



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Wednesday, December 7, 2022
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC
POST OFFICE BOX 12359
SPRING, TX 773914954

Re: Permit Modification Approval for BW EDGE MSH 6H
47-051-02472-00-00

Lateral Extension, Updated Lease Chain

SWN PRODUCTION COMPANY, LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.



James A. Martin
Chief

Operator's Well Number: BW EDGE MSH 6H
Farm Name: WILLIAM F EDGE JR & BARABARA EDGE - TOD⁺
U.S. WELL NUMBER: 47-051-02472-00-00
Horizontal 6A New Drill
Date Modification Issued: 12/07/2022

Promoting a healthy environment.

12/09/2022

WW-6B
(04/15)

Ch#
0001067583
\$5000
7/19/22

API NO. 47-051 - 02472 Exp MOD
OPERATOR WELL NO. BW Edge MSH 6H
Well Pad Name: BW Edge MSH

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: SWN Production Co., LLC 494512924 051-Marshall 6-Sand H 674-Wheeling
Operator ID County District Quadrangle

2) Operator's Well Number: BW Edge MSH 6H Well Pad Name: BW Edge MSH

3) Farm Name/Surface Owner: William F. Edge, Jr. & Barbara Edge- Tod & David Edge Public Road Access: Big Wheeling Creek Road

4) Elevation, current ground: 1254' Elevation, proposed post-construction: 1254'

5) Well Type (a) Gas x Oil Underground Storage

Other

(b) If Gas Shallow x Deep

Horizontal x

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Target Formation- Marcellus, Down-Dip well to the South, Target Top TVD- 6505', Target Base TVD- 6557', Anticipated Thickness- 52', Associated Pressure- 4263

8) Proposed Total Vertical Depth: 6541'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 25609'

11) Proposed Horizontal Leg Length: 16487.71'

12) Approximate Fresh Water Strata Depths: 615'

13) Method to Determine Fresh Water Depths: Nearby Water Well

14) Approximate Saltwater Depths: 1386' Salinity Profile Analysis

15) Approximate Coal Seam Depths: 741'

16) Approximate Depth to Possible Void (coal mine, karst, other): None that we are aware of.

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No x

(a) If Yes, provide Mine Info: Name: Depth: Seam: Owner:

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18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	20"	New	J-55	94#	126'	126'	CTS
Fresh Water	13 3/8"	New	H-40	48#	800'	800'	748 sx/CTS
Coal	See	Surface	Casing				
Intermediate	9 5/8"	New	J-55	36#	2056'	2056'	871 sx/CTS
Production	5 1/2"	New	P-110 HP	20#	25609'	25609'	Tail 3579sx/ 100' Inside Intermediate
Tubing							
Liners							

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	20"	30"	0.25	2120	81	Class A	1.20/30% Excess
Fresh Water	13 3/8"	17.5"	0.380	2730	633	Class A	1.20/30% Excess
Coal	See	Surface	Casing				
Intermediate	9 5/8"	12 1/4"	0.352	3520	1768	Class A	1.19/40% Excess
Production	5 1/2"	8 3/4"-8 1/2"	0.361	14360	10500	Class A	1.19/5% Excess
Tubing							
Liners							

PACKERS

Kind:				
Sizes:				
Depths Set:				

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill and stimulate any potential zones between and including the Benson to Marcellus. **If we should encounter a void place basket above and below void area- balance cement to bottom of void and grout from basket to surface or run external casing packer/cementing stage tool above void interval and perform 2 stage cementing operation dependent upon depth of void. Run casing not less than 20' below void nor more than 75' below void. (*If freshwater is encountered deeper than anticipated it must be protected, set casing 50' below and cts.)

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Well will be perforated within the target formation and stimulated with a slurry of water, sand, and chemical additives at a high rate. This will be performed in stages with the plug and perf method along the wellbore until the entire lateral has been stimulated within the target formation. All stage plugs are then drilled out and the well is flowed back to surface. In some instances, additional toe prep may be performed by pumping additional water in the toe of the well prior to perforating and pumping Stage 1 to ensure that the toe guns/toe sleeves are fully open prior to pumping stage 1. The well is produced through surface facilities consisting of high pressure production unites, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 12,500 psi @ 100 barrels a minute.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 13.88

22) Area to be disturbed for well pad only, less access road (acres): 6.58

23) Describe centralizer placement for each casing string:

All casing strings will be ran with a centralizer at a minimum of 1 per every 3 joints of casing.

24) Describe all cement additives associated with each cement type:

See Attachment ***

25) Proposed borehole conditioning procedures:

All boreholes will be conditioned with circulation and rotation for a minimum of one bottoms up and continuing until operator is satisfied with borehole conditions.

