

Latitude: 40°17'30" 1,657' TOP HOLE

THRASHER

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

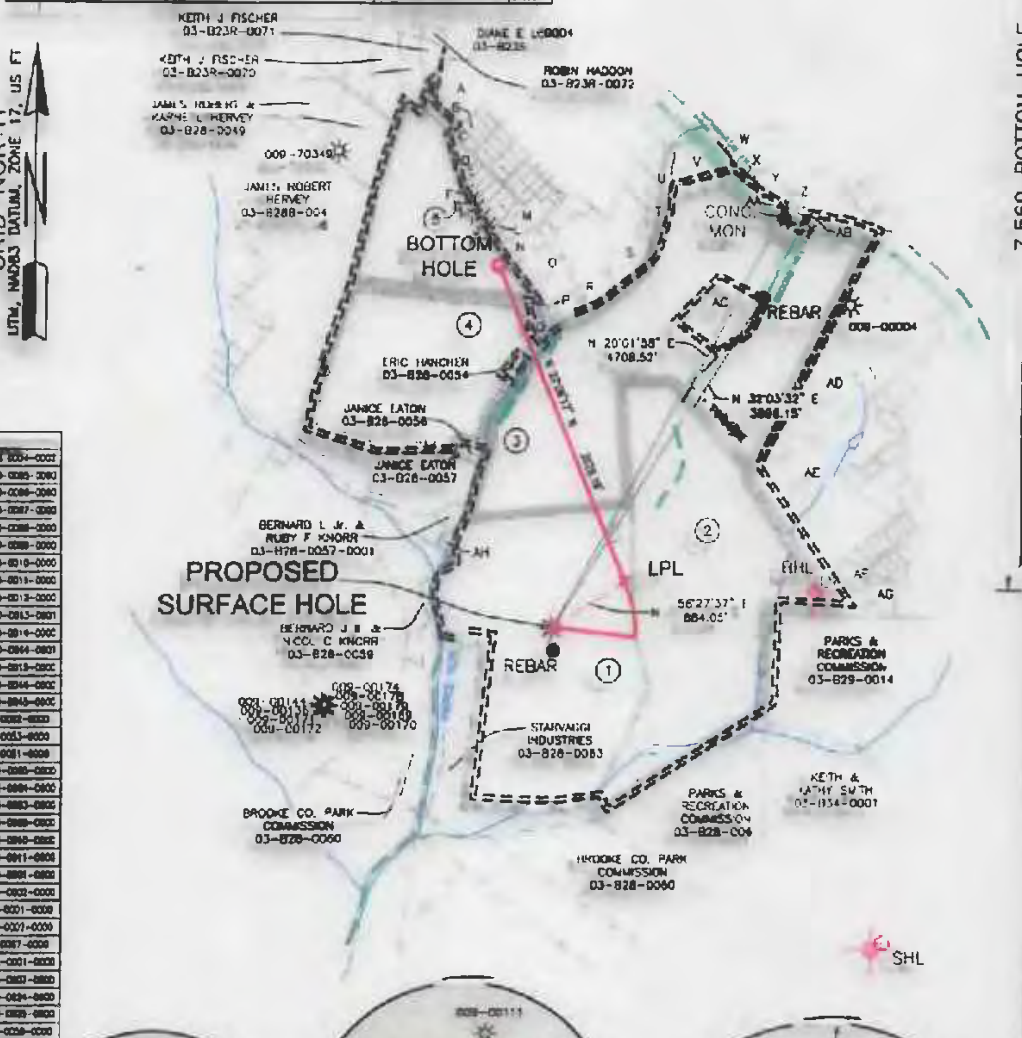
NOTES ON SURVEY

- 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.

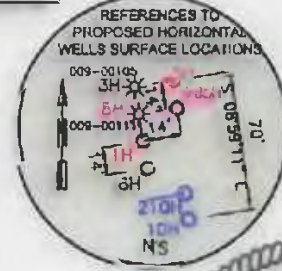
TRACT	ROYALTY OWNER	TAX PARCEL	ACRES
TRACT	RICHARD P GIST, VIRGINIA GIST ABBLITT, ANN GIST LEVIN	23-03-828-0084-0000	636.08
TRACT	SURFACE OWNER	TAX PARCEL	ACRES
1	BROOKE COUNTY PARK COMMISSION	23-03-828-0084-0000	135.00
2	PARK & RECREATION COMMISSION	23-03-828-0086-0000	133.50
3	PARK & RECREATION COMMISSION	23-03-828-0086-0000	148.00
4	CHARLES EDWARD & ELSE HELEN SCHUMPAUGH	23-03-828-0086-0000	85.88
5	CAROLLA RITA BUCY	23-03-828-0086-0000	54.89

