

THRASHER

THE THRASHER GROUP, INC.
600 WHITE OAKS RD.
BRIDGEPORT, WV 26330
PHONE 304-624-4108

NOTES ON SURVEY

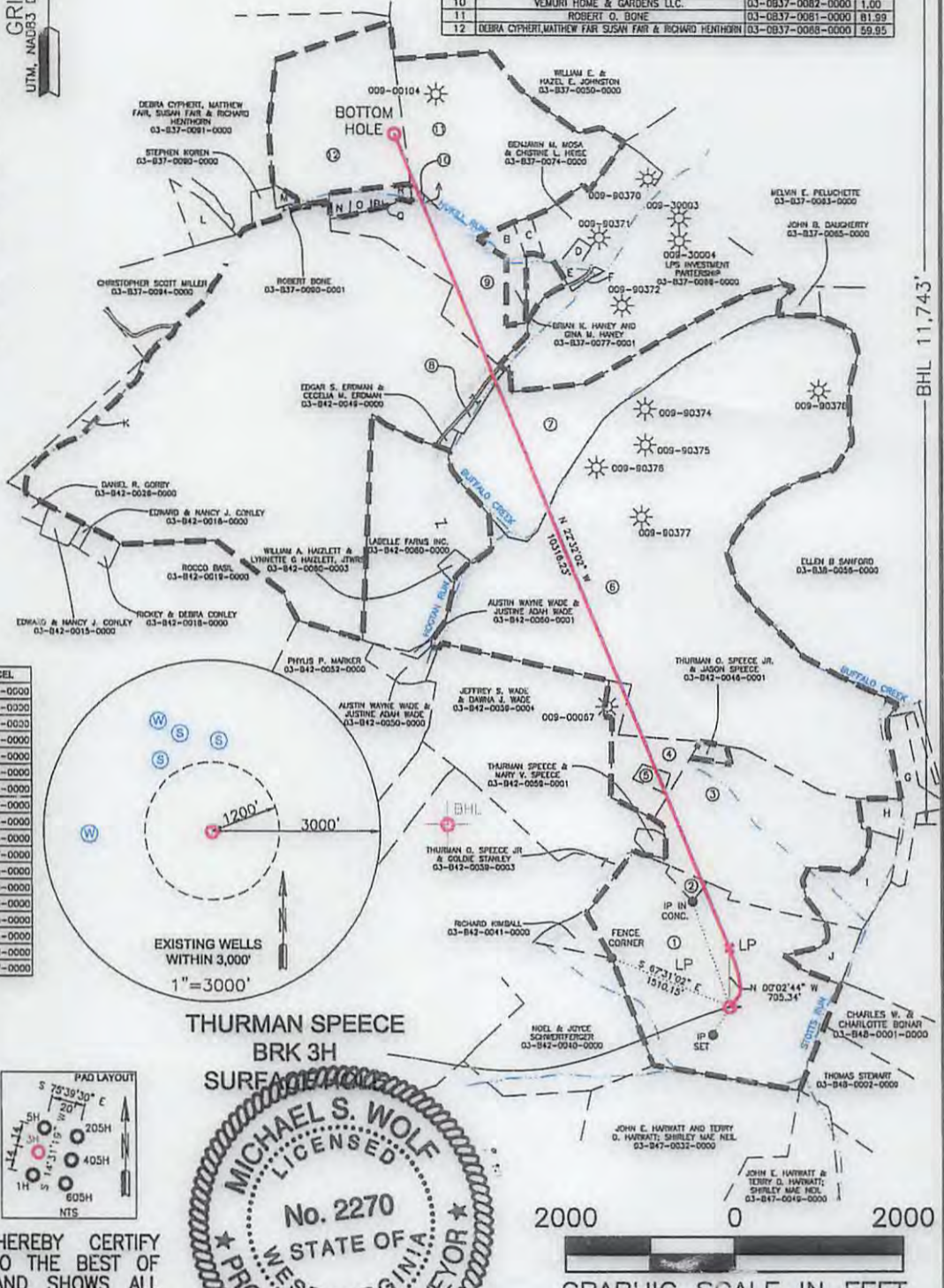
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS AND BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- 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 LIMITS OF DISTURBANCE.

