

LATITUDE: 40°10'00" SURFACE HOLE (2000' SCALE)

LATITUDE: 40°12'30" BOTTOM HOLE (2000' SCALE)

5841'

511'

LONGITUDE: 80°37'30" SURFACE HOLE (2000' SCALE)

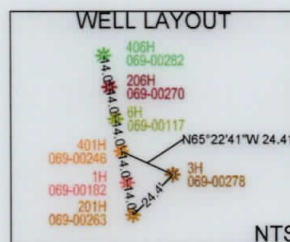
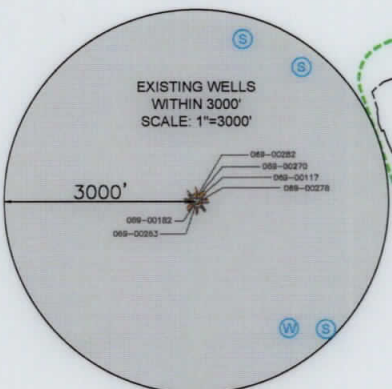
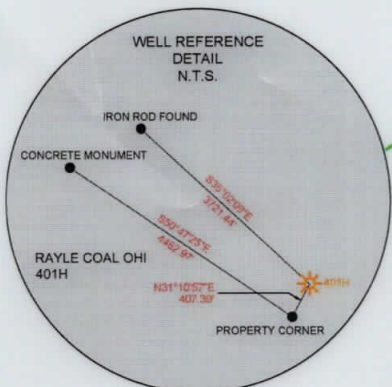
LONGITUDE: 80°37'30" BOTTOM HOLE (2000' SCALE)



