



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

Friday, January 17, 2020
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC
POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit Modification Approval for EDWARD DREMAK OHI 210H
47-069-00320-00-00

Modified Lateral to a TMD of 21,694'.

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 written over a faint circular stamp.

James A. Martin
Chief

Operator's Well Number: EDWARD DREMAK OHI 210H
Farm Name: ANDREW JOHN EVICK
U.S. WELL NUMBER: 47-069-00320-00-00
Horizontal 6A New Drill
Date Modification Issued: January 17, 2020

Promoting a healthy environment.

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 069-Ohio 5-Richland 641-Tiltonville & E
Operator ID County District Quadrangle

2) Operator's Well Number: Edward Dremak OHI 210H Well Pad Name: Edward Dremak OHI

3) Farm Name/Surface Owner: Andrew John Evick Public Road Access: Waddells Run Road

4) Elevation, current ground: 1088' Elevation, proposed post-construction: 1088'

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

(b) If Gas Shallow Deep _____
Horizontal

6) Existing Pad: Yes or No Yes

C. Hill 12.5.19

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- 5903', Target Base TVD- 5953', Anticipated Thickness- 50', Associated Pressure- 3870

8) Proposed Total Vertical Depth: 5941'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 21,694'

11) Proposed Horizontal Leg Length: 15104.56'

12) Approximate Fresh Water Strata Depths: 259'

13) Method to Determine Fresh Water Depths: Nearby Spring

14) Approximate Saltwater Depths: 377' Salinity Profile Calculation

15) Approximate Coal Seam Depths: 270'

16) Approximate Depth to Possible Void (coal mine, karst, other): Possible Void 270'

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: _____

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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 | H-40 | 94# | 100' | 100' | CTS |
| Fresh Water | 13 3/8" | New | H-40 | 48# | 343' | 343' | 343 sx/CTS |
| Coal | See | Surface | Casing | | | | |
| Intermediate | 9 5/8" | New | J-55 | 36# | 1633' | 1633' | 639 sx/CTS |
| Production | 5 1/2" | New | HCP-110 | 20# | 21,694' | 21,694' | Size 77 Start/End 30/220x 100' Inside |
| Tubing | | | | | | | |
| Liners | | | | | | | |

C-210 12-5-19

| 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 | Surface | 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 | | | | | | | |

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. The well is produced through surface facilities consisting of high pressure production units, horizontal separation units, water and oil storage tanks. Max press and anticipated max rate- 9000 lbs @ 100 barrels a minute.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 23.7

22) Area to be disturbed for well pad only, less access road (acres): 8

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:

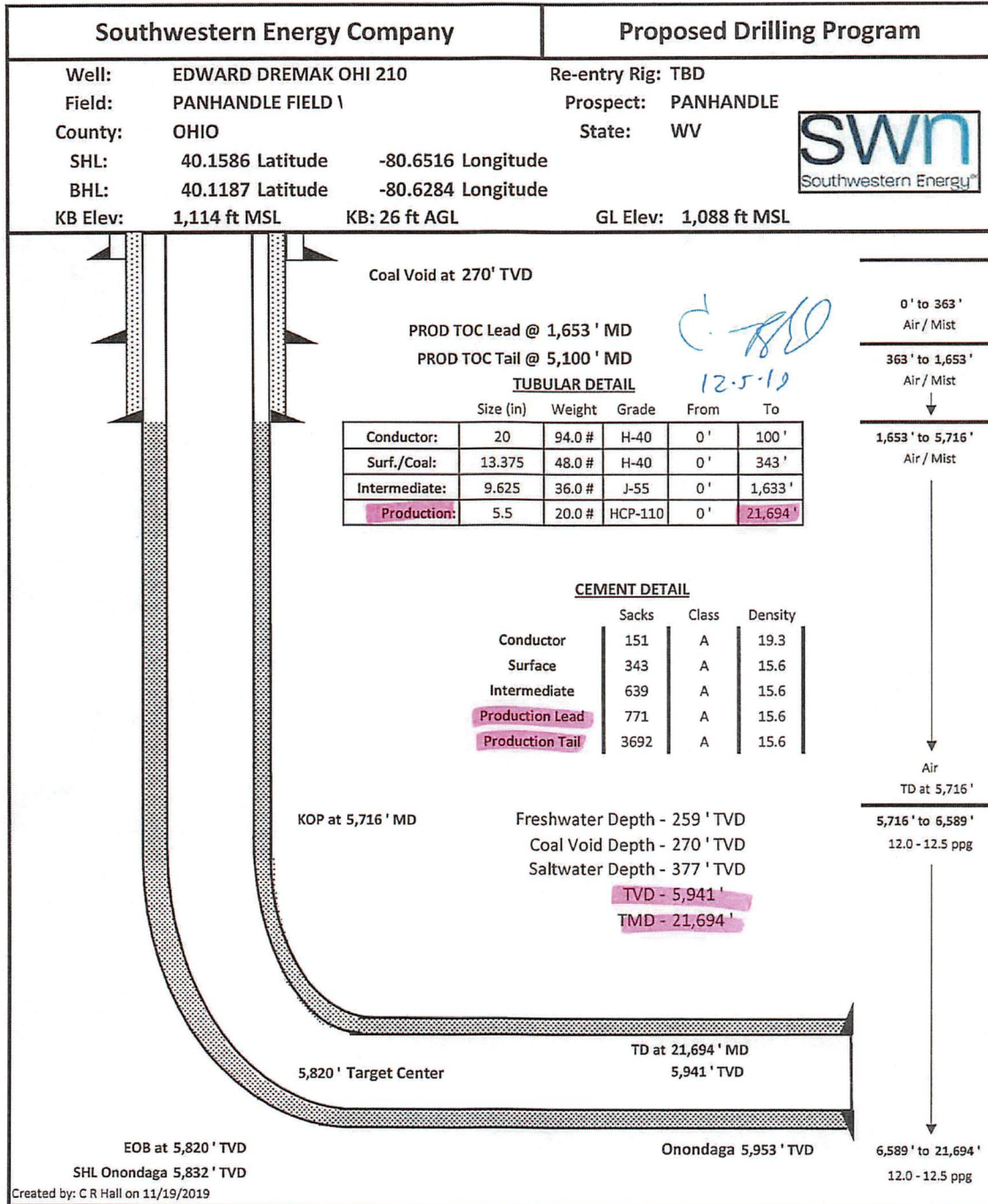
All boreholes will be conditioned with circulation and rotation for a minimum of one bottoms up and continuing until operator is satisfied with borehole conditions.

