

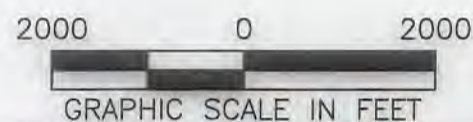
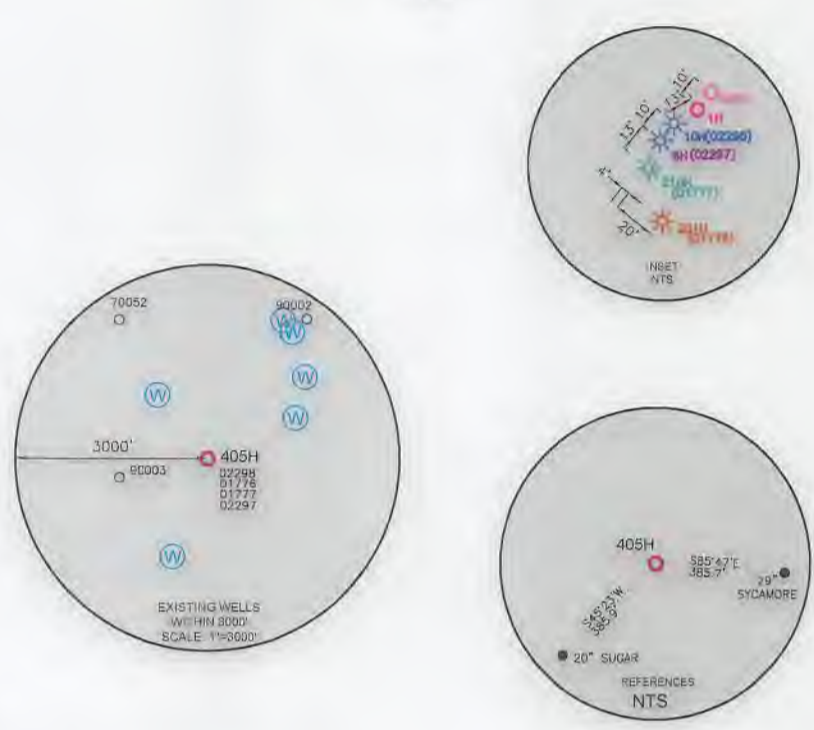
Latitude: 40°00'00" SURFACE HOLE 2954'
 Latitude: 40°02'30" BOTTOM HOLE 5700'

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

SURFACE HOLE LOCATION (SHL):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,821.363 EASTING: 531,114.130	
LANDING POINT LOCATION (LPL):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,426,779.411 EASTING: 531,906.965	
AZIMUTH POINT LOCATION-1 (AZL1):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,016.548 EASTING: 531,348.021	
AZIMUTH POINT LOCATION-2 (AZL2):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,026.445 EASTING: 531,343.623	
AZIMUTH POINT LOCATION-3 (AZL3):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,882.837 EASTING: 530,969.428	
AZIMUTH POINT LOCATION-4 (AZL4):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,894.858 EASTING: 530,964.070	
AZIMUTH POINT LOCATION-5 (AZL5):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,799.479 EASTING: 530,552.446	
AZIMUTH POINT LOCATION-6 (AZL6):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,429,825.301 EASTING: 530,541.193	
BOTTOM HOLE LOCATION (BHL):	
UTM (NAD83, ZONE 17, METERS): NORTHING: 4,430,496.695 EASTING: 530,261.483	

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

LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 76°05'34" W	813.87'	SHL TO LANDMARK	FD. 5/8" REBAR
L2	S 57°18'27" E	1708.06'	SHL TO LANDMARK	FD. 5/8" REBAR
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 86°58'16" E	2604.80'	3840.26'	SHL TO LPL
L4	N 23°57'39" W	35.53'	35.53'	AZL1 TO AZL2
L5	N 24°01'28" W	43.18'	43.18'	AZL2 TO AZL4
L6	N 23°32'49" W	92.42'	92.42'	AZL5 TO AZL6



WELL RESTRICTIONS

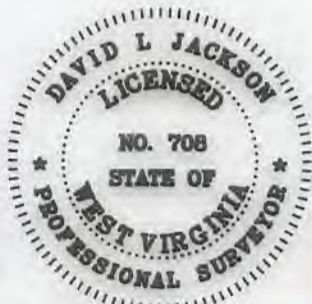
1. NO OCCUPIED DWELLINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
2. NO AGRICULTURE BUILDINGS > 2500 SQ FT. WITHIN 625 FEET OF CENTER OF PAD.
3. NO WATER WELLS OR DEVELOPED SPRINGS ARE WITHIN 250 FEET OF PROPOSED WELL.
4. NO PERENNIAL STREAMS, LAKES, PONDS, OR RESERVOIRS WITHIN 100 FEET OF THE LIMITS OF DISTURBANCE.
5. NO NATURALLY PRODUCING TROUT STREAM WITHIN 300 FEET OF LIMITS OF DISTURBANCE.
6. 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

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.

