

Latitude: 40°12'30" SURFACE HOLE 5419'

ELK LAKE SERVICES, LLC

280 Indian Springs Road,
Suite 123 Indiana, PA 15701
Phone: (724) 463-7303

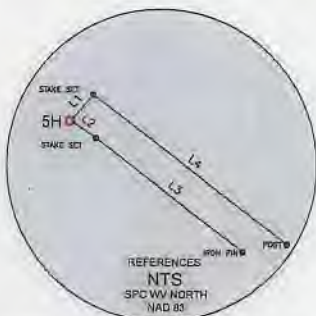
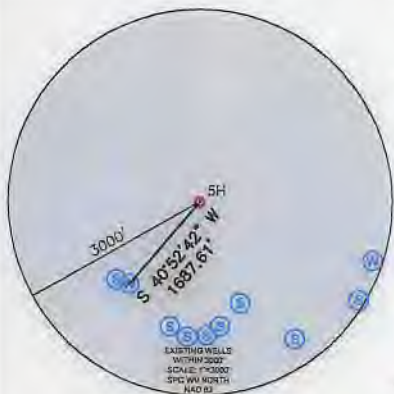
Latitude: 40°15'00"

BOTTOM HOLE 7595'

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,448,997.14
EASTING: 537,363.32
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,449,048.77
EASTING: 537,572.40
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4,451,173.23
EASTING: 536,689.10

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

05/10/2019



LINE	BEARING	DISTANCE
L1	N 41°29'23" E	356.30'
L2	S 55°34'17" E	318.99'
L3	S 52°36'46" E	1927.86'
L4	S 52°42'21" E	2535.38'

WELL RESTRICTIONS

1. NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
2. NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
3. WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 1688 FEET OF PROPOSED WELL.
4. PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS ARE WITHIN THE LIMITS OF DISTURBANCE.
5. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
6. NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

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 PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
3. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

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.





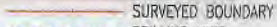
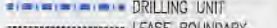
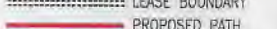
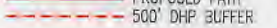
P.S. 2164



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 SOURCE OF ELEVATION: SURVEY GRADE GPS (NAVD 88, US FT)	SAMUEL JONES BRK OPERATOR'S WELL #: 5H API WELL #: 47 9 00263 STATE COUNTY PERMIT
	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: UPPER OHIO SOUTH DISTRICT: BUFFALO COUNTY: BROOKE COUNTY SURFACE OWNER: JONES, SAMUEL E. AND JUDITH F. OIL & GAS ROYALTY OWNER: RESOURCE MINERALS HEADWATER I, LP

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 <input type="checkbox"/> (SPECIFY) _____	TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,116' TVD 14,132' TMD
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT DR STE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508	DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT DR STE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508	

LEGEND:  PROPOSED SURFACE HOLE / BOTTOM HOLE  EXISTING / PRODUCING WELLHEAD LPL: LANDING POINT LOCATION  EXISTING WATER WELL  EXISTING SPRING	 SURVEYED BOUNDARY  DRILLING UNIT  LEASE BOUNDARY  PROPOSED PATH 500' DHP BUFFER	REVISIONS: 10-17-2018 ADDED 500' BUFFER AROUND BOREHOLE PATH 02-25-2019 EXTENDED LATERAL DATE: 03-12-2019 FILE NO: 17-02 DRAWN BY: JMB SCALE: 1" = 2000' DRAWING NO: 1 WELL LOCATION PLAT 1
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ELK LAKE SERVICES, LLC

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Phone: (724) 463-7303



DETAIL A

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	JONES, SAMUEL E & JUDITH F (S) / RESOURCE MINERALS HEADWATER I, LP (R)	3-B43-60
TRACT	SURFACE OWNER	TAX PARCEL
2	VALENTINE GENE C TRUST 11/25/86	3-B43-33
3	BETHANY COLLEGE	3-B38-31
4	BETHANY PIKE ROAD	
5	JEFFREY B. WOY, SUSAN KATE MOORE, PATRICIA RUTH WEST, WESLEY M. GERMON, III, AND ELIZABETH G. IGNAUT	3-B38-37

