PERMIT MODIFICATION APPROVAL

June 25, 2015

CHEVRON APPALACHIA, LLC
POST OFFICE BOX 611
MOON TOWNE, PA 15108

Re: Permit Modification Approval for API Number 5101823, Well #: TAYLOR B 5H

modify landing point and bottom hole locations, and casing program

Oil and Gas Operator:
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.

Please call James Martin at 304-926-0499, extension 1654 if you have any questions.

Sincerely,

Gene Smith
Assistant Chief of Permitting
Office of Oil and Gas
June 12, 2015

West Virginia D.E.P.
Office of Oil & Gas
601 57th Street SE
Charleston, WV 25304-2345

RE: Taylor B 2H, 3H, 4H, 5H, 6H, 7H, 8H, and 9H
Modification Request

Dear Ms. Hankins,

Please accept this as our formal request for a modification to the landing point and bottom hole as well as the casing program for our Taylor B Drill Permits noted below.

<table>
<thead>
<tr>
<th>Well Name</th>
<th>API Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taylor B 2H</td>
<td>47-051-01793</td>
</tr>
<tr>
<td>Taylor B 3H</td>
<td>47-051-01794</td>
</tr>
<tr>
<td>Taylor B 4H</td>
<td>47-051-01795</td>
</tr>
<tr>
<td><strong>Taylor B 5H</strong></td>
<td><strong>47-051-01823</strong></td>
</tr>
<tr>
<td>Taylor B 6H</td>
<td>47-051-01796</td>
</tr>
<tr>
<td>Taylor B 7H</td>
<td>47-051-01797</td>
</tr>
<tr>
<td>Taylor B 8H</td>
<td>47-051-01798</td>
</tr>
<tr>
<td>Taylor B 9H</td>
<td>47-051-01799</td>
</tr>
</tbody>
</table>

An updated plat, WW-6B form, WW-6A1 attachment, and schematic are enclosed. If you have any questions, please contact me at (724)564-3781 or kristenbrooks@chevron.com.

Sincerely,

Kristen Brooks
Permit Coordinator
Chevron Appalachia, LLC

Received
Office of Oil & Gas
JUN 15 2015

06/26/2015
STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Chevron Appalachia, LLC 49449935 Marshall Clay Glen Easton, WV
Operator ID County District Quadrangle

2) Operator's Well Number: 5H Well Pad Name: Taylor B

3) Farm Name/Surface Owner: Williams Ohio Valley Midstream Public Road Access: CR 17 Fork Ridge Road

4) Elevation, current ground: 1222' Elevation, proposed post-construction: 1222'

5) Well Type (a) Gas Oil Underground Storage
(b) If Gas Shallow Deep Horizontal X

6) Existing Pad: Yes or No Yes

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Marcellus, 6535', 49' - 0.64 psi/ft

8) Proposed Total Vertical Depth: 6533'

9) Formation at Total Vertical Depth: Marcellus

10) Proposed Total Measured Depth: 11,830'

11) Proposed Horizontal Leg Length: 4,240'

12) Approximate Fresh Water Strata Depths: 463' GL

13) Method to Determine Fresh Water Depths: 1 mi radius offset wells, freshwater wells, and freshwater base level

14) Approximate Saltwater Depths: 1276', 1880'-2370' KB: Francis IV offset well

15) Approximate Coal Seam Depths: 790' GL

16) Approximate Depth to Possible Void (coal mine, karst, other): NA - Solid coal anticipated

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: 

Received
Office of Oil & Gas
JUN 15 2015

Page 1 of 3
### CASING AND TUBING PROGRAM

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Size (in)</th>
<th>New or Used</th>
<th>Grade</th>
<th>Weight per ft. (lb/ft)</th>
<th>FOOTAGE: For Drilling (ft)</th>
<th>INTERVALS: Left in Well (ft)</th>
<th>CEMENT: Fill-up (Cu. Ft.)/CTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor</td>
<td>20&quot;</td>
<td>New</td>
<td></td>
<td></td>
<td>40'</td>
<td>40'</td>
<td>141.8</td>
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<tr>
<td>Fresh Water</td>
<td>13-3/8&quot;</td>
<td>New</td>
<td>J-55</td>
<td>54.5#</td>
<td>513'</td>
<td>513'</td>
<td>691.0</td>
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<tr>
<td>Intermediate</td>
<td>9-5/8&quot;</td>
<td>New</td>
<td>J-55</td>
<td>40#</td>
<td>2,240'</td>
<td>2,240'</td>
<td>905.0</td>
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<tr>
<td>Production</td>
<td>5-1/2&quot;</td>
<td>New</td>
<td>P-110</td>
<td>20#</td>
<td>11,830'</td>
<td>11,830'</td>
<td>3824.0</td>
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<tr>
<td>Tubing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liners</td>
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<td></td>
<td></td>
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### TYPE