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 **swn** *RT-V+*
 Production Company, LLC 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: 848.3' STAKED

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

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

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

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

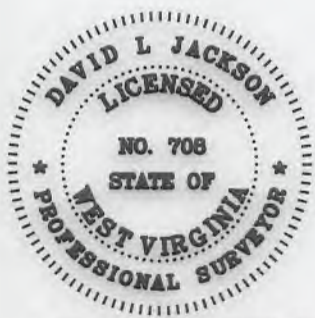
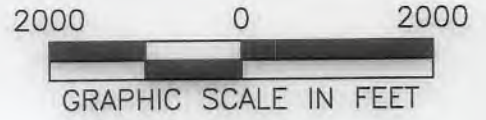
CONVERT PLUG & ABANDON CLEAN OUT & REPLUG OTHER CHANGE (SPECIFY) **05/14/2021**

TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,023 TVD 20,794 TMD

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

LEGEND:	○ PROPOSED SURFACE HOLE / BOTTOM HOLE	— SURVEYED BOUNDARY	REVISIONS:	DATE: 03-29-2021
⊗ EXISTING / PRODUCING WELLHEAD	— DRILLING UNIT	— LEASE BOUNDARY	△ ADDED SIGNATURE AND STAMP 04-30-2021	
LPL* LANDING POINT LOCATION	— ASDRILLED PATH	— PROPOSED PATH		DRAWN BY: N. MANO
⊕ EXISTING WATER WELL				SCALE: 1" = 2000'
⊙ EXISTING SPRING				DRAWING NO:
				WELL LOCATION PLAT

JACKSON SURVEYING
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 2413 EAST PIKE ST. # 112
 Clarksburg, WV 26302
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P.S. 708

David L. Jackson

05/14/2021

REVISIONS: ▲ ADDED SIGNATURE AND STAMP 04-30-2021	COMPANY:  	
OPERATOR'S BETTY SCHAFER MSH	API # HWA 47-051- 02383	DATE: 03-29-2021
WELL #: 405H	COUNTY: MARSHALL	DRAWN BY: N. MANO
DISTRICT: SAND HILL	STATE: WV	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"

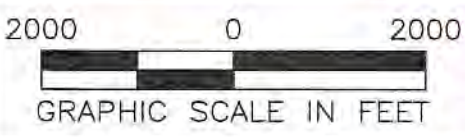
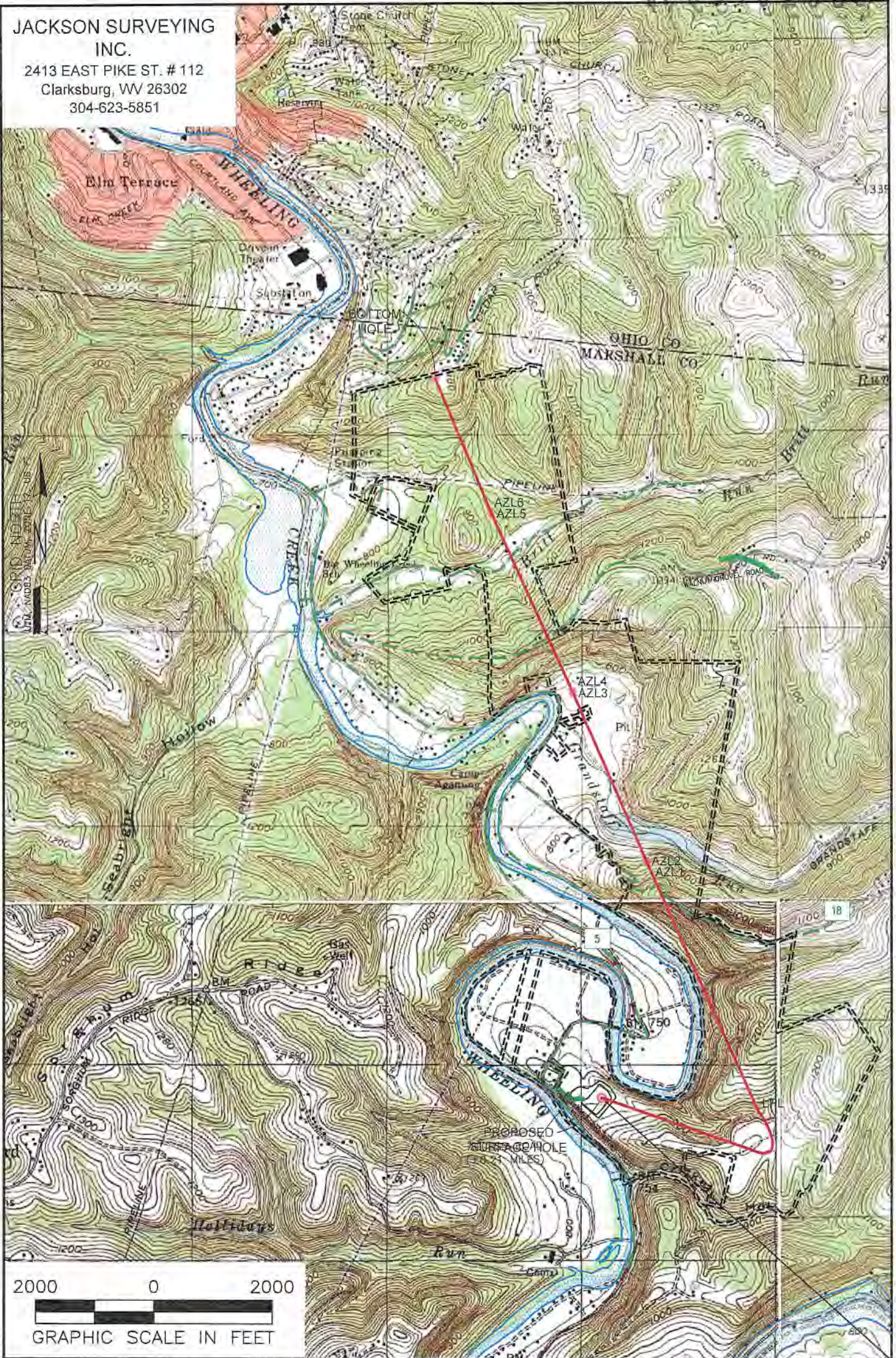


