

LATITUDE: 40°10'00" SURFACE HOLE | 7087'

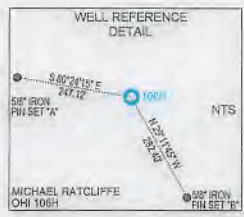
LATITUDE: 40°10'00" BOTTOM HOLE | 3590'

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

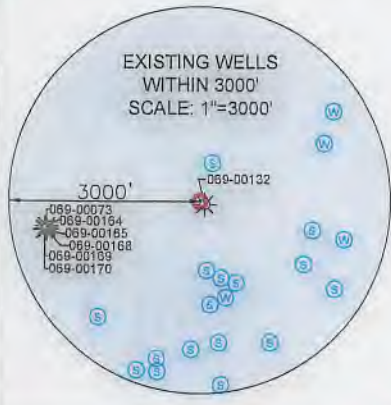
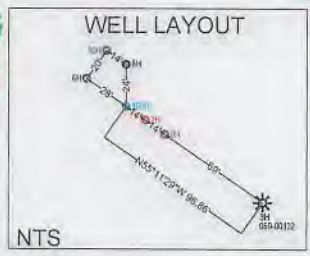
NOTES ON SURVEY

- COORDINATE 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/OR FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD
- 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 THE LIMITS OF DISTURBANCE.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.

GRID NORTH
 UTM, NAD83 DATUM, ZONE 17, US FT
 LONGITUDE: -80°32'30" BOTTOM HOLE
 LONGITUDE: -80°32'30" SURFACE HOLE | 14942'



LINE	BEARING	DISTANCE
L1	N64°22'15"W	857.94'
L2	N02°55'59"W	1434.34'



SURFACE HOLE LOCATION (SHL):
 UTM (NAD83, ZONE 17, METERS):
 NORTHING: 4444321.17
 EASTING: 536880.54

LANDING POINT (LPL):
 UTM (NAD83, ZONE 17, METERS):
 NORTHING: 4444119.64
 EASTING: 536908.58

BOTTOM HOLE LOCATION (BHL):
 UTM (NAD83, ZONE 17, METERS):
 NORTHING: 4441799.81
 EASTING: 537959.45



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

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

MICHAEL RATCLIFFE UD
 OPERATOR'S WELL #: OHI 106H
 API WELL #: 47 069 00288
 STATE COUNTY PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
 WATERSHED: OHIO UPPER SOUTH ELEVATION: 1,281.4'
 DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: BETHANY, WV
 SURFACE OWNER: MICHAEL T. RATCLIFFE ACREAGE: ±55.835
 OIL & GAS ROYALTY OWNER: MICHAEL T. RATCLIFFE ACREAGE: ±55.835
 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: BURKET ESTIMATED DEPTH: 6,254' TVD 14,847.4' TMD

