

(2,000' SCALE) LATITUDE: 40°20'00" SURFACE HOLE 9790'

(2,000' SCALE) LATITUDE: 40°22'30" BOTTOM HOLE | 2028'



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

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

PROPOSED
BOTTOM HOLE

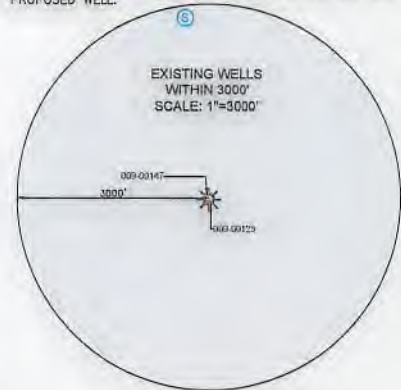
N 20°53'58" W
6320.69'

SHL

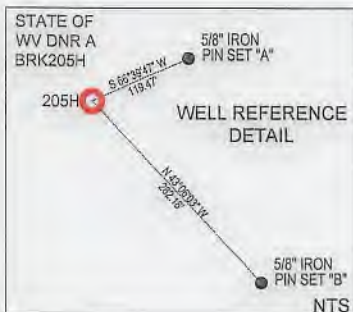
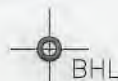
INSET "I"

NOTES ON SURVEY

1. COORDINATE SYSTEM IS UTM MAD 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.



EXISTING WELLS
WITHIN 3000'
SCALE: 1"=3000'

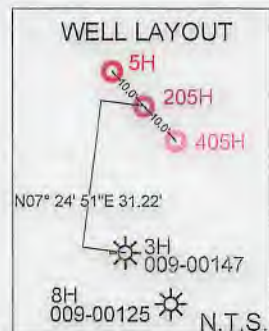


WELL REFERENCE
DETAIL

PROPOSED
SURFACE HOLE

LPL

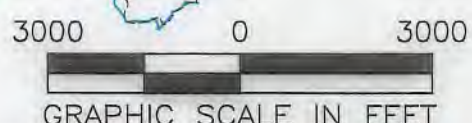
N 71°35'39" E
1418.39'



WELL LAYOUT

SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4463506.30 EASTING: 539496.43
LANDING POINT LOCATION (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4463649.41 EASTING: 539903.55
TURNING POINT LOCATION (TPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4465347.54 EASTING: 539019.69
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4467134.84 EASTING: 538302.64

LINE	BEARING	DISTANCE
L1	N 29°57'46" W	1568.93'
L2	N 16°14'51" E	1424.82'



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]* 10/22/19

SWN Production Company, LLC **SWN** Production Company™

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

STATE OF WV DNR A
BRK 205H

WVDEP
OFFICE OF OIL & GAS
601 57TH STREET
CHARLESTON, WV 25034

MINIMUM DEGREE OF ACCURACY: 1/200

PROVEN SURVEY SOURCE OF ELEVATION: GRADE GPS (NAVD 88, US FT)

OPERATOR'S WELL #: STATE OF WV DNR A BRK 205H

API WELL #: 47 STATE 009 COUNTY 00298 PERMIT

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

WATERSHED: UPPER OHIO NORTH ELEVATION: 1,139.8'

DISTRICT: CROSS CREEK COUNTY: BROOKE QUADRANGLE: STEUBENVILLE EAST, OH

SURFACE OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR ACREAGE: ±97.50

OIL & GAS ROYALTY OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR ACREAGE: ±97.50

DRILL DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION

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

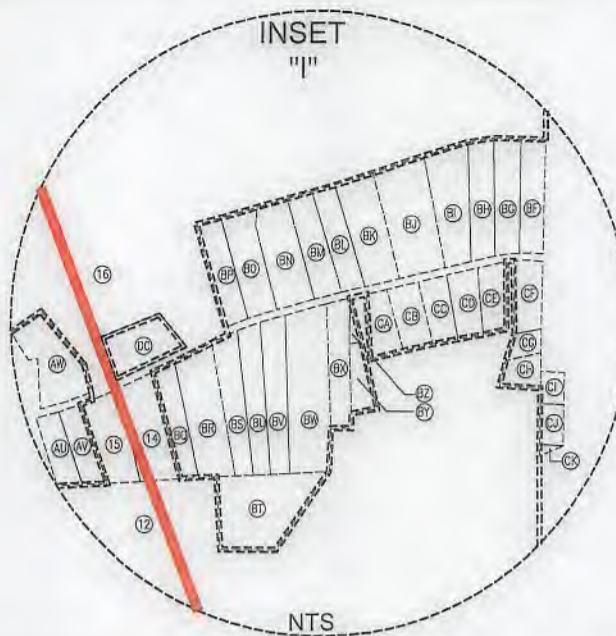
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 5,718' TVD 18,981' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY

ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201

CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	REVISIONS:	DATE: 10-22-2019
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	⊙ EXISTING WATER WELL	
☼ EXISTING / PRODUCING WELLHEAD	⊙ EXISTING SPRING	
LPL ✕ LANDING POINT LOCATION	--- SURVEYED BOUNDARY	
TPL ✕ TURNING POINT LOCATION	--- DRILLING UNIT	
	----- LEASE BOUNDARY	
	--- PROPOSED PATH	
		DRAWN BY: R. GRIMES
		SCALE: 1" = 3000'
		DRAWING NO: 2018-245
		WELL LOCATION PLAT



WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DIVISION OF NATURAL RESOURCES, PUBLIC LAND CORPORATION FOR THE USE AND BENEFIT OF THE WILDLIFE RESOURCES SECTION (S/R)	04-CC16-0007.0001
TRACT	SURFACE OWNER	TAX PARCEL
2	STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DIVISION OF NATURAL RESOURCES, PUBLIC LAND CORPORATION FOR THE USE AND BENEFIT OF THE WILDLIFE RESOURCES SECTION	04-CC16-0008.0001
3	TERRY A. DAMI & ET AL (L/E: JOSEPH T. & LOIS C. DAMI)	04-CC16-0009.0000
4	THE PALFALVY IRREVOCABLE TRUST (DENNIS PALFALVY, III)	04-CC16-0005.0000
5	RONALD ALLEN REED	04-CC16-0004.0000
6	RALPH A. BRADY, II & JOYCE ANN JOHNSTON (SURVIVOR)	04-CC16-0002.0000
7	RICHARD B. GASVODA	04-CC16-0001.0001
8	RICHARD B. GASVODA	04-CC16-0001.0004
9	PAUL MAROSI	04-CC16-0001.0000
10	DAVID L. & CHERYL D. MILL	04-C115-0058.0000
11	RONALD C. BOTTORF, II	04-C115-0092.0000
12	PETREL IRREVOCABLE TRUST (NANCY PETREL, TRUSTEE)	04-C11M-0034.0000
13	PETER M. & LYNN A. MARTIN	04-CC16-0006.0000
14	JAMES W. RAHR	04-C11M-0026.0000
15	BARBARA MCVICKER & MARIA FRANCIS	04-C11M-0027.0000
16	MARK C., JR. & MARY E. SECRIST (SURVIVOR)	04-C11M-0005.0000

