

**JACKSON SURVEYING  
INC.**

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26302  
304-623-5851

Latitude: 40°00'00"

SURFACE HOLE 2954'

Latitude: 40°02'30"

BOTTOM HOLE 5716'

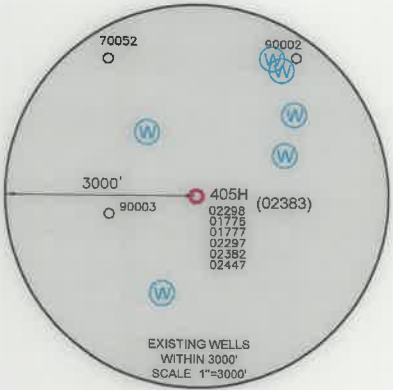
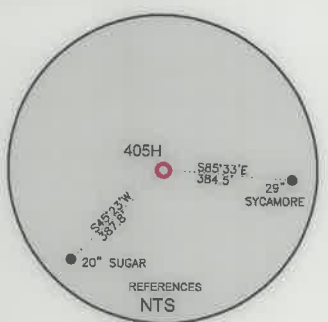
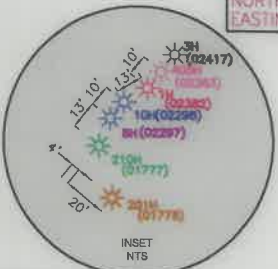
<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,821.363 EASTING: 531,114.130	<b>SURFACE HOLE LOCATION (SHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,821.790 EASTING: 531,114.535
<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,779.411 EASTING: 531,906.965	<b>LANDING POINT LOCATION (LPL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,773.491 EASTING: 531,917.922
<b>AZIMUTH POINT LOCATION-1 (AZL1):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,016.548 EASTING: 531,348.021	<b>AZIMUTH POINT LOCATION-1 (AZL1):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,011.436 EASTING: 531,354.769
<b>AZIMUTH POINT LOCATION-2 (AZL2):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,026.445 EASTING: 531,343.623	<b>AZIMUTH POINT LOCATION-2 (AZL2):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,036.856 EASTING: 531,343.674
<b>AZIMUTH POINT LOCATION-3 (AZL3):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,882.837 EASTING: 530,969.428	<b>AZIMUTH POINT LOCATION-3 (AZL3):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,875.168 EASTING: 530,979.002
<b>AZIMUTH POINT LOCATION-4 (AZL4):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,894.858 EASTING: 530,964.070	<b>AZIMUTH POINT LOCATION-4 (AZL4):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,900.375 EASTING: 530,967.429
<b>AZIMUTH POINT LOCATION-5 (AZL5):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,799.479 EASTING: 530,552.446	<b>AZIMUTH POINT LOCATION-5 (AZL5):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,784.294 EASTING: 530,560.340
<b>AZIMUTH POINT LOCATION-6 (AZL6):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,825.301 EASTING: 530,541.193	<b>AZIMUTH POINT LOCATION-6 (AZL6):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,809.412 EASTING: 530,548.575
<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,430,496.695 EASTING: 530,261.483	<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,430,164.746 EASTING: 530,386.116
	<b>BOTTOM HOLE LOCATION (BHL):</b> UTM (NAD83, ZONE 17, METERS): NORTHING: 4,430,496.030 EASTING: 530,256.707

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 76°12'39" W	814.83'	SHL TO LANDMARK	FD. 5/8" REBAR
L2	S 57°14'38" E	1707.70'	SHL TO LANDMARK	FD. 5/8" REBAR
L4	N 23°34'44" W	91.00'	AZL1 TO AZL2	
L5	N 24°39'40" W	91.00'	AZL3 TO AZL4	
L6	N 25°05'52" W	91.00'	AZL5 TO AZL6	

LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 86°33'35" E	2640.54'	3746.95'	SHL TO LPL
L7	N 23°05'00" W	89.98'	89.99'	AZL7 TO AZL8

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



**WELL RESTRICTIONS**

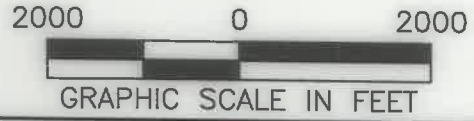
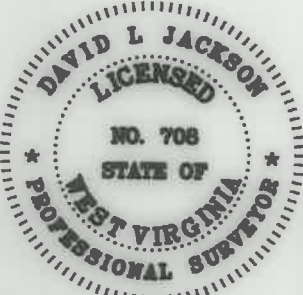
- NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
- NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
- NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
- NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
- NO GROUND INTAKE OR PUBLIC WATER SUPPLY WITHIN 1000 FEET OF WELL PAD, LIMITS OF DISTURBANCE, E & S CONTROLS OR PUBLIC WATER SUPPLY.

