

Latitude: 39°45'00" (LITTLETON) SHL 134'

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,398,196.511
EASTING: 535,684.289

LANDING POINT LOCATION (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,398,039.965
EASTING: 535,484.110

BOTTOM HOLE LOCATION (BHL):

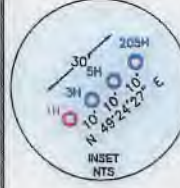
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,400,460.887
EASTING: 532,790.579

Latitude: 39°47'30" (CAMERON)

BHL 9526'

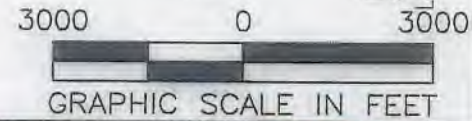
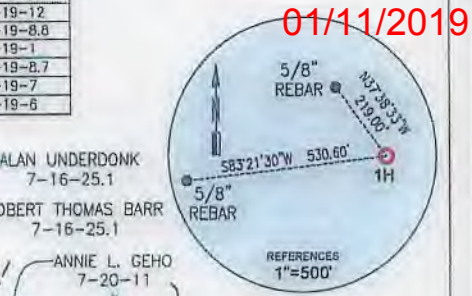
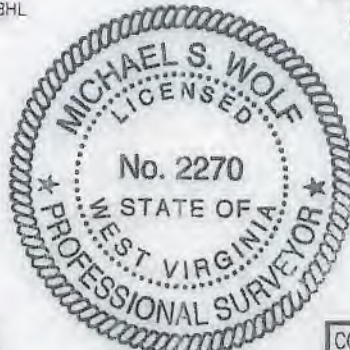
TRACT	SURFACE OWNER	TAX PARCEL
1	JOSEPH LEE & MICHAEL D. YOCUM (S/R)	7-26-9
2	JOSEPH LEE & MICHAEL D. YOCUM	7-27-4
3	DELORSE A. HORNER	7-26-10
4	CONSOLIDATED GAS SUPPLY CORPORATION	7-26-8
5	W. VA WILDLIFE RESOURCES SECTION	7-24-1
6	JAMES E. MORGAN	7-26-14
7	M. PEGGY GRIBBIN REVOC. LIVING TRUST	7-19-28
8	M. PEGGY GRIBBIN REVOC. LIVING TRUST	7-19-29
9	DELORSE A. HORNER	7-19-30
10	JOHN M. & TERESA L. HORNER	7-19-12
11	MASON DIXON FARMS LLC	7-19-8.8
12	MASON DIXON FARMS LLC	7-19-1
13	MICHAEL T. & CARLA M. WHITEMORE	7-19-8.7
14	CAROLYN RUTH FRANCIS	7-19-7
15	MASON DIXON FARMS, LLC	7-19-6

LINE	BEARING	DISTANCE
L1	N 53°23'28" W	2278.91'
L2	N 15°17'19" E	2590.04'
L3	S 51°58'25" W	833.73'



- 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.



(+) 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)

COMPANY: **SWN** Production Company, LLC
OPERATOR'S WELL #: YOCUM MSH 1H
API WELL #: 47 STATE 051 COUNTY 02133 PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW

WATERSHED: FISH CREEK
DISTRICT: LIBERTY COUNTY: MARSHALL
SURFACE OWNER: JOSEPH LEE AND MICHAEL D. YOCUM
OIL & GAS ROYALTY OWNER: JOSEPH LEE AND MICHAEL D. YOCUM
ELEVATION: 1053.4' (DESIGN)
QUADRANGLE: LITTLETON, WV
ACREAGE: ± 97.07
ACREAGE: ± 97.07

DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 7,082 TVD 19,413 TMD

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

LEGEND:	REVISIONS:	DATE:
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— SURVEYED BOUNDARY	10-24-2018
⊙ EXISTING / PRODUCING WELLHEAD	— DRILLING UNIT	
LPL LANDING POINT LOCATION	----- LEASE BOUNDARY	
⊙ EXISTING WATER WELL	— PROPOSED PATH	
⊙ EXISTING SPRING		
		DRAWN BY: K. POTH
		SCALE: 1" = 2000'
		DRAWING NO: 030-3170
		WELL LOCATION PLAT

01/11/2018



<p>1 in = 417 ft</p> <p>0 0.025 0.05 0.1 0.15 0.2 Miles</p> <p>Coordinate System: NAD 1983 UTM Zone 17N Units: Meter</p>	<p>Water Well</p> <p>1500' Buffer</p>	<p>Water Purveyor Map Well Pad: Yocum County: MSH</p>	
		<p>Southwestern Energy®</p>	
<p>Coordinates: 39.732795, -80.583668</p>		<p>Date: 4/19/2018</p>	<p>Author: willisb</p>

RECEIVED
Office of Oil and Gas
NOV 7 2018
WV Department of
Environmental Protection