



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

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Monday, August 31, 2020
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC
POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit Modification Approval for STATE OF WV DNR A BRK 206H
47-009-00299-00-00

Lateral Extension

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.

A handwritten signature in blue ink, appearing to read 'James A. Martin', is positioned above the printed name and title.

James A. Martin
Chief

Operator's Well Number: STATE OF WV DNR A BRK 206H
Farm Name: STATE OF WEST VIRGINIA, BUREAU OF COMME
U.S. WELL NUMBER: 47-009-00299-00-00
Horizontal 6A New Drill
Date Modification Issued: August 31, 2020

Promoting a healthy environment.

WW-6B
(04/15)

API NO. 47-009 - 00299
OPERATOR WELL NO. State of WV DNR A BRK 206H
Well Pad Name: State of WV DNR A BRK

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 009- Brooke 02-Cross 620-Steubenville
Operator ID County District Quadrangle

2) Operator's Well Number: State of WV DNR A BRK 206H Well Pad Name: State of WV DNR A BRK

3) Farm Name/Surface Owner: State of WV, Bureau of Commerce, DNR Public Road Access: Putney Ridge Road

4) Elevation, current ground: 1140' Elevation, proposed post-construction: 1140'

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

Other _____

(b) If Gas Shallow Deep _____

Horizontal _____

6) Existing Pad: Yes or No Yes

C. J. S. 8-11-20

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- 5668', Target Base TVD- 5734', Anticipated Thickness- 66', Associated Pressure- 3727

8) Proposed Total Vertical Depth: 6007' **RECEIVED**
Office of Oil and Gas

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 31,558' **AUG 20 2020**

11) Proposed Horizontal Leg Length: 25261.61 WV Department of Environmental Protection

12) Approximate Fresh Water Strata Depths: 542'

13) Method to Determine Fresh Water Depths: Salinity Profile from DNR A BRK 8H logs (API 47-009-00125) open-hole logs

14) Approximate Saltwater Depths: 692' Salinity Calculations from the DNR A BRK 8H (API 47-009-00125) logs

15) Approximate Coal Seam Depths: 99'

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

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

WW-6B
(04/15)

API NO. 47- 009
 OPERATOR WELL NO. State of WV DNR A BRK 209H
 Well Pad Name: State of WV DNR A BRK

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	H-40	94#	125'	125'	CTS
Fresh Water	13 3/8"	New	H-40	48#	642'	642'	602 sx/CTS
Coal	See	Conductor	Casing				
Intermediate	9 5/8"	New	J-55	36#	1443'	1443'	541 sx/CTS
Production	6"	New	HCP-110	24#	0'	5000'	Head 0.12cu/ft 5502cu 100' inside in
Production	5 1/2"	New	HCP-110	20#	5000'	31,558'	
Liners							

CAD 8-18-70

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	1.19/50% Excess
Fresh Water	13 3/8"	17.5"	0.380	2740	633	Class A	1.19/50% Excess
Coal	See	Conductor	Casing				
Intermediate	9 5/8"	12 1/4"	0.395	3950	1768	Class A	1.19/50% Excess
Production	5 1/2"	8 3/4"	0.361	12360	9500	Class A	1.20/50% Excess
Tubing							
Liners							

RECEIVED
Office of Oil and Gas

AUG 20 2020

WV Department of Environmental Protection

PACKERS

Kind:				
Sizes:				
Depths Set:				

Southwestern Energy Company

Proposed Drilling Program

Well: STATE OF WV DNR A BRK 206
 Field: PANHANDLE FIELD WET
 County: BROOKE
 SHL: 40.3211 Latitude -80.5351 Longitude
 BHL: 40.2551 Latitude -80.5070 Longitude
 KB Elev: 1,166 ft MSL

Re-entry Rig: TBD
 Prospect: PANHANDLE
 State: WV



KB: 26 ft AGL GL Elev: 1,140 ft MSL
 COAL VOID @ 99'

PROD TOC Lead @ 1,463' MD
 PROD TOC Tail @ 5,100' MD

TUBULAR DETAIL

	Size (in)	Weight	Grade	From	To
Conductor/Coal:	20	94.0 #	H-40	0'	125'
Surface:	13.375	48.0 #	H-40	0'	642'
Intermediate:	9.625	36.0 #	J-55	0'	1,443'
Production:	6	24.0 #	HCP-110	0'	5,000'
Production:	5.5	20.0 #	HCP-110	5,000'	31,558'

CEMENT DETAIL

	Sacks	Class	Density
Conductor	189	A	19.3
Surface	602	A	15.6
Intermediate	541	A	15.6
Production Lead	813	A	15.6
Production Tail	5862	A	15.6