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*Note: Attach additional sheets as needed.

Southwestern Energy Company

Proposed Drilling Program

Well: BW EDGE MSH 6
 Field: PANHANDLE FIELD WET
 County: MARSHALL
 SHL: 40.0065 Latitude -80.6276 Longitude
 BHL: 39.9572 Latitude -80.6048 Longitude
 KB Elev: 1,280 ft MSL KB: 26.4 ft AGL

Re-entry Rig: SDC 40
 Prospect: Marcellus Shale
 State: WV
 GL Elev: 1,254 ft MSL



NO COAL VOID EXPECTED

PROD TOC Lead @ 2,045' MD

PROD TOC Tail @ 5,595' MD

TUBULAR DETAIL

Casing String	Casing Size (in)	Weight (Min)	Grade (Min)	Planned Interval	
				From	To
Conductor	20	94.0 #	J-55	0'	126'
Surface/Coal	13.375	48.0 #	H-40	0'	800'
Intermediate	9.625	36.0 #	J-55	0'	2,056'
Production	5.5	20.0 #	P-110 HP	0'	25,609'

CEMENT DETAIL

	Sacks	Class	Density
Conductor:	151	A or eqv	19.3
Surface:	748	A or eqv	15.6
Intermediate:	871	A or eqv	15.6-16.0
Production:	3579	A	14.5-15.0

126' to 820'
Air/Mist

820' to 2,076'
Air/Mist

2,076' to 5,695'
Air/Mist

TD at 5,695'

5,695' to 6,891'
12.5-13.0 ppg

6,891' to 25,609'
13.5-13.8ppg

KOP at 5,695' MD

Freshwater Depth - 615' TVD
 Coal Depth - 741' TVD
 Saltwater Depth - 1,386' TVD
 TVD - 6,541'
 TMD - 25,609'

6,389' Target Center

TD at 25,609' MD
 6,541' TVD ✓

EOB at 6,891' MD

SHL Onondaga 6,405' TVD

Onondaga 6,557' TVD

Created by: C R Hall on 11/02/2022

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Strader Gower

API	Operator	Status	Latitude	Longitude	Vertical TD	Producing Formati
47-0051-90001	Unknown	Unknown	***	***	Unknown	Unknown
47-0051-0059-P	Kingery Drilling P.O. Box 1588 Ardnmore, OK 73401	Plugged	***	***	1,950	Unknown

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JACKSON SURVEYING
 INC.
 2413 EAST PIKE ST. # 112
 Clarksburg, WV 26301
 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.
4. ALL INSETS ARE GRID NORTH UNLESS OTHERWISE DEPICTED.

LEGEND:

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

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: BWEDGE MSH	WELL # 6H	SERIAL #
ADDRESS: 1300 FORT PIERPONT RD., SUITE 200 MORGANTOWN, WV 26508	COUNTY - CODE MARSHALL - 051	DISTRICT; SAND HILL	
SURFACE OWNER: WILLIAM F. EDGE, JR. & BARBARA EDGE	USGS 7 1/2 QUADRANGLE MAP NAME WHEELING, WV-OHIO	API #:	

Z:\2022 BACKUPS\1-03-22 DJ\SWN\BW EDGE MSH\WELL PLAT\6H\FINAL\FINAL 8-5-22\SWN B&W EDGE 6H WELL PLAT 8-5-22.DWG
 FRIDAY AUGUST 05 2022 09:20AM

PROPERTY NUMBER 2501163512
 PAD ID 3001161674

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Latitude: 40°02'30"

SURFACE HOLE 721'

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Clarksburg, WV 26301
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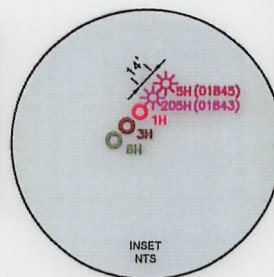
Latitude: 39°57'30" BOTTOM HOLE



6,020'