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
BL	FORRESTER, JAMES R JR & CAROLYN	2-B43F-35
BM	HERVEY, DOUGLAS H & HOLLY (SURV)	2-B43F-36
BN	FURBEE, THOMAS; SHELEK, KATHERINE	2-B43F-37
BO	FURBEE, THOMAS; SHELEK, KATHERINE (SURV)	2-B43F-38
BP	BETHANY COLLEGE	2-B43F-39
BQ	BETHANY COLLEGE	2-B43F-40
BR	BETHANY COLLEGE, THE TRUSTEES OF	2-B43F-41
BS	BETHANY COLLEGE	2-B43F-42
BT	BETHANY COLLEGE	2-B43F-43
BU	KEMP, SHIRLEY J	2-B43F-44
BV	BETHANY COLLEGE	2-B43F-46
BW	NESLEN, DOUGLAS G	2-B43F-47
BX	AYERS, THOMAS M	2-B43F-48
BY	FORSTY, JANICE I (L EST-MARY J FORSTY	2-B43F-49
BZ	SYKES, JOANNE	2-B43F-50
CA	SYKES, JOANNE	2-B43F-51
CB	BOUWENS, WAYNE NEIL & JAY ALAN	2-B43F-52
CC	BOUWENS, WAYNE NEIL(TUD);JOHNSTON, GRETCHEN	2-B43F-53
CD	MOURATIDIS, KOSMAS (LG ROBERT & NECOL	2-B43F-54
CE	CUNNINGHAM, JOHN & PATRICIA L (SURV)	2-B43F-55
CF	KANOTZ, ASHLEY L & A SCOTT	2-B43F-56
CG	SMITH, RYAN & BROOKE	2-B43F-57
CH	WEPPLER, RANDALL J & CYNTHIA	2-B43F-58
CI	BETHANY COLLEGE	2-B43F-79
CJ	BETHANY COLLEGE	2-B43F-78
CK	BETHANY COLLEGE	2-B43F-77
CL	BETHANY COLLEGE	2-B43F-76
CM	BETHANY COLLEGE	2-B43F-75
CN	LOZIER, JOHN W & CORAL	2-B43F-65
CO	D'AURORA, DOMINICK A & THERESA (SURV)	2-B43F-4
CP	BETHANY COLLEGE	2-B43F-73
CQ	LYONS, THOMAS PAUL	2-B43F-72
CR	LYONS, THOMAS PAUL	2-B43F-71
CS	WILLIAMSON, GRAY; HATZOPOULOS, SYDMA (SURV)	2-B43B-15
CT	KREISBERG, ROBERT & MELINDA (SURV)	2-B43F-80
CU	BETHANY COLLEGE	2-B43B-16
CV	BETHANY COLLEGE	2-B43B-17
CW	GROUX, HARRY W & SANDRA K (SURV)	2-B43B-18
CX	GROUX, HARRY W & SANDRA K (SURV)	2-B43F-19
CY	BETHANY COLLEGE	2-B43B-20
CZ	BETHANY COLLEGE	2-B43B-21
DA	LOVATO, DONNA SUE MARTIN	2-B43F-67
DB	FALCON, NED THOMAS & BILLIE JO	2-B43B-60
DC	KEENER, EARL R & PAMELA (SURV)	2-B43B-5
DD	MANUFACTURERS LIGHT & HEAT CO	2-B43B-27
DE	HUFF, JOHN HEIRS	2-B43B-40
DF	BETHANY COLLEGE	3-B38-31
DG	HOLLADAY, DANNY M & SANDRA L (SURV)	3-B43-3
DH	RUSCHELL, DENNIS & DERRELLE	3-B43-2
DI	RUSCHEL DENNIS & DERRELLE	3-B43-01
DJ	JOHNSON ALLEN, WARREN & CHARLES ETAL	3-B38-36
DK	OWENS DAVID G & WALTERS LINDA ROY R OWENS, LIFE ESTATE	3-B38-35
DL	OWENS DAVID G & WALTERS LINDA ROY R OWENS, LIFE ESTATE	3-B38-33
DM	OWENS DAVID G & WALTERS LINDA ROY R OWENS, LIFE ESTATE	3-B38-32
DN	BETHANY COLLEGE	3-B38-31
DO	BROWN CHARLES F & DONNA	3-B38-30
DP	WORTHLEY KIMBERLY CARMAN	3-B38-27
DQ	WORTHLEY KIMBERLY CARMAN	3-B38-25
DR	OWEN MARK W & KRUEZ VIRGINIA BEALL	3-B38-24
DS	VALENTINE GENE CHARLES TRUST OF 11/25/86	3-B43-28
DT	BETHANY COLLEGE	3-B38-31
DU	GORBY RICHARD FRANCIS	3-B43-27
DV	KEEGAN KATHLEEN	3-B43C-37
DW	CHAMBERS BARBARA I (TOD)	3-B43C-36

