

Latitude: 40°10'00" SURFACE HOLE

7112'

Latitude: 40°10'00" BOTTOM HOLE

3594'

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.

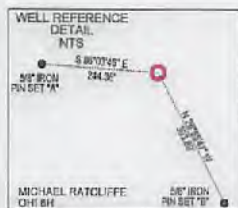


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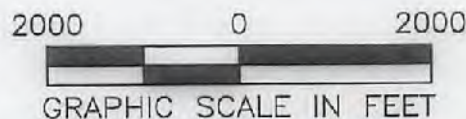
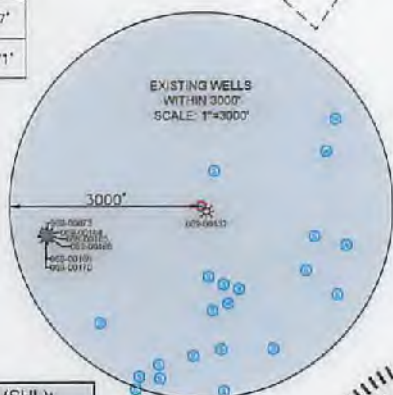
68011 Vineyard Road  
St. Clairsville, Ohio 43950  
740-695-8100



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



LINE	BEARING	DISTANCE
L1	N 62°54'55" W	868.97'
L2	N 02°52'46" W	1,458.71'



<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4444328.605 EASTING: 536880.449
<b>LANDING POINT (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4444207.794 EASTING: 537090.976
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4442542.431 EASTING: 537960.030

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 *Howard D. Kemp* 1-29-18

COMPANY: **SWN** Production Company, LLC

**SWN** <sup>REG. IN WV</sup> Production Company™

	(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS	MINIMUM DEGREE OF ACCURACY: 1/200	OPERATOR'S WELL #: OHI 8H
	WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034	PROVEN SOURCE OF SURVEY GRADE GPS ELEVATION: (NAVD 88, US FT)	API WELL #: <b>47</b> STATE <b>069</b> COUNTY <b>00275</b> PERMIT

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

WATERSHED: OHIO UPPER SOUTH ELEVATION: 1281.21'