05/14/2021

REVISIONS:	COMPANY:			 
▲ ADDED SIGNATURE AND STAMP 04-30-2021 	OPERATOR'S BETTY SCHAFER MSH WELL #: 405H DISTRICT: SAND HILL COUNTY: MARSHALL STATE: WV			

4705102383

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



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.

RECEIVED
Office of Oil and Gas
APR 06 2021

- LEGEND:
- PROPOSED SURFACE HOLE / BOTTOM HOLE
 - EXISTING / PRODUCING WELLHEAD
 - LANDING POINT LOCATION
 - FLOOD PLAN
 - ACCESS ROAD
 - PUBLIC ROAD
 - ACCESS ROAD TO PREV. SITE
 - LEASE BOUNDARY
 - PROPOSED PATH
 - ASDRILLED PATH

05/14/2021



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

**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	SCHAFER ROY A JR & SCHAFER 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 WILLIAM R ET AL (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)	12-0001-23
13	PALMER ADAM R (S)	12-0001-26
14	ADASE GEORGE & LAURIE (S)	12-0001-28
15	ALLEN MARK G & CHERYL L (S)	12-0001-28.1
16	GRAY JOHN A ET UX (S)	12-0001-28.2
17	ADASE GEORGE & LAURIE (S)	12-0001-29
18	KUNTZ JOHN H (S)	12-0001-31
19	COFFIELD MICHAEL L & TYLENE R (S)	12-0001-10
20	HAMILTON MARY SCHENK & GARY P (S)	12-0001-5.1

05/14/2021



REVISIONS:	COMPANY:			 	
△ ADDED SIGNATURE AND STAMP 04-30-2021	OPERATOR'S		BETTY SCHAFER MSH	API #	DATE: 03-29-2021
	WELL #:		405H	47-051- 01383	DRAWN BY: N. MANO
	DISTRICT:	COUNTY:	SAND HILL	MARSHALL	SCALE: N/A
		STATE:	WV		DRAWING NO:
					WELL LOCATION PLAT 4

**JACKSON SURVEYING
INC.**

2413 EAST PIKE ST. # 112
Clarksburg, WV 26302
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	FRAZIER GREGORY SCOTT	12-0001-24
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 RICHARD T & MICHELL 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	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 ET AL	12-0001-47
S2	BARTOLOVICH STEPHEN M	12-0001-11
T2	BROCK BERNICE VIRGINIA ET AL	12-0001-30
U2	SHELLHASE MARK A ET UX	12-0001-18
V2	SHELLHASE MARK A & ANDREA K	12-0001-15.4
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	PALMER ADAM R	12-0001-27.2
D3	FRAZIER GREGORY SCOTT	12-0001-27.1

05/14/2021

REVISIONS:	COMPANY:		
▲ ADDED SIGNATURE AND STAMP 04-30-2021			
	OPERATOR'S	BETTY SCHAFER MSH	API #
	WELL #:	405H	47-051- 02283
	DISTRICT:	SAND HILL	COUNTY:
		MARSHALL	STATE:
			WV
			DATE: 03-29-2021
			DRAWN BY: N. MANO
			SCALE: N/A
			DRAWING NO:
			WELL LOCATION PLAT 5