*Note: Attach additional sheets as needed.

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69-00320 MOD

WW-6A1
(5/13)

Operator's Well No. Edward Dremak OHI 210H

**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"

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

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: *John D. Startz*
 Its: John D. Startz, Technical Expert Landman

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EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, W-6A1, by SWN Production Company, LLC, Operator
Edward Dremak OHI 210H
Ohio County, West Virginia

| # | TMP | LESSOR | LESSEE | ROYALTY | BK/PG |
|----|----------|--|--|---------|--------------------|
| 1) | 4-R5-54 | Edward W. Dremak and Joanne V. Dremak, husband and wife | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 16.75% | 810/722 884/121 |
| 2) | 4-R5-49 | Edward W. Dremak and Joanne V. Dremak, husband and wife | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 16.75% | 810/673 884/109 |
| 3) | 4-R8-8.1 | Noble Energy, Inc. | SWN Production Company, LLC | 18.00% | 920/1 |
| 4) | 4-R5-10 | The Board of Commissioners of Ohio County a/k/a The County Commission of Ohio County | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 18.00% | 802/742 883/415 |
| 5) | 4-R5-55 | The Board of Commissioners of Ohio County a/k/a The County Commission of Ohio County | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 18.00% | 802/742 883/415 |
| 6) | 4-R8-15 | American Disposal Services of West Virginia, Inc. | SWN Production Company, L.L.C. | 16.00% | 921/535 |
| | | Janet Agnew Debar, a widow | SWN Production Company, L.L.C. | 14.00% | 926/724 |
| | | Jean E. Leavitt, a single woman | SWN Production Company, L.L.C. | 14.00% | 926/735 |
| | | Julie A. Lowman Bryant, a married woman dealing in her sole and separate property | SWN Production Company, L.L.C. | 18.00% | 928/546 |
| | | Mark Leavitt, a single man | SWN Production Company, L.L.C. | 14.00% | 926/718 |
| | | Martha E. Wakefield, a widow | SWN Production Company, L.L.C. | 14.00% | 931/339 |
| | | Sally Wakefield Westelin & Alan R. Westelin, wife and husband | SWN Production Company, L.L.C. | 14.00% | 926/741 |

69-60320 WOP

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EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, W-6A1, by SWN Production Company, LLC, Operator
Edward Dremak OHI 210H
Ohio County, West Virginia

