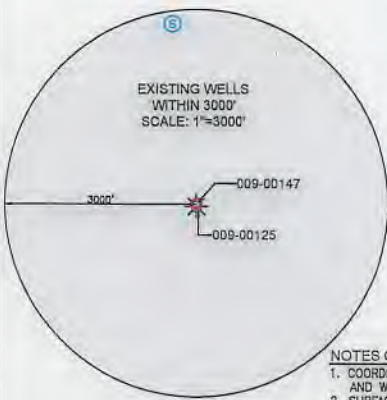
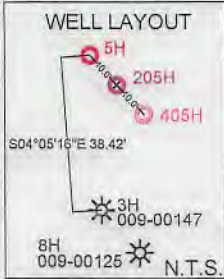


(2000' SCALE) LATITUDE: 40°20'00" SURFACE HOLE
9797'

(2000' SCALE) LATITUDE: 40°22'30" BOTTOM HOLE
2624'



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

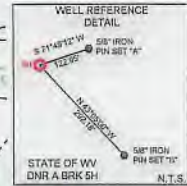


PROPOSED BOTTOM HOLE

INSET "B"

INSET "A"

LINE	BEARING	DISTANCE
L1	N30°01'26"W	1580.25'
L2	S15°52'26"W	1431.47'



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

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.

SURFACE HOLE LOCATION (SHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4463508.51
EASTING: 539494.33

LANDING POINT LOCATION (LPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4463562.15
EASTING: 539691.53

TURNING POINT LOCATION (TPL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4465270.59
EASTING: 538802.08

BOTTOM HOLE LOCATION (BHL):

UTM (NAD83, ZONE 17, METERS):
NORTHING: 4466977.07
EASTING: 538121.89

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



COMPANY: **SWN** Production Company, LLC

(+) 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)

STATE OF WV DNR A

OPERATOR'S WELL #: BRK 5H

API WELL #: 47 009 00304
STATE COUNTY PERMIT

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

WATERSHED: UPPER OHIO NORTH ELEVATION: 1140.0'

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: 5,720' TVD 18,548' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

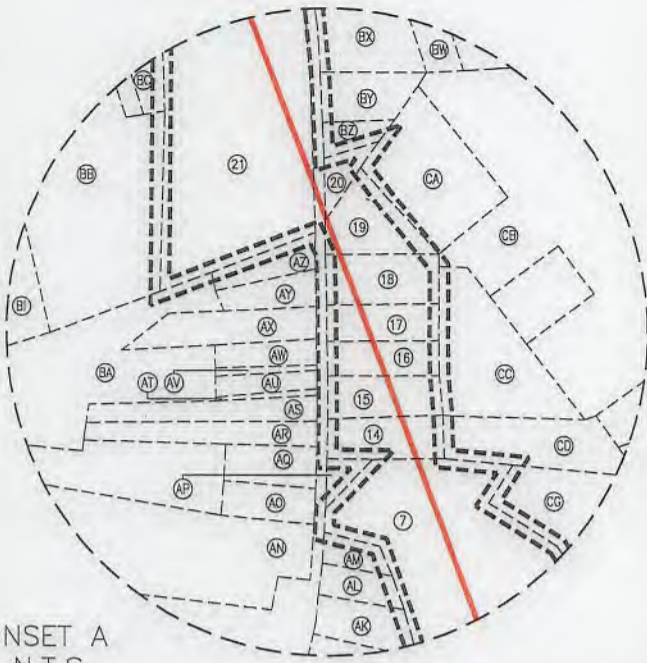
DESIGNATED AGENT: BRITTANY WOODY ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:

