

THRASHER

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

NOTES ON SURVEY

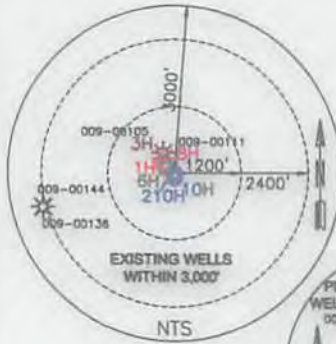
- COORDINATES SYSTEM IS UTM, NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND FIELD LOCATIONS.
- THIS PLAT DOES NOT 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.

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 34°39'35" W	45.89'	SHL TO REF. PNT.	BRK BH #09-00111
L2	S 18°51'59" W	292.97'	SHL TO REF. PNT.	REBAR SET
L3	N 28°36'23" E	4753.27'	SHL TO LANDMARK	CONC. MONUMENT
L4	N 31°30'38" E	3939.02'	SHL TO LANDMARK	REBAR FOUND
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L5	N 80°20'09" E	1503.80'		SHL TO LP
L6	S 19°44'38" E	4578.92'		LP TO BHL

13,272' SHL'
10,281' BHL'
Latitude: 40°17'30"

SWN PRODUCTION COMPANY, LLC "BROOKE COUNTY PARKS BRK 210H" SURFACE HOLE

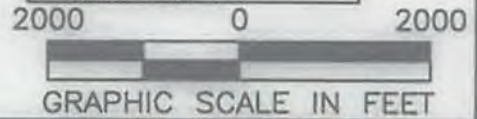
ELEV: 1206'



TRACT	SURFACE OWNER (SEE ROYALTY OWNER PG)	TAX PARCEL	ACRES
1	(BROOKE COUNTY PARK COMMISSION) RICHARD P. GIST VIRGINIA GIST ABBLITT ANN GIST LEVIN	05-03-028-0004-0000	138.01
2	(BROOKE COUNTY PARK COMMISSION) RICHARD P. GIST VIRGINIA GIST ABBLITT ANN GIST LEVIN	05-03-028-0005-0000	138.50
3	(BROOKE COUNTY PARK COMMISSION) BROOKE COUNTY PARKS & RECREATION COMMISSION	05-03-028-0001-0000	51.55
4	(KERRY SMITH & KERRY SMITH) OLGA G. SMITH & JAMES C. SMITH JR. KAREN C. YOUNG & TERRY D. YOUNG	05-03-034-0001-0000	55.77
5	(KERRY SMITH & KERRY SMITH) OLGA G. SMITH & JAMES C. SMITH JR. KAREN C. YOUNG & TERRY D. YOUNG	05-03-034-0018-0002	20.86
6	(KERRY SMITH & KERRY SMITH) OLGA G. SMITH & JAMES C. SMITH JR. KAREN C. YOUNG & TERRY D. YOUNG	05-03-034-0018-0005	3.31
7	(KERRY SMITH & KERRY SMITH) OLGA G. SMITH & JAMES C. SMITH JR. KAREN C. YOUNG & TERRY D. YOUNG	05-03-034-0018-0003	18.34

SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,456,762.235 EASTING: 538,454.038
LANDING POINT LOCATION (LPL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,456,839.182 EASTING: 538,905.893
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,455,525.574 EASTING: 539,377.371

SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,456,762.235 EASTING: 538,454.048
LANDING POINT LOCATION (LPL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,456,862.310 EASTING: 538,896.198
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS):	NORTHING: 4,455,528.591 EASTING: 539,382.767



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 5/12/17*

(+) 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)

COMPANY: **SWN** Production Company, LLC
OPERATOR'S WELL #: **BRK 210H**

BROOKE COUNTY PARKS
API WELL #: **47 009 00165**
STATE COUNTY PERMIT

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

WATERSHED: BUFFALO CREEK ELEVATION: 1206'

DISTRICT: BUFFALO COUNTY: BROOKE QUADRANGLE: STEUBENVILLE EAST & BETHANY

SURFACE OWNER: BROOKE COUNTY PARKS COMMISSION ACREAGE: ±135.00

OIL & GAS ROYALTY OWNER: RICHARD P. GIST, VIRGINIA GIST ABBLITT, ANN GIST LEVIN ACREAGE: ±438.27

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: 5,983' TVD 11,269' 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:
○ PROPOSED SURFACE HOLE / BOTTOM HOLE		05-11-2017
✱ EXISTING / PRODUCING WELLHEAD		SHEET 1 OF 3
✕ ABANDONED WELL	----- LEASE BOUNDARY	DRAWN BY: K. POTH
✕ PLUGGED & ABANDONED WELL	----- PROPOSED PATH	SCALE: 1" = 2000'
△ CUT CONDUCTOR	----- AS-DRILLED PATH	DRAWING NO: 050-5525
	----- ABANDONED PATH	WELL LOCATION PLAT

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PHONE 304-624-4108

TRACT	ADJOINER	TAX PARCEL
A	JOHN C WALES SR AND BARBARA A WALES	05-03-B34-0017-0000
B	BRIAN SMITH	05-03-B33-0114-0001
C	KEITH R SMITH AND KATHY J SMITH	05-03-B33-0114-0000
D	KEITH SMITH AND KATHY SMITH	05-03-B34-0016-0001
E	BROOKE COUNTY PARK AND RECREATION COMMISSION	05-03-B33-0117-0000
F	BROOKE COUNTY PARK AND RECREATION COMMISSION	05-03-B28-0060-0000
G	STARVAGGI INDUSTRIES	05-03-B28-0063-0000
H	STARVAGGI INDUSTRIES INC.	05-03-B28-0062-0000
I	RUSSELL D HERVEY	05-03-B28-0045-0000
J	BERNARD J. KNORR III & NICHOLE C. KNORR	05-03-B28-0059-0000
K	RUBY FAYE KNORR & BERNARD JOHN KNORR JR	05-03-B28-0058-0000
L	BERNARD J. KNORR JR & RUBY F KNORR	05-03-B28-0057-0001
M	BROOKE COUNTY COURT	05-03-B28-0066-0000
N	JOHN PAUL POTTER; PENNY POTTER SUAVE; JAY M POTTER II	05-03-B29E-0001-0000
O	JOHN G RADVANSKY AND BARBARA J RADVANSKY	05-03-B29J-0007-0000
P	GEORGE GIPALO AND RHODA GIPALO	05-03-B29J-0024-0000
Q	GEORGE GIPALO AND RHODA GIPALO	05-03-B29J-0025-0000
R	BROOKE COUNTY COURT	05-03-B29-0014-0000
S	DAVID L RAGAN	05-03-B34-0001-0001
T	DAVID L RAGAN	05-03-B34-0016-0004
U	WILLOW SPRINGS INC	05-03-B34-0010-0002
V	WILLIAM CURTIS HUNT & SUSAN L HUNT	05-03-B34-0007-0000
W	DELORES JEANNE BUYAN; SARAH LYNN LYCANS STENGER; JUDITH LEE BRINKLEY	05-03-B34-0010-0000
X	NANCY J AMBROSE	05-03-B34-0011-0000
Y	DAVID L RAGAN	05-03-B34-0016-0000

01/05/2018

COMPANY:
SWN **SWN** ^{RE} ^A ^V ⁺ ⁺ ⁺
Production Company, LLC Production Company™

REVISIONS:	DATE: 05-11-2017
	SHEET 2 OF 3
	DRAWN BY: K. POTH
	SCALE: 1" = 2000'
	DRAWING NO: 050-5525
	WELL LOCATION PLAT