| | | | | | |
|----|-----------|---|--------------------------------|--------|---------|
| | | Stephen Guy Lowman, a single man | SWN Production Company, L.L.C. | 18.00% | 928/525 |
| | | Thomas Leavitt, a single man | SWN Production Company, L.L.C. | 14.00% | 926/660 |
| 7) | 4-R8-22 | Tunnel Ridge, LLC | SWN Production Company, L.L.C. | 17.00% | 916/91 |
| 8) | 4-R8-61 | American Disposal Services of West Virginia, Inc, a Delaware Corporation | SWN Production Company, L.L.C. | 16.00% | 921/535 |
| | | James M. Taggart, a single man | SWN Production Company, L.L.C. | 16.00% | 926/112 |
| | | Shannon Wilds-Jones, a married woman dealing in her sole and separate property | SWN Production Company, L.L.C. | 16.00% | 926/100 |
| | | Robert Daniel Taggart, a married man dealing in his sole and separate property | SWN Production Company, L.L.C. | 16.00% | 926/106 |
| | | John S Taggart, Sr, a married man dealing in his sole and separate property | SWN Production Company, L.L.C. | 16.00% | 929/190 |
| | | Catherine Cashmareck, a widow | SWN Production Company, L.L.C. | 18.00% | 933/559 |
| | | Barbara DeWitt, a married woman dealing in her sole and separate property | SWN Production Company, L.L.C. | 18.00% | 937/670 |
| | | Linda Michelle McCloud, a married woman dealing in her sole and separate property | SWN Production Company, L.L.C. | 18.00% | 937/661 |
| | | John A. Sikish and Lucinda Sikish, husband and wife | SWN Production Company, L.L.C. | 18.00% | 937/664 |
| 9) | 4-R8-61.4 | Tunnel Ridge, LLC | SWN Production Company, LLC | 17.00% | 916/91 |

109-60320MAY

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Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, W-6A1, by SWN Production Company, LLC, Operator
Edward Dremak OHI 210H
Ohio County, West Virginia

| | | | | | |
|-----|--------------|--|--|----------------------|--|
| | | Catherine Cashmareck, a widow | SWN Production Company, L.L.C. | 18.00% | 933/559 |
| | | James M. Taggart, a single man | SWN Production Company, L.L.C. | 16.00% | 931/304 |
| | | John S. Taggart, Sr., a married man dealing in his sole and separate property | SWN Production Company, L.L.C. | 16.00% | 931/347 |
| | | Robert Daniel Taggart, a married man dealing in his sole and separate property | SWN Production Company, L.L.C. | 16.00% | 931/281 |
| | | Shannon Wilds-Jones, a married woman dealing in her sole and separate property | SWN Production Company, L.L.C. | 16.00% | 931/310 |
| | | Barbara Dewitt, a married woman dealing in her sole and separate property | SWN Production Company, L.L.C. | 18.00% | 937/670 |
| | | Linda Michelle McCloud, a married woman dealing in her sole and separate property | SWN Production Company, L.L.C. | 18.00% | 937/661 |
| | | John A. Sikish and Lucinda Sikish, husband and wife | SWN Production Company, L.L.C. | 18.00% | 937/664 |
| 10) | 4-R12-1 | Elias Joseph, a married man dealing in his sole and separate property | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 18.00% | 816/108 884/205 |
| 11) | 4-R12-23.15 | Harry A. Rumis Jr., and Edith J. Rumis, Trustees of the Rumis Revocable Trust dated November 22, 1999 | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 18.00% | 867/664 884/669 |
| 12) | 4-R12E-23.29 | Fir Drive, LLC | American Petroleum Partners Operating, LLC SWN Production Company, LLC | 18.00% | 946/505 971/600 |
| 13) | 4-R12E-23 | Andrew R. Cohen, a/k/a Andrew Cohen, a married man dealing in his sole and separate property Peggy Jo Cohen a/k/a Peggy Cohen, a single woman | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 18.00% 18.00% | 845/361 885/65 845/355 885/65 |

109-00320MAD

EXHIBIT "A"

Attached to and made a part of the State of West Virginia Oil and Gas Permit Form, W-6A1, by SWN Production Company, LLC, Operator
Edward Dremak OHI 210H
Ohio County, West Virginia

| | | | | | |
|-----|-----------|---|--|--------|--------------------|
| 14) | 4-R12J-45 | Lynn M. Kaminski, a widow | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 14.00% | 840/139 885/13 |
| 15) | 4-R12-7 | Phillip E. Withum and Mary Catherine Withum, husband and wife | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 18.00% | 811/301 884/157 |
| 16) | 4-R12-13 | Ramon H. Fagundo and Louann V. Fagundo, husband and wiffe | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 18.00% | 812/34 884/169 |
| 17) | 4-R12-12 | W. Quay Mull, II, a married man dealing in his sole and separate property | Chesapeake Appalachia, L.L.C. SWN Production Company, LLC | 14.00% | 799/213 884/217 |

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Environmental Protection

69-06320 Rev D

69-00320 Mod



SWN Production Company, LLC
P O Box 12359
Spring, Texas 77391-2359
www.swn.com

December 5, 2019

Ms. Laura Adkins
West Virginia Department of Environmental Protection
Division of Oil and Gas Management
601 57th Street
Charleston, WV 25304

Subject: Modification
SWN Production Company, LLC
Farm Name: Andrew John Evick
Well Nos.: Edward Dremak OHI 210H
API Nos.: 47-069-00320
Richland District, Ohio County, West Virginia

Dear Ms. Adkins:

SWN Production Company, LLC ("SWNPC") hereby respectfully submits to the West Virginia Department of Environmental Protection (the "Department") the enclosed permit modification for our Edward Dremak OHI 210H well. The modification being requested is lengthening the lateral of the well.