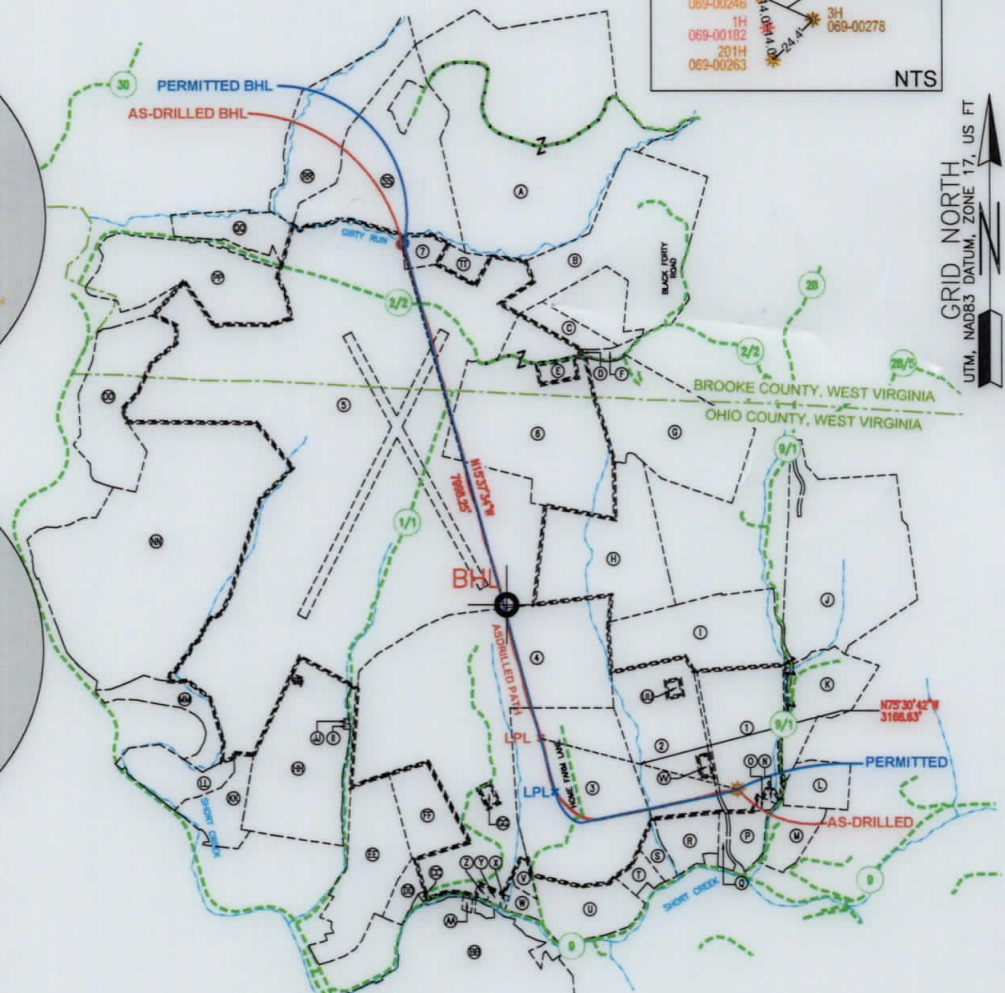
ENGINEERS SURVEYORS ENVIRONMENTAL GIS MAPPING

www.jhacompanies.com

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



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



SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4445743.27
EASTING: 531777.56
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4445715.97
EASTING: 530910.09
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4448311.70
EASTING: 530154.10
SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4445743.28
EASTING: 531777.55
LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4445969.14
EASTING: 530838.90
BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4448304.70
EASTING: 530143.29

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.
- THIS AS-DRILLED PLAT IS PREPARED FROM THE FINAL WELL PLAT PREPARED BY ANOTHER CONSULTANT AND THE DRILLING INFORMATION IS PROVIDED TO JHA.

3000 0 3000



GRAPHIC SCALE IN FEET

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

RAYLE COAL OHI OPERATOR'S WELL #: 401H API WELL #: 47 STATE 069 COUNTY PERMIT 00246

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

WATERSHED: UPPER OHIO SOUTH ELEVATION: 1,063.8'

