

ELK LAKE SERVICES, LLC

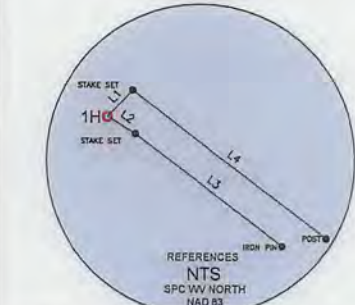
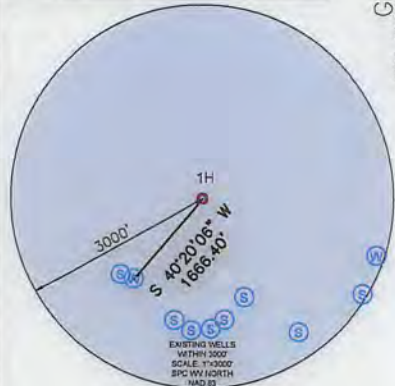
280 Indian Springs Road,
Suite 123 Indiana, PA 15701
Phone: (724) 463-7303

SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,448,995.34 EASTING: 537,355.59
LANDING POINT (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,448,885.06 EASTING: 537,149.44
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,451,142.49 EASTING: 536,211.08

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

Latitude: 40°12'30" SURFACE HOLE 5444'

Latitude: 40°15'00" BOTTOM HOLE 9164'



LINE	BEARING	DISTANCE
L1	N 43°52'16" E	377.79'
L2	S 58°48'39" E	337.71'
L3	S 52°36'46" E	1927.86'
L4	S 52°42'21" E	2535.38'

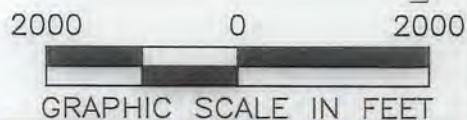
WELL RESTRICTIONS

- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 1,667 FEET OF PROPOSED WELL.
- PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS ARE WITHIN THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
- 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

- 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.
 - THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 - ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.
1. 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 **SWN** Production Company, LLC 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 SURVEY SOURCE OF GRADE GPS ELEVATION: (NAVD 88, US FT)

SAMUEL JONES BRK
OPERATOR'S WELL #: 1H
API WELL #: 47 069 00262
STATE COUNTY PERMIT

WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW
WATERSHED: UPPER OHIO SOUTH ELEVATION: 1205.4' PLANNED
DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: BETHANY
SURFACE OWNER: JONES, SAMUEL E. AND JUDITH F. ACREAGE: ±164.70
OIL & GAS ROYALTY OWNER: RESOURCE MINERALS HEADWATER I, LP ACREAGE: ±164.70
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: 6,101' TVD 14,591' 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:	— SURVEYED BOUNDARY	— DATE: 04-26-2018
⊙ PROPOSED SURFACE HOLE / BOTTOM HOLE	— DRILLING UNIT	— FILE NO: 17-0010
⊙ EXISTING / PRODUCING WELLHEAD	— LEASE BOUNDARY	— DRAWN BY: N. LASSAK
⊙ LANDING POINT LOCATION	— PROPOSED PATH	— SCALE: 1" = 200'
⊙ EXISTING WATER WELL		— DRAWING NO: 1
⊙ EXISTING SPRING		— WELL LOCATION PLAT 1

ELK LAKE SERVICES, LLC

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

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER / ROYALTY OWNER	TAX PARCEL
1	JONES, SAMUEL E. AND JUDITH F. / RESOURCE MINERALS HEADWATER I, LP	3-B43-60
TRACT	SURFACE OWNER	TAX PARCEL
2	NORDEN, ANNA MAE	3-B48-22
3	CORWIN, BRIAN DAVID	3-B43-22
4	CORWIN, BRIAN DAVID (LE-MARION PYLE STONE)	3-B43-25
5	BETHANY COLLEGE	3-B38-31
6	LIPINSKI JOHN M	2-B43F-4
7	RUGGIERO, RICHARD L AND FELICITY	2-B43F-3
8	WEST VIRGINIA DEPARTMENT OF TRANSPORTATION, DIVION OF HIGHWAYS	BETHANY PIKE
9	LEONETTI, BETTIE BECK	3-B43-5