Enclosed with this permit modification are the following documents, with the changes highlighted:

- Revised Form WW-6B, including the revised TVD, TMD, horizontal leg length and casing;
- Revised Well Bore Diagram;
- A new mylar plat; and
- A new Form WW-6A1

If you have any questions, please do not hesitate to contact Brittany Woody at (304) 884-1613, or via email at brittany_woody@swn.com.

Respectfully submitted,


Carla L. Suszkowski
Regulatory Manager

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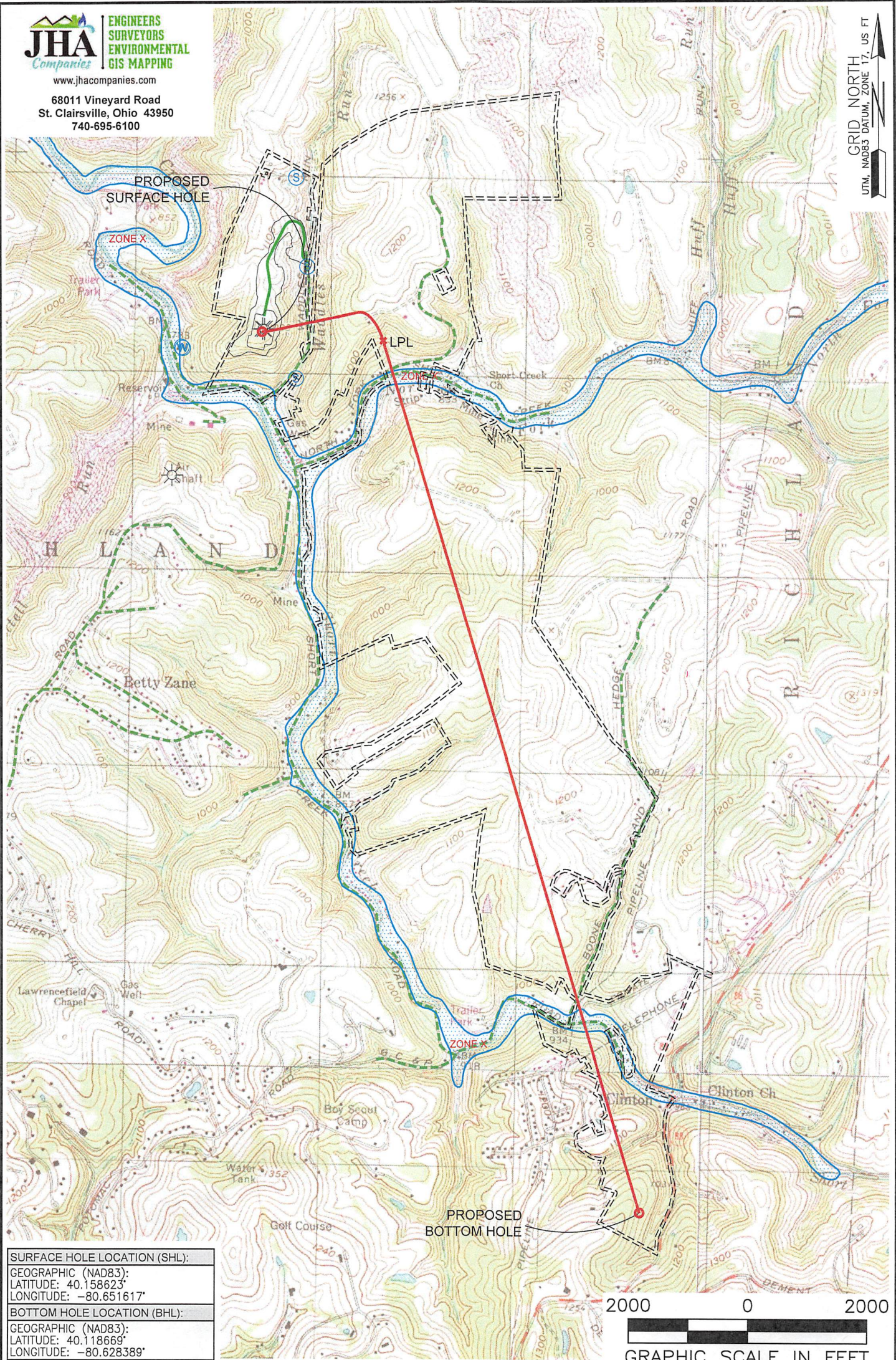




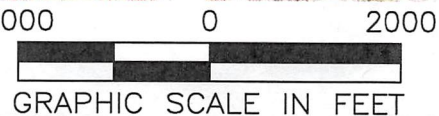
www.jhacompanies.com

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: 40.158623° |
| LONGITUDE: -80.651617° |
| BOTTOM HOLE LOCATION (BHL): |
| GEOGRAPHIC (NAD83): |
| LATITUDE: 40.118669° |
| LONGITUDE: -80.628389° |



