

SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD 83): LATITUDE: 40.1485153 LONGITUDE: -80.5670433
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD 83): LATITUDE: 40.1064911 LONGITUDE: -80.5347359
GEOGRAPHIC (NAD 83): LATITUDE: 40.1485153 LONGITUDE: -80.5670433
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD 83): LATITUDE: 40.1064832 LONGITUDE: -80.5347556

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:**
- EXISTING BOTTOM HOLE
 - ☼ EXISTING / PRODUCING WELLHEAD
 - LPL ● EXISTING LANDING POINT LOCATION
 - PROPOSED SURFACE HOLE / BOTTOM HOLE
 - LPL ● PROPOSED LANDING POINT LOCATION

SEP 13 2019
 ACCESS ROAD
 PUBLIC ROAD
 FLOOD PLAIN
 WV Department of Environmental Protection
 LEASE BOUNDARY
 DRIILLED PATH
 PROPOSED PATH

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: MICHAEL RATCLIFFE OHI	WELL # 10H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	COUNTY - CODE OHIO - 069	DISTRICT: LIBERTY	
SURFACE OWNER: MICHAEL T. RATCLIFFE	USGS 7 1/2 QUADRANGLE MAP NAME BETHANY & VALLEY GROVE, WV		

(2,000' SCALE) LATITUDE: 40°10'00" SURFACE HOLE

7098'

(2,000' SCALE) LATITUDE: 40°07'30" BOTTOM HOLE

9714'



