

Latitude: 40°10'00" SURFACE HOLE

7056'

Latitude: 40°10'00" BOTTOM HOLE

4385'



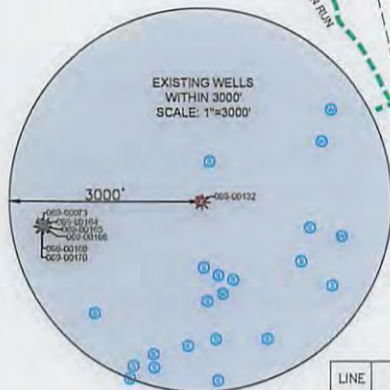
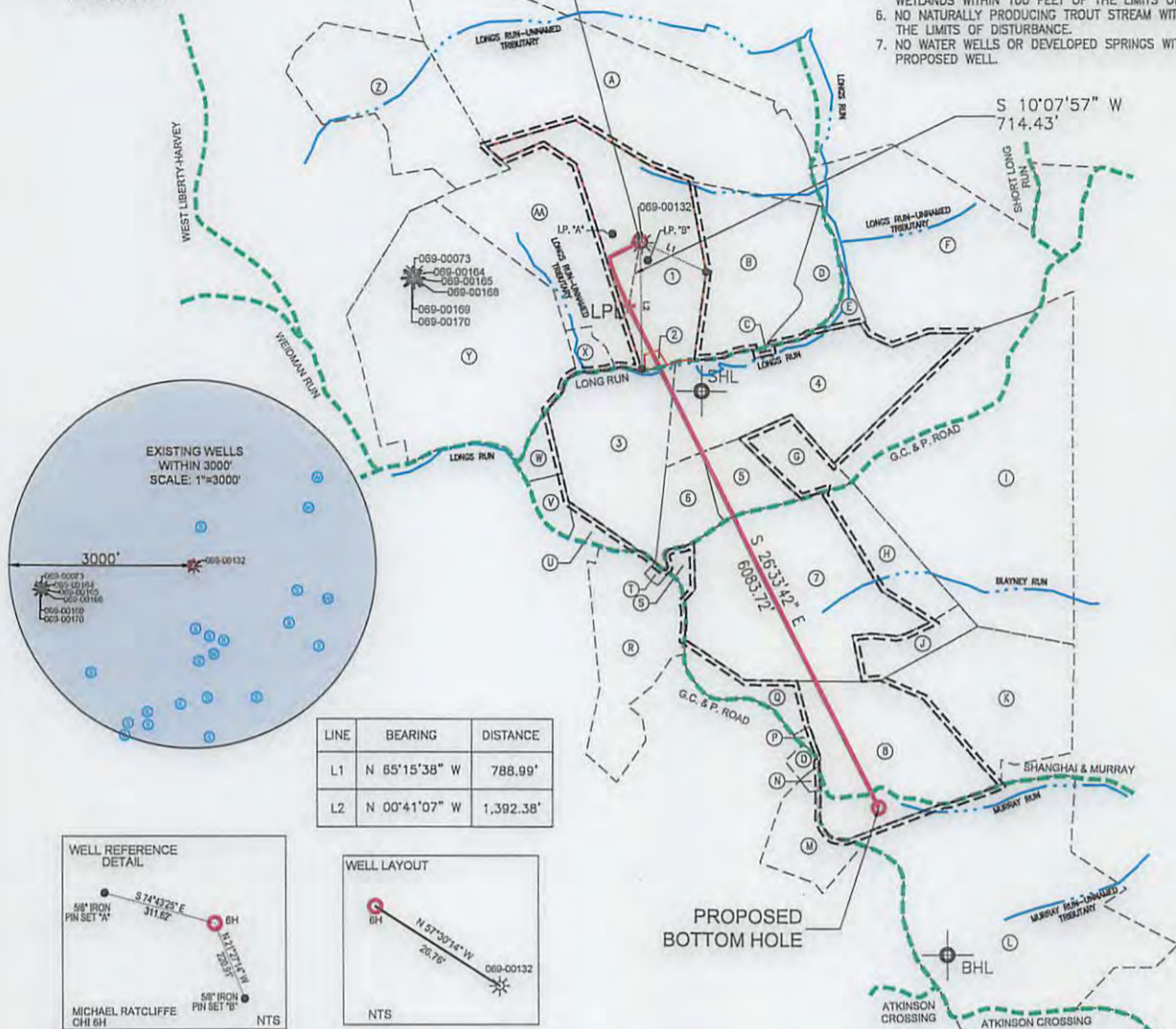
www.jhacompanies.com
68011 Vineyard Road
St. Clairsville, Ohio 43950
740-695-6100

NOTES ON SURVEY

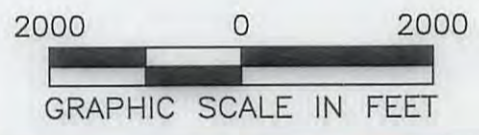
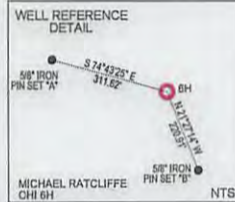
1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
3. THIS PLAT DOES 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.