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 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: EDWARD DREMAK OHI | | WELL # 210H | SERIAL # XXXX |
| ADDRESS: 1300 FORT PIERPONT DRIVE, SUITE 201, MORGANTOWN, WV 26508 | | COUNTY: OHIO | CODE: 069 | DISTRICT: RICHLAND | API # 47-069-XXXX |
| SURFACE OWNER: ANDREW JOHN EVICK | | USGS 7 1/2 QUADRANGLE MAP NAME: TILTONVILLE, OH-WV & WHEELING, WV | | | |

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

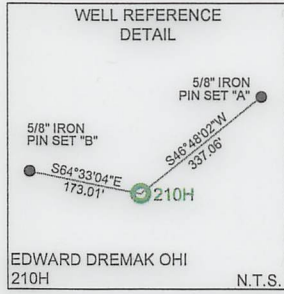
7436'

LATITUDE: 40°07'30" BOTTOM HOLE (2000' SCALE) 943'

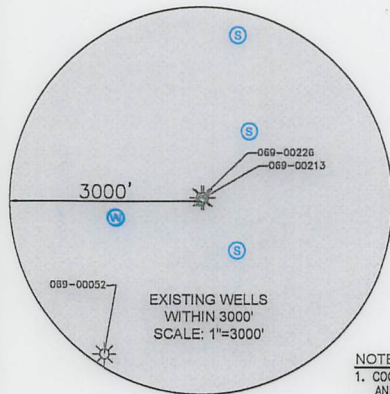


www.jhacompanies.com

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



| LINE | BEARING | DISTANCE |
|------|-------------|----------|
| L1 | S85°13'02"W | 778.42' |
| L2 | N78°51'21"W | 793.04' |



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 PLAN 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.



SURFACE HOLE LOCATION (SHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4445421.26
EASTING: 529668.95

LANDING POINT LOCATION (LPL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4445385.59
EASTING: 530287.56

BOTTOM HOLE LOCATION (BHL):
UTM (NAD83, ZONE 17, METERS):
NORTHING: 4440994.58
EASTING: 531665.64

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



(+) 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 ELEVATION: GRADE GPS (NAVD 88, US FT)

COMPANY: **SWN** Production Company, LLC

EDWARD DREMAK OHI
OPERATOR'S WELL #: 210H

API WELL #: 47 STATE 069 COUNTY PERMIT 00320M0D

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

WATERSHED: UPPER OHIO SOUTH ELEVATION: 1,088.0'-DESIGN

DISTRICT: RICHLAND COUNTY: OHIO QUADRANGLE: TILTONSVILLE, OH-WV & WHEELING, WV

SURFACE OWNER: ANDREW JOHN EVICK ACREAGE: ±34.19

OIL & GAS ROYALTY OWNER: EDWARD W. & JOANNE V. DREMAK ACREAGE: ±34.19

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: 5,941' TVD 21,694' TMD

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: |
|---------------------------------------|------------|----------------------|
| ○ PROPOSED SURFACE HOLE / BOTTOM HOLE | | 11-20-2019 |
| ⊙ EXISTING / PRODUCING WELLHEAD | | API NO: 47-069-XXXX |
| ⊙ LPL | | DRAWN BY: R. GRIMES |
| ⊙ EXISTING WATER WELL | | SCALE: 1" = 3000' |
| ⊙ EXISTING SPRING | | DRAWING NO: 2018-284 |
| — NATURAL WATERWAY | | WELL LOCATION PLAT |
| — SURVEYED BOUNDARY | | |
| — LEASE BOUNDARY | | |
| — PROPOSED PATH | | |
| — PUBLIC ROAD | | |

| WELL BORE TABLE FOR SURFACE / ROYALTY OWNERS | | |
|--|---|---------------|
| TRACT | SURFACE OWNER (S) / ROYALTY OWNER (R) | TAX PARCEL |
| 1 | ANDREW JOHN EVICK (S) EDWARD W. & JOANNE V. DREMAK (R) | 04-R5-54.0 |
| TRACT | SURFACE OWNER | TAX PARCEL |
| 2 | EDWARD W. & JOANNE DREMAK | 04-R5-49.0 |
| 3 | WINDSOR POWER HOUSE COAL COMPANY | 04-R8-08.1 |
| 4 | OHIO COUNTY BOARD OF COMMISSIONERS | 04-R5-10.0 |
| 5 | OHIO COUNTY BOARD OF COMMISSIONERS | 04-R5-55.0 |
| 6 | AMERICAN DISPOSAL SERVICES OF WEST VIRGINIA, INC | 04-R8-15.0 |
| 7 | TUNNEL RIDGE, LLC | 04-R8-22.0 |
| 8 | AMERICAN DISPOSAL SERVICES OF WEST VIRGINIA, INC | 04-R8-61.0 |
| 9 | TUNNEL RIDGE, LLC | 04-R8-61.4 |
| 10 | JOSEPH ELIAS | 04-R12-01.0 |
| 11 | MICHAEL THOMAS & MICHELLE LYNN RATCLIFFE | 04-R12-23.15 |
| 12 | SEAN P. & KATIE M. SMITH | 04-R12E-23.29 |
| 13 | GREGORY J. & SHERRI L. POND | 04-R12E-23.0 |
| 14 | LYNN M. KAMINSKI | 04-R12J-45.0 |
| 15 | LORI JEAN HENRY | 04-R12-07.0 |
| 16 | MICHAEL S. & SHEILA M. LITTLE | 04-R12-13.0 |
| 17 | MULL W. QUAY, II TRUST | 04-R12-12.0 |