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

Latitude: 40°15'00" SHL 1,967'

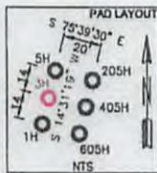
BHL 5,864'

TRACT	SURFACE OWNER	TAX PARCEL	ACRES
1	THURMAN O. SPEECE JR. & GOLDIE M. STANLEY	03-0842-0042-0000	115.23
2	RICHARD A. STANLEY JR.	03-0842-0042-0001	2.00
3	THURMAN O. SPEECE JR. & GOLDIE M. STANLEY	P/O 03-0842-0046-0000	73.29
4	THURMAN O. SPEECE JR. & GOLDIE M. STANLEY	P/O 03-0842-0046-0000	15.85
5	THURMAN O. SPEECE JR. & ADAM (SURV)	03-0842-0046-0002	2.00
6	LABELLE FARMS INC.	03-0842-0060-0000	349.88
7	ELLEN B. SANFORD	03-0837-0076-0000	66.00
8	LINDA REEVES GREATHOUSE & VICKI LYNN GREATHOUSE HAMILTON	03-0837-0087-0000	322.84
9	BRIAN K. & GINA M. HANEY	03-0837-0077-0000	45.75
10	VENURI HOME & GARDENS LLC.	03-0837-0082-0000	1.00
11	ROBERT O. BONE	03-0837-0081-0000	81.99
12	DEBRA CYPHERT, MATTHEW FAR SUSAN FAR & RICHARD HENHORN	03-0837-0088-0000	69.95



ID	ADJOINER	TAX PARCEL
A	BRIAN K. & GINA M. HANEY	03-0837-0077-0000
B	TERRENCE & SUELV BONE	03-0837-0080-0000
C	BENJAMIN M. MOSA & CHRISTINE L. HOSE	03-0837-0079-0000
D	BENJAMIN M. MOSA & CHRISTINE L. HOSE	03-0837-0075-0000
E	WILLIAM A. III & JENNA L. SPERRINGER	03-0837-0078-0000
F	WILLIAM A. III & JENNA L. SPERRINGER	03-0837-0078-0000
G	WINDSOR POWER HOUSE COAL CO.	03-0842-0048-0000
H	THURMAN O. SPEECE & GOLDIE M. STANLEY	03-0842-0047-0000
I	THURMAN O. SPEECE & GOLDIE M. STANLEY	03-0842-0045-0000
J	THURMAN O. SPEECE & GOLDIE M. STANLEY	03-0842-0043-0000
K	LINDA R. GREATHOUSE & VICKI L. HAMILTON	03-0837-0087-0000
L	KEVIN CHUMNEY	03-0837-0093-0000
M	ROBERT BONE	03-0837-0089-0000
N	CARL R. & SANDRA S. CLARK	03-0837-0088-0000
O	MICHAEL ARACH	03-0837-0085-0000
P	KAREN K. TOBER	03-0837-0084-0000
Q	EUGENE EDWARD RINDERER	03-0837-0083-0000
R	BRIAN K. & GINA M. HANEY	03-0837-0077-0000

SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,448,882.978 EASTING: 534,888.287
LANDING POINT LOCATION (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,449,097.948 EASTING: 534,888.088
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,452,002.292 EASTING: 533,683.084



THURMAN SPEECE
BRK 3H
SURFACE HOLE



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. 2270

M.S. Wolf 2/28/17

COMPANY: **SWN** Production Company, LLC

<p>(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS</p> <p>WVDEP OFFICE OF OIL & GAS 601 57TH STREET CHARLESTON, WV 25034</p>	MINIMUM DEGREE OF ACCURACY: 1/200 PROVEN SURVEY SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	COMPANY: THURMAN SPEECE OPERATOR'S WELL #: BRK 3H API WELL #: 47 009 00192 STATE COUNTY PERMIT
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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: BUFFALO CREEK	ELEVATION: 1139.5'
DISTRICT: BUFFALO	COUNTY: BROOKE	QUADRANGLE: BETHANY
SURFACE OWNER: THURMAN O. SPEECE JR & GOLDIE M. STANLEY	ACREAGE: 115.23	ACREAGE: 115.23
OIL & GAS ROYALTY OWNER: THURMAN O. SPEECE JR & GOLDIE M. STANLEY	DRILL <input checked="" type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" 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 (SPECIFY)	TARGET FORMATION: MARCELLUS	ESTIMATED DEPTH: 5,973' TVD 16,661' TMD