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

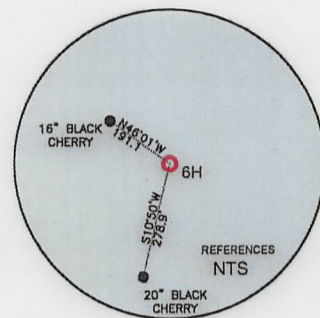
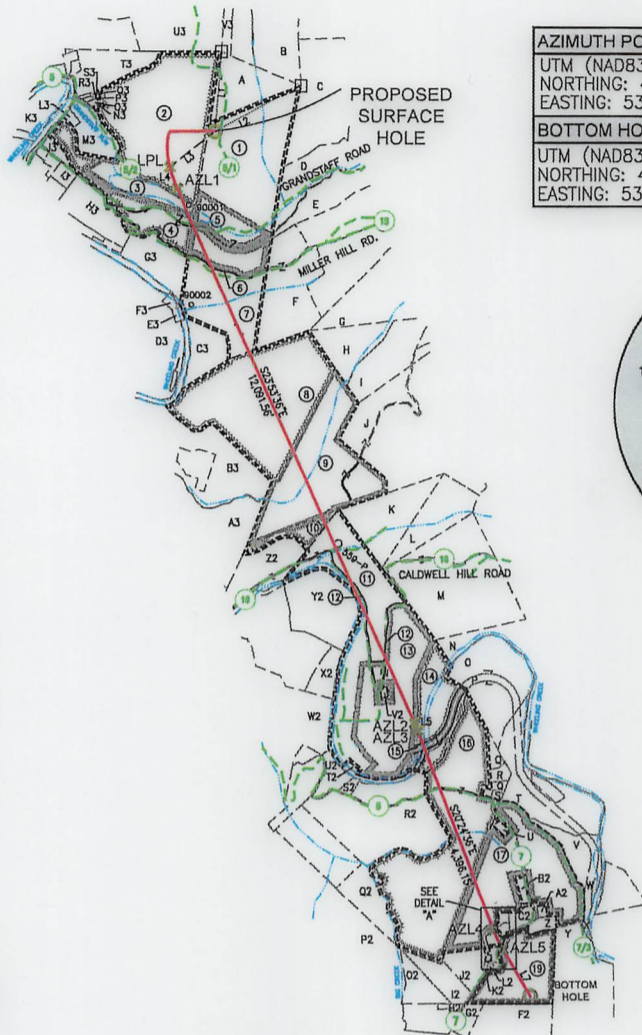
LINE	BEARING	DISTANCE	DESCRIPTION	MONUMENT
L1	N 04°30'12" E	1680.25'	SHL TO LANDMARK	5/8" REBAR
L2	N 61°33'53" E	2028.31'	SHL TO LANDMARK	5/8" REBAR
L7	N 29°52'56" E	1103.64'	AZL5 TO BHL	
LINE	BEARING	DISTANCE	CURVE LENGTH	DESCRIPTION
L3	S 52°04'26" W	1204.84'	1680.26'	SHL TO LPL
L4	S 19°39'28" E	470.45'	470.93'	LPL TO AZL1
L5	S 22°09'02" E	174.07'	174.09'	AZL2 TO AZL3
L6	S 25°08'45" E	472.91'	473.42'	AZL4 TO AZL5



BOTTOM HOLE 397'

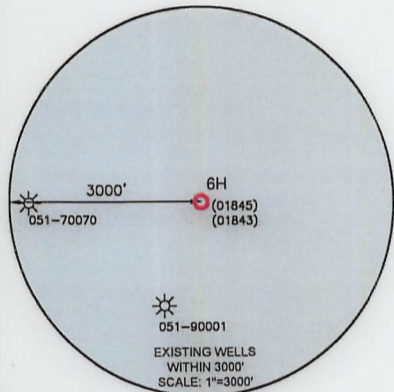
SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,544.023 EASTING: 531,787.145
LANDING POINT LOCATION (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,318.303 EASTING: 531,497.468
AZIMUTH POINT LOCATION-1 (AZL1): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,428,183.267 EASTING: 531,545.706
AZIMUTH POINT LOCATION-2 (AZL2): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,424,813.596 EASTING: 533,038.470
AZIMUTH POINT LOCATION-3 (AZL3): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,424,764.456 EASTING: 533,058.474
AZIMUTH POINT LOCATION-4 (AZL4): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,423,508.629 EASTING: 533,525.764

AZIMUTH POINT LOCATION-5 (AZL5): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,423,378.147 EASTING: 533,587.013
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4,423,086.480 EASTING: 533,754.608



Longitude: 80°35'00"

Longitude: 80°37'30"



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.

