



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

PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

SWN PRODUCTION COMPANY, LLC
POST OFFICE BOX 12359

SPRING, TX 773914954

Re: Permit Modification Approval for MIKE RYNIAWEC BRK 6H
47-009-00214-00-00

Add Expected Void

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: MIKE RYNIAWEC BRK 6H
Farm Name: RYNIAWEC, MIKE
U.S. WELL NUMBER: 47-009-00214-00-00
Horizontal 6A / New Drill
Date Issued: 2/16/2018

Promoting a healthy environment.

02/16/2018

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

1) Well Operator: SWN Production Co., LLC 49447757 009-Brooke 3- Buffalo 247-Bethany
Operator ID County District Quadrangle

2) Operator's Well Number: Mike Ryniawec BRK 6H Well Pad Name: Mike Ryniawec PAD

3) Farm Name/Surface Owner: Mike Ryniawec Public Road Access: Lazear Run Road

4) Elevation, current ground: 1147' Elevation, proposed post-construction: 1147'

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

(b) If Gas Shallow Deep _____
Horizontal _____

6) Existing Pad: Yes or No yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Associated Pressure(s):
Target Formation- Marcellus, Target Top TVD- 5862', Target Base TVD- 5902', Anticipated Thickness- 40', Associated Pressure- 3534

8) Proposed Total Vertical Depth: 5992'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 14026'

11) Proposed Horizontal Leg Length: 7719.4'

12) Approximate Fresh Water Strata Depths: 346'

13) Method to Determine Fresh Water Depths: Salinity Profile

14) Approximate Saltwater Depths: 645'

15) Approximate Coal Seam Depths: 342'

16) Approximate Depth to Possible Void (coal mine, karst, other): Possible Void 342'

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: _____

Handwritten notes:
47009092
47009092
C. D. P. 2.15.18