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
AP	DAVID P. MELLISH	04-C11M-0035.0000
AQ	DAVID LANCASTER	04-C11M-0032.0000
AR	LAWRENCE V. & LISA L. PERRONE (SURVIVOR)	04-C11M-0033.0000
AS	PAUL MAROSI	04-C11M-0029.0000
AT	PAUL MAROSI	04-C11M-0028.0000
AU	BARBARA MCVICKER & MARIA FRANCIS	04-C11M-0027.0000
AV	JEFFREY W. & MARIA L. FRANCIS	04-C11M-0027.0001
AW	GERALD GOURLEY	04-C11M-0004.0000
AX	ST. JOHN'S EPISCOPAL CHURCH	04-C11M-0003.0000
AY	MARK C. JR. & MARY E. SECRIST	04-C11M-0005.0000
AZ	MARK JR. & MARY SECRIST (SURVIVOR)	04-C11M-0001.0000
BA	LINDA BURDISS	04-CC11-0085.0000
BB	WYLIE MCBRIDE, JR. & SUSAN BETH MCBRIDE GRIFFITH	04-CC11-0083.0000
BC	THOMAS J. PATE & JOHN SZYMANEK	04-CC11-0078.0000
BD	PETREL IRREVOCABLE TRUST, DATED 7/25/2013	04-CC12-0005.0000
BE	BRAD A. & MELISSA JO EVANS (SURVIVOR) (L/E: JUDY KEISTER)	04-C12J-0004.0000
BF	DANIEL PHILLIP KEISTER & DAVID LEE KEISTER	04-C12J-0003.0000
BG	ROBERT L. KERNS, JR. (F/A: KATHY CANTOR) (SURVIVOR)	04-C11M-0002.0000
BH	KENNETH J., JR. & AMY M. MCLAUGHLIN (SURVIVOR)	04-C12J-0001.0000
BI	GLENN, JR. & VALERIE C. CAIN (SURVIVOR)	04-C11M-0012.0000
BJ	LARRY J. & TINA C. DINIACO GASTON (SURVIVOR)	04-C11M-0011.0000
BK	MICHAEL & EMILIA REALE	04-C11M-0005.0002
BL	MICHAEL N. & EMILIE REALE (TRUSTEES)	04-C11M-0010.0000
BM	LUKE A. MESTER	04-C11M-0009.0000
BN	LUKE A. MESTER	04-C11M-0008.0000
BO	STEPHEN R. & TAMARA K. GRIMM	04-C11M-0007.0000
BP	STEPHEN R. & TAMARA K. GRIMM	04-C11M-0006.0000
BQ	RUSSELL E. RECH, III	04-C11M-0025.0000
BR	MARY L. LEMASTERS	04-C11M-0024.0000
BS	ROBERT S. LATIMER	04-C11M-0023.0000
BT	OPEN DOOR BAPTIST CHURCH	04-C11M-0034.0002
BU	EDWARD & KATHY CRUNY (F/A: KATHY CANTOR) (SURVIVOR)	04-C11M-0022.0000
BV	EUGENE R. & PATRICIA L. VISCO	04-C11M-0021.0000
BW	OPEN DOOR BAPTIST CHURCH	04-C11M-0020.0000
BX	DONOVAN L. FLUHARTY	04-C11M-0019.0000
BY	DONOVAN FLUHARTY	04-C11M-0018.0000
BZ	DONOVAN LAWRENCE FLUHARTY	04-C11M-0017.0000
CA	COLLIERS METHODIST CHURCH	04-C11M-0016.0000
CB	STEVEN M. & TAMMY L. KOZORA (SURVIVOR)	04-C11M-0015.0000
CC	TIMOTHY & DIANE J. SWANGO	04-C11M-0014.0000
CD	ROBERT RICHARD LONG	04-C11M-0013.0000
CE	GREGORY FRESHWATER & GARY FRESHWATER	04-C12J-0058.0000
CF	JAMES M. KERNS	04-C12J-0057.0000
CG	NICHOLAS & DEBORAH L. CEBULA; DANIEL L. & JUDITH A. SMITH	04-C12J-0056.0000
CH	JOHN & CARRIE SNATCHKO (SURVIVOR)	04-C12J-0055.0000
CI	STANLEY & SANDRA M. PETROSKY (SURVIVOR)	04-C12J-0052.0000
CJ	STANLEY & SANDRA M. PETROSKY (SURVIVOR)	04-C12J-0053.0000
CK	STANLEY & SANDRA M. PETROSKY (SURVIVOR)	04-C12J-0054.0000
CL	JAMIE LYNN DEULEY & SHERYL KOSEVIC	04-C12J-0041.0000
CM	SHAWN A. DENNIS	04-C12J-0042.0000
CN	SHAWN A. DENNIS	04-C12J-0033.0000
CO	TAWNIA R. DENNIS	04-CC12-0062.0000
CP	MATTHEW C. & HOLLY W. LEWIS (SURVIVOR)	04-CC12-0054.0001
CQ	NEIL E., JR. & MICHELLE L. VANCAMP (SURVIVOR)	04-CC16-0028.0000
CR	WILLIAM RICHARD WILLS	04-CC16-0033.0000
CS	LAWRENCE & JILL MAZZELLA	04-CC16-0025.0000
CT	RALPH A. BRADY, II & JOYCE ANN JOHNSTON (SURVIVOR)	04-CC16-0003.0000
CU	DENNIS MOLNAR, SR. & DENNIS MOLNAR, JR.	04-CC16-0013.0000
CV	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC16-0012.0000
CW	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC16-0010.0000
CX	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC16-0011.0000
CY	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC16-0023.0001
CZ	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC16-0023.0000
DA	SUSAN K. PRONCHIK	04-CC20-0008.0000
DB	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC20-0046.0000
DC	ROBERT W. CONN	04-C11M-0029.0000
DD	JAMES E. & NANCY RHODES (SURVIVOR)	04-C11M-0034.0001

