

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

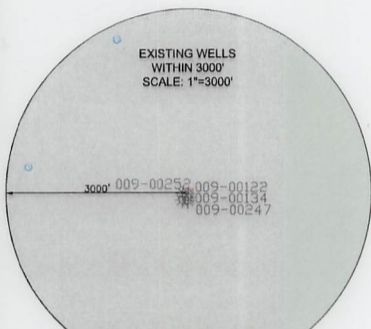
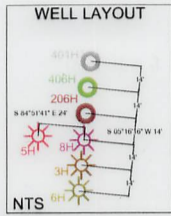
7654'

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

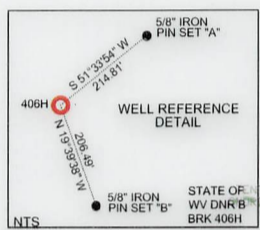
5377'



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

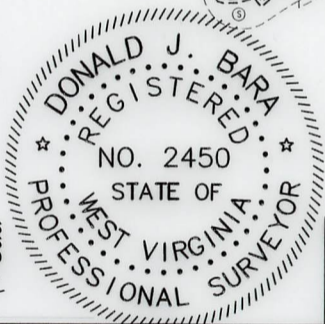
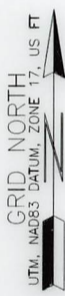


- NOTES ON SURVEY**
1. COORDINATE SYSTEM IS UTM NAD 83 DATUM, ZONE 17, U.S. FOOT AND WELL COORDINATES ESTABLISHED USING SURVEY GRADE GPS
 2. SURFACE AND ROYALTY OWNER INFORMATION AND THEIR BOUNDARIES SHOWN HEREON WERE PLOTTED FROM DEEDS AND/OR TAX PARCEL MAPS PROVIDED BY CLIENT AND/OR FIELD LOCATIONS.
 3. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
 4. NO DWELLINGS OR BUILDINGS WITHIN 625 FEET OF PROPOSED CENTER OF PAD
 5. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
 6. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF THE LIMITS OF DISTURBANCE.
 7. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL.

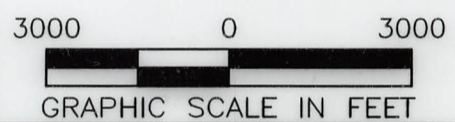


LONGITUDE: 80°35'00" BOTTOM HOLE (2000' SCALE)
10872'
11955'
LONGITUDE: 80°30'00" SURFACE HOLE (2000' SCALE)

SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4465707.90 EASTING: 540110.21
LANDING POINT LOCATION (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4465451.17 EASTING: 539483.57
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4461713.15 EASTING: 540827.28



LINE	BEARING	DISTANCE
L1	N 05°42'26" E	662.50'
L2	N 33°41'03" W	1250.01'



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.E. 19809

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 B BRK

OPERATOR'S WELL #: 406H

API WELL #: 47 009 00332
STATE COUNTY PERMIT

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

WATERSHED: UPPER OHIO NORTH ELEVATION: 1201.22'

DISTRICT: CROSS CREEK COUNTY: BROOKE/OHIO QUADRANGLE: STEUBENVILLE EAST

SURFACE OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR ACREAGE: ±169.43

OIL & GAS ROYALTY OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR ACREAGE: ±169.43

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: 5,845' TVD (19,340' MD) 09/30/2022

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:	REVISIONS:	DATE: 08-22-2022
○ PROPOSED SURFACE HOLE / BOTTOM HOLE		API NO: 47-009-XXXX
● EXISTING / PRODUCING WELLHEAD	— NATURAL WATERWAY	DRAWN BY: R.GRIMES
LPL* LANDING POINT LOCATION	— SURVEYED BOUNDARY	SCALE: 1" = 3000'
⊙ EXISTING WATER WELL	== LEASE BOUNDARY	DRAWING NO: 2017-541
⊙ EXISTING SPRING	— PROPOSED PATH	WELL LOCATION PLAT
	— PUBLIC ROAD	