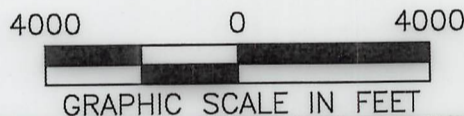
NOTES ON SURVEY

- 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

OPERATOR'S WELL #: 6H

API WELL #: 47 STATE 051 COUNTY 02472 PERMIT MODI

(+) 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)

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

WATERSHED: GRANDSTAFF RUN OF WHEELING CREEK (HUC-10) ELEVATION: 1253.6'

DISTRICT: SAND HILL COUNTY: MARSHALL QUADRANGLE: WHEELING, WV-OHIO

SURFACE OWNER: WILLIAM F. EDGE, JR. & BARABARA EDGE-TOD & DAVID WAYNE EDGE ACREAGE: ±87.8

OIL & GAS ROYALTY OWNER: JOSEPHINE FLETCHER ACREAGE: ±115.8

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: 6,541' TVD 25,609' TMD

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

ADDRESS: 1300 FORT PIERPONT RD., SUITE 200 ADDRESS: 1300 FORT PIERPONT RD., SUITE 200

CITY: MORGANTOWN STATE: WV ZIP CODE: 26508 CITY: MORGANTOWN STATE: WV ZIP CODE: 26508

LEGEND:	— SURVEYED BOUNDARY	— DRILLING UNIT	— LEASE BOUNDARY	— PROPOSED PATH	— AZL* AZIMUTH POINT LOCATION
○ PROPOSED SURFACE HOLE / BOTTOM HOLE	☀ EXISTING / PRODUCING WELLHEAD	LPL* LANDING POINT LOCATION	⊙ EXISTING WATER WELL	⊙ EXISTING SPRING	
REVISIONS:					DATE: 11-03-2022
DRAWN BY: N. MANO					SCALE: 1" = 4000'
DRAWING NO:					WELL LOCATION PLAT

JACKSON SURVEYING
 INC.
 2413 EAST PIKE ST. # 112
 Clarksburg, WV 26301
 304-623-5851

WELL BORE TRACTS		
TRACT	SURFACE OWNER (S) / ROYALTY OWNER (R)	TAX PARCEL
1	EDGE WILLIAM JR & BARBARA ANN - TOD & DAVID WAYNE EDGE (S)/ FLETCHER JOSEPHINE (R)	12-9-8
TRACT	SURFACE OWNER (S)	TAX PARCEL
2	FOLMAR EDITH A TRUST (S)	12-1-19
3	WHEELING CREEK WATERSHED COMM (S)	12-9-6.1
4	DYE ALBERT M - LIFE (S)	12-9-6
5	ISALY ROBERT A SR EST (S)	12-9-9
6	WV DEPARTMENT OF TRANSPORTATION (S)	ROUTE 18 MILLER HILL RD
7	PIKEWOOD ENERGY CORP (S)	12-9-10
8	FISHER CHARLES B & CARLA S (S)	12-9-20
9	MERINAR CALVIN C - LIFE (S)	12-9-19
10	MERINAR CALVIN C - LIFE (S)	12-10-7
11	MERINAR KENNETH L ET AL (S)	12-10-9
12	WV DEPARTMENT OF TRANSPORTATION (S)	ROUTE 16 CALDWELL HILL RD
13	HICKEY GLENN M (S)	12-10-8
14	HICKEY GLENN M (S)	15-1-6.1
15	HICKEY GLENN M (S)	15-1-7
16	ROSE TATIA JOSEPHINE (S)	15-1-19
17	ISKCON - NEW MATHURA VRINDABAN (S)	15-1-16
18	ISKCON - NEW MATHURA VRINDABAN (S)	15-1-16.3
19	ECO-VRINDABAN, INC (S)	15-2-3.5



ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
A	WHEELING POWER COMPANY	12-9-8.1
B	GIZA ALEXANDER C & CHRISTOPHER C	12-1-16
C	GIZA ALEXANDER C & CHRISTOPHER C	12-2-14
D	ISALY ROBERT A SR EST	12-2-13
E	GIBSON WILLIAM E	12-9-12
F	GRAY JOHN ALVIN	12-9-11
G	MERINAR JAMES MARTIN ET UX	12-9-15.1
H	MERINAR CALVIN C - LIFE	12-9-15
I	MERINAR CALVIN C - LIFE	12-9-16
J	MERINAR CALVIN C - LIFE	12-9-18
K	MERINAR CALVIN C	12-11-1
L	CLAYTON CHARLES W ET AL	12-11-2
M	TH EXPLORATION LLC	12-11-3
N	THOMAS RICHARD LEE BARTON	12-11-16
O	ISKCON - NEW MATHURA VRINDABAN	15-1-8
P	ISKCON - NEW MATHURA VRINDABAN	15-1-9
Q	ROSE TATIA JOSEPHINE	15-1-10
R	PRETTYMAN JEREMY A & BETH A	15-1-19.1
S	BROWN ELEANORE	15-1-11
T	ISKCON - NEW MATHURA VRINDABAN	15-1-12
U	ISKCON - NEW MATHURA VRINDABAN	15-1-16.2
V	ISKCON - NEW MATHURA VRINDABAN	15-1-15
W	ISKCON - NEW MATHURA VRINDABAN	15-1-14
X	MARKWEST LIBERTY MIDSTREAM & RESOURCES LLC	15-2-3.1
Y	ANDERSON SARA JO	15-2-4
Z	ISKCON - NEW MATHURA VRINDABAN	15-2-3.6
A2	ISKCON - NEW MATHURA VRINDABAN	15-1-16.1
B2	ISKCON - NEW MATHURA VRINDABAN	15-1-17
C2	ISKCON - NEW MATHURA VRINDABAN	15-1-18
D2	MOWEN JOHN H JR	15-1-18.1
E2	ISKCON NEW VRINDABAN	15-1-18.2
F2	ISKCON - NEW VRINDABAN INC	15-2-5
G2	PATEL RAMESH & VINA	15-2-5.7
H2	ALPERT DIANT	15-2-5.1
I2	GAFFOOR SHAM & VIDYA RAMKAREE	15-2-3.8
J2	HELLER ELUCIA N	15-2-3.9