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

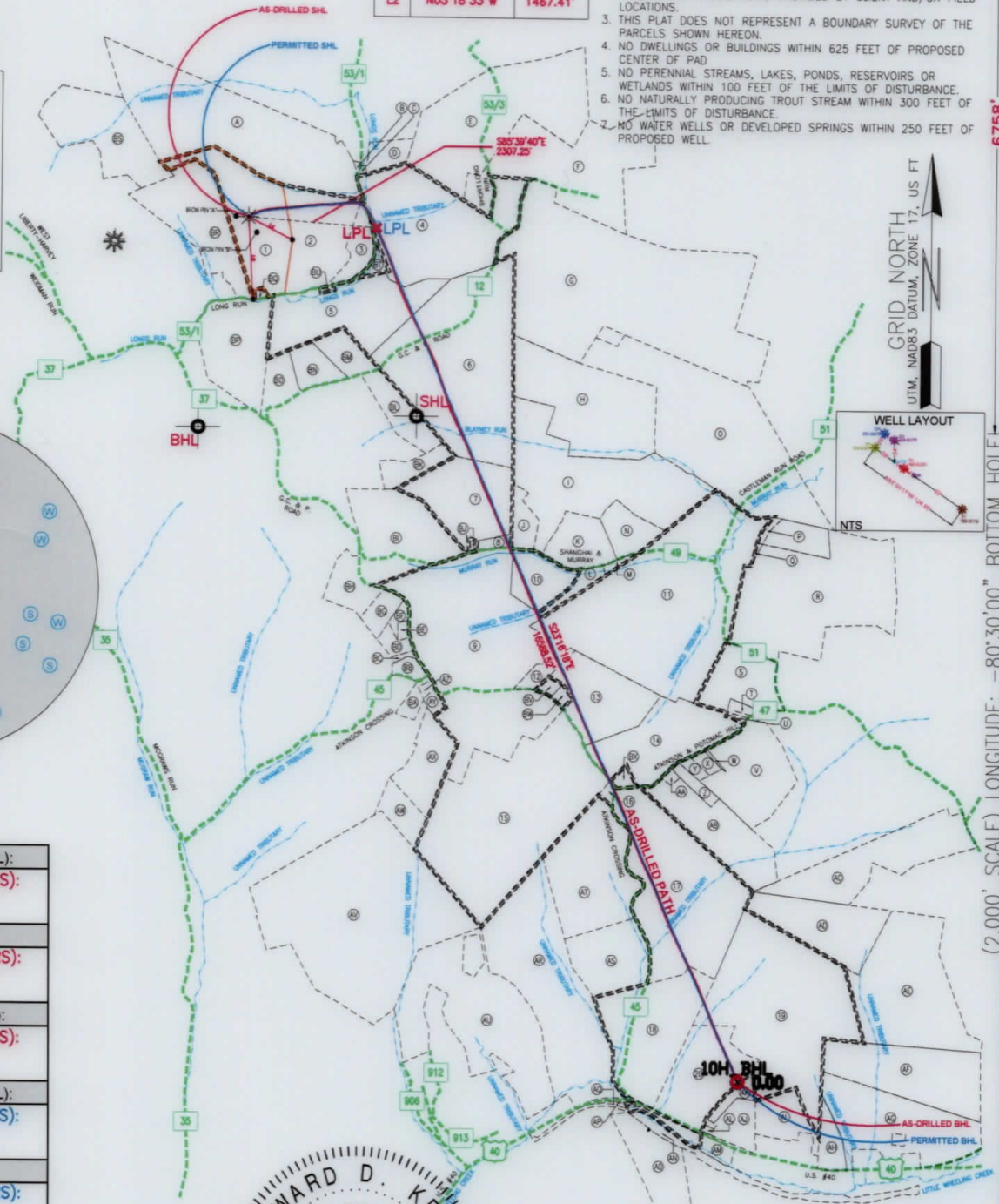
WELL REFERENCE DETAIL



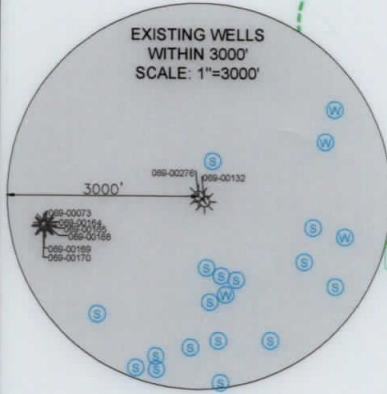
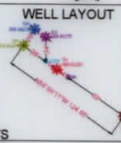
LINE	BEARING	DISTANCE
L1	N62°47'08"W	882.53'
L2	N03°18'33"W	1467.41'

NOTES ON SURVEY

- COORDINATE 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/OR FIELD LOCATIONS.
- THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD
- 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 THE LIMITS OF DISTURBANCE.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL



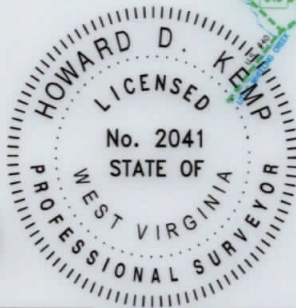
GRID NORTH
UTM, NAD83 DATUM, ZONE 17, US FT



SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4444331.01 EASTING: 536876.93
LANDING POINT (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4444289.58 EASTING: 537578.70
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4439680.51 EASTING: 539653.11
SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4444331.01 EASTING: 536876.93
LANDING POINT (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4444292.76 EASTING: 537578.31
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4439679.63 EASTING: 539651.44

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



3000 0 3000

GRAPHIC SCALE IN FEET

COMPANY:

SWN

Production Company, LLC

SWN ^{R-V+}

Production Company™

MICHAEL RATCLIFFE

OPERATOR'S WELL #: OHI 10H

API WELL #:	47	069	276
	STATE	COUNTY	PERMIT



(+) 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 ELEVATION: GRADE GPS (NAVD 88, US FT)

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

WATERSHED: OHIO UPPER SOUTH ELEVATION: 1,281.3'

DISTRICT: LIBERTY COUNTY: OHIO QUADRANGLE: BETHANY & VALLEY GROVE, WV

SURFACE OWNER: MICHAEL T. RATCLIFFE ACREAGE: ±55.835

OIL & GAS ROYALTY OWNER: MICHAEL T. RATCLIFFE ACREAGE: ±55.835

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: 6,535' TVD 23,760' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC

ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201

CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

DESIGNATED AGENT: BRITTANY WOODY

ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201

CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:

- EXISTING BOTTOM HOLE
- EXISTING / PRODUCING WELLHEAD
- EXISTING LANDING POINT LOCATION
- PROPOSED SURFACE HOLE / BOTTOM HOLE
- PROPOSED LANDING POINT LOCATION
- EXISTING WATER WELL
- EXISTING SPRING
- SURVEYED BOUNDARY
- LEASE BOUNDARY
- ASDRILLED PATH
- PROPOSED PATH

REVISIONS:

DATE: 09-06-2019

DRAWN BY: D. REED

SCALE: 1" = 3000'

DRAWING NO: 2017-637

WELL LOCATION PLAT

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	MICHAEL T. RATCLIFFE (S/R)	03-L5-12.4
TRACT	SURFACE OWNER	TAX PARCEL
2	TRAVIS C. RATCLIFFE	03-L5-12
3	TRAVIS CHRISTOPHER RATCLIFFE (LE)	03-L5-12.1
4	DONALD F. & J.L. DOLENCE	03-L5-11
5	DONALD D. PRINCE	03-L5-24
6	SUSAN LOUISE SMITH	03-L5-27
7	DONALD L. & DEBORAH JO WADDELL	03-L5-23
8	STEVEN DILLE	03-L8-8
9	ROBERT C. JONES	03-L8-11
10	SCOTT A. & JILL L. DILLE	03-L8-9.3
11	HOLLY HOLLOWAY & JOSHUA REASS	03-L9-1
12	RANDY J. CREIGHTON	03-L8-11.2
13	JODY LEE KLUG	03-L8-10
14	LARRY G. BALL	03-L8-42
15	DAVID E. DAVIS, JR.	03-L8-35
16	BERNARD T. & PATRICIA ADAMS	03-L8-37.1
17	TIMMY B. & AMY LYNN MINCH	03-L9-12
18	MARTHA E. CREIGHTON	03-L11-29
19	WILLIAM I. & DOUGLAS W. RODGERS	03-L12-1
20	MILDRED J. MAZGAJ	03-L11-62