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)	4-CC16-19
TRACT	SURFACE OWNER	TAX PARCEL
2	TICE DANNY D & MARCIA (SURV)	4-CC16-16
3	KUZMA NATHANAEI AMY (JTWS)	4-CC16-26.1
4	SUTER ARRISMA M; COCHRAN KENNETH A (SURV)	4-CC16-27
5	LEWIS MATTHEW C & HOLLY W (SURV)	4-CC12-54.1
6	VANCAMP NEIL E JR & MICHELLE L (SURV)	4-CC16-28
7	WILLS KENNETH 1/3 WILLS TED 1/3 ELLERY DONNA 1/3	4-CC16-33
8	FIELD LEONARD KEITH	4-CC16-31
9	MAZZELLA LAWRENCE & JILL	4-CC16-25
10	MOLNAR DENNIS SR & DENNIS JR	4-CC16-13
11	WEST VIRGINIA ST OF BUREAU DIV OF COMM DIV OF NAT RES PB LD	4-CC16-11
12	ST OF WV BUREAU OF COMM-DNR PUBLIC LAND CORP	4-CC16-23.1
13	STATE OF WV BUREAU COMM-DIV NR PUBLIC LAND CORP	4-CC16-8.1
14	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC16-23
15	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC16-24
16	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC20-27
17	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC20-30
18	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC20-31
19	ST OF WV DEPT OF COMMERCE NAT RESOURCES DIV	4-CC20-25
ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	FRESHWATER MARGARET	4-C12K-80
B	HAMILTON DEBORAH JANE	4-C12K-78
C	MCDERMITT ARTHUR C JR	380-008-00-00-0007-01
D	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PB LD CORP	4-CC16-22
E	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PB LD CORP	4-CC16-20
F	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PB LD CORP	4-CC16-21
G	MCDERMITT ARTHUR C JR	380-008-00-00-0007-03
H	PENNWEIR CONSTRUCTION CO	380-014-00-00-0009-00
I	PENNWEIR CONSTRUCTION CO	380-014-00-00-0008-00
J	PENNWEIR CONSTRUCTION CO	380-014-00-00-0007-00
K	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC20-30
L	GOODMAN RICHARD & JANICE	4-CC20-29
M	GOODMAN RICHARD T & JANICE (SURV)	4-CC20-30.1
N	PENNWEIR CONSTRUCTION CO	380-014-00-00-0006-00
O	PENNWEIR CONSTRUCTION CO	380-014-00-00-0005-00
P	PENNWEIR CONSTRUCTION CO	380-014-00-00-0004-00
Q	PENNWEIR CONSTRUCTION CO	380-014-00-00-0003-00
R	PENNWEIR CONSTRUCTION CO	380-014-00-00-0003-00
S	NICKOLES 3 LLC	4-CC20-33
