATION EXISTING WATER WELL EXISTING SPRING SURVEYED BOUNDARY DRILLING UNIT LEASE BOUNDARY PROPOSED PATH	<b>REVISIONS:</b> Δ REVISED DHP 03-07-2018 Δ REVISED TVD, TMD, & OWNERSHIP OF PARCEL 01-04-12 03-13-2018 DATE: 12-07-2017 DRAWN BY: N. MANO SCALE: 1" = 2000' DRAWING NO: WELL LOCATION PLAT
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**NOTES ON SURVEY**  
1. 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.  
2. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

**LEGEND:**

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- EXISTING / PRODUCING WELLHEAD
- LPL LANDING POINT LOCATION
- FLOOD PLAIN
- ACCESS ROAD
- PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH

<b>WELL OPERATOR:</b> SWN PRODUCTION COMPANY, LLC	<b>WELL (FARM) NAME:</b> RINE WTZ	<b>WELL #</b> 1H	<b>SERIAL #</b>
<b>ADDRESS:</b> P.O. BOX 1300 JANE LEW, WV 26378	<b>COUNTY - CODE</b> WETZEL - 103	<b>DISTRICT; CENTER</b>	
<b>SURFACE OWNER:</b> LARRY G. RINE & JANA L. RINE	<b>USGS 7 1/2 QUADRANGLE MAP NAME</b> LITTLETON, WV		