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	JOHNSON, ALLEN WARREN, CHARLES ETAL	3-B38-36
B	GERMON, RUTH;WOY, JEFFREY;MOORE, SUE; WEST, PATRICIA; WOY, SARA	3-B38-37
C	HOLLADAY, DANNY M & SANDRA L (SURV)	3-B43-3
D	KISNER, GARLAND	3-B43-4
E	BETHANY COLLEGE	3-B38-31
F	BETHANY COLLEGE, TRUSTEES OF (SURV)	2-B43B-1
G	MYERS, YVONNE B	2-B43B-2
H	BETHANY COLLEGE	2-B43F-10
I	CSAPLAR, WILFRID W; GUNASEGARAM, SAKUNTHALA W	2-B43F-2
J	GRAHAM, LINDA	2-B43F-5
K	RAHR, ROBERT P JR & PENNY K (SURV)	2-B43F-6
L	REVEN, FRANK M & MARIAN	2-B43F-7
M	PETTINI, JOSEPH P & BARBARA A (SURV)	2-B43F-8
N	BURNS, JOHN THOMAS & ANNE E	2-B43F-9
O	GIESMANN, JOHN C & SUSAN L	2-B43F-10
P	DULLY, EDWARD A	2-B43F-11
Q	BOWN, ERIC H	2-B43F-12
R	BETHANY COLLEGE	2-B43F-13
S	SAWTARIE, FUJIKO OGURI	2-B43F-14
T	CUNNINGHAM, JOHN & PATRICIA	2-B43F-15
U	DARSHAN, SHARMA R & CRYSTAL (JWS)	2-B43F-16
V	SACHS, ANDREW C & PAULA L (SURV)	2-B43F-17
W	BETHANY COLLEGE	2-B43F-18
X	BETHANY COLLEGE	2-B43F-19
Y	BETHANY COLLEGE	2-B43F-20
Z	BETHANY COLLEGE	2-B43F-21
AA	BETHANY COLLEGE	2-B43F-22
AB	BETHANY COLLEGE	2-B43F-23
AC	VALENTINE GENE CHARLES THE TRUST OF FENDON, DEBORAH C	2-B43F-24
AD	VALENTINE GENE CHARLES THE TRUST OF MCVICAR, ROBERT L	2-B43F-25
AE	NEEL, CURTIS LEE & LOUANN (SURV)	2-B43F-26
AF	NEEL, CURTIS LEE & LOUANN (SURV)	2-B43F-27
AG	NEEL, CURTIS LEE & LOUANN (SURV)	2-B43F-28
AH	HOFFMAN, JOHN & CYNTHIA	2-B43F-29
AI	COBB, ROSEMARY JEANNE	2-B43F-30
AJ	BUCKELEW, ALBERT R JR & SUSAN	2-B43F-31
AK	ELTRINGHAM, THOMAS L & LAURI L (SURV)	2-B43F-32
AL	HULL, LIVING TR; JOHN & DEBRA	2-B43F-33
AM	MORGAN, KENNETH & JUDITH (SURV)	2-B43F-34
AN	FORRESTER, JAMES R JR & CAROLYN	2-B43F-35
AO	HERVEY, DOUGLAS H & HOLLY (SURV)	2-B43F-36
AP	FURBEE, THOMAS; SHELEK, KATHERINE	2-B43F-37
AQ	FURBEE, THOMAS; SHELEK, KATHERINE (SURV)	2-B43F-38
AR	BETHANY COLLEGE	2-B43F-39
AS	BETHANY COLLEGE	2-B43F-40
AT	BETHANY COLLEGE, THE TRUSTEES OF	2-B43F-41
AU	BETHANY COLLEGE	2-B43F-42
AV	BETHANY COLLEGE	2-B43F-43
AW	KEMP, SHIRLEY J	2-B43F-44
AX	BETHANY COLLEGE	2-B43F-45
AY	NIESLEN, DOUGLAS G	2-B43F-47
AZ	AYERS, THOMAS M	2-B43F-48
BA	FORSTY, JANICE L (L EST-MARY J FORSTY	2-B43F-49
BB	SYKES, JOANNE	2-B43F-50
BC	SYKES, JOANNE	2-B43F-51
BD	BOUWENS, WAYNE NEIL & JAY ALAN	2-B43F-52
BE	BOUWENS, WAYNE NEIL(TUD)JOHNSTON, GRETCHEN	2-B43F-53
BF	MOURATIDIS, KOSMAS (LC ROBERT & NEGOL	2-B43F-54
BG	CUNNINGHAM, JOHN & PATRICIA L (SURV)	2-B43F-55