| ADJOINING OWNERS TABLE | | |
|------------------------|--|------------------|
| TRACT | SURFACE OWNER | TAX PARCEL |
| A | OHIO COUNTY BOARD OF COMMISSIONERS | 04-R5-10.0 |
| B | MARC SEAMON | 04-R6-02.0 |
| C | SHORT CREEK COAL COMPANY | 04-R6-17.3 |
| D | SHORT CREEK COAL COMPANY | 04-R6-17.0 |
| E | MARC SEAMON | 04-R6-37.0 |
| F | SHORT CREEK CEMETERY ASSOCIATION, TRUSTEES | 04-R5-57.0 |
| G | SHORT CREEK METHODIST CHURCH | 04-R5-60.0 |
| H | ROBERT L. & GWENDOLYN NOVAK | 04-R5-59.0 |
| I | ERIC W. & LISA N. GADD | 04-R5-55.1 |
| J | ERIC W. & LISA N. GADD | 04-R5-55.3 |
| K | LUTHER R., II & D.F. SMITH | 04-R8-16.1 |
| L | DELBERT E. & CAROL L. HUFFMAN | 04-R8-16.2 |
| M | DELBERT E. HUFFMAN, JR. | 04-R8-18.4 |
| N | LUTHER R., JR. & ELEANOR L. SMITH | 04-R8-18.3 |
| O | LUTHER R., JR. & E.L. SMITH | 04-R8-18.1 |
| P | JOHN E. HARWATT | 04-R8-18.2 |
| Q | LUTHER R., JR. & E.L. SMITH | 04-R9-14.4 |
| R | HELEN M. PERRY (L/E) & ET AL | 04-R9-14.2 |
| S | HELEN M. PERRY (L/E) & ET AL | 04-R9-14.1 |
| T | JORDAN & GAYLE WEBER | 04-R9-09.0 |
| U | L.R. HOPKINS, JR. & R.F. DELATORE | 04-R9-05.0 |
| V | WILLIAM ISAAC KNIGHT & MEREDITH SERTICH | 04-R9-03.7 |
| W | DONNA MARTIN EVANS | 04-R9-03.5 |
| X | BETH ANNE KENNEDY | 04-R9-03.4 |
| Y | RCK 2 GROUP | 04-R9-01.0 |
| Z | WILLIAM H. & C.L. REUTHER | 04-R9-02.0 |
| AA | BRADFORD & NANNETTA HARTLEY | 04-R9-01.3 |
| AB | GREGORY TAGGART | 04-R9-50.0 |
| AC | DOMINIC J. & SHERRIE D. COTTRELL | 04-R12-19.30 |
| AD | ROBERT C. & PATRICIA L. KOTA | 04-R12-01.2 |
| AE | MARK & LAURA DAWSON | 04-R12-01.1 |
| AF | ROBERT E. JONES LIVING TRUST | 04-R12-18.0 |
| AG | DANIEL & M. HARRIMAN | 04-R12-18.2 |
| AH | DANIEL & M. HARRIMAN | 04-R12-18.1 |
| AI | COLUMBIA GAS TRANSMISSION CORPORATION | 04-R12-19.1 |
| AJ | STEPHEN E. & DEBORAH E. KEDING | 04-R12-19.21 |
| AK | CARLEY & CHRISTOPHER ELSWICK | 04-R12-21.0 |
| AL | EDWARD A. & K.L. WOODS | 04-R12-21.1 |
| AM | LAWRENCE WITZBERGER, IV | 04-R12-19.5 |
| AN | WILLIAM & J.M. WITZBERGER | 04-R12-23.2 |
| AO | LAWRENCE W., III & J.C. WITZBERGER | 04-R12-22.0 |
| AP | MICHAEL L. & KATHY D. BARON | 04-R12-23.8 |
| AQ | GLORIA J. CIARROCCHI | 04-R12-23.4 |
| AR | LARRY E. PAUGH | 04-R12-23.9 |
| AS | E. JEBBIA, R. RUTTENBER & J. O'DELL | 04-R12-23.5 |
| AT | MATTHEW J. & TISHA L. PAREE | 04-R12-23.6 |
| AU | HARRY A., JR. & EDITH J. RUMIS, REVOCABLE TRUST | 04-R12-23.0 |
| AV | BRIAN K. & STACEY L. PAGE | 04-R12-23.7 |
| AW | LORI JEAN HENRY | 04-R12-23.14 |
| AX | LORI JEAN HENRY | 04-R12-23.1 |
| AY | LORI JEAN HENRY | 04-R12-9999-9999 |
| AZ | HENRY'S SERVICE STATION (LORI JEAN HENRY) | 04-R12-28.1 |
| BA | LORI HENRY (C/O: HENRY'S SERVICE STATION) | 04-R12-29.0 |
| BB | KAREN NOEL & SCOTT R. YOCUM | 04-R12-45.17 |
| BC | RYAN RIES & DANIELLE WASSAM | 04-R12-45.20 |
| BD | JOHN A. TARR, IV | 04-R12-45.0 |
| BE | JONATHAN D. LECHNER | 04-R12-45.12 |
| BF | JONATHAN D. LECHNER, MD | 04-R12-46.1 |
| BG | ROBERT L. & PATRICIA J. WEISS, IRREVOCABLE TRUST | 04-R12-46.0 |
| BH | ROBERT GAUDIO & CLARE McDONALD | 04-R12-11.0 |
| BI | MULL W. QUAY, II TRUST | 04-R12-10.14 |
| BJ | MULL W. QUAY, II TRUST | 04-R12-10.17 |
| BK | WEST RENTALS, INC | 04-R12-10.16 |