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<thead>
<tr>
<th>Size (in)</th>
<th>Wellbore Diameter (in)</th>
<th>Wall Thickness (in)</th>
<th>Burst Pressure (psi)</th>
<th>Anticipated Max. Internal Pressure (psi)</th>
<th>Cement Type</th>
<th>Cement Yield (cu. ft./k)</th>
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<tr>
<td>Conductor</td>
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<td>26&quot;</td>
<td>0.380&quot;</td>
<td>2,730 psi</td>
<td>Class A</td>
<td>1.18</td>
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<tr>
<td>Fresh Water</td>
<td>13-3/8&quot;</td>
<td>17-1/2&quot;</td>
<td>0.380&quot;</td>
<td>2,730 psi</td>
<td>Class A</td>
<td>1.18</td>
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<tr>
<td>Intermediate</td>
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<td>12-1/4&quot;</td>
<td>0.395&quot;</td>
<td>3,950 psi</td>
<td>Class A</td>
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<td>Production</td>
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<td>8-1/2&quot;</td>
<td>0.361&quot;</td>
<td>12,640 psi</td>
<td>Class A</td>
<td>1.61</td>
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<tr>
<td>Tubing</td>
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<tr>
<td>Liners</td>
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### PACKERS

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<tr>
<td>Sizes:</td>
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<tr>
<td>Depths Set:</td>
<td></td>
</tr>
</tbody>
</table>

**Received by Office of Oil & Gas**

**JUN 15 2015**
19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill 17-1/2" hole to 513' then run and cement 13-3/8" casing to surface covering the fresh water. Drill 12.25" hole to 2,240' then run and cement to surface 9 5/8" casing, covering the Big Injun. Drill 8 1/2" hole to KOP at 5,688. Drill 8 1/2" curve and lateral to 11,830' MD and 6,533 TVD. Run 5 1/2" production casing and cement to a minimum TOC of 500' above top perfs'.

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

Chevron will be utilizing plug and perf method with 44 stages using 8,572 bbl of fluid and 315,000 lbm of sand per stage

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 18.3

22) Area to be disturbed for well pad only, less access road (acres): 4.3

23) Describe centralizer placement for each casing string:

There will be a bow spring centralizer every two jts on the Water string and intermediate. The production string will have two centralizer every jt in the lateral and curve, then one every jt from KOP to surface.

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

For the Water String the blend will contain class A cement, 3% CaCl2, and flake. The intermediate will contain class A cement, 10% CaCl2, Salt, and flake. The Production cement will have a lead and tail cement. The lead will contain class A cement, KCl, dispersant, suspension agent, and retarder. The tail will contain class A cement, Calcium Carbonate, KCl, dispersant, de-foamer, suspension agent, and friction reducer.

25) Proposed borehole conditioning procedures:

Well will be circulated a minimum of 3 bottoms up once casing point has been reached, all hole sections and until uniform mud properties are achieved.

*Note: Attach additional sheets as needed.
<table>
<thead>
<tr>
<th>SURFACE OWNER</th>
<th>DIST-TM/PAR</th>
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<tbody>
<tr>
<td>WILLIAMS OHIO VALLEY MIDSTREAM LLC</td>
<td>4-10/20</td>
</tr>
<tr>
<td>JAMES D. RULONG</td>
<td>4-9/20</td>
</tr>
<tr>
<td>LEE R. TAYLOR ET UX</td>
<td>4-10/21</td>
</tr>
<tr>
<td>KENNETH L. MCCRACKEN ET UX</td>
<td>4-9/23.5</td>
</tr>
<tr>
<td>WILLIAM R. STANDIFORD ET UX</td>
<td>4-9/23.3</td>
</tr>
<tr>
<td>DONALD E. VAN SCYOC ET UX</td>
<td>4-9/23.2</td>
</tr>
<tr>
<td>WILLIAMS OHIO VALLEY MIDSTREAM</td>
<td>4-9/25</td>
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<td>WILLIAM R. STANDIFORD ET UX</td>
<td>4-9/5.1</td>
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<tr>
<td>RONALD A. HILL</td>
<td>4-9/5</td>
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<table>
<thead>
<tr>
<th>LESSOR</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>A. LEE R. &amp; SHERRI L. TAYLOR</td>
<td></td>
</tr>
<tr>
<td>B. CLARENCE RULONG</td>
<td></td>
</tr>
<tr>
<td>C. LEE R. &amp; SHERRI L. TAYLOR</td>
<td></td>
</tr>
<tr>
<td>D. KENNETH L. &amp; SHIRLEY J. MCCRACKEN</td>
<td></td>
</tr>
<tr>
<td>E. WILLIAM ROGER STANDIFORD</td>
<td></td>
</tr>
<tr>
<td>F. DONALD E. VAN SCYOC</td>
<td></td>
</tr>
<tr>
<td>G. DONALD E. VAN SCYOC</td>
<td></td>
</tr>
<tr>
<td>H. WILLIAM ROGER STANDIFORD</td>
<td></td>
</tr>
<tr>
<td>J. RONALD A. HILL, ET AL</td>
<td></td>
</tr>
</tbody>
</table>

