

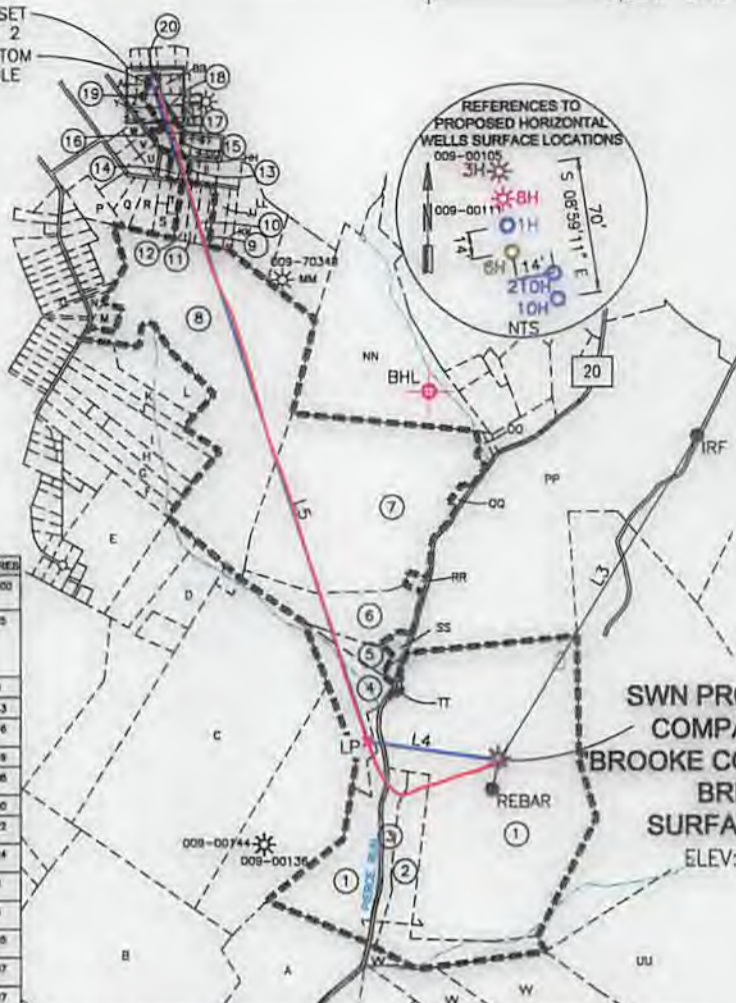


THE THRASHER GROUP, INC.
600 WHITE OAKS BLVD.
BRIDGEPORT, WV 26330
PHONE 304-624-4109

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.

SEE INSET SHEET 2 BOTTOM HOLE



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

3,581' BHL

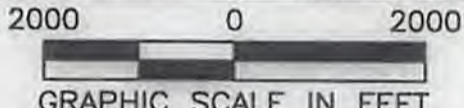
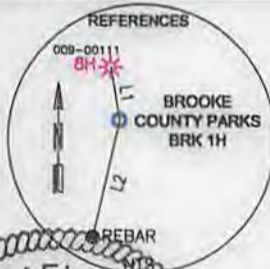
11,356' SHL

SWN PRODUCTION COMPANY, LLC
BROOKE COUNTY PARKS
BRK 1H"
SURFACE HOLE
ELEV: 1,206'

TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL	ACRES
1	(S)BROOKE CO. PARKS COMMISSION (R)RICHARD P. GIST, (R)VIRGINIA GIST ABBLIT, (R)ANN GIST LEVIN	05-03-828-0084-0000	135.00
2	(S)WESTWING INDUSTRIES (R)CLARENCE PAUL & EDNA LARSON (R)TERRY P. & SHARON M. PASNETTI (R)THOMAS P. & NINA PASNETTI	05-03-828-0083-0000	13.25
3	(S)WESTWING INDUSTRIES	05-03-828-0082-0000	3.00
4	(S)ROBERT J. H. & NICOLE C. KNORR	05-03-828-0059-0000	21.43
5	(S)ROBERT J. H. & NICOLE C. KNORR (R)ROBERT L. KNORR JR. & RUBY F. KNORR	05-03-828-0057-0002	3.846
6	(S)WIDONALD JR. & JACQUE EATON	05-03-828-0057-0000	28.88
7	(S)CHARLES EDWARD & ELSIE ELLEN SCHUBACH (R)CHARLES EDWARD SCHUBACH & ELSIE HELEN SCHUBACH	05-03-828-0055-0000	65.06
8	(S)JAMES ROBERT & KAREN L. HONEY	05-03-828-0046-0000	79.00
9	(S)LARRY J. HOOD & VALERIE S. HOOD (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0022-0000	0.722
10	(S)LARRY J. HOOD (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0023-0000	1.424
11	(S)MARY ELLEN NELSON (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0024-0000	1.40
12	(S)DAN E. & DENISE A. NELSON (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0025-0000	1.55
13	(S)TODD GARREY STENDER (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0017-0000	0.505
14	(S)EDWARD PATTERSON (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0018-0000	0.507
15	(S)KENNETH LEWISTERS, JR. (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0006-0000	0.487
16	(S)SHIRLEY A. HUBERTH (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0005-0000	0.878
17	(S)KELORES ELLIOTT (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0043-0000	0.854
18	(S)PROFESSOR R. HUGGINS (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0042-0000	0.771
19	(S)ROBERT R. ELLIOTT, JR. (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0041-0000	0.7975
20	(S)LOUIS TEMPLE (R)SANDRA ELIZABETH CHAPMAN MALDY	05-03-8238-0040-0000	1.048

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 09°15'20" W	14.11'	SHL TO REF. PNT.	BRK 8H #09-00111
L2	S 13°08'59" W	309.96'	SHL TO REF. PNT.	REBAR SET
L3	N 32°00'06" E	3930.89'	SHL TO REF. PNT.	REBAR FOUND
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L4	N 81°54'29" W	1380.65'		SHL TO LP
L5	N 17°55'55" W	7102.93'		LP TO BHL

SURFACE HOLE LOCATION (SHL):	SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,456,769.745 EASTING: 538,446.602	UTM (NAD83, ZONE 17, METERS): NORTHING: 4,456,769.745 EASTING: 538,446.602
LANDING POINT LOCATION (LPL):	LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,456,828.926 EASTING: 538,029.912	UTM (NAD83, ZONE 17, METERS): NORTHING: 4,456,828.206 EASTING: 538,030.223
BOTTOM HOLE LOCATION (BHL):	BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,458,888.789 EASTING: 537,363.398	UTM (NAD83, ZONE 17, METERS): NORTHING: 4,458,927.386 EASTING: 537,339.664



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 *[Signature]* 5/2/17

<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 GRADE GPS ELEVATION: (NAVD 88, US FT)	COMPANY: SWN Production Company, LLC OPERATOR'S WELL #: BROOKE COUNTY PARKS BRK 1H API WELL #: 47 STATE 009 COUNTY 00166 PERMIT
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WELL TYPE: OIL WASTE DISPOSAL PRODUCTION DEEP GAS LIQUID INJECTION STORAGE SHALLOW

WATERSHED: BUFFALO CREEK ELEVATION: 1,205.60'

DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: STEUBENVILLE EAST

SURFACE OWNER: BROOKE CO. PARKS COMMISSION ACREAGE: 135.00

OIL & GAS ROYALTY OWNER: RICHARD P. GIST, VIRGINIA GIST ABBLIT, ANN GIST LEVIN ACREAGE: 397.70

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

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

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 3,940' TVD 13,695' TMD

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

ADDRESS: P.O. BOX 1300 ADDRESS: P.O. BOX 1300

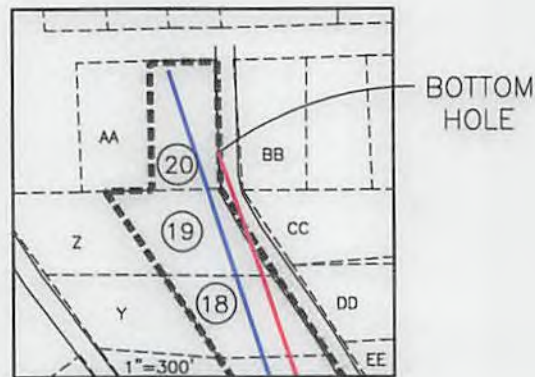
CITY: JANE LEW STATE: WV ZIP CODE: 26378 CITY: JANE LEW STATE: WV ZIP CODE: 26378

LEGEND: ○ PROPOSED SURFACE HOLE / BOTTOM HOLE ✱ EXISTING / PRODUCING WELLHEAD ✕ ABANDONED WELL ✕ PLUGGED & ABANDONED WELL △ CUT CONDUCTOR - - - - - LEASE BOUNDARY - - - - - PROPOSED PATH - - - - - AS-DRILLED PATH - - - - - ABANDONED PATH	REVISIONS: DATE: 05-11-2017 SHEET 1 OF 2 DRAWN BY: K POTH SCALE: 1" = 2000' DRAWING NO: 050-5525 WELL LOCATION PLAT
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THRASHER