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC20-0025.0000
B	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC20-0025.0001
C	COLLIERS SPORTSMAN CLUB	04-CC20-0024.0000
D	COLLIERS SPORTSMAN CLUB	04-CC20-0045.0000
E	FREDA M. DUNN & SANDRA ROBERT (L/E: FREDA DUNN)	04-CC20-0001.0000
F	DAVID C. DAMI	04-CC20-0001.0001
G	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC16-0006.0000
H	LENORA J. RINEHART	04-CC15-0074.0000
I	LARRY E. REED	04-CC15-0068.0001
J	REED GEHRING FAMILY TRUST, DATED 11/17/2008	04-CC16-0032.0000
K	LAURA J. & STUART STEUDEBAKER	04-C15D-0030.0000
L	JESSE J. BURDINE	04-C15D-0019.0000
M	ROBERTA L. ROGOWSKI REVOCABLE TRUST	04-C15D-0014.0000
N	WALTER & MARJORIE JESKIEWICZ	04-C15D-0015.0000
O	WALTER & MARJORIE JESKIEWICZ	04-C15D-0016.0000
P	ROBERT W. HARBIN	04-C115-0051.0000
Q	PATRICIA I. GOLDSMITH	04-C115-0052.0000
R	NICOLE E. LONG	04-C115-0053.0000
S	JASON M. & JENNIFER D. KAZMIRSKI (SURVIVOR)	04-C115-0054.0000
T	WRIGHT FAMILY REVOCABLE TRUST, DATED 12/10/2013	04-C115-0055.0000
U	JAMES A. CLARK	04-C115-0056.0000
V	ROBERT A. WYATT	04-C115-0057.0000
W	JEFFREY S. DULANEY	04-C115-0046.0000
X	HELEN T. CARBASHO	04-C115-0045.0000
Y	ROBERTA L. ROGOWSKI REVOCABLE TRUST	04-C115-0044.0000
Z	WILLIAM C. & BARBARA J. WILHARM	04-C115-0062.0000
AA	NEIL C. & LINDA S. STEWART (SURVIVOR)	04-C115-0061.0000
AB	NEIL C. & LINDA S. STEWART	04-C115-0060.0000
AC	CHARLES E. & DEBORA HENDERSHOT	04-C115-0059.0000
AD	SHARON K. MICHAELSON	04-C115-0080.0000
AE	SHARON K. MICHAELSON	04-C115-0081.0000
AF	ANNA BELLE BRYANT	04-C115-0082.0000
AG	UNITED PRESBYTERIAN CHURCH	04-C115-0083.0000
AH	PROPERTY SERVICES, LLC	04-C115-0010.0000
AI	WILLIAM A. & VICKY L. HERCULES	04-C115-0009.0000
AJ	MARY ANN MARTIN	04-C115-0084.0000
AK	DENNIS CALVIN GOOCH	04-C115-0085.0000
AL	ANGELA C. CALVERESE	04-C115-0090.0000
AM	RONALD C. BOTTORF II	04-C115-0091.0000
AN	DAVID P. MELLISH	04-C115-0089.0000
AO	DWAYNE WADLEY & CATHLEEN L. DONNE (JTWS)	04-C115-0096.0000

REVISIONS:	COMPANY: 4700900299 SWN Production Company, LLC	SWN Production Company™
	OPERATOR'S STATE OF WV DNR A	DATE: 10-22-2019
	WELL #: BRK 205H	DRAWN BY: R. GRIMES
	DISTRICT: CROSS CREEK	SCALE: N/A
	COUNTY: BROOKE	DRAWING NO: 2018-245
	STATE: WV	WELL LOCATION PLAT