ADJOINING OWNERS TABLE		
TRACT	SURFACE OWNER	TAX PARCEL
K2	FRAENKELANDY & RUTH	15-2-3.7
L2	FRAENKELANDY & RUTH	15-2-3.2
M2	FRAENKELANDY & RUTH	15-2-3.4
N2	ISKCON - NEW MATHURA VRINDABAN	15-2-3.3
O2	ISKCON - NEW MATHURA VRINDABAN	15-2-3
P2	ISKCON - NEW MATHURA VRINDABAN	15-2-2
Q2	ECO-VRINDABAN, INC	15-1-6
R2	MERINAR KENNETH L ET AL	15-1-6.3
S2	MERINAR KENNETH L ET AL	15-1-6.2
T2	MERINAR JEFFREY T	12-10-8.2
U2	LORENCE THOMAS & SILVIA LAU	15-1-5
V2	ECO-VRINDABAN, INC	15-1-4
W2	HICKORY GLENN M	12-10-8.1
X2	BAUER DEBRA RAE & WHITE WILLIAM E	15-1-2.2
Y2	FINTEL DOUGLAS	15-1-2.1
Z2	ECO-VRINDABAN, INC	15-1-2
A3	FISH PATRICIA A & FREDERICK W	12-10-1.2
B3	SCHAFFER ROY A JR & EDWARD J	12-9-22
C3	GRAY JOHN ALVIN	12-9-21
D3	GRAY JOHN ALVIN	13-3-14
E3	SHEPHERD TIMOTHY & DEBORAH L	13-3-14.4
F3	PROVANCE FRANK J & ELIZABETH & BARRY F	13-3-14.5
G3	STEADMAN FRANKLIN L ET UX	12-9-5.1
H3	MANNERS NATALIE M	12-9-5
I3	TEACOCK JAY M ET UX	12-9-5.3
J3	DYE WILLIAM R	12-9-1
K3	MAAS BRIAN J & AMY C - TRUST	13-3-10
L3	MERINAR JUSTIN K	12-1-21
M3	HADSELL SANDRA L	12-1-20
N3	DUFF JAMES E & BROOKE L CAPP	12-1-22.1
O3	DUFF JAMES E & BROOKE L CAPP	12-1-22
P3	FRAZIER GREGORY SCOTT - TOD	12-1-23
Q3	PALMER ADAM R	12-1-26
R3	FRAZIER GREGORY SCOTT - TOD	12-1-27.1
S3	PALMER ADAM R	12-1-27.2
T3	ADASE GEORGE & LAURIE	12-1-28
U3	SHELLHASE MARK A ET UX	12-1-18
U4	GIZA ALEXANDER C & CHRISTOPHER C	12-1-15

DETAIL "A"