| ADJOINING OWNERS TABLE | | |
|------------------------|--|---------------|
| TRACT | SURFACE OWNER | TAX PARCEL |
| BL | CHARLINE M. DOFKA (C/O: WESBANCO TRUST) | 04-R12J-46.0 |
| BM | FRANK A. & K.E. JACKSON | 04-R12J-40.0 |
| BN | MICHAEL S. & SHEILA M. LITTLE | 04-R12J-42.0 |
| BO | ANN E. REAM | 04-R12J-43.3 |
| BP | MATTHEW & TINA L. MAJETICH | 04-R12J-43.14 |
| BQ | TODD & COURTNEY MORRISON | 04-R12J-43.5 |
| BR | JAMES M. & C.L. MYER | 04-R12J-51.0 |
| BS | MICHAEL S. & SHEILA M. LITTLE | 04-R12J-44.0 |
| BT | STEPHANIE HELLER | 04-R12J-50.0 |
| BU | LYNN M. KAMINSKI | 04-R12J-50.2 |
| BV | RONALD A. & LYNN M. KAMINSKI | 04-R12J-50.1 |
| BW | STEPHANIE HELLER | 04-R12J-47.0 |
| BX | GREGORY J. & SHERRI L. POND | 04-R12E-23.22 |
| BY | BARRY L. SUTPHIN, JR. | 04-R12E-23.20 |
| BZ | ARLIE B. & M.L. MASSEY | 04-R12E-23.21 |
| CA | DANIEL S. TENNANT & MICHAELA R. JELLEN-TENNANT | 04-R12E-23.24 |
| CB | TIMOTHY J. & C.L. GILLIGAN | 04-R12E-23.31 |
| CC | ROBERT JEFFREY MUCHECK | 04-R12E-23.30 |
| CD | DEBRA LYN SHELEK | 04-R12E-23.19 |
| CE | DAVID M. & K.S. WEYRAUCH | 04-R12E-23.18 |
| CF | RENEE A. & JOHN J., JR. BILLIE | 04-R12E-23.23 |
| CG | DEBORAH J. GRIFFITHS | 04-R12E-23.15 |
| CH | STEVEN M. & LORI J. MGLUMPHY | 04-R12E-23.13 |
| CI | DAVID S. & DIAHANN M. FISHER | 04-R12E-23.16 |
| CJ | LARRY C. BOWMAN & ET AL | 04-R12-06.0 |
| CK | STEPHANIE CIPRIANI | 04-R12-06.2 |
| CL | DAVID J., JR. & V.A. MILLER | 04-R12-03.0 |
| CM | MARY ANN BURKHART | 04-R12-04.0 |
| CN | RELYKS, LLC | 04-R12-05.0 |
| CO | MARY ANN ARMSTRONG | 04-R12-02.0 |
| CP | HOWARD L. & B.M. SHACKELFORD | 04-R11-35.2 |
| CQ | TUNNEL RIDGE, LLC | 04-R12-01.3 |
| CR | TUNNEL RIDGE, LLC | 04-R11-34.3 |
| CS | TUNNEL RIDGE, LLC | 04-R11-34.12 |
| CT | TUNNEL RIDGE, LLC | 04-R8-61.2 |
| CU | SANDCREST FOUNDATION, INC | 04-R11-15.0 |
| CV | TUNNEL RIDGE, LLC | 04-R8-61.1 |
| CW | TUNNEL RIDGE, LLC | 04-R8-74.0 |
| CX | TUNNEL RIDGE, LLC | 04-R8-60.1 |
| CY | TUNNEL RIDGE, LLC | 04-R8-59.0 |
| CZ | TUNNEL RIDGE, LLC | 04-R8-22.1 |
| DA | TUNNEL RIDGE, LLC | 04-R8-60.0 |
| DB | TUNNEL RIDGE, LLC | 04-R8-58.0 |
| DC | K.L. & R.J. HUFFFMAN | 04-R8-55.0 |