DISTRICT: RICHLAND COUNTY: OHIO QUADRANGLE: TILTONSVILLE, OH

SURFACE OWNER: SHORT CREEK COAL COMPANY ACREAGE: ±61.53

OIL & GAS ROYALTY OWNER: TRIENERGY HOLDING, LLC ACREAGE: ±61.53

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: 5,810' TVD 15,830' TMD

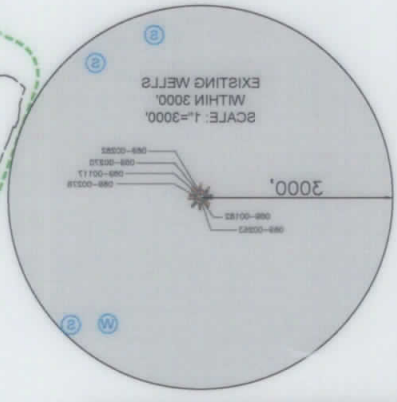
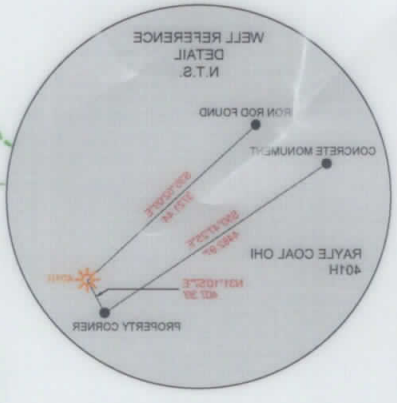
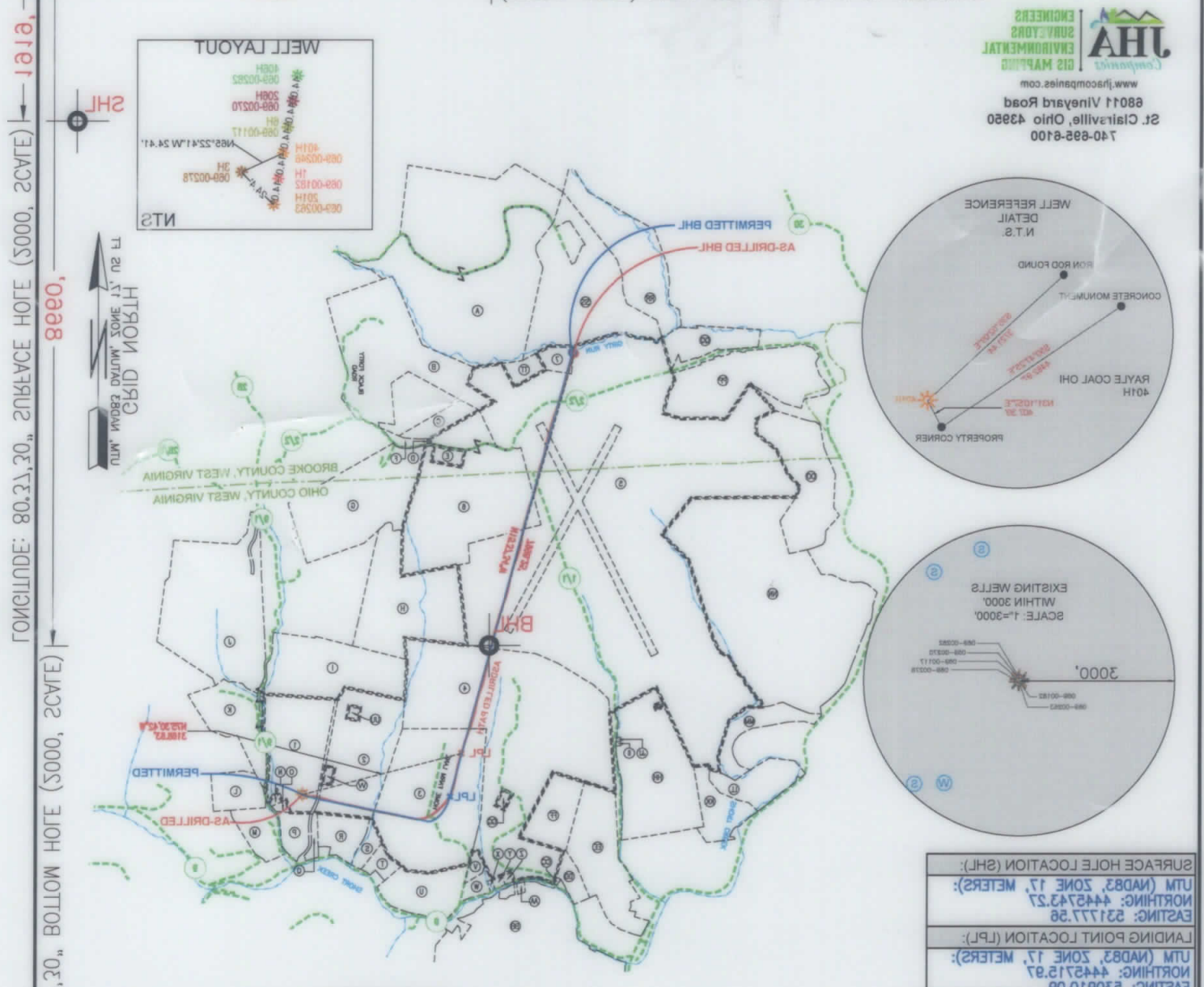
WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY

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:	EXISTING WATER WELL	REVISIONS:	DATE: 07-09-2019
EXISTING BOTTOM HOLE	EXISTING SPRING		API NO: 47-069-00246
EXISTING / PRODUCING WELLHEAD	SURVEYED BOUNDARY		DRAWN BY: D. REED
EXISTING LANDING POINT LOCATION	LEASE BOUNDARY		SCALE: 1" = 3000'
PROPOSED SURFACE HOLE / BOTTOM HOLE	ASDRILLED PATH		DRAWING NO: 2018-864
PROPOSED LANDING POINT LOCATION	PROPOSED PATH		WELL LOCATION PLAT

LATITUDE: 40°12'30" BOTTOM HOLE (5000', SCALE) 2841'
 LATITUDE: 40°10'00" SURFACE HOLE (5000', SCALE) 211'