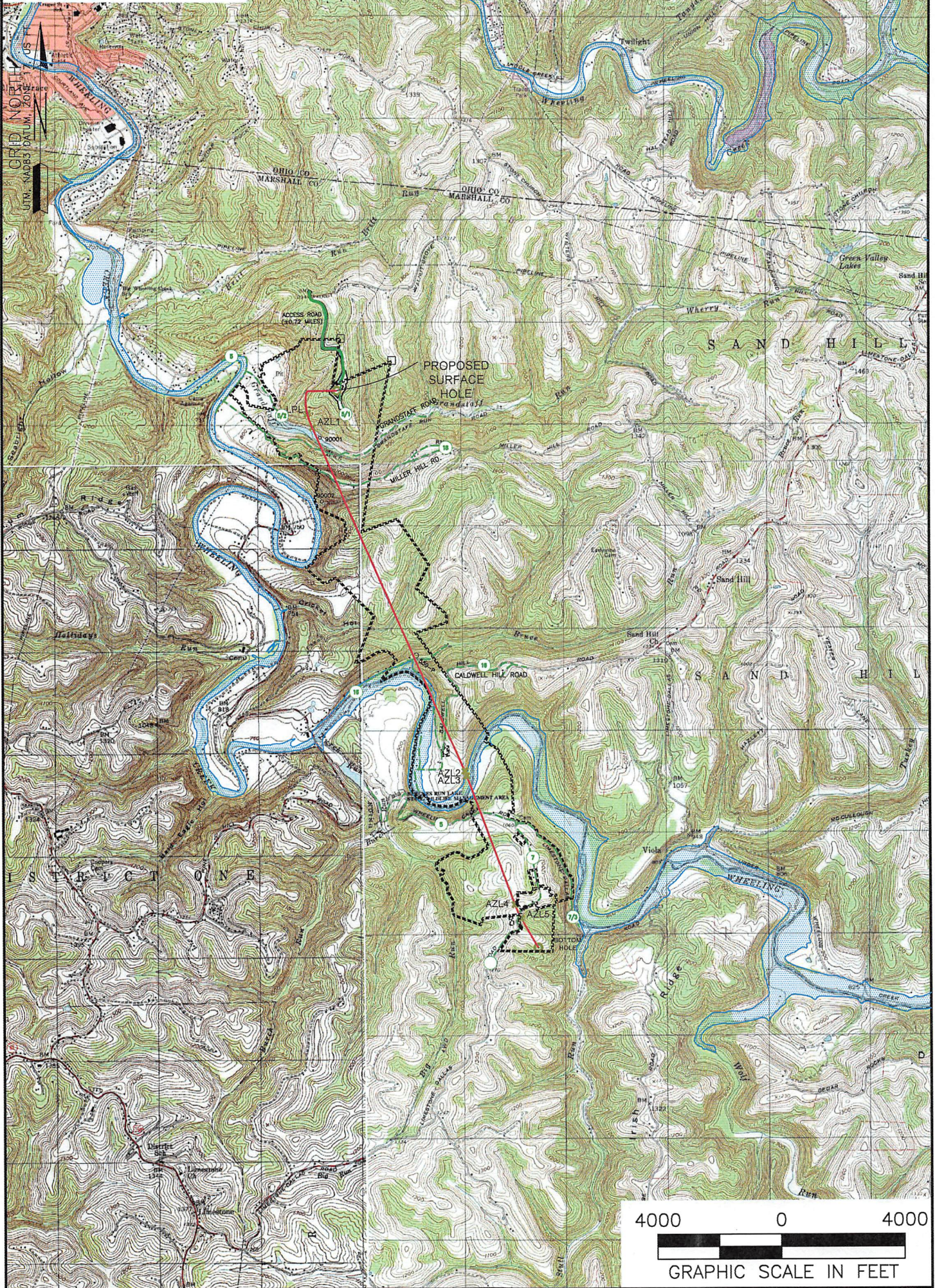


12/09/2022

REVISIONS:	COMPANY:	 		
	OPERATOR'S	BW EDGE MSH	API #:	DATE: 11-03-2022
	WELL #:	6H	47-051-02472	DRAWN BY: N. MANO
	DISTRICT:	SAND HILL	COUNTY:	SCALE: N/A
			STATE: WV	DRAWING NO:
			MOD 1	WELL LOCATION PLAT 2

**JACKSON SURVEYING
INC.**

2413 EAST PIKE ST. # 112
Clarksburg, WV 26301
304-623-5851



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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. THIS PLAT DOES NOT REPRESENT A BOUNDARY SURVEY OF THE PARCELS SHOWN HEREON.
4. 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 PREV. SITE
- LEASE BOUNDARY
- PROPOSED PATH
- ✖ AZL* AZIMUTH POINT LOCATION

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC		WELL (FARM) NAME: BW EDGE MSH		WELL # 6H	SERIAL #
ADDRESS: 1300 FORT PIERPONT RD., SUITE 200 MORGANTOWN, WV 26508		COUNTY - CODE MARSHALL - 051	DISTRICT; SAND HILL		
SURFACE OWNER: WILLIAM F. EDGE, JR. & BARABARA EDGE-TOD & DAVID WAYNE EDGE		USGS 7 1/2 QUADRANGLE MAP NAME WHEELING, WV-OHIO		API #:	