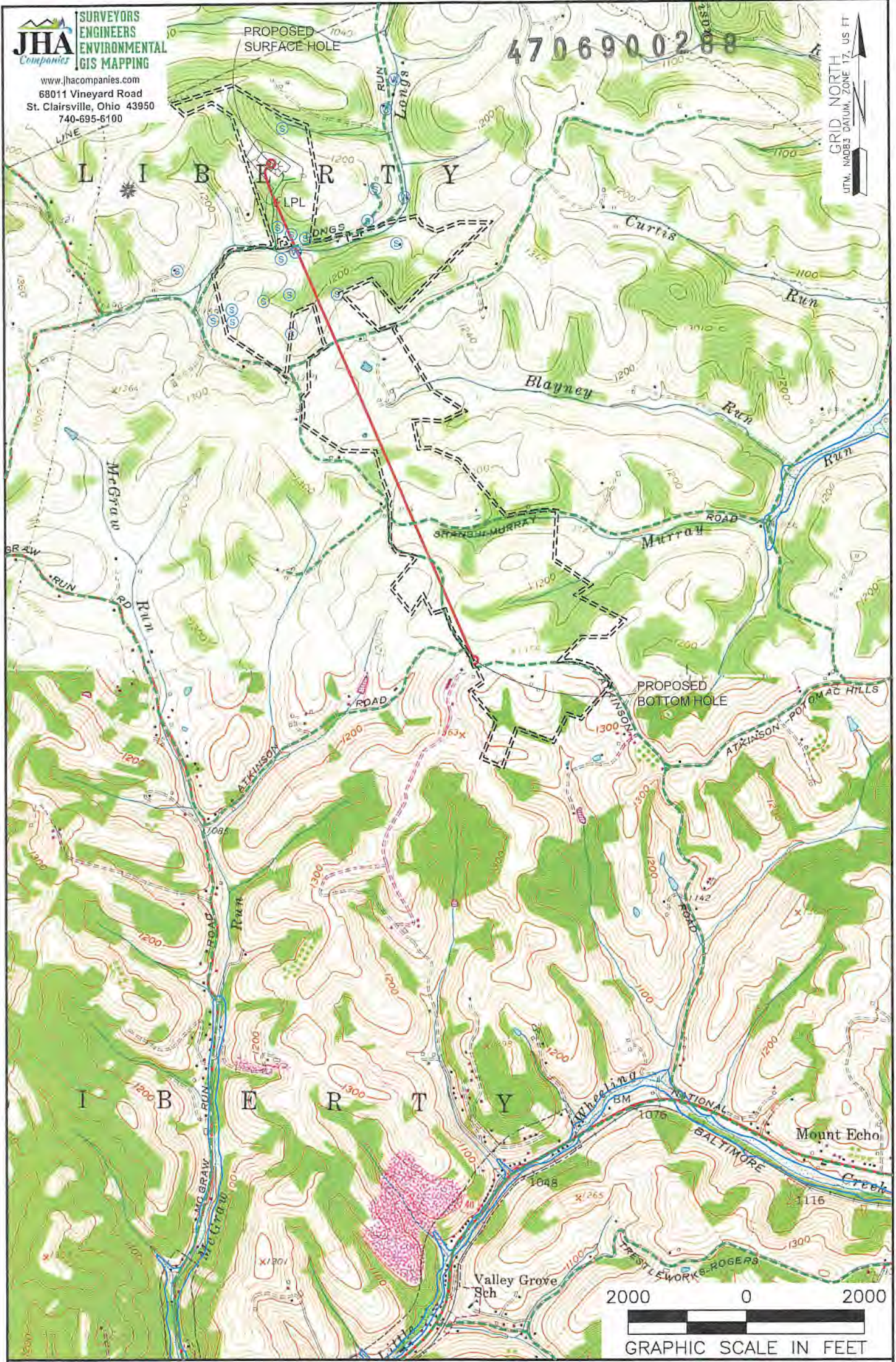
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY
 ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300
 CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:
 ○ PROPOSED SURFACE HOLE / BOTTOM HOLE
 ✱ EXISTING / PRODUCING WELLHEAD
 LPL ✱ LANDING POINT LOCATION
 (W) EXISTING WATER WELL
 (S) EXISTING SPRING
 — SURVEYED BOUNDARY
 ===== LEASE BOUNDARY
 — PROPOSED PATH

REVISIONS:
 DATE: 08-15-2018
 DRAWN BY: D. REED
 SCALE: 1" = 2000'
 DRAWING NO: 2017-637
 WELL LOCATION PLAT

4706900288

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



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 X LANDING POINT LOCATION
- FLOOD PLAIN
- ACCESS ROAD
- PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH

RECEIVED

Office of Oil and Gas
WELL OPERATOR:
SWN PRODUCTION COMPANY, LLC
ADDRESS:
P.O. BOX 1300 JANE LEW, WV 26378
SURFACE OWNER:
MICHAEL T. RATCLIFFE

WELL (FARM) NAME:
MICHAEL RATCLIFFE UD OHI
COUNTY - CODE
OHIO - 069
USGS 7 1/2 QUADRANGLE MAP NAME
BETHANY, WV

WELL #
106H
SERIAL #
XXXX
DISTRICT;
LIBERTY