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	LARSON GARY E & VAUGHNDA S	3-B43C-04
B	BETHANY COLLEGE	2-B43C-03
C	BETHANY COLLEGE	2-B43C-02
D	BETHANY COLLEGE	2-B43C-01
E	PUBLIC PARCEL	1-B43B-26
F	STRAUB, TRAVIS G & GREGORY B	2-B43F-84
G	SONNEWALD, GEORGE JR.	2-B43F-82
H	SONNEWALD, GEORGE JR.	2-B43F-81
I	HEIRS, WILLIAM MITCHELL	2-B43B-22
J	MITCHELL, DONALD STEVEN	2-B43F-83
K	TOWN OF BETHANY	2-B43F-86
L	TOWN OF BETHANY	2-B43F-87
M	TOWN OF BETHANY	2-B43F-88
N	TOWN OF BETHANY	3-B43-32
O	BETHANY COLLEGE	3-B43-31
P	CITY OF BETHANY	2-B43G-15
Q	BETHANY COLLEGE	3-B38-31
R	GENE C VALENTINE TRUST	3-B43-35-8
S	GENE C VALENTINE TRUST	3-B43-36
T	GENE C VALENTINE TRUST	3-B43-49-3
U	WV ST OF DEPT OF COMM DIV OF NAT RE WILDLIFE RES SEC	3-B48-18
V	FONNER, MARY LOU	3-B43-58
W	PUSKARICH, TRACY T	3-B43-59
X	CHAMBERS, ROBERT M & CHARLOTTE A	3-B48-24
Y	AYERS, ALBERT GLENN & REBECCA A (SURV)	3-B43-61
Z	CHAMBERS, ROBT M & CHARLOTTE A	3-B48-23
AA	NORDEN, ANNA MAE	3-B48-22
AB	CORWIN BRIAN DAVID	3-B43-22
AC	BETHANY COLLEGE	3-B38-31
AD	BETHANY COLLEGE	2-B43F-1
AE	CSAPLAR, WILFRID W; GUNASEGARAM, SAKUNTHALA W (SUR)	2-B43F-2
AF	RUGGIERO, RICHARD L & FELICITY	2-B43F-3
AG	D'AURORA, DOMINICK A & THERESA (SURV)	2-B43F-4
AH	GRAHAM, LINDA	2-B43F-5
AI	RAHR, ROBERT P JR & PENNY K (SURV)	2-B43F-6
AJ	REVEN, FRANK M & MARIAN	2-B43F-7
AK	PETTINI, JOSEPH P & BARBARA A (SURV)	2-B43F-8
AL	BURNS, JOHN THOMAS & ANNE E	2-B43F-9
AM	GIESMANN, JOHN C & SUSAN L	2-B43F-10
AN	DULLY, EDWARD A	2-B43F-11
AO	BOWN, ERIC H	2-B43F-12
AP	BETHANY COLLEGE	2-B43F-13
AQ	SAWTARIE, FUJIKO OGURI	2-B43F-14
AR	CUNNINGHAM, JOHN & PATRICIA	2-B43F-15
AS	DARSHAN, SHARMA R & CRYSTAL (JWS)	2-B43F-16
AT	SACHS, ANDREW C & PAULA L (SURV)	2-B43F-17
AU	BETHANY COLLEGE	2-B43F-18
AV	BETHANY COLLEGE	2-B43F-19
AW	BETHANY COLLEGE	2-B43F-20
AX	BETHANY COLLEGE	2-B43F-21
AY	BETHANY COLLEGE	2-B43F-22
AZ	BETHANY COLLEGE	2-B43F-23
BA	VALENTINE GENE CHARLES THE TRUST OF FENDON, DEBORAH C	2-B43F-24
BB	VALENTINE GENE CHARLES THE TRUST OF FENDON, DEBORAH C	2-B43F-25
BC	VALENTINE GENE CHARLES THE TRUST OF FENDON, DEBORAH C	2-B43F-26
BD	MCVICAR, ROBERT L	2-B43F-27
BE	NEEL, CURTIS LEE & LOUANN (SURV)	2-B43F-28
BF	HOFFMAN, JOHN & CYNTHIA	2-B43F-29
BG	COBB, ROSEMARY JEANNE	2-B43F-30
BH	BUCKELEW, ALBERT R JR & SUSAN	2-B43F-31
BI	ELTRINGHAM, THOMAS L & LAURI L (SURV)	2-B43F-32
BJ	HULL, LIVING TR; JOHN & DEBRA	2-B43F-33
BK	MORGAN, KENNETH & JUDITH (SURV)	2-B43F-34

