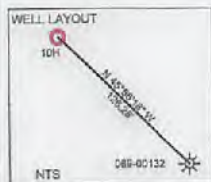
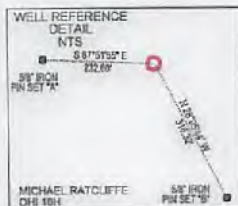


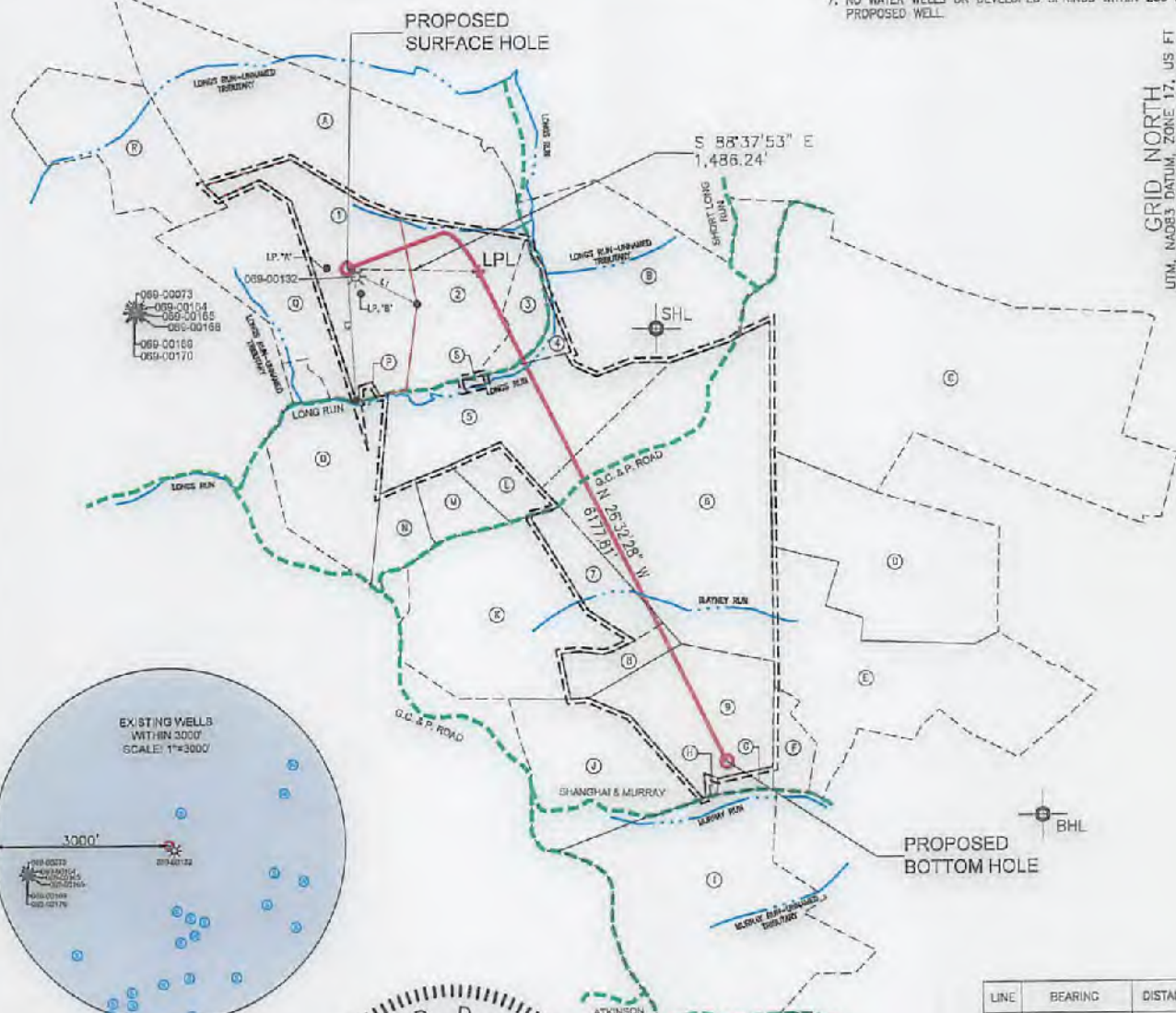


www.jhacompanies.com
68011 Vineyard Road
St. Clairsville, Ohio 43960
740-695-6100

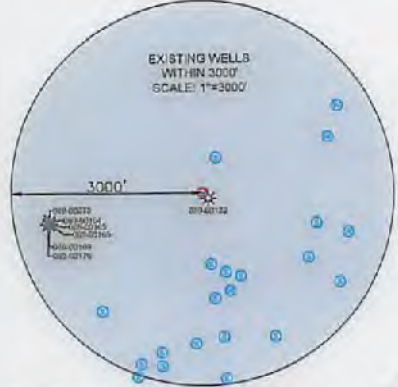


NOTES ON SURVEY

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.
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.



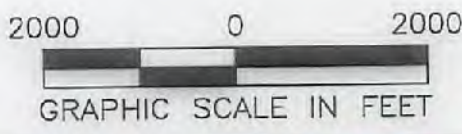
6620'
Longitude: -80°32'30" SURFACE HOLE
12128'
Longitude: -80°32'30" BOTTOM HOLE



SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4444331.01
EASTING: 536876.93
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4444327.79
EASTING: 537329.78
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4442658.17
EASTING: 538198.97



LINE	BEARING	DISTANCE
L1	N 62°45'53" W	692.46'
L2	N 03°18'20" W	1,467.43'



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

(+) 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)

OPERATOR'S WELL #: MICHAEL RATCLIFFE OHI 10H

API WELL #: 47 STATE 069 COUNTY 00276 PERMIT

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

WATERSHED: OHIO UPPER SOUTH ELEVATION: 1281.27'

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: MARCELLUS ESTIMATED DEPTH: 6.0' 05/11/2018

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:	SURVEYED BOUNDARY	REVISIONS:	DATE: 01-29-2018
PROPOSED SURFACE HOLE / BOTTOM HOLE	DRILLING UNIT		
EXISTING / PRODUCING WELLHEAD	LEASE BOUNDARY		
L.P.L. LANDING POINT LOCATION	PROPOSED PATH		
EXISTING WATER WELL			
EXISTING SPRING			
			DRAWN BY: D.REED
			SCALE: 1" = 2000'
			DRAWING NO: 2017-637
			WELL LOCATION PLAT