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: 605/11/2018 TMD

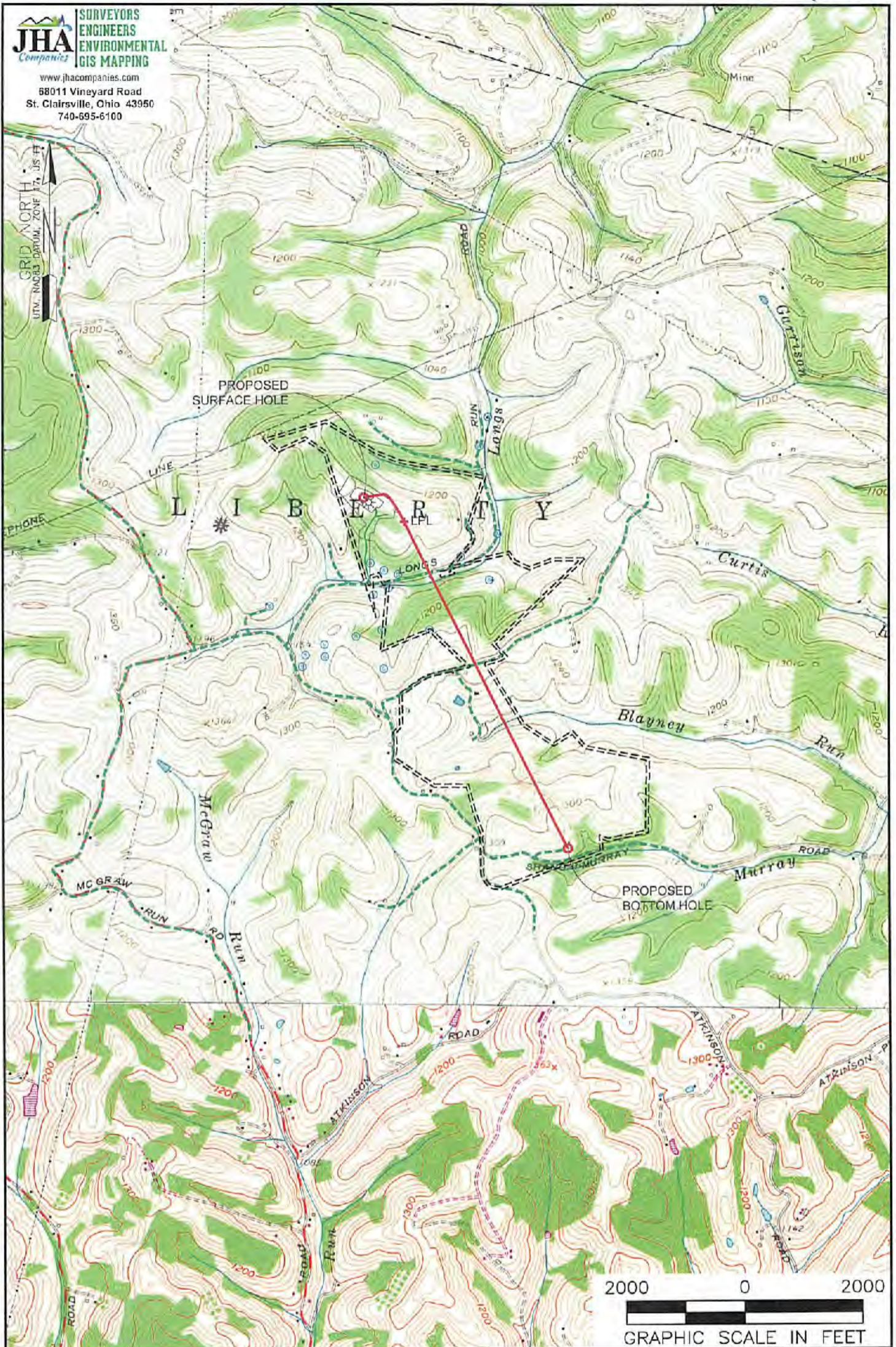
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: DEE SOUTHALL

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

<b>LEGEND:</b>	— SURVEYED BOUNDARY	<b>REVISIONS:</b>	<b>DATE:</b> 01-29-2018
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— DRILLING UNIT		
● EXISTING / PRODUCING WELLHEAD	===== LEASE BOUNDARY		
LPL * LANDING POINT LOCATION	— PROPOSED PATH		
⊙ EXISTING WATER WELL			
⊕ EXISTING SPRING			
			<b>DRAWN BY:</b> D. REED
			<b>SCALE:</b> 1" = 2000'
			<b>DRAWING NO:</b> 2017-637
			<b>WELL LOCATION PLAT</b>

**JHA** Companies  
**SURVEYORS  
 ENGINEERS  
 ENVIRONMENTAL  
 GIS MAPPING**  
 www.jhacompanies.com  
 68011 Vineyard Road  
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2. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

RECEIVED  
 Office of Oil and Gas

FEB 2 2018

**LEGEND:**

- PROPOSED SURFACE HOLE / BOTTOM HOLE
- ⊗ EXISTING / PRODUCING WELLHEAD
- LPL ✕ LANDING POINT LOCATION
- FLOOD PLAIN
- ACCESS ROAD TO PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH

05/11/2018

WELL OPERATOR:  
 SWN PRODUCTION COMPANY, LLC

ADDRESS:  
 P.O. BOX 1300 JANE LEW, WV 26378

SURFACE OWNER:  
 MICHAEL T. RATCLIFFE

WV Department of

WELL (FARM) NAME:  
 MICHAEL RATCLIFFE OHI

WELL #  
 8H

SERIAL #  
 XXXX

COUNTY - CODE  
 OHIO - 069

DISTRICT:  
 LIBERTY

USGS 7 1/2 QUADRANGLE MAP NAME  
 BETHANY, WV