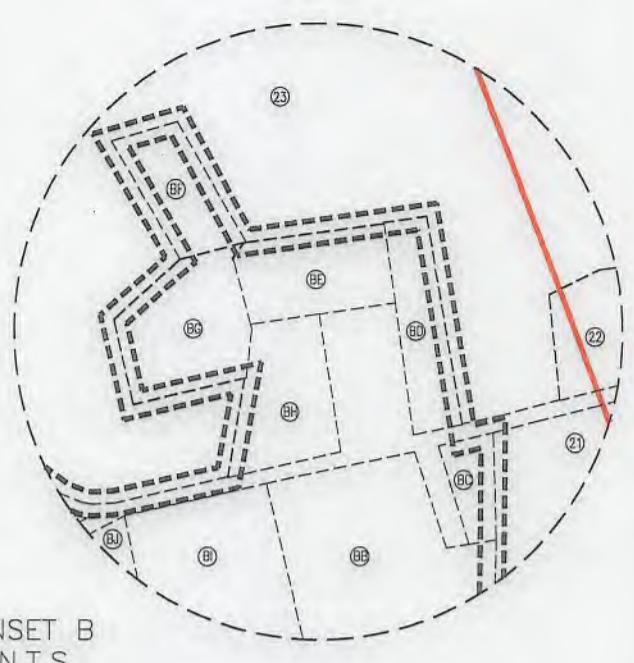
- PROPOSED SURFACE HOLE / BOTTOM HOLE
- EXISTING / PRODUCING WELLHEAD
- LPL X LANDING POINT LOCATION
- TPL X TURNING POINT LOCATION
- EXISTING WATER WELL
- EXISTING SPRING
- NATURAL WATERWAY
- SURVEYED BOUNDARY
- LEASE BOUNDARY
- PROPOSED PATH
- PUBLIC ROAD

REVISIONS:

DATE: 10-22-2019
API NO: 47-009-XXXX
DRAWN BY: R. GRIMES
SCALE: 1" = 3000'
DRAWING NO: 2019-0789
WELL LOCATION PLAT



INSET A
N.T.S.



INSET B
N.T.S.

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	THE PALFALY IRREVOCABLE TRUST (DENNIS PALFALY, III)	04-CC16-0005.0000
4	RONALD ALLEN REED	04-CC16-0004.0000
5	PAUL MAROSI	04-CC16-0001.0000
6	LAURA J. & STUART STELDEBAKER	04-C15D-0030.0000
7	DAVID L. & CHERYL D. MILL	04-C11S-0058.0000
8	WALTER & MARJORIE JESKIEWICZ	04-C15D-0016.0000
9	ROBERT W. HARBIN	04-C11S-0051.0000
10	PATRICIA I. GOLDSMITH	04-C11S-0052.0000
11	NICOLE E. LONG	04-C11S-0053.0000
12	JASON M. & JENNIFER D. KAZMIRSKI (SURVIVOR)	04-C11S-0054.0000
13	WRIGHT FAMILY TRUST 12/10/13 (DOUG & PENNY WRIGHT TRUSTEES)	04-C11S-0055.0000
14	DENNIS CALVIN GOOCH	04-C11S-0085.0000
15	FREDERICK E. WELSHANS	04-C11S-0086.0000
16	ANGELA C. CALVARESE	04-C11S-0087.0000
17	ROBERT B. & BETTY EILEEN WYKE	04-C11S-0088.0000
18	DAVID P. MELLISH	04-C11M-0035.0000
19	DAVID LANCASTER	04-C11M-0032.0000
20	CHAD A. & CHRISTINA M. RICCELLI (L/E: ROSE ANN RICCELLI)	04-C11M-0031.0000
21	ST. JOHN'S CEMETERY ASSOCIATION	04-C11M-0039.0000
22	ST. JOHN'S EPISCOPAL CHURCH	04-C11M-0003.0000
23	MARK JR. & MARY SECRIST (SURVIVOR)	04-C11M-0001.0000