**NOTES ON SURVEY**

- 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.
- ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

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. 708 *David L Jackson*



COMPANY: **SWN** Production Company, LLC **SWN** Production Company™

(+) 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)

BETTY SCHAFER MSH  
OPERATOR'S WELL #: 405H  
API WELL #: 47 051 02383  
STATE COUNTY PERMIT

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

WATERSHED: WHEELING CREEK (HUC-10) ELEVATION: 848.5'

DISTRICT: SAND HILL COUNTY: MARSHALL QUADRANGLE: MOUNDSVILLE, WV

SURFACE OWNER: ROY A. SCHAFFER JR. & EDWARD J. SCHAFFER ACREAGE: ±205.06

OIL & GAS ROYALTY OWNER: ROY A. SCHAFFER JR. & EDWARD J. SCHAFFER ACREAGE: ±205.06

DRILL  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION

CONVERT  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER CHANGE  (SPECIFY) ASDRILLED

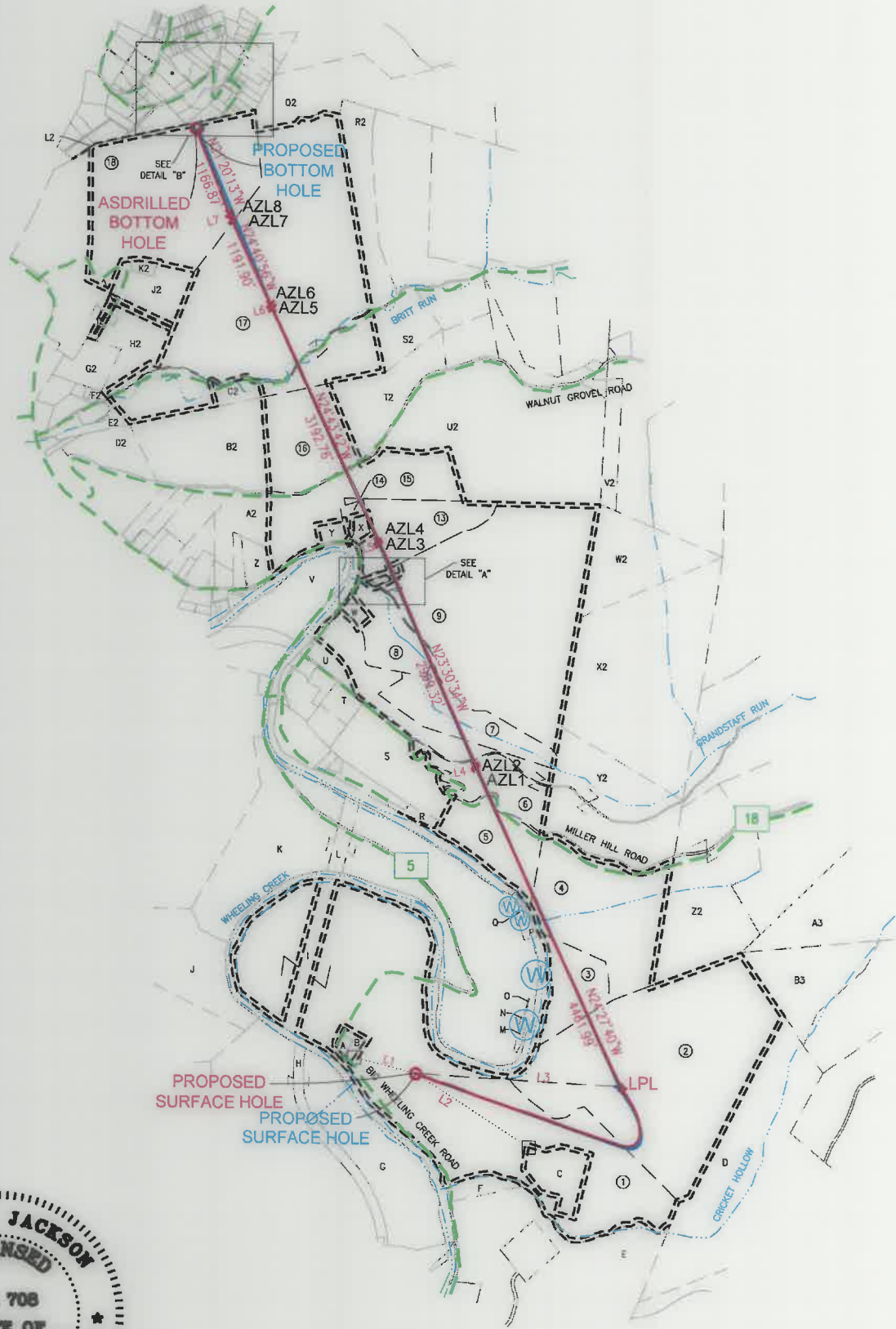
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6.02 09/09/2022