BH	KANOTZ, ASHLEY L & A SCOTT	2-B43F-56
BI	SMITH, RYAN & BROOKE	2-B43F-57
BJ	WEPPLER, RANDALL J & CYNTHIA	2-B43F-58
BK	BETHANY COLLEGE	2-B43F-79
BL	BETHANY COLLEGE	2-B43F-78
BM	BETHANY COLLEGE	2-B43F-77
BN	BETHANY COLLEGE	2-B43F-76
BO	BETHANY COLLEGE	2-B43F-75
BP	LOZIER, JOHN W & CORAL	2-B43F-65
BQ	D'AURORA, DOMINICK A & THERESA (SURV)	2-B43F-4
BR	BETHANY COLLEGE	2-B43F-73
BS	LYONS, THOMAS PAUL	2-B43F-72
BT	LYONS, THOMAS PAUL	2-B43F-71
BU	WILLIAMSON, GRAY, HATZOPOULOS, SYDMA (SURV)	2-B43B-15
BV	KREISBERG, ROBERT & MELINDA (SURV)	2-B43F-80
BW	BETHANY COLLEGE	2-B43B-16
BX	BETHANY COLLEGE	2-B43B-17
BY	GROUX, HARRY W & SANDRA K (SURV)	2-B43B-18
BZ	GROUX, HARRY W & SANDRA K (SURV)	2-B43F-19
CA	BETHANY COLLEGE	2-B43B-20
CB	BETHANY COLLEGE	2-B43B-21
CC	LOVATO, DONNA SUE MARTIN	2-B43F-67
CD	FALCON, NED THOMAS & BILLIE JO	2-B43B-60
CE	KEENER, EARL R & PAMELA (SURV)	2-B43B-5
CF	MANUFACTURERS LIGHT & HEAT CO	2-B43B-27
CG	HUFF, JOHN HEIRS	2-B43B-40
CH	BETHANY COLLEGE	3-B38-31
CI	MITCHELL, WILLIAM HEIRS	2-B43B-22
CJ	MITCHELL, DONALD STEVEN	2-B43F-B3
CK	BETHANY TOWN OF	2-B43F-B6
CL	BETHANY TOWN OF	2-B43F-B7
CM	BETHANY TOWN OF	2-B43F-B8
CN	BETHANY TOWN OF	3-B43-32
CO	VALENTINE, GENE C TR OF 11/26/B6	3-B43-33
CP	FONNER, MARY LOU	3-B43-58
CQ	PUSKARICH, TRACY T	3-B43-59
CR	CHAMBERS, ROBERT M & CHARLOTTE A	3-B48-24
CS	AYERS, ALBERT GLENN & REBECCA ANN (SURV)	3-B43-61
CT	CHAMBERS, ROBT M & CHARLOTTE A	3-B48-23
CU	NORDEN, ANNA MAE	3-B48-22
CV	SEIDEWITZ, PAUL ROBERT & WENDY KAY	3-B48-18.1
CW	PYLE, LAWRENCE RAY & JUDITH A	3-B48-18
CX	BONAR, CHARLES W & CHARLOTTE (SURV)	3-B48-15
CY	BONAR, CHARLES W & CHARLOTTE (SURV)	3-B48-14
CZ	BONAR, CHARLES W & CHARLOTTE (SURV)	3-B48-10
DA	COX, WILLIAM BRITT	3-B43-21
DB	STONE, MARION PYLE	3-B43-20
DC	STONE, MARION PYLE	3-B43-19
DD	WHITEHEAD, SILVEA MAZZELLA	3-B43-18
DE	MCGEEHAN, JOYCE ANN	3-B43-17
DF	MCGEEHAN, JOYCE ANN	3-B43-23
DG	CORWIN, BRIAN	3-B43-26
DH	BECK, JOHN	3-B43-6
DI	CHAMBERS, MARY WELLS	3-B43-11
DJ	CHAMBERS, MARY WELLS	3-B43-12
DK	CHAMBERS, MARY WELLS	3-B43-13
DL	WINDSOR POWER HOUSE COAL CO	3-B43-15
DM	SANFORD, ELLEN B	3-B38-56
DN	THOMPSON, TERRY P & KAREN	3-B38-38

REVISIONS:	COMPANY:	 	
	OPERATOR'S	SAMUEL JONES BRK	
	WELL #:	1H	
	DISTRICT:	COUNTY:	STATE:
	BUFFALO	BROOKE	WV
			DATE: 04-26-2018
			FILE NO: 17-0010
			DRAWN BY: N. LASSAK
			SCALE: N/A
			DRAWING NO: 1
			WELL LOCATION PLAT 1