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	JOSEPH P. & SHIRLEY J. TAGGART	03-L5-3
B	E.L. & S.J. MONROE (C/O: DORIS SMITH)	03-L5-7
C	GENE & SHIRLEY MONROE	03-L5-7.3
D	GEORGE W., JR. & LAURIE GROVE	03-L5-7.1
E	TIMOTHY R. & THELMA C. HAYS	03-L5-29
F	JOSEPH E. & MARJORIE G. ENNIS	03-L5-8
G	HELEN L. & JOHN I., JR. TOMINACK	03-L5-10
H	LYNN MCELVANY	03-L5-26
I	GLENN A. DILLE	03-L8-9.7
J	NEAL P. BROWN	03-L8-9.6
K	FRED E. & JANET K. FOSTER	03-L8-9
L	GEORGE E., III & M.A. PORTER	03-L8-9.5
M	MARGARET ANN PORTER & GEORGE E. PORTER, III	03-L8-9.2
N	JARRETT K. & LESLIE K. REEDY	03-L8-9.4
O	DELMER K. & V.G. LOEW	03-L6-19
P	RODNEY G. & JESSICA J. PLANTS	03-L9-2.2
Q	RODNEY G. & JESSICA J. PLANTS	03-L9-2.3
R	RODNEY G. & JESSICA J. PLANTS	03-L9-2
S	MICHAEL H. FISHER & SUSAN K. FISHER	03-L9-6.6
T	DOROTHY M. BALL	03-L9-6.3
U	DOROTHY BALL	03-L9-8
V	WILLIAM E. NOBLE & DAWN BALTICH	03-L9-14
W	CHARLES P. & D.E. SMITH	03-L9-14.1
X	CHARLES P. & D.E. SMITH	03-L9-10
Y	PATRICK E. & P.A. LEONARD	03-L9-9
Z	PATRICK & PAMELA LEONARD	03-L8-38
AA	WILLIAM H. & E.P. BALL	03-L8-40
AB	WILLIAM H. & LARRY G. BALL	03-L9-11
AC	CARL E. MILLER, JR. (LIFE ESTATE: THELMA A. MILLER)	03-L9-15
AD	JEFFREY S. & DANA R. OCH	03-L12-2.1
AE	RAYMOND M. & H.E. MILLER (C/O: HILDA MILLER)	03-L12-2
AF	TUNNEL RIDGE, LLC	03-L12-4.6
AG	JOSEPH & ANITA M. TANKOVITS	03-L12-4
AH	JACK M. & J. DILLIE	03-L12-4.1
AI	WILLIAM I. RODGERS & DOUGLAS WAYNE RODGERS	03-L12-5.1
AJ	TODD M. MAXWELL	03-L12-27
AK	CATHY J. & JERRY W. CALDWELL	03-L16-6
AL	LARRY MICHAEL PATRICK	03-L11-68
AM	MARION S. & MILDRED J. MAZGAJ	03-L11-67
AN	TUNNEL RIDGE, LLC	03-L12-32
AO	SHARON & WARREN GRIFFITH	03-L11-60.1
AP	JOHN A. NOLAN, JR.	03-L11-66
AQ	JOHN A. NOLAN, JR.	03-L11-63
AR	WINTERS FAMILY FARM, LLC	03-L11-28
AS	HOWARD WINTERS	03-L11-28.1
AT	HOWARD WINTERS	03-L8-36
AU	EDWARD G. GROUX, JR. & JEFFREY L. GROUX	03-L11-27
AV	EDWARD G. GROUX, JR. (L/E: EDWARD G. & LYDIA C. GROUX)	03-L11-26
AW	EDWARD G. GROUX, JR. (L/E: EDWARD G. & LYDIA C. GROUX)	03-L11-26.6
AX	ROBERT C. JONES	03-L8-11.1
AY	ROBERT S. SHILLING, SR.	03-L8-33.9
AZ	JOSEPH T. KLUG	03-L8-34.1
BA	ROBERT A. SHILLING, SR.	03-L8-33
BB	THOMAS P. & TERESA HUDRLIK	03-L8-12.12
BC	BILL RAILING	03-L8-12.8
BD	VICKI L. & DANIEL P. TUSTIN	03-L8-12.6
BE	DANIEL P. TUSTIN, JR.	03-L8-12.9
BF	DANIEL PAUL TUSTIN, JR.	03-L8-12.11
BG	RICHARD R. & L.L. BLOOMFIELD	03-L8-12.10
BH	BARNETT E. & LAURIE L. BECK	03-L8-12.5
BI	BERNARD T. & MARJORIE A. RAAB	03-L8-7
BJ	DONALD L. & D.J. WADDELL	03-L8-39
BK	DONALD L. & DEBORAH JO WADDELL	03-L5-23.6
BL	DALE R. & JACKIE A. RITCHEA	03-L5-23.2
BM	SUSAN NORTHWOOD SMITH & RICHARD ALAN SMITH	03-L5-23.1
BN	JASON & RACHEL MILLER	03-L5-23.3
BO	EDWARD & ELIZABETH LINK	03-L5-23.7
BP	EDWARD R. & ELIZABETH A. LINK	03-L5-22
BQ	MICHAEL T. RATCLIFFE	03-L5-12.3
BR	CASEY P. & DEVAN M. YOUNG	03-L5-13
BS	MARK & ANNELIESE KAUFMAN	03-L5-1.1
BT	JOSEPH G. PRINCE & DONALD D. PRINCE	03-L5-11.2
BU	JOSEPH G. PRINCE	03-L5-25
BV	PAUL A. MAIN	03-L8-10.1
BW	RICHARD C. & K.J. WHEAT	03-L8-10.2
BX	SUSAN J.H. HARDMAN	03-L8-37

REVISIONS:

COMPANY:

SWN
Production Company, LLC

SWN ^{R-V+°}
Production Company™

OPERATOR'S MICHAEL RATCLIFFE

DATE: 09-06-2019

WELL #: OHI 10H

DRAWN BY: D. REED

DISTRICT:
LIBERTY

COUNTY:
OHIO

STATE:
WV

SCALE: N/A

DRAWING NO: 2017-637

WELL LOCATION PLAT

PROPERTY NUMBER 2501163391
PAD ID 3001155653