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY WOODY  
ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200 ADDRESS: 1300 FORT PIERPONT ROAD, SUITE 200  
CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

<b>LEGEND:</b>	— SURVEYED BOUNDARY	— DRILLING UNIT	— DATE: 06-13-2022
⊙ PROPOSED SURFACE HOLE / BOTTOM HOLE	— LEASE BOUNDARY	— ASDRILLED PATH	— DRAWN BY: N. MANO
⊙ EXISTING / PRODUCING WELLHEAD	— PROPOSED PATH	—	— SCALE: 1" = 2000'
LPL ⊙ LANDING POINT LOCATION			— DRAWING NO:
⊙ EXISTING WATER WELL			— WELL LOCATION PLAT
⊙ EXISTING SPRING			

Longitude: 80°37'30" Longitude: 80°37'30" SURFACE HOLE 3280' BOTTOM HOLE 6387'

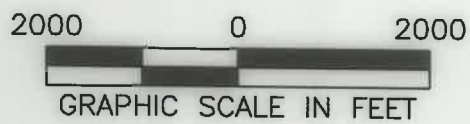
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 Clarksburg, WV 26302  
 304-623-5851



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P.S. 708

*David L Jackson*



REVISIONS:	COMPANY:	09/09/2022	
	<b>SWN</b> Production Company, LLC	<b>swN</b> Production Company™	
	OPERATOR'S	BETTY SCHAFFER MSH	API #
	WELL #:	405H	47-051-02383
	DISTRICT:	COUNTY:	STATE:
	SAND HILL	MARSHALL	WV
			DATE: 06-13-2022
			DRAWN BY: N. MAND
			SCALE: 1" = 2000'
			DRAWING NO:
			WELL LOCATION PLAT 2

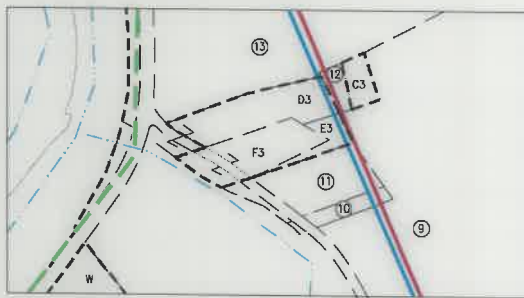


JACKSON SURVEYING  
 INC.  
 2413 EAST PIKE ST. # 112  
 Clarksburg, WV 26302  
 304-623-5851

DETAIL "B"



DETAIL "A"



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P.S. 708

*David L Jackson*

09/09/2022

REVISIONS:	COMPANY:		
	OPERATOR'S	BETTY SCHAFFER MSH	API #
	WELL #:	405H	47-051-02383
	DISTRICT:	COUNTY:	STATE:
	SAND HILL	MARSHALL	WV
			DATE: 06-13-2022
			DRAWN BY: N. MANO
			SCALE: N/A
			DRAWING NO:
			WELL LOCATION PLAT 3