KOP at 4,985' MD

Freshwater Depth - 542' TVD
 Coal Depth - 99' TVD
 Saltwater Depth - 692' TVD
 TVD - 6,007'
 TMD - 31,558'

RECEIVED
 Office of Oil and Gas

AUG 20 2020

WV Department of
 Environmental Protection

EOB at 5,721' TVD

5,721' Target Center

TD at 31,558' MD
 6,007' TVD

Onondaga 286' TVD

0' to 125'

0' to 662'
 Air / Mist

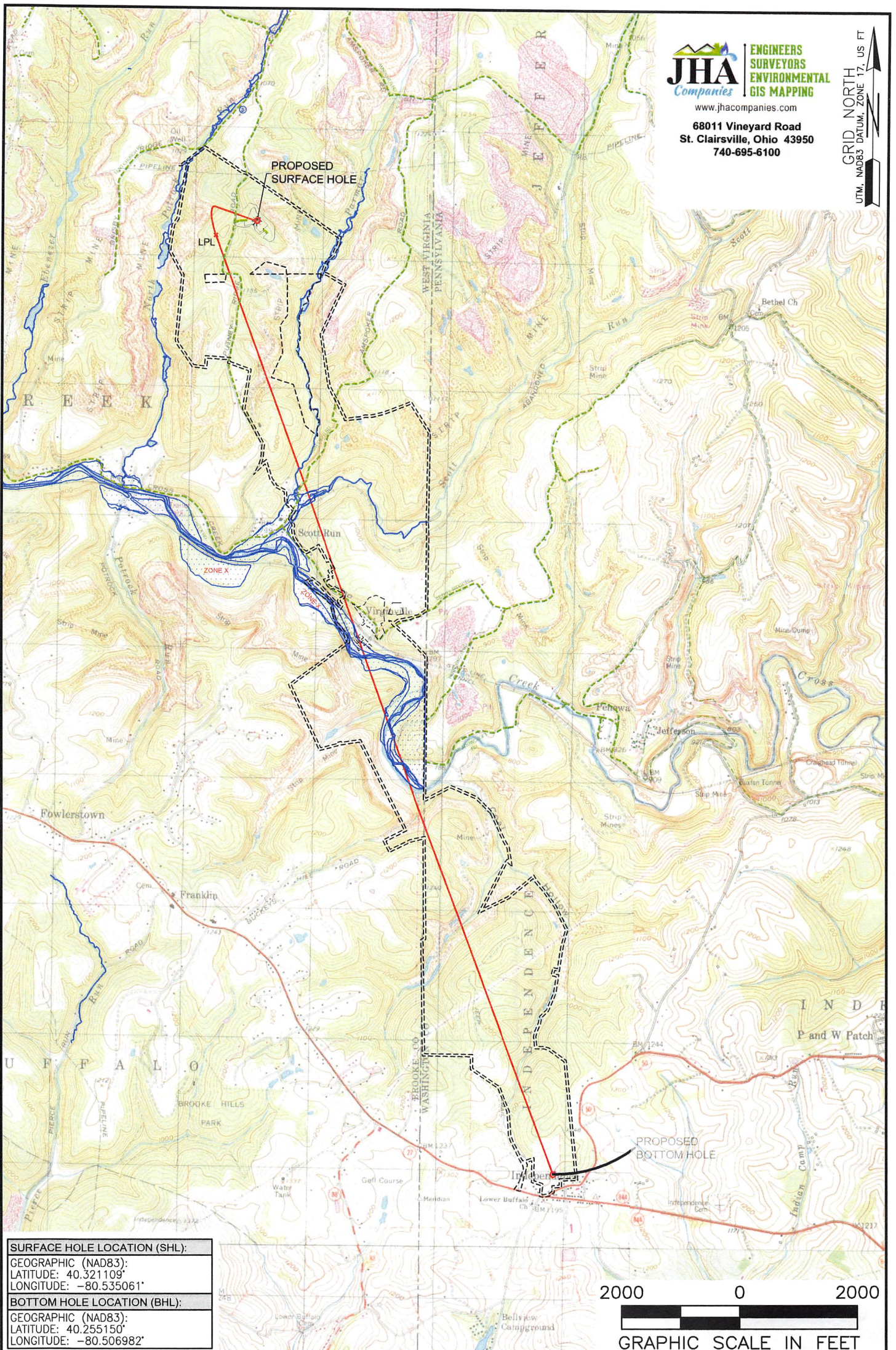
662' to 1,463'
 Air / Mist

1,463' to 4,985'
 Air / Mist

Air
 TD at 4,985'