12/09/2022

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, WW-6A1, by SWN Production Company, LLC, Operator
 BW Edge MSH 6H
 Marshall County, West Virginia

RECEIVED
 Office of Oil and Gas

NOV 29 2022

WV Department of
 Environmental Protection

#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG
1)	12-0009-0008-0000	Josephine Fletcher f/k/a Josephine Fisher, a married woman acting in her sole and separate property	NPAR, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	20.00%	707/584 756/332 30/532 33/110
2)	12-0001-0019-0000	Edith Adell Folmar, a widow	SWN Production Company, L.L.C.	18.00%	932/525
3)	12-0009-0006-0001	Wheeling Creek Watershed Protection and Flood Prevention Commission, a West Virginia Corporation, d/b/a Wheeling Creek Watershed Corporation	SWN Production Company, LLC	18.00%	1095/333
4)	12-0009-0006-0000	Richard D. Dye, a/k/a Richard Douglas Dye, a married man dealing in his sole and separate property	SWN Production Company, LLC	15.00%	1073/577
		William R. Dye, a married man dealing in his sole and separate property	SWN Production Company, LLC	15.00%	1073/217
		Kimberly D. Schoger a/k/a Kimberly Dye-Schoger and Matthias D. Schoger, wife and husband	SWN Production Company, LLC	15.00%	1073/501
		Mark M. Dye a/k/a Mark Montgomery Dye and Tania L. Dye, husband and wife	SWN Production Company, LLC	15.00%	1073/601
5)	12-0009-0009-0000	Robert A. Isaly, Jr. and Margaret A. Isaly, husband and wife	Chesapeake Appalachia, L.L.C.	18.00%	834/199
		Connie S. Harris, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	33/110 1073/30
		Edward L. Gardner, II, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	1074/486
		Scott A. Gardner, a married man dealing in his sole and separate property	SWN Production Company, LLC	18.00%	1073/44
		Eric M. Gordon, Esq., as Special Commissioner on behalf of James E. Isaly and his Unknown Heirs and Beneficiaries	SWN Production Company, LLC	18.00%	1114/363
6)	Miller Hill Road	West Virginia Department of Transportation, Division of Highways	SWN Production Company, LLC	20.00%	955/69
7)	12-0009-0010-0000	Golden Eagle Resources II, LLC	American Petroleum Partners Operating, LLC SWN Production Company, LLC	19.00%	965/370 45/381

		Joan Hindman Hutcherson, a widow	TH Exploration, LLC	15.00%	898/593
			American Petroleum Partners Operating LLC		43/497
		George Leslie Kersey, a single person	SWN Production Company, LLC	18.00%	45/381
		Geana Kay Kersey, a single person	SWN Production Company, L.L.C.	18.00%	881/41
		Dennis Mitchell Kersey, a single person	SWN Production Company, L.L.C.	18.00%	881/46
		Tiffany Ann Kersey, a single person	SWN Production Company, L.L.C.	18.00%	883/475
		Gregory Keith Kersey, Jr., a single man	SWN Production Company, LLC	18.00%	886/366
8)	12-0009-0020-0000	Charles B. Fisher and Carla S. Fisher, his wife	TriEnergy, Inc.	12.50%	655/559
			AB Resources LLC		19/623
			Chevron U.S.A. Inc.		756/397
			Chesapeake Appalachia, L.L.C.		30/532
			SWN Production Company, LLC		33/110
9)	12-0009-0019-0000	Robert A. Smith, a married man dealing in his sole and separate property	Chesapeake Appalachia, L.L.C.	18.00%	721/209
			SWN Production Company, LLC		33/110
10)	12-0010-0007-0000	Calvin C. Merinar, divorced, dealing in his sole and separate property	Great Lakes Energy Partners, L.L.C.	14.00%	652/32
			Range Resources - Appalachia, LLC		19/443
			Chesapeake Appalachia, L.L.C.		23/368
			SWN Production Company, LLC		33/110
11)	12-0010-0009-0000	Kenneth Lee Merinar, a married man dealing in his sole separate property, James Martin Mariner, a married man dealing in his sole separate property; Jeffrey Thomas Merinar, a single man; and, Stanley J. Merinar, a married man dealing in his sole separate property	TriEnergy Holdings, LLC	18.75%	706/105
			NPAR, LLC		26/120
			Chevron U.S.A. Inc.		26/201
			Chesapeake Appalachia, L.L.C.		30/532
			SWN Production Company, LLC		33/110
12)	Caldwell Hill Road	West Virginia Department of Transportation, Division of Highways	SWN Production Company, LLC	20.00%	1142/351
13)	12-0010-0008-0000	Glenn M. Hickey, a single man, Stanley L. Merinar, a married man dealing in sole and separate property, and Calvin C. Merinar, a single man	TriEnergy Holdings, LLC	18.75%	706/613
			NPAR, LLC		24/180
			Chevron U.S.A. Inc.		756/332
			Chesapeake Appalachia, L.L.C.		30/532
			SWN Production Company, LLC		33/110