**JACKSON SURVEYING  
INC.**

2413 EAST PIKE ST. # 112  
Clarksburg, WV 26302  
304-623-5851

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	SCHAFFER ROY A JR & SCHAFFER EDWARD J (S/R)	12-0009-22
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	FISHER CHARLES B & CARLA S (S)	12-0009-20
3	GRAY JOHN ALVIN (S)	12-0009-21
4	PIKEWOOD ENERGY CORP (S)	12-0009-10
5	STEADMAN FRANKLIN L ET UX (S)	12-0009-5.1
6	DYE ALBERT M - LIFE (S)	12-0009-6
7	WHEELING CREEK WATERSHED COMM (S)	12-0009-6.1
8	HADSELL SANDRA L (S)	12-0001-20
9	FOLMAR EDITH A, AS TRUSTEE OF THE EDITH A FOLMAR TRUST AGREEMENT DATED THE 23RD DAY OF MAY 2019 (S)	12-0001-19
10	DUFF JAMES E & CAPP BROOKE L (S)	12-0001-22.1
11	DUFF JAMES E & CAPP BROOKE L(S)	12-0001-22
12	FRAZIER GREGORY SCOTT (S)	12-0001-27.1
13	ADASE GEORGE & LAURIE (S)	12-0001-28
14	GRAY JOHN A ET UX (S)	12-0001-28.2
15	ADASE GEORGE & LAURIE (S)	12-0001-29
16	KUNTZ JOHN H (S)	12-0001-31
17	COFFIELD MICHAEL L & TYLENE R (S)	12-0001-10
18	HAMILTON MARY SCHENK & GARY P (S)	12-0001-5.1

REVISIONS:

COMPANY:

**SWN**

Production Company, LLC

**SWN**

Production Company™

09/09/2022

OPERATOR'S BETTY SCHAFFER MSH

API #

DATE: 06-13-2022

WELL #: 405H

47-051-02383

DRAWN BY: N. MANO

DISTRICT:  
SAND HILL

COUNTY:  
MARSHALL

STATE:  
WV

SCALE: N/A

DRAWING NO:

WELL LOCATION PLAT 4

**JACKSON SURVEYING  
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2413 EAST PIKE ST. # 112  
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304-623-5851