T	SLIDAY DEBORAH K	4-CC20-32
U	ST OF WV DEPT OF COMMERCE NAT RESOURCES DIV	4-CC20-25
V	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC20-31
W	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC20-26
X	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC16-8
Y	ST OF WV DEPT OF COMMERCE NAT RESOURCES	4-CC20-46
Z	WV BUREAU OF COMMERCE DIV OF NATURAL RESOURCE	4-CC16-7.1
AA	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PUB LD COM	4-CC16-6
AB	PALFALVY IRREVOCABLE TRUST DENNIS III, THE	4-CC16-5
AC	DAMI TERRY A ETAL (LE-JOSEPH T & LOIS C	4-CC16-9
AD	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PB LD COMM	4-CC16-10
AE	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PB LD CORP	4-CC16-12
AF	REED RONALD ALLEN	4-CC16-4
AG	BRADY RALPH A II; JOHNSTON JOYCE ANN (SURV)	4-CC16-2
AH	BRADY RALPH A II; JOHNSTON JOYCE ANN (SURV)	4-CC16-3
AI	MAROSI PAUL	4-CC16-1
AJ	VANCAMP NEIL E JR & MICHELLE L (JTWS)	4-CC16-1.5
AK	IVILL LIVING TRUST CHERYL TRUSTEE	4-C115-58
AL	DENNIS TAWNIA R	4-CC12-62
AM	DENNIS SHAWN A	4-C12J-33
AN	LANTZ SUSAN PORCH	4-C12J-28
AO	THOMAS RITA K	4-CC12-55
AP	LEWIS MATTHEW C & HOLLY W (SURV)	4-CC12-52
AQ	LONGWELL MARTY R & DIANA L (SURV)	4-CC12-48
AR	LONGWELL MARTY R & DIANA L (SURV)	4-CC12-47
AS	LONGWELL MARTY R & DIANA L (SURV)	4-CC12-46
AT	LONGWELL DIANA LYNN & MARTY ROBBON	4-CC12-45
AU	BUBECK PHILIP J	4-CC12-44
AV	BUBECK BRIAN B & STEPHANIE J (SURV)	4-CC12-43
AW	LONGWELL DIANA	4-CC12-42
AX	DODD GERALDINE	4-CC12-41
AY	DODD PAUL C & DONNA A (JTWS)	4-CC12-40
AZ	DODD PAUL C & DONNA A (JTWS)	4-CC12-39
BA	DODD LARRY G SR & NORA LOU	4-CC12-38
BB	THOMAS RITA K	4-CC12-55
BC	MONROE ALLEN & JENNIFER (JTWS)	4-CC12-63
BD	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PB LD CORP	4-CC16-18
BE	WEST VIRGINIA ST OF BUREAU OF COMM DIV OF NAT RES PB LD CORP	4-CC16-17
BF	CUNNINGHAM TIMOTHY BRIAN	4-CC16-15
BG	PAULES DONNA K	4-CC16-14
BH	HOOPER TIMOTHY S & STACY (SURV)	4-CC12-54
BI	TENNANT WILLIAM J & APRIL L (JTWS)	4-CC16-34
BJ	ABATE ALICIA F	4-CC16-30
BK	STECIK KIRK & BRANDY L JTWS	4-CC16-29
BL	FAMILY CONNECTIONS INC	4-CC16-26