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-CC16-0006.0000
B	LENORA J. RINHART	04-CC15-0074.0000
C	LARRY E. REED	04-CC15-0088.0001
D	REED GEHLUNG FAMILY TRUST, DATED 10/17/2008	04-CC16-0032.0000
E	GORDON KIGER	04-C15H-0013.0000
F	FRANK & CYNTHIA PAESANO	04-C15H-0014.0000
G	MIKE E. & MARY E. BAILEY	04-C15H-0015.0000
H	DALE W. GAYNOR, JR.	04-C15H-0016.0000
I	DELONG FAMILY KEYSTONE TRUST (VAL JEAN DELONG, TRUSTEE)	04-C15D-0040.0000
J	GLENN THOMPSON	04-C15D-0037.0000
K	JOSEPH A. BIRMINGHAM, JR.	04-C15D-0030.0002
L	CHARLES L. & CYNTHIA WILLIAMSON	04-C15D-0031.0000
M	DOUGLAS SWAIN	04-C15D-0030.0003
N	SHAFFER FAMILY IRREVOCABLE TRUST (INCOME ONLY TRUST)	04-C15D-0027.0000
O	TROY LUCAS	04-C15D-0025.0000
P	TROY LUCAS	04-C15D-0022.0000
Q	CHRISTOPHER E. SMITH	04-C15D-0020.0000
R	JESSE J. BURDINE	04-C15D-0019.0000
S	ROBERTA L. ROGOWSKI (REVOCABLE TRUST)	04-C15D-0014.0000
T	WALTER & MARJORIE JESKIEWICZ	04-C15D-0015.0000
U	DAVID L. & KAREN K. DULANEY (IRREVOCABLE TRUST)	04-C15D-0017.0000
V	DAMON R. MCCORD	04-C15D-0045.0000
W	WILLARD E. & NORMA D. SCOTT	04-C11S-0049.0000
X	JAMES E. & JOYCE M. CRAFT	04-C11S-0048.0000
Y	MICHAEL F. & PATRICIA BRADLEY	04-C11S-0047.0000
Z	JAMES A. CLARK	04-C11S-0056.0000
AA	ROBERT A. WYATT	04-C11S-0057.0000
AB	JEFFREY S. DULANEY	04-C11S-0046.0000
AC	HELEN T. CARBASHO	04-C11S-0045.0000
AD	ROBERTA L. ROGOWSKI (REVOCABLE TRUST)	04-C11S-0044.0000
AE	WILLIAM C. & BARBARA J. WILHARM (SURVIVOR)	04-C11S-0063.0000
AF	WILLIAM C. & BARBARA J. WILHARM (SURVIVOR)	04-C11S-0062.0000
AG	NEIL C. & LINDA S. STEWART (SURVIVOR)	04-C11S-0061.0000
AH	NEIL C. & LINDA S. STEWART (SURVIVOR)	04-C11S-0060.0000
AI	CHARLES E. & DEBORA HENDERSHOT	04-C11S-0059.0000

4700900304

REVISIONS:

COMPANY:

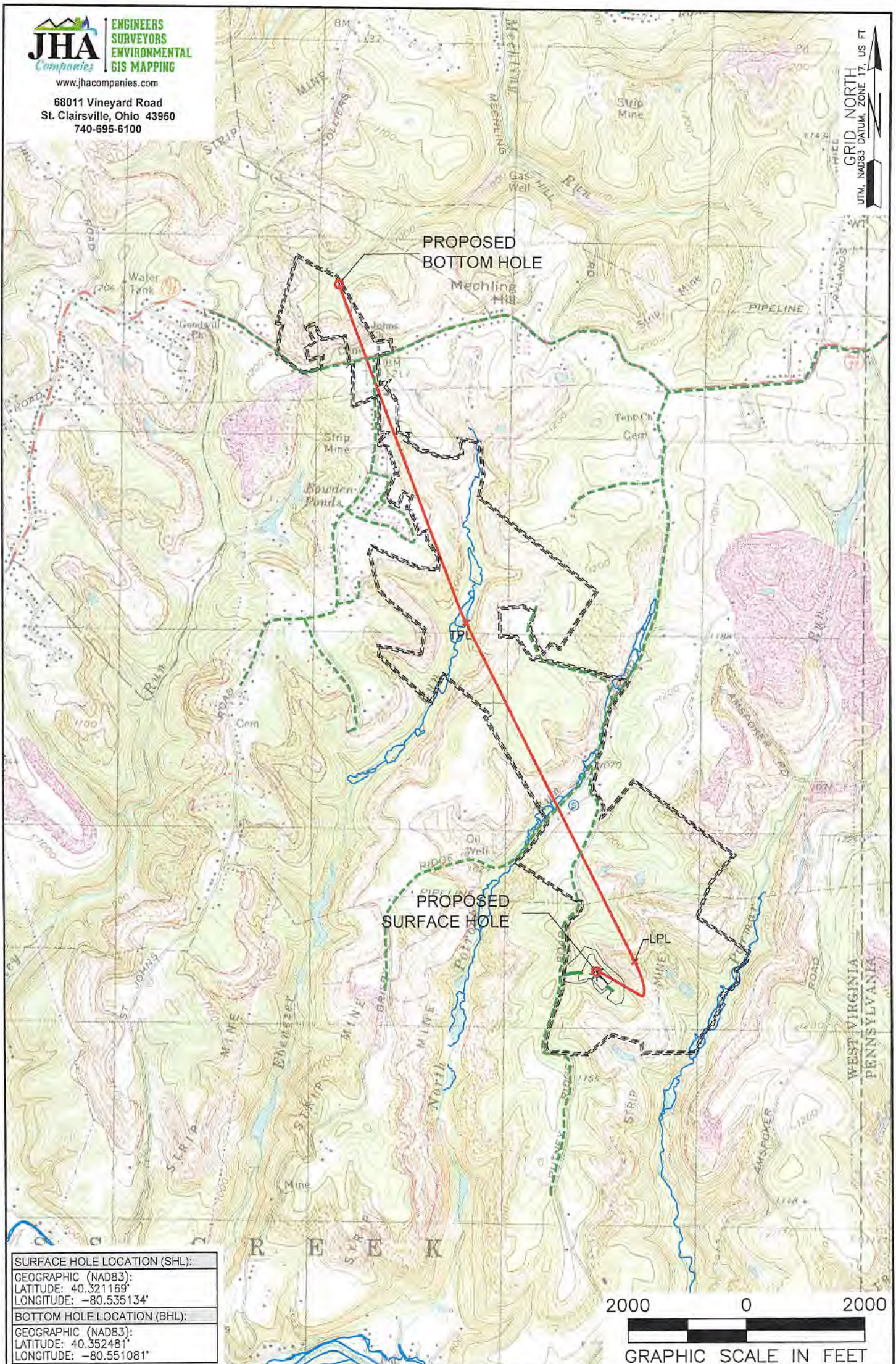
SWN
Production Company, LLC

SWN ^{R²-V⁺}_A
Production Company™

OPERATOR'S STATE OF WV DNR A
WELL #: 47-009-00304 BRK 5H

DATE: 10-22-2019
API NO: 47-009-XXXXX
DRAWN BY: R. GRIMES
SCALE: N/A
DRAWING NO: 2019-0789
WELL LOCATION PLAT

DISTRICT: CROSS CREEK COUNTY: BROOKE STATE: WV



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.321169°
LONGITUDE: -80.535134°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.352481°
LONGITUDE: -80.551081°

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:		— NATURAL WATERWAY	
○	PROPOSED SURFACE HOLE / BOTTOM HOLE	—	ACCESS ROAD
☼	EXISTING / PRODUCING WELLHEAD	- - -	PUBLIC ROAD
LPL*	LANDING POINT LOCATION	- - - -	ACCESS ROAD TO PREV. SITE
🌊	FLOOD PLAIN	==	LEASE BOUNDARY
		—	PROPOSED PATH

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: STATE OF WV DNR A	WELL # BRK 5H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	COUNTY: BROOKE	CODE: 009	DISTRICT: CROSS CREEK
SURFACE OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR	USGS 7 1/2 QUADRANGLE MAP NAME: STUEBENVILLE EAST, OH		