2,247' BOTTOM HOLE

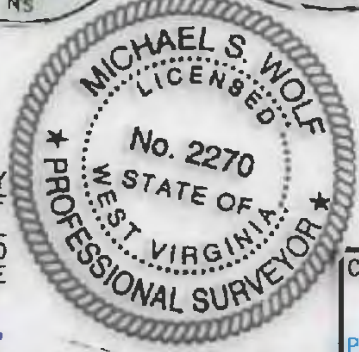
GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



TRACT	OWNER	ACRES
A	WILLIAM BARNES HENSHER	03-828-0094-0002
B	COHME - MAYNARD	03-828-0094-0003
C	MARY & JOHN SHALA	03-828-0094-0004
D	STEWART DOUGLAS JENNIFER WILSON	03-828-0097-0000
E	STEWART DOUGLAS JENNIFER WILSON	03-828-0098-0000
F	OLYN B & CORA B BOWEN	03-828-0019-0000
G	OLYN B & CORA B BOWEN	03-828-0019-0000
H	RUSSELL W COCHRAN	03-828-0019-0000
J	JOHN J PEY	03-828-0019-0000
K	BROOKE COUNTY P.S.B.	03-828-0019-0000
L	BERNE & GARRETT HET	03-828-0094-0001
M	LOIS K WILSON	03-828-0019-0000
N	ROBERT F FOLE	03-828-0094-0002
O	KURT E & HANCO CAMPBELL	03-828-0094-0002
P	MARY ALICE WALSHLEY	03-828-0094-0002
Q	CORINNA A COON	03-828-0019-0000
R	ANDREW DENSON	03-828-0019-0000
S	ELIZABETH ANN POTTER	03-828-0094-0002
T	ELIZABETH ANN POTTER	03-828-0094-0002
U	JAMES MCARDY	03-828-0094-0002
V	FARRIS L CUMMERY RESER. TRUSTEES	03-828-0094-0002
W	FARRIS L CUMMERY CHURCH	04-028-0094-0002
X	MARY E SANDFORD CHURCH L NEELY	04-028-0094-0002
Y	FLOYD I & ROSEMARY E BERDINE	04-028-0094-0002
Z	WILLIAM KENNETH & IVA SILVERMAN	04-028-0094-0002
AA	MARY K HERVEY DEAN	03-828-0019-0000
AB	THE BROOKE COUNTY COMMISSION	03-828-0019-0000
AC	BROOKE COUNTY PARK COMMISSION	03-828-0019-0000
AD	POTTER JAY W BUCKER PEARL SARNE POWY POTTER	03-828-0019-0000
AE	JOHN GARRETT PROBERTY	03-828-0019-0000
AF	GEORGE & BRUCE SPALD	03-828-0019-0000
AG	GEORGE & BRUCE SPALD	03-828-0019-0000
AH	MARY FAYE & BERNARD JOHN HENSON	03-828-0019-0000



SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,456,779.359
EASTING: 538,451.211
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,456,928.239
EASTING: 536,675.806
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,457,924.025
EASTING: 538,675.806



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. 2270 *[Signature]* 8/26/17

COMPANY: **SWN** Production Company, LLC

(+) 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 SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)

BROOKE COUNTY PARKS BRK
OPERATOR'S WELL #: 5H
API WELL #: 47 009 0034 KA
STATE COUNTY PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: BUFFALO CREEK ELEVATION: 1206'
DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: STEUBENVILLE EAST & BETHANY
SURFACE OWNER: BROOKE COUNTY PARKS COMMISSION ACREAGE: ±135.00
OIL & GAS ROYALTY OWNER: RICHARD P GIST, VIRGINIA GIST ABBLITT, ANN GIST LEVIN ACREAGE: ±618.31
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: 5,954' TVD 9,934' TMD