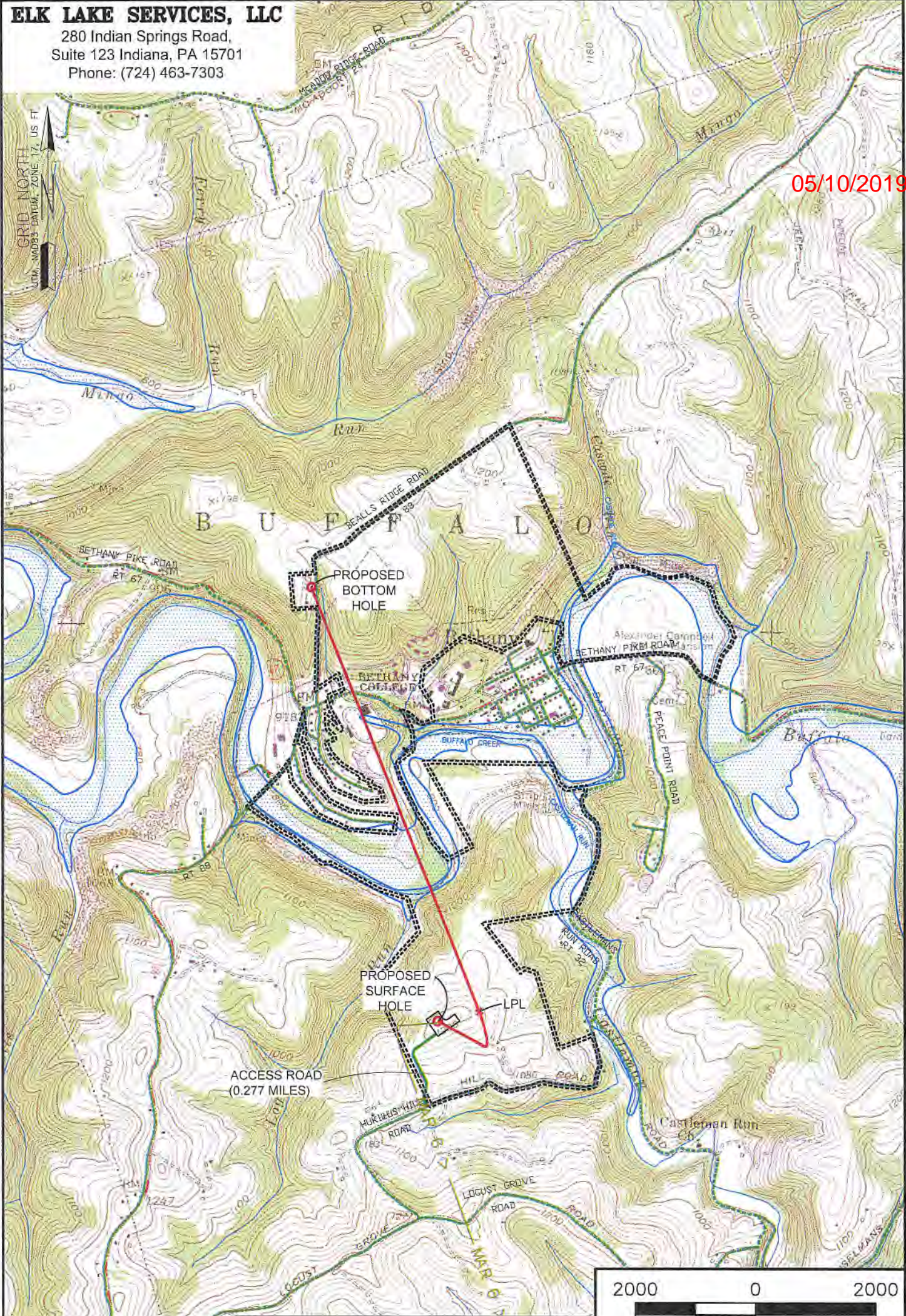
API WELL #: 47 STATE 9 COUNTY 00263 PERMIT MD

REVISIONS:	COMPANY:		
	OPERATOR'S:	SAMUEL JONES BRK	
	WELL #:	5H	
	DISTRICT:	COUNTY:	STATE:
	BUFFALO	BROOKE COUNTY	WV
		DATE:	03-11-2019
		FILE NO:	17-02
		DRAWN BY:	JMB
		SCALE:	N/A
		DRAWING NO:	1
		WELL LOCATION PLAT	1

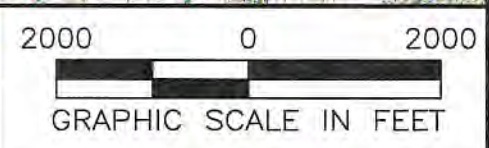
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05/10/2019



API WELL #: **47** **9**
STATE COUNTY PERMIT



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

WELL OPERATOR:
SWN PRODUCTION COMPANY, LLC
ADDRESS:
1300 FORT PIERPONT DR STE 201, MORGANTOWN, WV 26508
SURFACE OWNER:
JONES, SAMUEL E & JUDITH F

WELL (FARM) NAME: SAMUEL JONES BRK
WELL # 5H **SERIAL #** XXXX
COUNTY BROOKE COUNTY - 9 **DISTRICT:** BUFFALO
USGS 7 1/2 QUADRANGLE MAP NAME BETHANY, WV