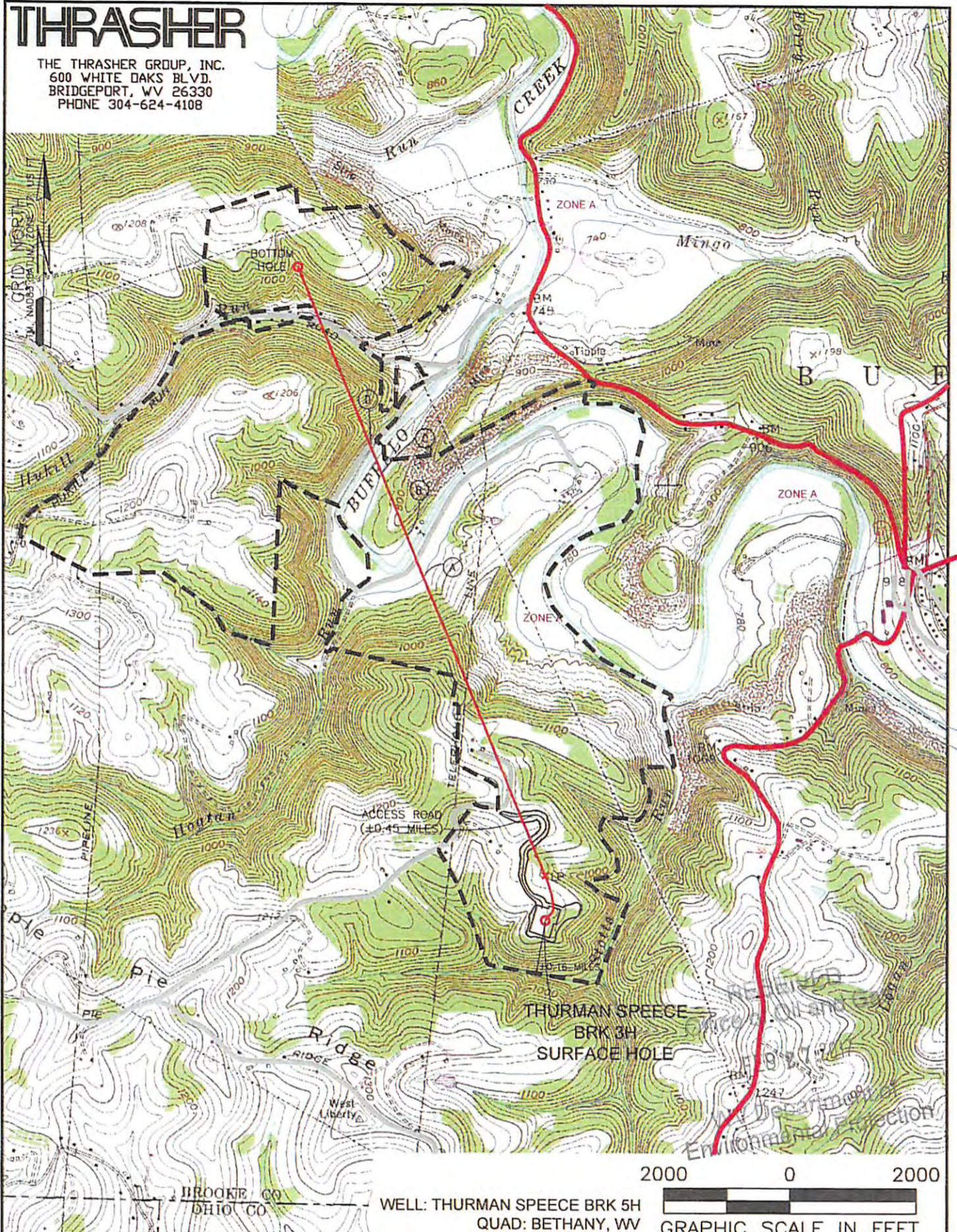
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	DESIGNATED AGENT: DEE SOUTHALL
ADDRESS: P.O. BOX 1300	ADDRESS: P.O. BOX 1300
CITY: JANE LEW STATE: WV ZIP CODE: 26378	CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND:	REVISIONS:	DATE: 02-08-2017
<ul style="list-style-type: none"> PROPOSED SURFACE HOLE / BOTTOM HOLE EXISTING / PRODUCING WELLHEAD ABANDONED WELL PLUGGED & ABANDONED WELL CUT CONDUCTOR LEASE BOUNDARY 400' DHP BUFFER MARCELLUS DHP ABANDONED PATH 		DRAWN BY: R. DOERR SCALE: 1" = 2000' DRAWING NO: 030-2888 WELL LOCATION PLAT