09/30/2022

REVISIONS:	 	
	COMPANY:	
	OPERATOR'S	STATE OF WV DNR B BRK
	WELL #:	47-009-00332 406H
	DISTRICT:	CROSS CREEK
	COUNTY:	BROOKE/OHIO
	STATE:	WV
		DATE: 08-22-2022
		API NO: 47-009-XXXX
		DRAWN BY: R.GRIMES
		SCALE: N/A
		DRAWING NO: 2017-541
		WELL LOCATION PLAT

4700900332

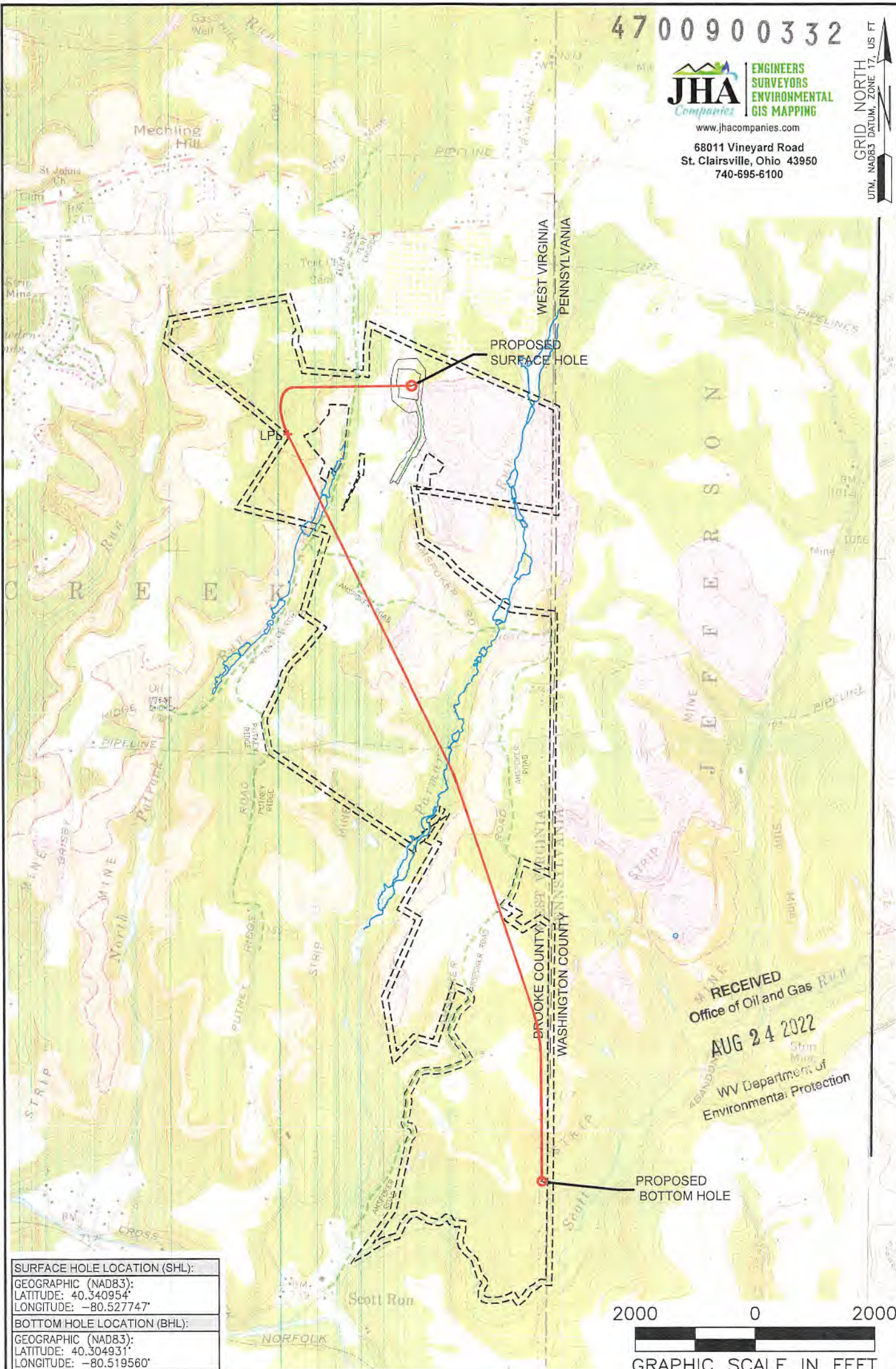


ENGINEERS
SURVEYORS
ENVIRONMENTAL
GIS MAPPING

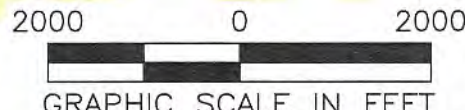
www.jhacompanies.com

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

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



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.340954° LONGITUDE: -80.527747°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83): LATITUDE: 40.304931° LONGITUDE: -80.519560°



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:

PROPOSED SURFACE HOLE / BOTTOM HOLE	NATURAL WATERWAY
EXISTING / PRODUCING WELLHEAD	ACCESS ROAD
LPL LANDING POINT LOCATION	PUBLIC ROAD
FLOOD PLAIN	ACCESS ROAD TO PREV. SITE
	LEASE BOUNDARY
	PROPOSED PATH

09/30/2022

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: STATE OF WV DNR B BRK	WELL # 406H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	COUNTY: BROOKE/OHIO	CODE: 9	DISTRICT: CROSS CREEK
SURFACE OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR	USGS 7 1/2 QUADRANGLE MAP NAME: BETHANY, WV		