4,985' to 6,294'
 12.0 - 12.5 ppg

6,294' to 31,558'
 12.0 - 12.5 ppg



SURFACE HOLE LOCATION (SHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.321109°
LONGITUDE: -80.535061°
BOTTOM HOLE LOCATION (BHL):
GEOGRAPHIC (NAD83):
LATITUDE: 40.255150°
LONGITUDE: -80.506982°



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
- FLD FLOOD PLAIN
- NATURAL WATERWAY
- ACCESS ROAD
- PUBLIC ROAD
- ACCESS ROAD TO PREV. SITE
- == LEASE BOUNDARY
- PROPOSED PATH

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC	WELL (FARM) NAME: STATE OF WV DNR A	WELL # BRK 206H	SERIAL # XXXX
ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508	COUNTY: BROOKE	CODE: 009	DISTRICT: CROSS CREEK
SURFACE OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR	USGS 7 1/2 QUADRANGLE MAP NAME: STUEBENVILLE EAST, OH		

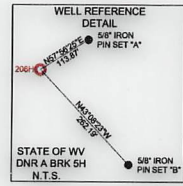
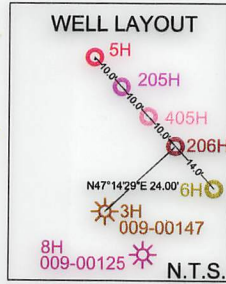
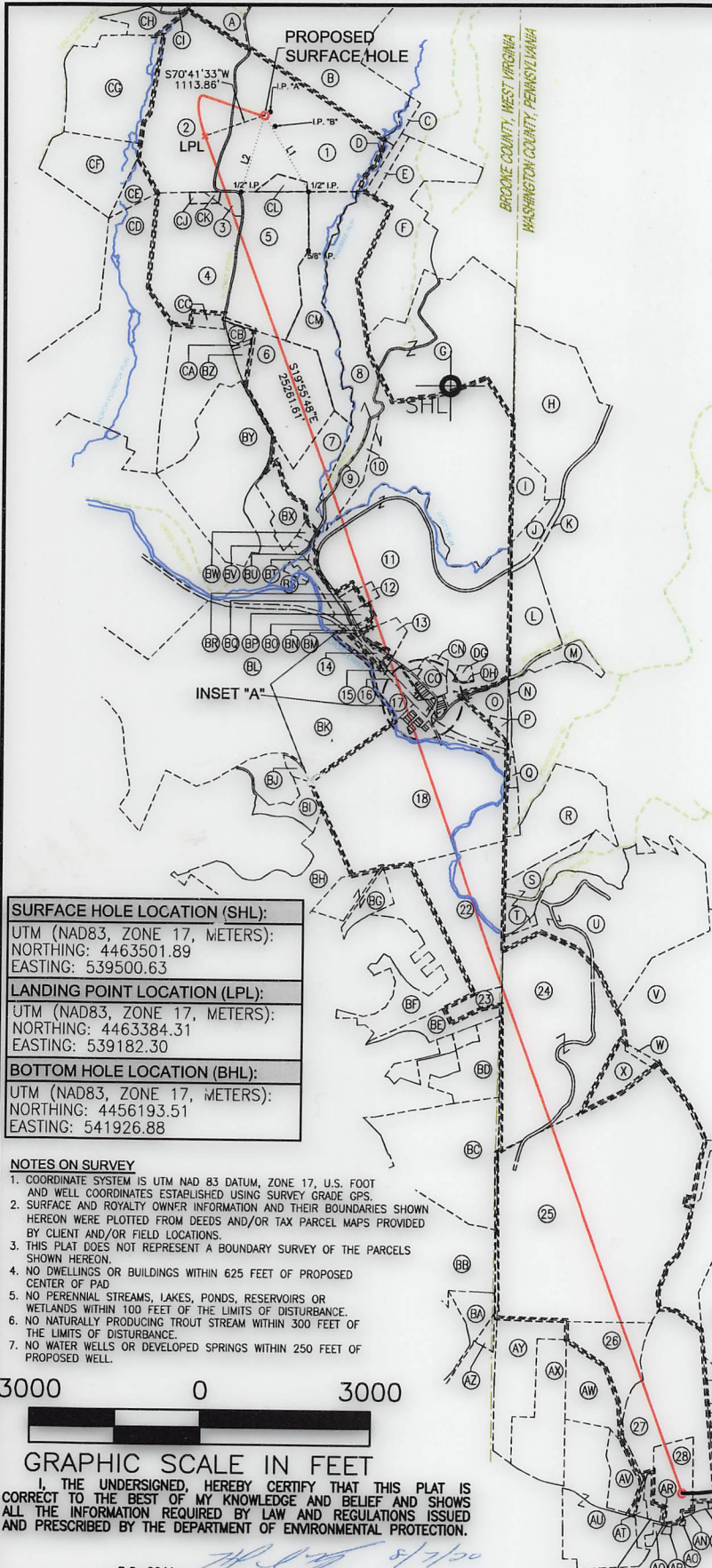
(2000' SCALE) LATITUDE: 40°20'00" SURFACE HOLE

