

Latitude: 40°17'30" SURFACE HOLE 4,212'

BOTTOM HOLE 9,447'

THRASHER

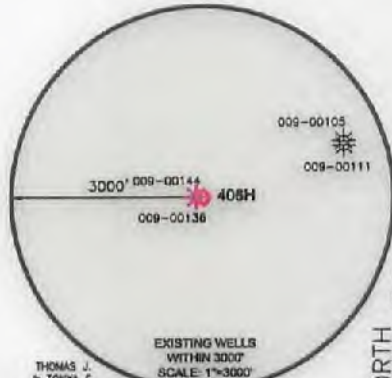
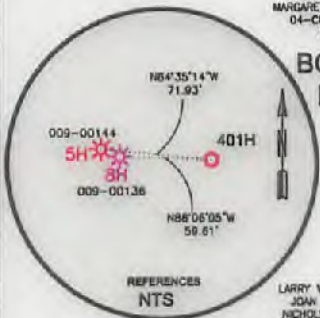
THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-824-4108

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 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.



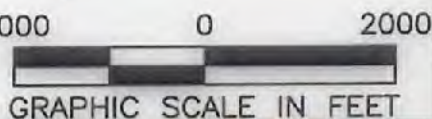
WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS			
TRACT	ROYALTY OWNER	TAX PARCEL	ACRES
1	RUSSELL D. & LISA K. HERVEY	03-B28-0045	37.84
SURFACE OWNER			
1	RUSSELL D. HERVEY	03-B28-0045	37.84
2	WILLIAM JUDSON HERVEY III	03-B28-0045-2	111.50
3	PAULA BARANOWSKI, PATRICIA GRAHAM, MICHAEL WHITCO, & EILEEN RIDGELY	03-B28-0043	87.05
4	PAULA BARANOWSKI, PATRICIA GRAHAM, MICHAEL WHITCO, & EILEEN RIDGELY	03-B28-0029	54.97
5	JULIA K. STANLEY, LIFE TENANT, EILEEN M. STANLEY, REMAINDERMAN	03-B28-0044	74.88
6	DANIEL J. STANLEY	03-B28-0003-1	2.41
7	ALLISON M. STANLEY & TIMOTHY M. WILLIAMS	03-B28-0031	1.33
8	CALVIN D. & LYNETTE I. STANLEY	03-B28-0002	1.16
9	CALVIN D. STANLEY	03-B28-0001	0.80
10	STANLEY DEWITT	03-B28F-0061	8.03
11	OHIO AMERICAN ENERGY INC.	03-B28E-0029	66.00
12	FOUR SWANS LP	03-B28A-0039	74.28
13	STATE ROAD COMMISSION	03-B28A-0006	1.83
14	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION	COUNTY ROAD 274 GENTEEL RIDGE RD	1.68



Longitude: 80°32'30" SURFACE HOLE 12,255'

SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,456,245.21 EASTING: 536,115.37
LANDING POINT LOCATION (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,456,213.33 EASTING: 536,909.71
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,456,499.58 EASTING: 537,717.26

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 *M.S. Wolf 9/12/17*

COMPANY: **SWN** Production Company, LLC

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SOURCE OF SURVEY GRADE GPS ELEVATION: (NAVD 88, US FT)	COMPANY: RUSSELL HERVEY BRK OPERATOR'S WELL #: 401H <i>H6A</i> API WELL #: 47 STATE COUNTY PERMIT 009 00217
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WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW

WATERSHED: BUFFALO CREEK ELEVATION: 1166.2'

DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: STEUBENVILLE

SURFACE OWNER: RUSSELL D. HERVEY ACREAGE: ±37.84

OIL & GAS ROYALTY OWNER: RUSSELL D. HERVEY & LISA K. HERVEY ACREAGE: ±37.84

DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION

CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

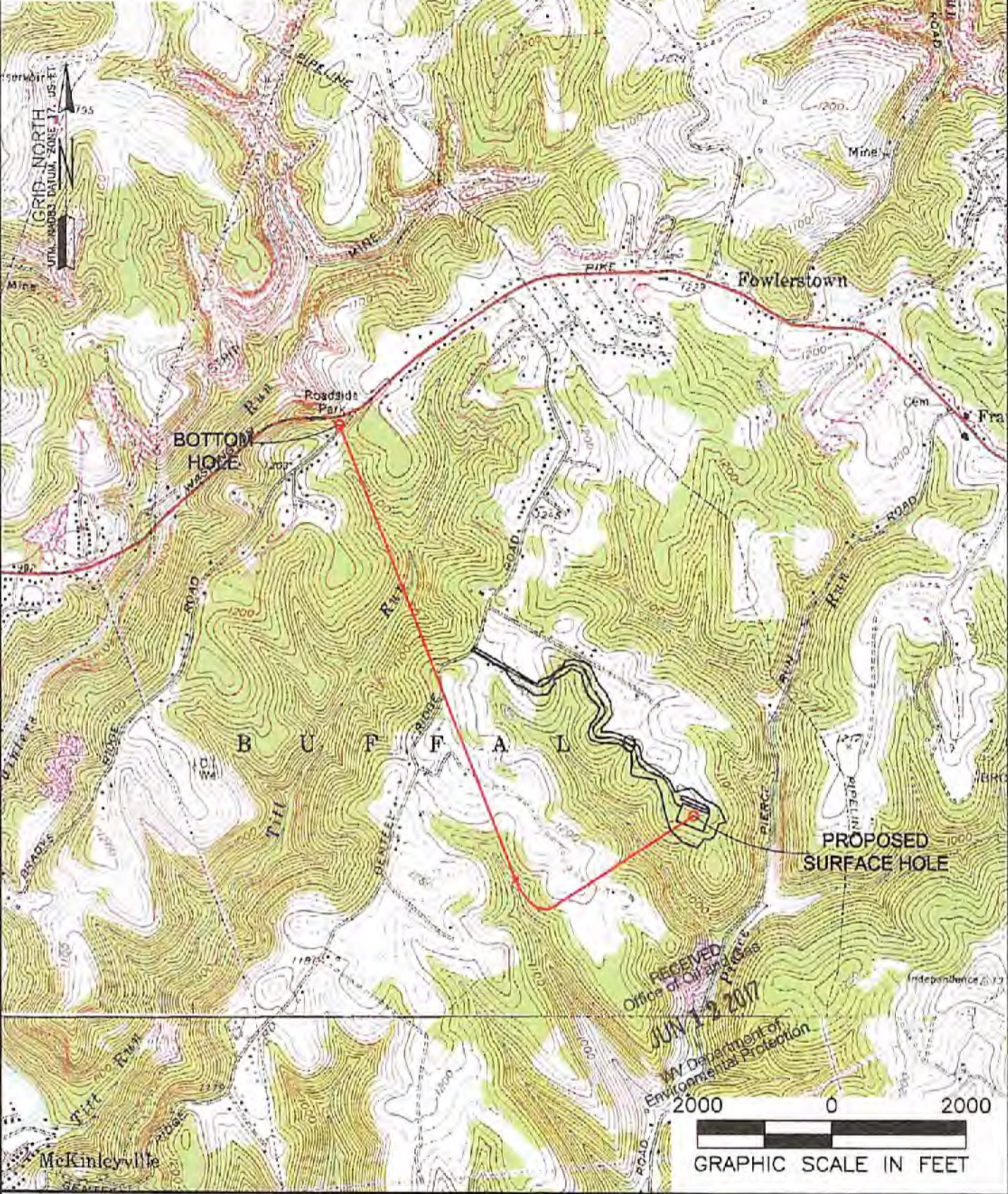
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,873' *MD 11,202'*

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL
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 WELLHEAD LPL * LANDING POINT LOCATION W EXISTING WATER WELL S EXISTING SPRING	— SURVEYED BOUNDARY — DRILLING UNIT — LEASE BOUNDARY — PROPOSED PATH	REVISIONS: DATE: 09-12-2017 DRAWN BY: R. DOERR SCALE: 1" = 2000' DRAWING NO: 050-5495 WELL LOCATION PLAT
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9-00217

THRASHER
 THE THRASHER GROUP, INC.
 600 WHITE OAKS BLVD.
 BRIDGEPORT, WV 28330
 PHONE 304-624-4108



NAME AND DISTANCE TO THE NEAREST STREAM: AN UN-NAMED TRIBUTARY TO PIERCE RUN IS LOCATED ±0.16 MILES SOUTHWEST OF THE CENTER OF THE DRILL PAD.		STREAM CROSSING COORDINATES (NAD 83):		COMPANY: SWN Production Company, LLC		RECEIVED Office of Oil and Gas JUN 12 2017 WV Department of Environmental Protection	
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 RUSSELL HERVEY BRK		WELL #: 401H		LOCATION: BUFFALO DISTRICT, BROOKE COUNTY, WEST VIRGINIA	
FEMA FLOOD INFORMATION: NO FLOOD ZONES.		SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.258107226° LONGITUDE: -80.556463614°		09/22/2017		BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.273904484° LONGITUDE: -80.575202165°	
LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ✖ EXISTING / PRODUCING WELLHEAD ✖ ABANDONED WELL ✖ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR		○ EXISTING SPRING ○ EXISTING WATER WELL — ACCESS ROAD — ACCESS ROAD TO PREV. SITE — HIGHWAY/INTERSTATE — COUNTY ROAD		REVISIONS:		DATE: 06-01-2017	
				DRAWN BY: R. DOERR SCALE: 1" = 2000' DRAWING NO: 050-5495 TOPOGRAPHIC MAP			