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	SCHAFER ROY A JR & SCHAFER EDWARD J	12-0009-23
B	SCHAFER ROY A JR & SCHAFER EDWARD J	12-0009-22.1
C	CONSOLIDATION COAL COMPANY;MURRAY ENERGY C/O LAND DEPT	12-0009-22.2
D	MERINAR CALVIN C - LIFE	12-0009-19
E	FISH PATRICIA A & FREDERICK W	12-0010-1.2
F	ROMAN JEWELL L	12-0010-01
G	HOGG THOMAS D & DONN W ET AL	13-0008-3
H	HOGG THOMAS D & DONN W ET AL	13-0008-4
I	SCHAFER ROY A JR & SCHAFER EDWARD J	12-0009-24
J	HART JOHN J & RENEE A	13-0008-2.1
K	GRAY JOHN ALVIN	13-0003-14
L	GRAY JOHN ALVIN	13-0003-13
M	JESTERS COURT 13 INC	13-0003-14.1
N	JESTERS COURT 13 INC	13-0003-14.2
O	JESTERS COURT 13 INC	13-0003-14.3
P	SHEPHERD TIMOTHY & DEBORAH L	13-0003-14.4
Q	PROVANCE FRANK J ET AL	13-0003-14.5
R	SMITH BEVERLY JILL ANITA	12-0009-5.5
S	MANNERS DANIEL J ET UX	12-0009-5
T	TEACOACH JAY M ET UX	12-0009-5.3
U	DYE WILLIAM R	12-0009-1
V	MAAS BRIAN J & AMY C - TRUST	13-0003-10
W	MERINAR JUSTIN K	12-0001-21
X	ALLEN MARK G & CHERYL L	12-0001-28.1
Y	SAVAGE CHARLES JACKSON	12-0001-29.1
Z	WHARTON PETER R ET AL	12-0001-34
A2	ESTEP DOUGLAS J & LINDA R	12-0001-33.1
B2	MERCER DARICK B & RENEE A	12-0001-32
C2	CONSOLIDATION COAL COMPANY; MURRAY ENERGY C/O LAND DEPT	12-0001-10.2
D2	MARPLE JEFFREY J & BARBARA J	12-0001-32.1
E2	HIGGINS CONSTANCE L - LIFE	12-0001-7.3
F2	RUNKLE SHERRY L	12-0001-7.2
G2	SLIGAR KAREN SCHENK & TERRY B	12-0001-5.2
H2	SLIGAR KAREN SCHENK	12-0001-5
I2	REARDON SHELLY S	12-0001-5.6
J2	HAMILTON MARY SCHENK & GARY P	12-0001-5.4
K2	WETMORE BROOKE L & BRIAN B	12-0001-5.5
L2	ENGINEERED FOUNDATION SOLUTIONS, PLLS (S)	12-001A-94
M2	SNYDER JOHN J ET UX	12-001A-85
N2	SNYDER JOHN J ET UX	12-001A-84
O2	ZDONCZYK ROBIN G	12-001A-83.1
P2	SNYDER LONNIE A	12-001A-83
Q2	HARTMAN WALTER L ET UX	12-0001-10.1
R2	BARTOLOVICH STEPHEN M	12-0001-47
S3	BARTOLOVICH STEPHEN M	12-0001-11
T2	LEASURE ANNA	12-0001-30
U2	SHELLHASE MARK A ET UX	12-0001-18
V2	GIZA CHESTER A ET UX	12-0001-15
W2	WHEELING POWER COMPANY	12-0009-8.1
X2	EDGE WILLIAM F JR & BARBARA ANN ET AL	12-0009-8
Y2	ISALY ROBERT A SR EST	12-0009-9
Z2	GRAY JOHN ALVIN	12-0009-11
A3	MERINAR JAMES MARTIN ET UX	12-0009-15.1
B3	MERINAR CALVIN C - LIFE	12-0009-15
C3	COX JOSHUA N	12-0001-27.2
D3	PALMER ADAM R	12-0001-26
E3	FRAZIER GREGORY SCOTT	12-0001-23
F3	FRAZIER GREGORY SCOTT	12-0001-24

REVISIONS:

COMPANY:

**SWN**

Production Company, LLC

**SWN** <sup>R<sup>+</sup> V<sup>+</sup></sup>

Production Company™

09/09/2022

OPERATOR'S BETTY SCHAFER MSH

API #

DATE: 06-13-2022

WELL #: 405H

47-051-02383

DRAWN BY: N. MANO

DISTRICT:  
SAND HILL

COUNTY:  
MARSHALL

STATE:  
WV

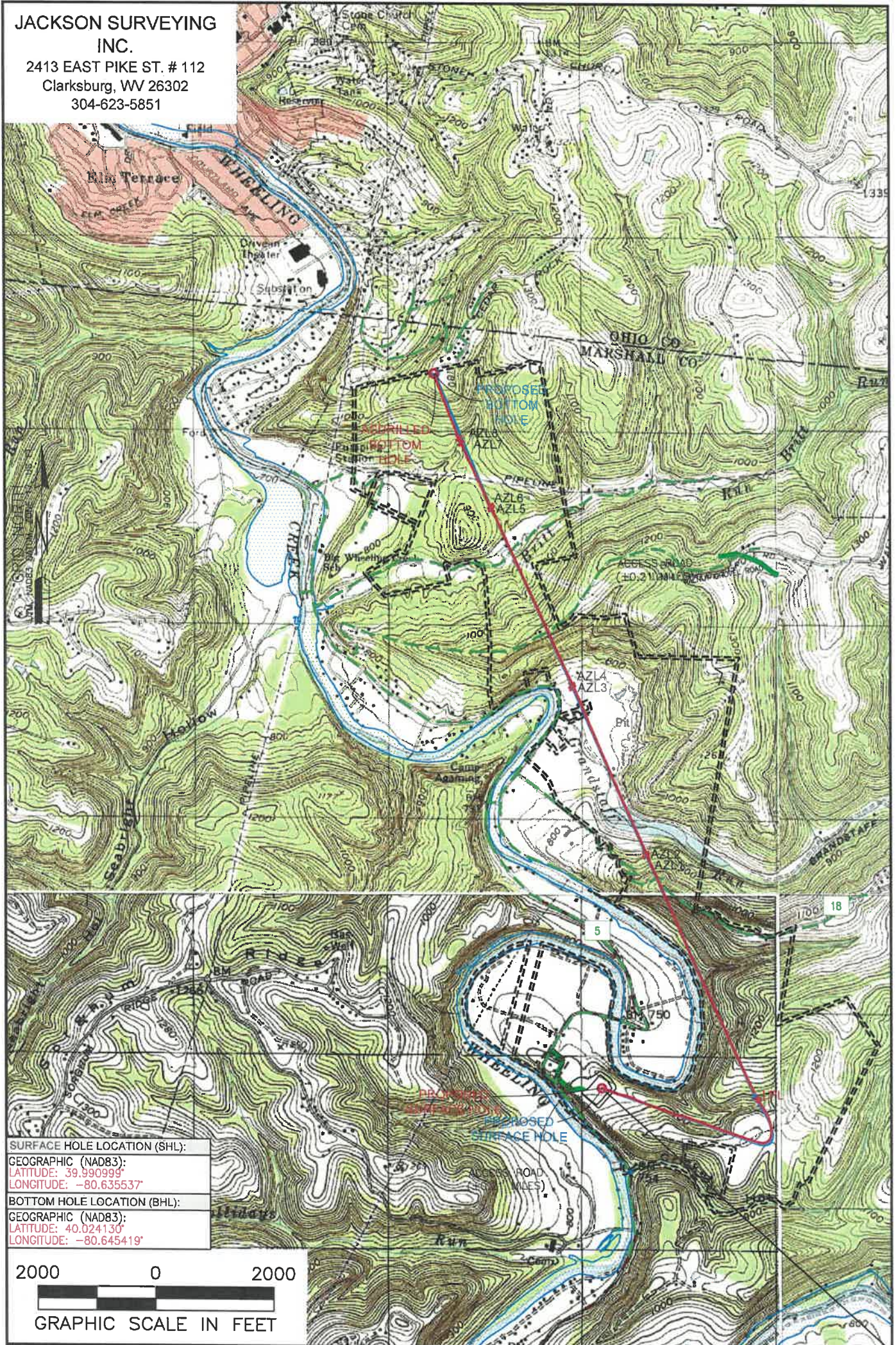
SCALE: N/A

DRAWING NO:  
WELL LOCATION PLAT 5



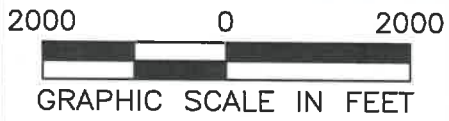
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304-623-5851



**SURFACE HOLE LOCATION (SHL):**  
GEOGRAPHIC (NAD83):  
LATITUDE: 39.990999°  
LONGITUDE: -80.635537°

**BOTTOM HOLE LOCATION (BHL):**  
GEOGRAPHIC (NAD83):  
LATITUDE: 40.024130°  
LONGITUDE: -80.645419°



**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
- ☼ EXISTING / PRODUCING WELLHEAD
- LPL\* LANDING POINT LOCATION
- 🌊 FLOOD PLAN
- ACCESS ROAD
- PUBLIC ROAD
- ACCESS ROAD TO PROP. SITE
- == LEASE BOUNDARY
- PROPOSED PATH
- ASDRILLED PATH

<b>WELL OPERATOR:</b> SWN PRODUCTION COMPANY, LLC	<b>WELL (FARM) NAME:</b> BETTY SCHAFER MSH	<b>WELL #</b> 405H	<b>SERIAL #</b>
<b>ADDRESS:</b> 1300 FORT PIERPONT ROAD, SUITE 200 MORGANTOWN, WV 26508	<b>COUNTY - CODE</b> MARSHALL - 051	<b>DISTRICT;</b> SAND HILL	
<b>SURFACE OWNER:</b> ROY A. SCHAFER JR. & EDWARD J. SCHAFER	<b>USGS 7 1/2 QUADRANGLE MAP NAME</b> MOUNDSVILLE, WV	<b>API #</b> 47-051-02383	

06/09/2022