9777'

(2000' SCALE) LATITUDE: 40°17'30" BOTTOM HOLE

1949'

LINE	BEARING	DISTANCE
L1	N29°46'58"W	1550.98'
L2	S16°56'26"W	1414.58'



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

(2000' SCALE) LONGITUDE: 80°30'00" BOTTOM HOLE

13304'

(2000' SCALE) LONGITUDE: 80°30'00" SURFACE HOLE

4454'

SURFACE HOLE LOCATION (SHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4463501.89 EASTING: 5395000.63
LANDING POINT LOCATION (LPL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4463384.31 EASTING: 539182.30
BOTTOM HOLE LOCATION (BHL): UTM (NAD83, ZONE 17, METERS): NORTHING: 4456193.51 EASTING: 541926.88

- 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.

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



JHA Companies
ENGINEERS
SURVEYORS
ENVIRONMENTAL
GIS MAPPING
www.jhacompanies.com

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

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)

STATE OF WV DNR A

OPERATOR'S WELL #: BRK 206H

API WELL #: 47 009 00299

STATE COUNTY PERMIT

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

WATERSHED: UPPER OHIO NORTH ELEVATION: 1139.9'

DISTRICT: CROSS CREEK COUNTY: BROOKE QUADRANGLE: STEUBENVILLE EAST, OH

SURFACE OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR ACREAGE: ±97.50

OIL & GAS ROYALTY OWNER: STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DNR ACREAGE: ±97.50

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

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

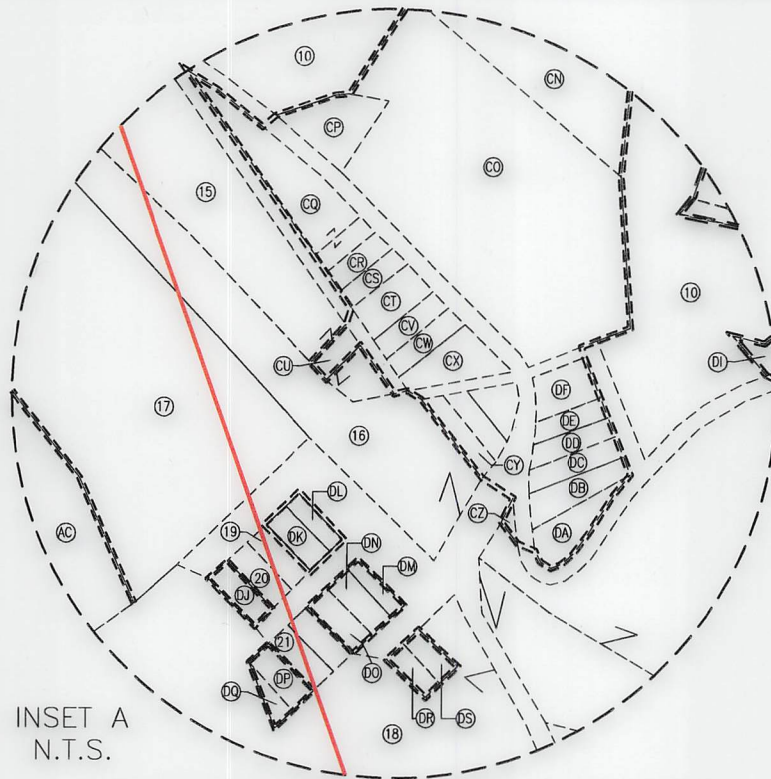
TARGET FORMATION: MARCELLUS ESTIMATED DEPTH: 6,007' TVD 31,558' TMD

WELL OPERATOR: SWN PRODUCTION COMPANY, LLC DESIGNATED AGENT: BRITTANY W ODY

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: 26308

LEGEND:	<ul style="list-style-type: none"> PROPOSED SURFACE HOLE / BOTTOM HOLE EXISTING / PRODUCING WELLHEAD LANDING POINT LOCATION TURNING POINT LOCATION EXISTING WATER WELL EXISTING SPRING NATURAL WATERWAY SURVEYED BOUNDARY LEASE BOUNDARY PROPOSED PATH PUBLIC ROAD 	REVISIONS: DATE: 08-07-2020 API NO: 47-009-XXXXX DRAWN BY: L.CLINE SCALE: 1" = 3000' DRAWING NO: 2019-0789 WELL LOCATION PLAT
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INSET A
N.T.S.