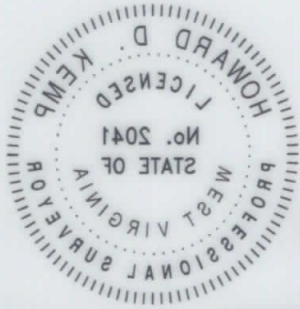


SURFACE HOLE LOCATION (SHL):	UTM (NAD83, ZONE 17, METERS):
EASTING: 521777.58	NORTHING: 4445243.27
LANDING POINT LOCATION (LPL):	UTM (NAD83, ZONE 17, METERS):
EASTING: 520910.09	NORTHING: 4445215.97
BOTTOM HOLE LOCATION (BHL):	UTM (NAD83, ZONE 17, METERS):
EASTING: 520154.10	NORTHING: 4448311.70
SURFACE HOLE LOCATION (SHL):	UTM (NAD83, ZONE 17, METERS):
EASTING: 521777.58	NORTHING: 4445243.28
LANDING POINT LOCATION (LPL):	UTM (NAD83, ZONE 17, METERS):
EASTING: 520828.90	NORTHING: 4445889.14
BOTTOM HOLE LOCATION (BHL):	UTM (NAD83, ZONE 17, METERS):
EASTING: 520143.29	NORTHING: 4448304.70

NOTES ON SURVEY

- COORDINATE SYSTEM IS UTM AND 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS.
- SURFACE AND RAYLE COAL OHI OWNERS INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
- THIS PLAN DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
- NO PERMANENT STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY OCCURRING TROUT STREAM WITHIN 200 FEET OF THE LIMITS OF DISTURBANCE.
- NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.
- THIS AS-DRILLED PLAN IS PREPARED FROM THE PLAN INFORMATION IS PROVIDED TO JHA.

GRAPHIC SCALE IN FEET



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN 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.

7/19/19

SWIN Production Company, LLC
 COMPANY: SWIN
 47 STATE COUNTY PERMIT

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

DESIGNATED AGENT: BRITTANY WOODY

DATE: 07-08-2019
 API NO: 47-088-00248
 DRAWN BY: D. REED
 SCALE: 1" = 3000'
 DRAWING NO: 2018-864
 WELL LOCATION PLAN

REVISIONS:

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

WATERSHED: UPPER OHIO SOUTH

DISTRICT: RICHLAND COUNTY: OHIO

SURFACE OWNER: SHORT CREEK COAL COMPANY

OIL & GAS ROYALTY OWNER: TRIENERGY HOLDING, LLC

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: 5810' TVD 15830' TMD

OPERATOR'S WELL #: 401H RAYLE COAL OHI

API WELL #: 47 STATE COUNTY PERMIT 088 00248

ELEVATION: 1063.8'

QUADRANGLE: TILTONSVILLE, OH

ACREAGE: ±61.23

ACREAGE: ±61.23

MINIMUM DEGREE OF ACCURACY: 1/500

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

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

PROFESSIONAL SURVEYOR STATE OF WEST VIRGINIA LICENSED HOWARD D. KEMP No. 2041

WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	SHORT CREEK COAL COMPANY (S) TRIENERGY HOLDING, LLC (R)	04-R6-0017.0004
TRACT	SURFACE OWNER	TAX PARCEL
2	SHORT CREEK COAL COMPANY	04-R6-0017.0000
3	MARK & KRISTEN SEAMON	04-R6-0037.0000
4	BOARD OF COMMISSIONERS OF OHIO COUNTY	04-R5-0055.0000
5	BOARD OF COMMISSIONERS OF OHIO COUNTY	04-R5-0010.0000
6	BRUCE D. BONAR & WILLIAM D. BONAR	03-B46-0020.0000
7	BARRY L. & PATRICIA A. GREATHOUSE	03-B46-0019.0000