| DD | TUNNEL RIDGE, LLC | 04-R8-20.0 |
| DE | TUNNEL RIDGE, LLC | 04-R8-21.2 |
| DF | TUNNEL RIDGE, LLC | 04-R8-27.7 |
| DG | TUNNEL RIDGE, LLC | 04-R8-27.6 |
| DH | TUNNEL RIDGE, LLC | 04-R8-15.4 |
| DI | CHARLES M. & M.M. MILLER | 04-R8-15.3 |
| DJ | STATE OF WEST VIRGINIA, DEPARTMENT OF TRANSPORTATION | 04-R8-0 |
| DK | DEBRA S. SHEPHERD | 04-R8-15.2 |
| DL | LOUIS R. HERCULES & ET AL | 04-R8-07.0 |
| DM | ALLIANCE RESOURCE GROUP, LLC | 04-R8-06.0 |
| DN | JUDITH K. TYLER | 04-R8-08.8 |
| DO | SAM L., JR. & AMY M. PELLEN | 04-R8-08.0 |
| DP | ARTHUR ENNIS, PEGGY CLARK & ALMA SINCAVICH | 04-R8-09.0 |
| DQ | MICHAEL W. DAVIS | 04-R8-09.1 |
| DR | EUNICE MAE DAVIS | 04-R8-09.3 |
| DS | HAROLD & EUNICE MAE DAVIS | 04-R8-09.2 |
| DT | JOYCE ANN FARLEY | 04-R8-10.1 |
| DU | JOYCE ANN FARLEY | 04-R8-10.2 |
| DV | BETTY L. SNYDER (C/O: PAULA MCGEE) | 04-R8-10.0 |
| DW | MARK D. MATTHIAS | 04-R8-11.1 |
| DX | MARK D. MATTHIAS | 04-R8-11.0 |
| DY | RHONDA J. ROBBINS | 04-R8-13.2 |
| DZ | RODNEY & A.J. SNYDER | 04-R8-13.0 |
| EA | RICKIE SNYDER | 04-R8-14.0 |
| EB | ALLIED WASTE, INC | 04-R5-56.0 |
| EC | ALLIED WASTE, INC | 04-R5-56.2 |
| ED | ALLIED WASTE, INC | 04-R5-56.1 |
| EE | OHIO COUNTY COMMISSION | 04-R8-08.16 |
| EF | TUNNEL RIDGE, LLC | 04-R8-08.17 |
| EG | TUNNEL RIDGE, LLC | 04-R8-08.14 |
| EH | TUNNEL RIDGE, LLC | 04-R8-08.2 |
| EI | SUSAN L. CAIN | 04-R8-08.3 |
| EJ | TUNNEL RIDGE, LLC | 04-R8-08.18 |
| EK | ALLIANCE RESOURCE GROUP, LLC | 04-R5-52.0 |
| EL | ALLIANCE RESOURCE GROUP, LLC | 04-R5-53.0 |
| EM | WINDSOR COAL COMPANY | 04-R5-50.0 |
| EN | BRYAN K. & LAURA L. PETTIT | 04-R5-55.4 |
| EO | PATRICK DAVID & KRISTY ANN DEFRANCO | 04-R12-17.0 |
| EP | DAVID P. & KRISTY A. DEFRANCO | 04-R12-23.3 |
| EQ | DAVID P. & KRISTY A. DEFRANCO | 04-R12-15.0 |
| EQ | KARYL LEE DONALDSON | 04-R12-16.0 |

REVISIONS:

| | | | |
|------------|---|--------|---|
| COMPANY: |  | |  |
| OPERATOR'S | EDWARD DREMAK OHI | | DATE: 11-20-2019 |
| WELL #: | 210H | | API NO: 47-069-XXXX |
| DISTRICT: | COUNTY: | STATE: | DRAWN BY: R. GRIMES |
| RICHLAND | OHIO | WV | SCALE: N/A |
| | | | DRAWING NO: 2018-284 |
| | | | WELL LOCATION PLAT |

69-00320 MOD