BHL 11,743'
SHL 21,997'
Longitude: 80°35'00"

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<p>NAME AND DISTANCE TO THE NEAREST STREAM: UNNAMED TRIBUTARY TO STOTTS RUN IS LOCATED ±0.16 MILES SOUTH OF THE CENTER OF THE DRILL PAD.</p>		<p>STREAM CROSSING COORDINATES (NAD 83): A. LAT: 40.2044029° / LONG: -80.5669930° B. LAT: 40.2061941° / LONG: -80.5979576° C. LAT: 40.2086681° / LONG: -80.5993662° D. LAT: 40.2099805° / LONG: -80.5999745°</p>		<p>COMPANY: SWN Production Company, LLC SWn Production Company™</p>	
<p>WELL RESTRICTIONS: WELL PAD, LOD, & E & S CONTROL FEATURES TO PERENNIAL STREAM, LAKE, POND, RESERVOIR OR WETLAND: >100 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO NATURALLY PRODUCING TROUT STREAM: >300 FEET WELL PAD, LOD, & E & S CONTROL FEATURES TO GROUNDWATER INTAKE OR PUBLIC WATER SUPPLY: >1000 FEET WELL SHL TO EXISTING WATER WELL OR DEVELOPED SPRING: >250 FEET CENTER OF PAD TO OCCUPIED DWELLING STRUCTURE: >625 FEET CENTER OF PAD TO AGRICULTURAL BUILDINGS LARGER THAN 2500 SQ FT: >625 FEET</p>		<p>OPERATOR'S: THURMAN SPEECE WELL #: BRK 3H</p>		<p>LOCATION: BUFFALO, BROOKE COUNTY, WEST VIRGINIA</p>	
<p>FEMA FLOOD INFORMATION: BY GRAPHIC PLOTTING ONLY FEMA FIRM INCORPORATED AREA OF BROOKE COUNTY, WEST VIRGINIA; MAP NUMBER 54009C0130D; EFFECTIVE DATE: 04/19/2010 & MAP NUMBER 54009C0140D; EFFECTIVE DATE: 04/19/2010.</p>		<p>SURFACE HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.1896101° LONGITUDE: -80.5901442°</p>		<p>DATE: 02-08-2017</p>	
<p>LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ⊙ EXISTING / PRODUCING WELLHEAD ⊗ ABANDONED WELL ⊕ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR</p>		<p>○ EXISTING SPRING ⊙ EXISTING WATER WELL — ACCESS ROAD — ACCESS ROAD TO PREV. SITE — HIGHWAY/INTERSTATE — COUNTY ROAD</p>		<p>BOTTOM HOLE LOCATION: GEOGRAPHIC (NAD83): LATITUDE: 40.2177623° LONGITUDE: -80.6041385°</p>	
<p>REVISIONS:</p>		<p>DATE: 02-08-2017</p>		<p>DRAWN BY: R. DOERR SCALE: 1" = 2000' DRAWING NO: 030-2888 TOPOGRAPHIC MAP</p>	