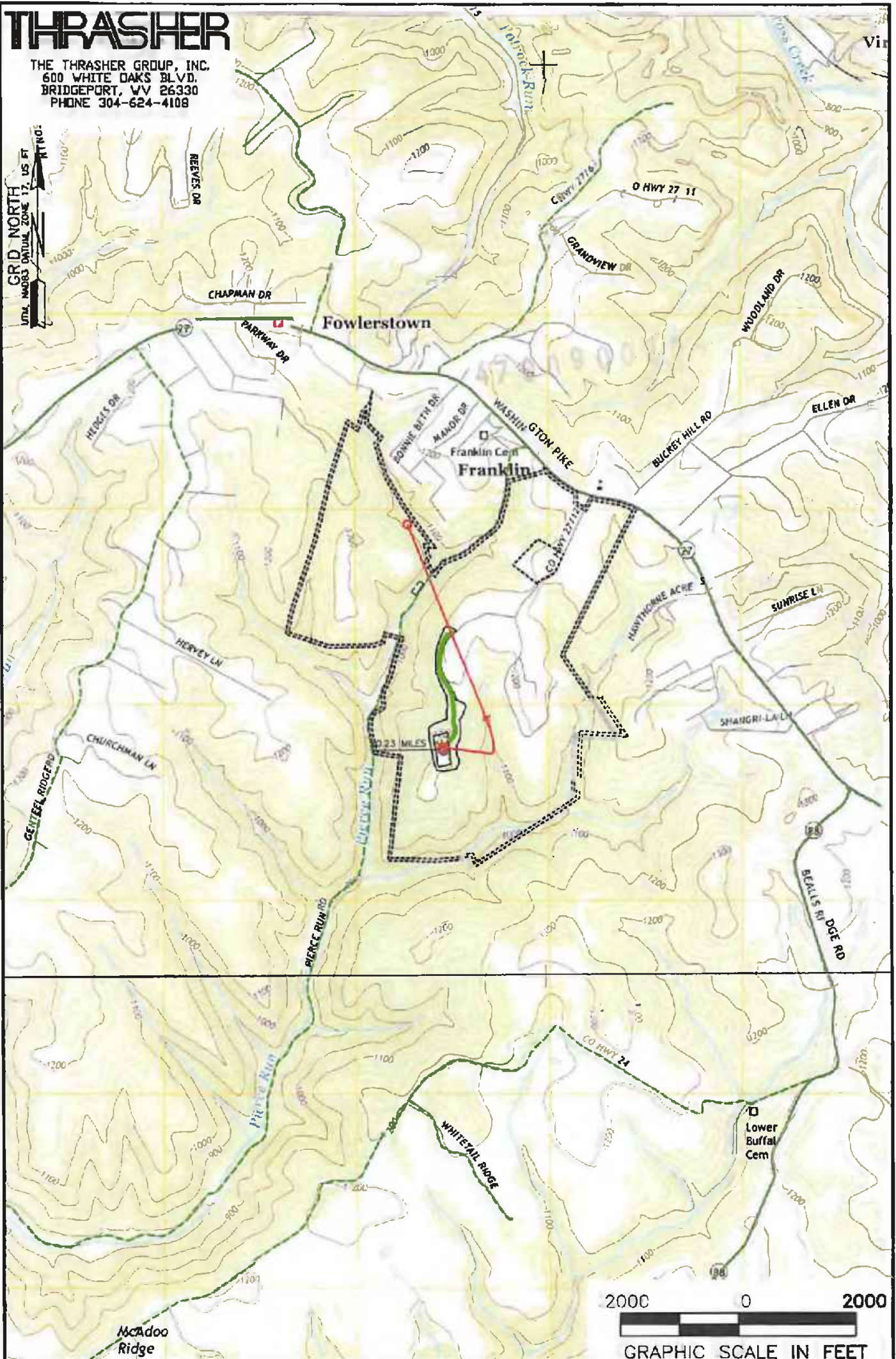
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHWELL
ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:
PROPOSED SURFACE HOLE / BOTTOM HOLE
EXISTING / PRODUCING WELLS HEAD
LANDING POINT LOCATION
EXISTING WATER WELL
EXISTING SPRING
SURVEYED BOUNDARY
DRILLING UNIT
LEASE BOUNDARY
PROPOSED PATH

THRASHER

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

GRD. NORTH
UTM, NAD83 DATUM, ZONE 17, US FT
M TNGS



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
2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED

LEGEND:

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

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: BROOKE COUNTY PARKS BRK	WELL # 5H	SERIAL #
ADDRESS: P.O. BOX 1300 JANE LEW, WV 26378	COUNTY - CODE OHIO - 103	DISTRICT: BUFFALO	
SURFACE OWNER: WILLIAM D & SHIRLEY E RITCHEA	USGS 7 1/2 QUADRANGLE MAP NAME WILEYVILLE, WV		

05/22/2017