14)	15-0001-0006-0001	Glenn M. Hickey, a single man, Stanley L. Merinar, a married man dealing in sole and separate property, and Calvin C. Merinar, a single man	TriEnergy Holdings, LLC NPAR, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC SWN Production Company, L.L.C.	18.75%	706/613 24/180 756/332 30/532 33/110 860/340
15)	15-0001-0007-0000	Tatia Josephine Rose, a single woman	Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	16.00%	820/167 32/235 33/110
16)	15-0001-0019-0000	Tatia Josephine Rose, a single woman	Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	16.00%	820/167 32/235 33/110
17)	15-0001-0016-0000	International Society of Krishna Consciousness - New Mathura Vrindaban, Inc. by Carlos Ordonez, President	NPAR, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	696/144 756/332 30/532 33/110
18)	15-0001-0016-0003	ISKCON New Vrindaban, Inc.	American Petroleum Partners Operating, LLC SWN Production Company, LLC	20.00%	979/22 45/381
19)	15-0002-0003-0005	Gorakshya-Seva & Environmental Education Trust Of America, Inc. (dba GEETA)	NPAR, LLC Chevron U.S.A. Inc. Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.75%	696/94 756/332 30/532 33/110

* 18 & 19 added/updated leases

August 2, 2022

Mr. Charles Brewer
WV DEP Office of Oil & Gas
601 57th St., SE
Charleston, WV 25304


RE: SWN's proposed New Well: BW Edge MSH 6H in Marshall County, West Virginia, Drilling under Walnut Grove Road, Grandstaff Road, Miller Hill Road, Caldwell Hill Road, Big Wheeling Creek Road, Lowers Stull Run Road, and McCreary's Ridge Road.

Dear Mr. Brewer:

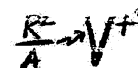
SWN Production Company, LLC ("SWN") is applying for a drilling permit for the above referenced well. The State of West Virginia has raised some concern as to SWN's right to drill under Walnut Grove Road, Grandstaff Road, Miller Hill Road, Caldwell Hill Road, Big Wheeling Creek Road, Lowers Stull Run Road, and McCreary's Ridge Road. Please be advised that SWN has leased all mineral owners under said route as it relates to the above-referenced well and unit.

Thank you.

Sincerely,



Andrew Rielly
Staff Landman
SWN Production Company, LLC



November 28, 2022

Mr. Charles Brewer
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

RE: Proposed Expedited Modification: BW Edge MSH 6H

Dear Mr. Brewer:

Enclosed please find the required documents to modify this well. We would like to extend the lateral. This well is situated on the Edge's property, in Sand Hill District, Marshall County, West Virginia.

Enclosed you will find:

- 6B
- WBD
- Mylar
- 6A1

If you have any questions or desire additional information, please me at 304-884-1613

Thank you.

Sincerely,



Brittany Woody
Senior Regulatory Analyst
Southwestern Energy Production Company, LLC

RECEIVED
Office of Oil and Gas

NOV 29 2022

WV Department of
Environmental Protection





Stansberry, Wade A <wade.a.stansberry@wv.gov>

Expedited Modification Horizontal H6A Well Work Permit API : (47-051-02472)

1 message

Stansberry, Wade A <wade.a.stansberry@wv.gov>

Wed, Dec 7, 2022 at 10:57 AM

To: Eric Buzzard <ebuzzard@marshallcountywv.org>, Strader C Gower <strader.c.gower@wv.gov>, Brittany Woody <Brittany_Woody@swn.com>, Liz Gee <liz_gee@swn.com>

I have attached a copy of the newly issued well [permit](#) numbers:

47-051-02472 - BW EDGE MSH 6H

These will serve as your copy.

Thank you,

Wade A. Stansberry

Environmental Resource Specialist 3

West Virginia Department of Environmental Protection

Office of Oil & Gas


601 57th St. SE

Charleston, WV 25304

(304) 926-0499 ext. 41115

(304) 926-0452 fax

Wade.A.Stansberry@wv.gov

 **47-051-02472 - mod.pdf**
9202K

12/09/2022