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)	04-CC16-0007.0001
TRACT	SURFACE OWNER	TAX PARCEL
2	STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DIVISION OF NATURAL RESOURCES, PUBLIC LAND CORPORATION FOR THE USE AND BENEFIT OF THE WILDLIFE RESOURCES SECTION	04-CC16-0006.0000
3	FREDA M. DUNN & ROBERT SAUNDRA (L/E FREDA DUNN)	04-CC20-0001.0000
4	WILLIAM & ANNA MAE SAUNDERS	04-CC20-0002.0000
5	COLLIERS SPORTSMAN CLUB	04-CC20-0024.0000
6	COLLIERS SPORTSMAN CLUB	04-CC20-0021.0000
7	WILLIAM MORGAN & DORIS J. ROUSE	04-CC20-0020.0000
8	STATE OF WEST VIRGINIA, BUREAU OF COMMERCE, DIVISION OF NATURAL RESOURCES, PUBLIC LAND CORPORATION FOR THE USE AND BENEFIT OF THE WILDLIFE RESOURCES SECTION	04-CC20-0025.0000
9	STATE OF WEST VIRGINIA DEPARTMENT OF HIGHWAYS	AMSPOKER ROAD
10	DEBORAH K. SLIDAY	04-CC20-0032.0000
11	NICKOLES 3 LLC	04-CC20-0033.0000
12	JEFFREY O. NICKOLES	04-CC20-0033.0001
13	JANE KIERCE	04-C24B-0004.0000
14	STATE OF WEST VIRGINIA, DEPARTMENT OF HIGHWAYS	04-C24B-0005.0000
15	ANNETTE MILLER (L/E FRANK & ANNA MAE MCQUILLAN)	04-C24B-0028.0000
16	NORFOLK & WESTERN RAILWAY CO.	04-C19K-0018.0000
17	NORFOLK & WESTERN RAILWAY CO.	04-C24B-0029.0000
18	MICHAEL OBER	04-CC24-0007.0000
19	MARY ELLEN MORRIS	04-C24F-0003.0000
20	MARY ELLEN MORRIS	04-C24F-0002.0000
21	MICHAEL OBER	04-C24F-0009.0000
22	EUGENE CRUNY	04-CC24-0130.0000
23	STARVAGGI INDUSTRIES	04-CC24-0129.0000
24	BROWNLEE LAND VENTURES	370-1-15-0
25	STATE LINE REAL ESTATE LLC	370-4-1-0
26	RONALD B. JR. & ROSEANNE POWELL	370-7-2-2
27	WILLIAM & GEORGE TACZAK	370-4-47-0
28	OWINGS FAMILY TRUST (JOANNE OWINGS TRUSTEES)	370-4-46-0

REVISIONS:

COMPANY:

SWN
Production Company, LLC

SWN ^{R+} ^A ^{V+} [®]
Production Company™

OPERATOR'S STATE OF WV DNR A

WELL #: 47-001-00299

BRK 206H

DATE: 08-07-2020

API NO: 47-009-XXXXX

DRAWN BY: L.CLIN

DISTRICT:
CROSS CREEK

COUNTY:
BROOKE

STATE:
WV

SCALE: N/A

DRAWING NO: 2019-0789

WELL LOCATION PLAT

COMPLETION ID 2501166537
PAD ID 3001156588

DATE: 08-07-2020
 API NO: 47-009-XXXXX
 DRAWN BY: L.CLINE
 SCALE: N/A
 DRAWING NO: 2019-0789
 WELL LOCATION PLAT

OPERATOR'S STATE OF WV DNR A
 WELL #: 47-009-00299
 BRK 206H
 COUNTY: BROOKE
 STATE: WV

DISTRICT: CROSS CREEK
 REVISIONS:

COMPANY: SWS Production Company, LLC
 SWS Production Company, LLC

ADJOINING OWNERS TABLE

TRACT	SURFACE OWNER	TAX PARCEL
BA	DEBRA MCOULLAN ETAL (1/3 FRANK L & ANNA MAE MCOULLAN)	4-C24B-27
BN	STATE OF WEST VIRGINIA, DEPARTMENT OF HIGHWAYS	4-C24B-3
BO	EDWARD L & CAROL J THOMPSON	4-C24B-2
BP	JEFFREY, RANDY, & GREGORY NICKOLAS (SURVORSHIP)	4-C24B-1
BQ	JAMES & CHARLENE JOHNSON	4-C220-43
BR	TIMOTHY J. DISERIO	4-C220-42
BS	NORFOLK & WESTERN RAILROAD CO.	4-C24B-29
BT	ROBERT G. HIGGINBOTHAM JR.	4-C220-41
BU	RON GASPARIANE	4-C220-40
BV	WILLIAM & MILFREED T. MARINO	4-C220-35
BW	ROBERT & DELORIS CLINE	4-C220-34
BX	LINDY L. & SALLY GALIANO	4-C220-191
BY	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	4-C220-6
BZ	SUSAN D. & DENNIS M. BREEN	4-C220-22
CA	SUSAN D. & DENNIS BREEN (SURVORSHIP)	4-C220-231
CB	WILLIAM C & ANNA MAE SANDERS	4-C220-23
CC	STACI & PATRICK BREEN	4-C220-3
CD	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	4-C219-168
CE	JASON P. NUZUM	4-C219-113
CF	JASON P. NUZUM	4-C215-70
CG	PETER D. & RUTH M. BASKOVICH	4-C215-71
CH	LENDRA J. RINEHART	4-C215-74
CI	LARRY E. REED	4-C215-88.1
CJ	DAVID C. DAMI	4-C220-2.1
CK	DAVID C. DAMI	4-C220-1.1
CL	COLLIERS SPORTSMANS CLUB	4-C220-45
CM	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	4-C220-25.1
CN	NICKOLAS J LLC	4-C220-33
CO	ANNETTE MILLER	4-C24B-7
CP	GREGORY NICKOLAS	4-C24B-6
CQ	DEBRA MCOULLAN ETAL (1/3 FRANK L & ANNA MAE MCOULLAN)	4-C24B-27
CR	FRANKLIN WINSKI	4-C24B-25
CS	FRANKLIN WINSKI	4-C24B-24
CT	ALICE M. STEVENS	4-C24B-23
CU	DEBRA MCOULLAN & ANNETTE MILLER (1/3 FRANK L & ANNA MAE MCOULLAN)	4-C24B-19
CV	DENNIS F. MCOULLAN	4-C24B-22
CW	DENNIS F. MCOULLAN	4-C24B-21
CX	KATHY E. LAWRENCE	4-C24B-20
CY	GREG & CAROL NICKOLAS	4-C24B-18
CZ	JAMES & CHARLENE JOHNSON (SURVOR)	4-C24B-10
DA	GREG & CAROL NICKOLAS	4-C24B-11
DB	GREG & CAROL NICKOLAS	4-C24B-12
DC	GREG & CAROL NICKOLAS	4-C24B-13
DD	GREG & CAROL NICKOLAS	4-C24B-14
DE	H3 LLC	4-C24B-15
DF	NICKOLAS J LLC	4-C220-33
DG	RANDY L. NICKOLAS	4-C24B-8
DH	RANDY L. NICKOLAS	4-C24B-33
DI	JEFFREY NICKOLAS	4-C24B-9
DJ	MICHAEL L. OBER	4-C24F-1
DK	MARY ELLEN MORRIS	4-C24B-31
DL	MARY ELLEN MORRIS	4-C24B-30
DM	ROBERT & PEGGY ANKROM (JWS)	4-C24F-6
DN	ROBERT & PEGGY ANKROM (JWS)	4-C24F-7
DO	JOSEPH & LINA (SURVOR)	4-C24F-8
DP	MICHAEL L. OBER	4-C24F-10
DQ	*UNKNOWN*	4-C24F-11
DR	ROBERT & PEGGY ANKROM (JWS)	4-C24F-12
DS	ROBERT & PEGGY ANKROM (JWS)	4-C24F-13