PROPOSED SURFACE HOLE

PROPOSED BOTTOM HOLE



LINE	BEARING	DISTANCE
L1	N 65°15'38" W	788.99'
L2	N 00°41'07" W	1,392.38'



SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4444308.994
EASTING: 536898.095
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4444094.097
EASTING: 536863.394
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4442450.210
EASTING: 537719.923

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 *[Signature]* 1-29-18

COMPANY: **SWN** Production Company, LLC **SWN** Production Company™

	(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	MINIMUM DEGREE OF ACCURACY: 1/200	MICHAEL RATCLIFFE
	WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	PROVEN SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)	OPERATOR'S WELL #: OHI 6H API WELL #: 47 STATE 069 COUNTY 00274 PERMIT

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

WATERSHED: OHIO UPPER SOUTH ELEVATION: 1,281.16'

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

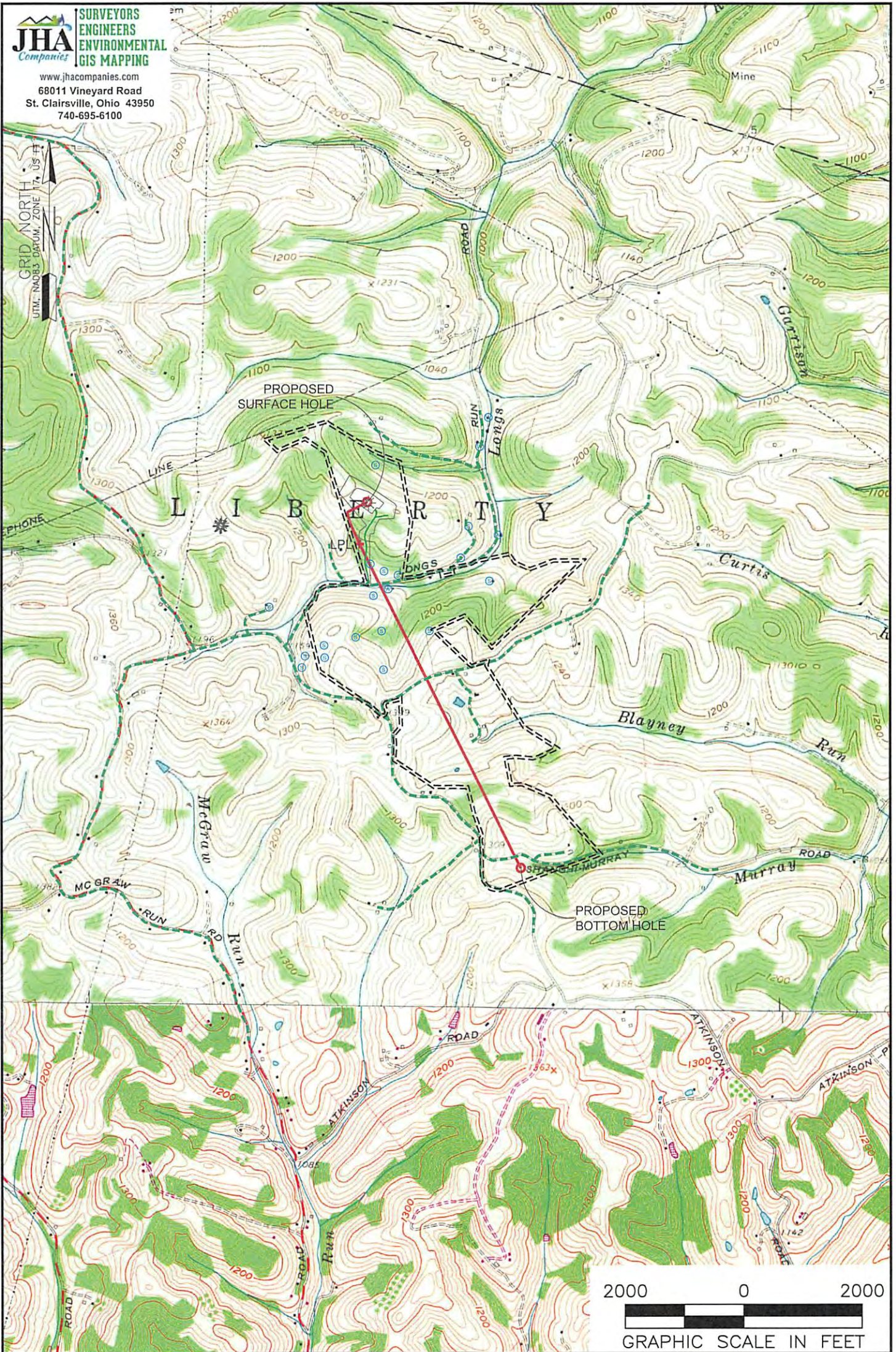
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY)

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,057' 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:	REVISIONS:	DATE: 01-29-2018
● PROPOSED SURFACE HOLE / BOTTOM HOLE	— SURVEYED BOUNDARY	
⊙ EXISTING / PRODUCING WELLHEAD	— DRILLING UNIT	
LPL* LANDING POINT LOCATION	==== LEASE BOUNDARY	
⊙ EXISTING WATER WELL	— PROPOSED PATH	
⊙ EXISTING SPRING		
		DRAWN BY: D.REED
		SCALE: 1" = 2000'
		DRAWING NO: 2017-637
		WELL LOCATION PLAT

JHA Companies
**SURVEYORS
 ENGINEERS
 ENVIRONMENTAL
 GIS MAPPING**
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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 PLAIN
- ACCESS ROAD / PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH

RECEIVED
 Office of Oil and Gas
 FEB 2 2018

WV Department of
 Environmental Protection

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 OHI

COUNTY - CODE
 OHIO - 069

USGS 7 1/2 QUADRANGLE MAP NAME
 BETHANY, WV

WELL # SERIAL #
 6H XXXX

DISTRICT;
 LIBERTY