

(2,000' SCALE) LATITUDE: 40°15'00" BOTTOM HOLE

(2,000' SCALE) LATITUDE: 40°12'30" SURFACE HOLE

9686'

4471'

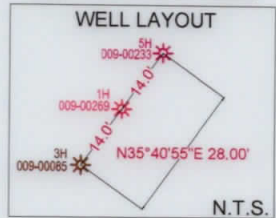
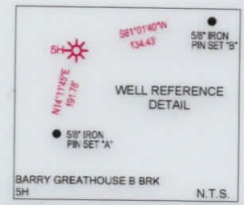
**JHA**  
SURVEYORS  
ENGINEERS  
ENVIRONMENTAL  
GIS MAPPING  
www.jhacompanies.com  
68011 Vineyard Road  
St. Clairsville, Ohio 43950  
740-695-6100

**NOTES ON SURVEY**

1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. 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.
3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
5. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
6. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
7. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.

LINE	BEARING	DISTANCE
L1	S37°12'48"W	3059.53'
L2	S78°48'56"W	2249.38'

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



<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448656.47 EASTING: 530544.68
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448937.90 EASTING: 530521.00
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4452127.46 EASTING: 528965.31
<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448656.47 EASTING: 530544.68
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4448824.01 EASTING: 530578.50
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4452132.62 EASTING: 528976.20



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. 2041

**SWN** Production Company, LLC **SWN** Production Company™

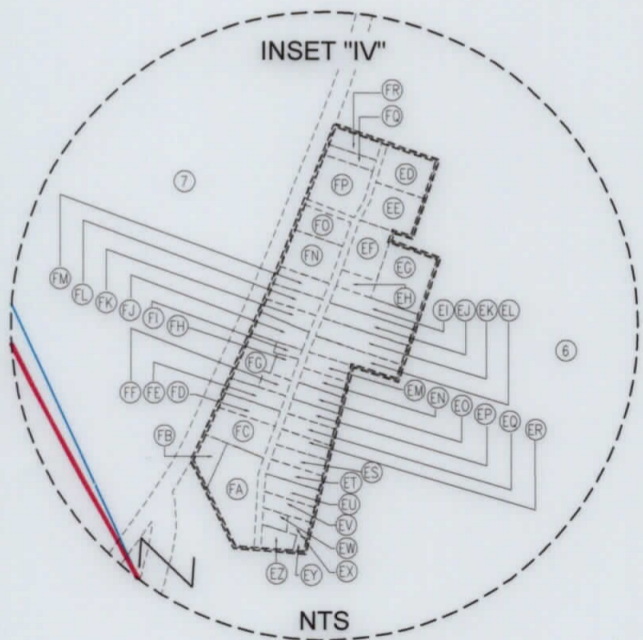
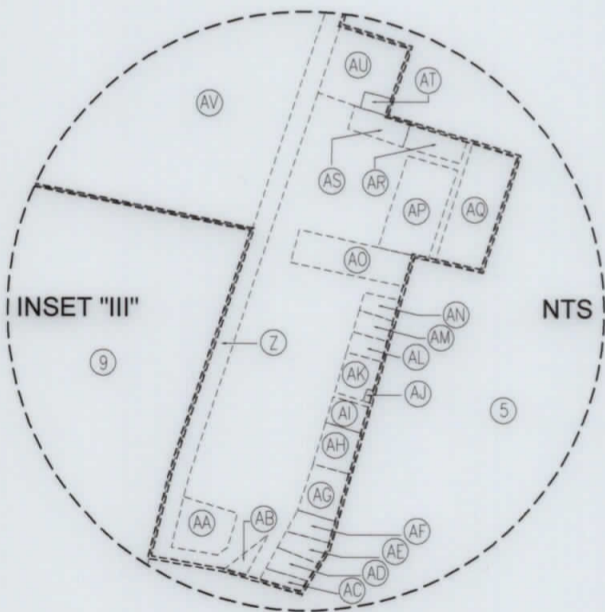
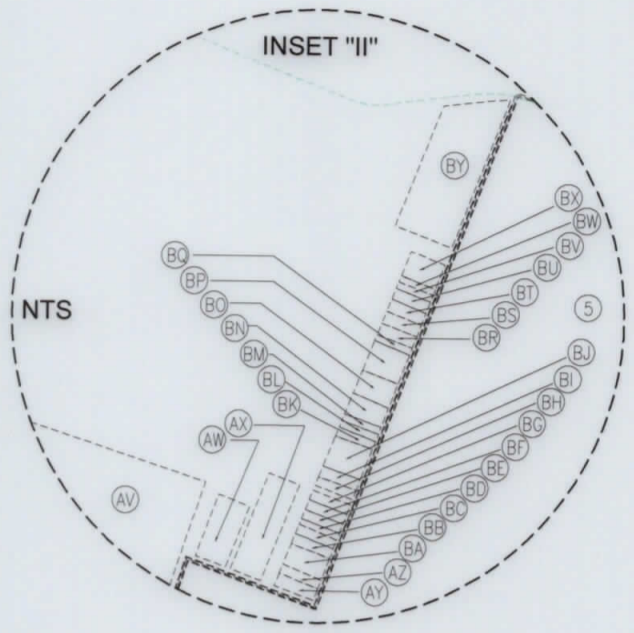
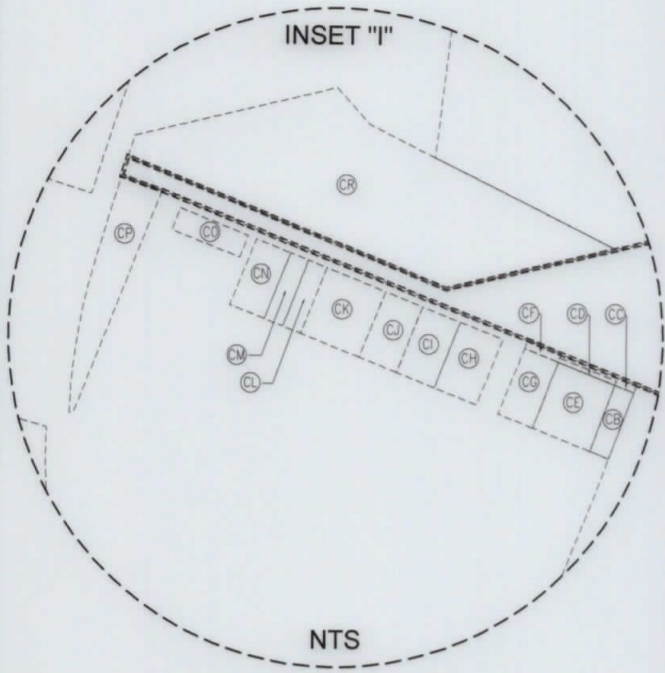
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	BARRY GREATHOUSE B BRK OPERATOR'S WELL #: 5H API WELL #: 47 009 00233 STATE COUNTY PERMIT
	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: UPPER OHIO SOUTH DISTRICT: BUFFALO COUNTY: BROOKE SURFACE OWNER: BARRY L. GREATHOUSE & PATRICIA A. GREATHOUSE OIL & GAS ROYALTY OWNER: RAYLE COAL COMPANY	ELEVATION: 1,142.9' QUADRANGLE: TILTONSVILLE, OH-WV ACREAGE: ±229.00 ACREAGE: ±229.00
DRILL <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input 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 checked="" type="checkbox"/> (SPECIFY) AS-DRILLED	ESTIMATED DEPTH: 5,814' TVD 18,264' TMD
TARGET FORMATION: MARCELLUS	