ADJOINING OWNERS TABLE

TRACT	SURFACE OWNER	TAX PARCEL
A	THE PALFAY IRREVOCABLE TRUST (DENNIS PALFAY III)	04-C216-0005.0000
B	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-C216-0008.0000
C	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-C216-0009.0000
D	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-C220-0046.0000
E	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-C220-0027.0000
F	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-C220-0031.0000
G	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	04-C220-0031.0000
H	PENWER CONSTRUCTION COMPANY	380-14-4-0
I	PENWER CONSTRUCTION COMPANY	380-14-3-0
J	GALVIN H. MYERS JR.	380-14-2-0
K	PITTSBURGH & WEST VIRGINIA RAILROAD CO.	380-14-1-0
L	RANDY L. NICKOLAS	380-15-19-0
M	WILLIAM & CAROLYN R. ROTTELLINI	380-15-18-1
N	*UNKNOWN*	380-15-18-1
O	JEFFREY O. NICKOLAS	04-C24F-0009.0000
P	PITTSBURGH & WEST VIRGINIA RAILWAY CO.	04-C24F-0014.0000
Q	JERRY & LINDA MCNEELY	380-15-1-2
R	ROBERT ROTTELLINI & ANDREA L. PUSKARICH	380-15-9-0
S	EUGENE CRUYN & JERAM A. JOSEPH	380-15-8-0
T	EUGENE CRUYN & JERAM A. JOSEPH	380-15-8-0
U	DANIEL BANOVICH	370-1-1-0
V	PETER J. KLOVAINICH INC.	370-1-12-0
W	BROWNLEE LAND VENTURES	370-1-15-0
X	KENNETH D. JR. & CECILIA C. VARNER	370-1-14-0
Y	KENNETH D. JR. & CECILIA C. VARNER	370-4-3-0
Z	ANGELO F. & PHILIP FALCONI	370-4-3-0
AA	DAVID L. & KELLY L. PERRIN	370-4-52-7
AB	DAVID L. & KELLY L. PERRIN	370-4-52-8
AC	DAREN L. PERRIN	370-4-52-9
AD	JASON STENGER	370-4-52-5
AE	MARK & CYNTHIA CECCHINI	370-4-52-6
AF	MARK & CYNTHIA CECCHINI	370-4-52-4
AG	MARK & CYNTHIA CECCHINI	370-4-52-2
AH	JOHN P. JR. DIBBLE & RACHELE E. PADILLA	370-4-52-3
AI	JOHN P. JR. DIBBLE & RACHELE E. PADILLA	370-4-52-0
AL	DUANE C. & RUTH ANN RYANWEC	370-8-1-1-8-1
AM	GARY W. DUPRIN	370-8-1-1-7-0
AN	DONALD ALBERT SELLA & USA HAMILTON	370-8-1-1-6-0
AO	TRUDI PITTMAN RUSH	370-8-1-2-1-0
AP	FRANCIS M. JR. & MARGARET T. COOKE	370-8-1-3-4-0
AQ	LOWER BUFFALO PRESBYTERIAN CHURCH	370-8-1-3-2-0
AR	NORMA V. HADDON	370-8-1-1-3-0
AS	NORMA V. HADDON	370-8-1-1-1-0
AT	WILLIAM & GEORGE TACZAK	370-8-1-1-1-1
AU	ROBERT G. & NANCY L. BRIGGS	370-7-0-0-2-0
AV	DAVID J. & JOANNE K. DEMPSTER	370-7-0-0-2-3
AW	CHEERY BUTA	370-7-0-0-2-1
AX	JOSEPH J. DEPERO III	370-7-0-0-1-0
AY	RYAN M. & BROOKE N. SMITH	370-7-0-0-1-1
AZ	NEAL E. & JOANNE W. SMITH	4-C229-194.2
BA	RUTH ANN STEWART & MADELOE DAWN JACKSON	4-C229-194
BB	ROBERT LEE FRESHWATER	4-C229-134
BC	DEBRA CYPHER(1/2) MATTHEW FAIR(1/4) SUSAN BRUFFY(1/4)	4-C229-57
BD	ELLEN CATTARUZZA	4-C229-39
BE	MICHAEL D. & LOIS J. JONES	4-C229-128
BF	DEAN SMITH	4-C224-98
BG	DEAN SMITH	4-C224-98
BH	GEORGE L. BRADLEY	4-C224-55
BI	RAYMOND S. & DENNIS P. CROSS	4-C224-13
BJ	WHEELING ENERGY WORKS LTD	4-C224-8
BK	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	4-C224-3
BL	STATE OF WEST VIRGINIA, DIVISION OF NATURAL RESOURCES	4-C23-325

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
See Exhibit "A"				

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**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

WV Department of
Environmental Protection

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: SWN Production Company, LLC
 By: *Bailey R. ...*
 Its: Landman - SW Appalachia

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
State of WV DNR A BRK 206H
Brooke County, West Virginia