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	BARRY A. & PATRICIA A. GREATHOUSE	03-B41-0082.0000
B	DANNY GENE & VIRGINIA MARGARET BRITT	03-B46-0027.0000
C	TRACY GILBERT	03-B46-0022.0001
D	TRACEY GILBERT	03-B46-0023.0001
E	DOUGLAS L. STEWART	03-B46-0021.0000
F	BUSTER T. & BARBARA A. BLAKE	03-B46-0023.0000
G	MY THREE SONS HOLDINGS, LP	03-B46-0024.0000
H	MARC SEAMON	04-R6-0002.0000
I	SHORT CREEK COAL COMPANY	04-R6-0017.0003
J	WINDSOR COAL COMPANY	04-R6-0012.0000
K	WAYNE E. SHOOK	04-R6-0015.0000
L	WINDELL H. & GLADYS GOFF	04-R6-0027.0001
M	WINDELL H. & GLADYS GOFF	04-R6-0024.0003
N	STELLA M. BRYAN & KATHLEEN J. BRYAN	04-R6-0017.0001
O	WINDSOR COAL COMPANY	04-R6-0025.0000
P	RICHARD A. WOOD, JR.	04-R6-0024.0006
Q	EDITH M. WOOD	04-R6-0022.0000
R	LOUIS J., JR. & GRETCHEN L. ENNIS	04-R6-0019.0002
S	SEAN A. SISARICK	04-R6-0019.0000
T	LUKE A. SISARICK	04-R6-0019.0004
U	MARC SEAMON	04-R6-0037.0001
V	SHORT CREEK CEMETERY	04-R5-0057.0000
W	SHORT CREEK METHODIST E CHURCH	04-R5-0060.0000
X	ROBERT L. & GWENDOLYN NOVAK	04-R5-0059.0000
Y	ERIC W. & LISA N. GADD	04-R5-0055.0001
Z	ERIC W. & LISA N. GADD	04-R5-0055.0003
AA	LUTHER R., II & D.F. SMITH	04-R8-0016.0001
BB	AMERICAN DISPOSAL SERVICES OF WV, INC	04-R8-0015.0000
CC	ALLIED WASTE, INC	04-R5-0056.0001
DD	ALLIED WASTE, INC	04-R5-0056.0000
EE	WINDSOR POWER COAL COMPANY	04-R8-0008.0001
FF	BOARD OF COMMISSIONERS OF OHIO COUNTY	04-R5-0010.0000
GG	BRYAN K. & LAURA L. PETTIT	04-R5-0055.0004
HH	EDWARD W. & JOANNE DREMAK	04-R5-0049.0000
II	RAY W. ARCHER	04-R5-0058.0000
JJ	RICHARD L. & DEBORAH K. BLACK	04-R5-0058.0001
KK	WINDSOR COAL COMPANY	04-R5-0050.0000
LL	JOHN W. METZ	04-R5-0046.0000
MM	BURNT MILL ACRES, LLC	04-R5-0013.000
NN	SHANE E. WOLOSHAN, TRUSTEE	04-R5-0009.0000
OO	RODNEY K. & N.C. MCCONNELL	04-R2-0020.0000
PP	HENRY W. ZEIDLER & JUDITH K. ZEIDLER	03-B46-0015.0000
QQ	BARRY L. & PATRICIA A. GREATHOUSE	03-B46-0018.0000
RR	BARRY L. & PATRICIA A. GREATHOUSE	03-B41-0032.0000
SS	BARRY L. & PATRICIA A. GREATHOUSE	03-B41-0083.0000
TT	STACY ANN & PATRICIA ANN GREATHOUSE	03-B46-0019.0000
UU	WEIRTON NATIONAL BANK	04-R6-0017.0005
VV	SHORT CREEK COAL COMPANY	04-R6-0017.0002

REVISIONS:

COMPANY:

SWN
Production Company, LLC

SWN ^{R-V+}_A
Production Company™

OPERATOR'S

RAYLE COAL OHI

WELL #:

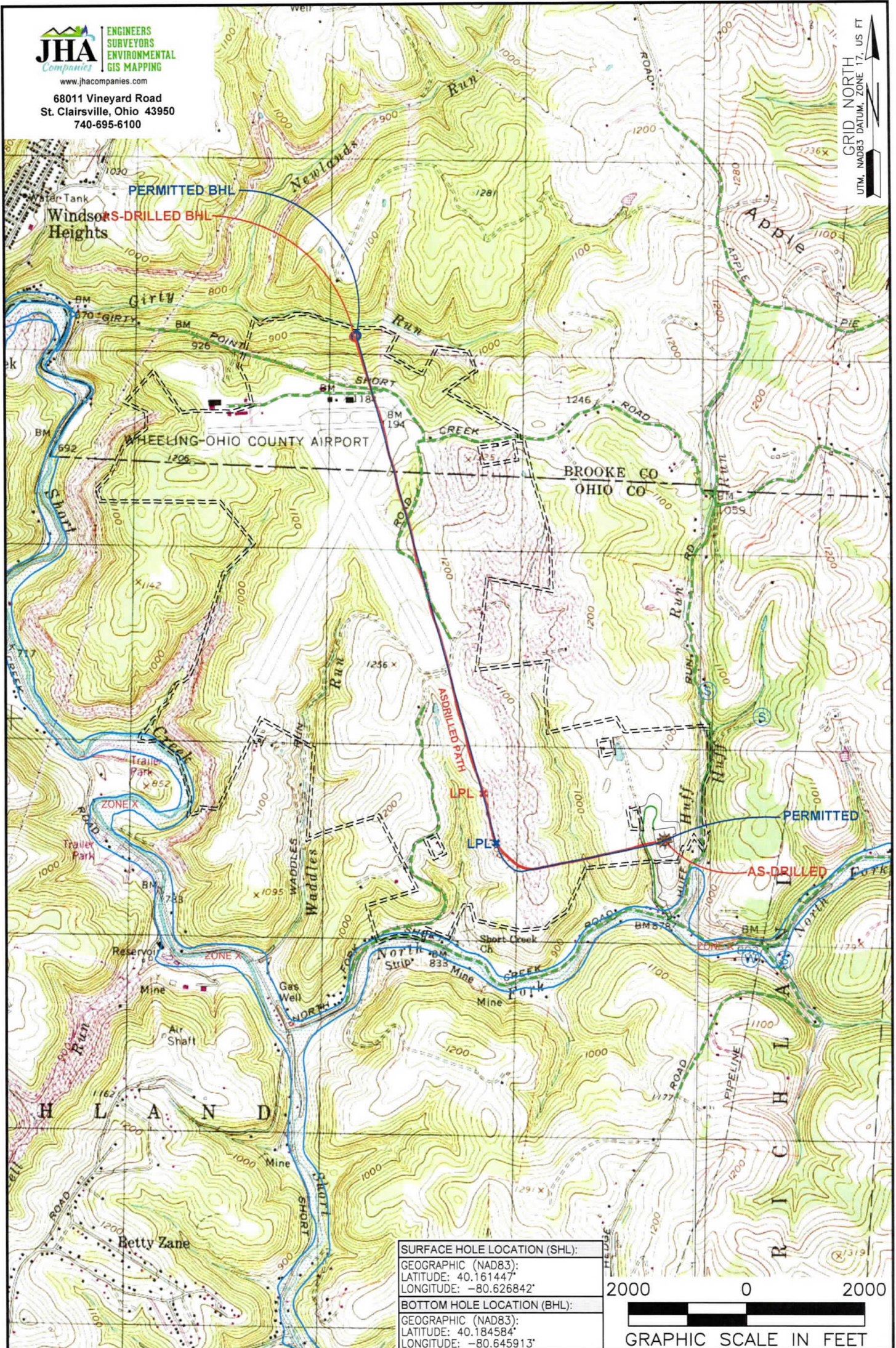
401H

DISTRICT:
RICHLAND

COUNTY:
OHIO

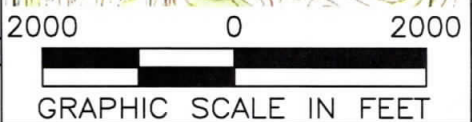
STATE:
WV

DATE: 07-09-2019
API NO: 47-069-00246
DRAWN BY: D. REED
SCALE: N/A
DRAWING NO: 2018-864
WELL LOCATION PLAT



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.161447°
LONGITUDE: -80.626842°

BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.184584°
LONGITUDE: -80.645913°



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
- ACCESS ROAD
- PUBLIC ROAD
- === LEASE BOUNDARY
- PROPOSED PATH
- AS-DRILLED PATH
- ☾ FLOOD PLAN

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC		WELL (FARM) NAME: RAYLE COAL OHI		WELL # 401H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508		COUNTY: OHIO	CODE: 069	DISTRICT: RICHLAND	API # 47-069-00246
SURFACE OWNER: SHORT CREEK COAL COMPANY		USGS 7 1/2 QUADRANGLE MAP NAME: TILTONSVILLE, OH			