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508	DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508
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<b>LEGEND:</b> ○ EXISTING BOTTOM HOLE * EXISTING / PRODUCING WELLHEAD LPL * EXISTING LANDING POINT LOCATION ○ PROPOSED SURFACE HOLE / BOTTOM HOLE LPL * PROPOSED LANDING POINT LOCATION — SURVEYED BOUNDARY ===== LEASE BOUNDARY — AS DRILLED PATH — PROPOSED PATH ○ EXISTING WATER WELL ○ EXISTING SPRING	<b>REVISIONS:</b> DATE: 09-09-2019 FILE NO: 47-009-00233 DRAWN BY: D. REED SCALE: 1" = 3000' DRAWING NO: 2017-547 WELL LOCATION PLAT
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(2,000' SCALE) LONGITUDE: -80°37'30" SURFACE HOLE  
(2,000' SCALE) LONGITUDE: -80°37'30" BOTTOM HOLE



REVISIONS:


COMPANY:

**SWN**  
Production Company, LLC

**SWN** *R-V+*  
Production Company™

OPERATOR'S

BARRY GREATHOUSE B BRK

WELL #:

5H

DISTRICT:

BUFFALO

COUNTY:

BROOKE

STATE:

WV

DATE: 09-09-2019

FILE NO: 47-009-00233

DRAWN BY: D. REED

SCALE: N/A

DRAWING NO: 2017-547

WELL LOCATION PLAT

PROPERTY NUMBER 2501166102  
PAD ID 3001156743