#	TMP	LESSOR	LESSEE	ROYALTY	BK/PG
1)	04-CC16-0007-0001	LPS Investment Partnership, a limited partnership formed under, and existing pursuant to, the laws of the Commonwealth of Pennsylvania	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	18/635 30/480
2)	04-CC16-0006-0000	Starvaggi Industries, Incorporated	Fortuna Energy, Inc. Range Resources - Appalachia, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	9/532 10/226 10/541 30/480
3)	04-CC20-0001-0000	Freda M. Dunn, a widow (Life Estate Interest) and Sandra L. Dunn, a single woman (Remainder Interest) and Robert W. Dunn and Amanda Dunn, husband and wife (Remainder Interest)	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	21/745 30/480
4)	04-CC20-0002-0000	William C. Saunders, single	Great Lakes Energy Partners, L.L.C. Range Resources - Appalachia, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	10/133 20/733 10/552 30/480
5)	04-CC20-0024-0000	Starvaggi Industries, Incorporated	Fortuna Energy, Inc. Range Resources - Appalachia, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	9/532 10/226 10/541 30/480
6)	04-CC20-0021-0000	Starvaggi Industries, Incorporated	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	22/514 30/480
7)	04-CC20-0020-0000	William Morgan Rouse and Doris Jean Rouse, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	14.00%	20/680 30/480
8)	04-CC20-0025-0000	Starvaggi Industries, Incorporated	Fortuna Energy, Inc. Range Resources - Appalachia, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	12.50%	9/532 10/226 10/541 30/480
9)	Ampoker Road	West Virginia Department of Transportation, Division of Highways	SWN Production Company, LLC	20.00%	56/205
10)	04-CC20-0032-0000	John J. Sliday and Deborah K. Sliday, husband and wife	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	18/476 30/480
11)	04-CC20-0033-0000	Nickoles 3, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	18/471 30/480

12)	04-CC20-0033-0001	Nickoles 3, LLC	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	18/471 30/480
13)	04-C24B-0004-0000	Jane Kierce, n/k/a Ruth Jane Afuso, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	52/339
14)	04-C24B-0005-0000	Jane Kierce, n/k/a Ruth Jane Afuso, a married woman dealing in her sole and separate property	SWN Production Company, LLC	18.00%	52/339
15)	04-C24B-0028-0000	Frank L. McQuillian, also know as Frank L. McQuillan and Anna Mae McQuillian, also known as Anna Mae McQuillan, husband and wife	SWN Production Company, L.L.C.	18.00%	40/738
		Louis F. McQuillian and Kelley A. McQuillian, husband and wife	SWN Production Company, L.L.C.	18.00%	40/721
		Annette Miller, single	SWN Production Company, L.L.C.	18.00%	40/729
16)	04-C19K-0018-0000	Wheeling & Lake Erie Railway Company, a Delaware Corporation, sublessee of the Pittsburgh & West Virginia Railway Company	SWN Production Company, LLC	18.00%	53/702
17)	04-C24B-0029-0000	Wheeling & Lake Erie Railway Company, a Delaware Corporation, sublessee of the Pittsburgh & West Virginia Railway Company	SWN Production Company, LLC	18.00%	53/702
18)	04-CC24-0007-0000	Michael Ober, a single man	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	18.00%	11/385 30/480
19)	04-C24F-0003-0000	Mary Ellen Morris, a divorced woman	SWN Production Company, L.L.C.	16.00%	35/83
20)	04-C24F-0002-0000	Mary Ellen Morris, a divorced woman	SWN Production Company, L.L.C.	16.00%	35/83
21)	04-C24F-0009-0000	Michael L. Ober, a single man	SWN Production Company, L.L.C.	17.00%	34/674
22)	04-CC24-0130-0000	Sharon K. Riggs, a single woman	Chesapeake Appalachia, L.L.C. SWN Production Company, LLC	15.00%	19/618 30/480
		Clayton W. Seiple and Lisa L. Seiple, husband and wife	SWN Production Company, L.L.C.	18.00%	51/531
		Kevin W. Seiple	SWN Production Company, L.L.C.	18.00%	51/786

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23)	04-CC24-0129-0000	Starvaggi Industries, Incorporated	Fortuna Energy, Inc.	12.50%	9/532
			Range Resources - Appalachia, LLC		10/226
			Chesapeake Appalachia, L.L.C.		10/541
			SWN Production Company, LLC		30/480

August 10, 2020

Ms. Laura Adkins
WV DEP Office of Oil & Gas
601 57th St., SE
Charleston, WV 25304

RE: SWN's proposed New Well: State of WV DNR A BRK 206H in Brooke County, West Virginia, Drilling under Putney Ridge Road, Amspoker Road, and Bethel Ridge Road.

Dear Ms. Adkins:

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 Putney Ridge Road, Amspoker Road, and Bethel 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,



Bailey Brougher
Landman
SWN Production Company, LLC

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WV Department of
Environmental Protection



August 19, 2020

Ms. Laura Adkins
Office of Oil & Gas
601 57th Street
Charleston, WV 25304

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RE: Proposed Expedited Modification: State of WV DNR A BRK 206H

Dear Ms. Adkins

Enclosed please find the required documents to modify this well. We are wanting to extend this lateral. These wells are situated on the DNR As property, in Cross Creek District, Brooke County, West Virginia.

Enclosed you will find:

- Updated 6B
- Updated Casing Program
- Mylar Plat
- 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

*OK # 1052315
Amt \$5000
Date 8/11/20*