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

TRACT	ADJOINER	PARCEL
A	STARVAGGI INDUSTRIES	05-03-B33-0025-0000
B	MICHAEL WHITOC & PATRICIA GRAHAM	05-03-B28-0043-0000
C	WILLIAM HERVEY III	05-03-B28-0045-0002
D	FREDERICK L. & CATHY JO HERVEY	05-03-B28-0045-0001
E	KENNETH & JANE C. DIGHT	05-03-B28F-0036-0000
F	MARY K. MILLER	05-03-B28B-0039-0000
G	MARY K. MILLER	05-03-B28B-0040-0000
H	NEAL SMITH	05-03-B28B-0041-0000
I	NEAL SMITH	05-03-B28B-0043-0000
J	NEAL SMITH	05-03-B28B-0044-0000
K	JOHN BARLOW	05-03-B28B-0045-0001
L	JOHN W. BARLOW	05-03-B28-0068-0000
M	GARY LISH & BONNIE LISH	05-03-B28B-0047-0000
N	KERRY M. & JANICE F. JACKSON	05-03-B28B-0048-0000
O	TERRY CLYDE PATTERSON	05-03-B28B-0049-0000
P	MILDRED CRAFT	05-03-B23P-0050-0000
Q	TIM & LISA HALSTEAD	05-03-B23R-0029-0000
R	ADAM FLETCHER & LISA FLETCHER	05-03-B23R-0028-0000
S	DAVID NELSON	05-03-B23R-0075-0000
T	RUTH L. BROWN	05-03-B23R-0026-0000
U	EDWARD G. PATTERSON	05-03-B23R-0033-0000
V	ANGELO IARUSSI	05-03-B23R-0034-0000
W	GERALD & MEGAN NICOLE MCCLAIN	05-03-B23R-0035-0000
X	ROBERT CLAY MCADOO	05-03-B23R-0004-0000
Y	JASPER PROVENZANO	05-03-B23R-0003-0000
Z	ROSS A. TENNANT	05-03-B23R-0002-0000
AA	BOBBIE JEAN MERCER	05-03-B23R-0039-0000
BB	RALPH MORGAN	05-03-B23R-0050-0000
CC	LOUIS & JUDITH TEMPLE	05-03-B23R-0049-0000
DD	BERNARD ELLIOT JR.	05-03-B23R-0048-0000
EE	RODNEY R. HUGGINS	05-03-B23R-0044-0000
FF	STEPHEN & KELLI MEADE	05-03-B23R-0007-0000
GG	JOHN & SHARON EDWARDS	05-03-B23R-0008-0000
HH	CATHY JO HERVEY	05-03-B23R-0016-0000
II	FRED P. & LORETTA A. MCDONALD	05-03-B23R-0015-0000
JJ	DORSEN & PATTY MCCONNAUGHY	05-03-B23R-0021-0000
KK	DEBORAH K. LEFANTI	05-03-B23R-0020-0000
LL	FREDERICK & CATHY JO HERVEY	05-03-B28-0048-0000
MM	JAMES & KAREN HERVEY	05-03-B28-0049-0000
NN	CARMELLA BUCY	05-03-B28-0050-0000
OO	CORINNA A. COEN	05-03-B28-0053-0000
PP	BROOKE COUNTY COURT	05-03-B28-0066-0000
QQ	ERIC HANCHER & CHARLOTTE GLASURE	05-03-B28-0054-0000
RR	DONALD EATON JR.	05-03-B28-0056-0000
SS	BERNARD F. KNORR JR.	05-03-B28-0057-0001
TT	BERNARD J. III & NICOLE C. KNORR	05-03-B28-0059-0000
UU	BROOKE COUNTY COURT	05-03-B28-0061-0000
VV	BROOKE COUNTY PARK COMMISSION	05-03-B28-0060-0000



01/05/2018

COMPANY:
SWN **SWN** ^{PL} ^{AV+}
Production Company, LLC Production Company™

REVISIONS:	DATE: 05-11-2017
	SHEET 1 OF 2
	DRAWN BY: K POTH
	SCALE: 1" = 2000'
	DRAWING NO: 050-5525
	WELL LOCATION PLAT