JUNE 3, 2015

06/26/2015
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:

<table>
<thead>
<tr>
<th>Lease Name or Number</th>
<th>Grantor, Lessor, etc.</th>
<th>Grantee, Lessee, etc.</th>
<th>Royalty</th>
<th>Book/Page</th>
</tr>
</thead>
</table>

See Attached

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: Chevron Appalachia, LLC
By: [Signature]
Its: [Signature]
<table>
<thead>
<tr>
<th>Parcel</th>
<th>Lessor</th>
<th>Assignee</th>
<th>Royalty</th>
<th>DB/PG</th>
<th>Assignment 1</th>
<th>Assignment 2</th>
<th>Assignment 3</th>
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<tr>
<td>B</td>
<td>Rulong, Clarence</td>
<td>Chevron U.S.A., INC.</td>
<td>14%</td>
<td>796/177</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>F, G</td>
<td>Van Scyoc, Donald E., et al</td>
<td>Chevron U.S.A., INC.</td>
<td>16%</td>
<td>820/276</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>
January 6, 2015

West Virginia D.E.P.
Office of Oil & Gas
601 57th Street SE
Charleston, WV 25304-2345

To Whom It May Concern:

Please be advised that Chevron Appalachia, LLC and Chevron U.S.A. Inc. are affiliated entities. Unless and until revoked, and as evidenced by the signatures of authorized representatives of each entity below, Chevron Appalachia, LLC is authorized to operate assets owned by Chevron U.S.A. Inc. which are located in West Virginia, including oil and gas leases. More particularly, Chevron Appalachia, LLC is authorized to obtain well work permits for assets owned by Chevron U.S.A. Inc. I trust that this will alleviate any concerns the Department may have about Chevron Appalachia, LLC applying for well work permit applications on properties either leased or owned by Chevron U.S.A. Inc. If you have any further questions or concerns, please do not hesitate to contact me.

[Signatures]

Branden Weimer
Attorney-In-Fact for Chevron Appalachia, LLC

Marc Tate
Attorney-In-Fact for Chevron U.S.A. Inc.
ASSIGNMENT OF OIL AND GAS LEASES

This Assignment of Oil and Gas Leases (the "Assignment") is from AB RESOURCES LLC and NPAR, LLC, both of which are Delaware limited liability companies, and whose addresses are 6802 W. Snowville Road, Suite E, Brecksville, Ohio 44141 (collectively referred to as "Assignor") to CHIEF EXPLORATION & DEVELOPMENT LLC, a Texas limited liability company, whose address is 5956 Sherry Lane, Suite 1500, Dallas, Texas, and RADLER 2000 LIMITED PARTNERSHIP, a Texas limited partnership, whose address is 3131 W. Seventh Street, Suite 400, Fort Worth, Texas 76107 (referred to jointly as "Assignee").

For adequate consideration the receipt of which is acknowledged, Assignor, subject to the terms and provisions herein contained as well as the reservations hereinafter set forth, does hereby grant, sell, assign and convey unto Assignee, its successors and assigns, an undivided fifty percent (50%) working interest in, to and under the Oil and Gas Leases identified on Exhibit "A" attached to and made a part hereof covering the lands described on Exhibit "A".

For purposes of this Assignment (a) the Oil and Gas Leases described on Exhibit "A" are referred to as the "Leases", (b) the lands covered by the Leases are referred to as the "Lands", and (c) the undivided fifty percent (50%) working interest in, to and under the Leases and the Lands assigned and conveyed by Assignor to Assignee pursuant to this Assignment hereinafter collectively are referred to as the "Assigned Interests".

This Assignment is made expressly subject to the following:

1. The Assigned Interests will be subject to (i) the royalty interest as provided in the Leases and any recorded assignment of the Leases to Assignor, and (ii) all of the terms, conditions and provisions set forth in the Leases and/or such assignment of the Leases to Assignor.

2. The Assigned Interests will be subject to that certain Operating Agreement (the "Agreement") that was part of and associated with that certain Participation Agreement dated November 29, 2007 between AB Resources LLC and Chief Exploration & Development LLC, the Participation Agreement having since terminated. All the terms and provisions of the Agreement are fully incorporated herein by reference.

3. Assignor warrants the title to the Assigned Interests unto Assignee, its successors and assigns, against all adverse claims arising by, through and under Assignor, but not otherwise. EXCEPT AS PROVIDED IN THE PRECEDING SENTENCE AND EXCEPT AS PROVIDED IN THE UNRECORDED AGREEMENT, THIS ASSIGNMENT IS WITHOUT WARRANTY, EXPRESS, IMPLIED, OR STATUTORY, WHATSOEVER.

Jan Pest
MARSHALL County 12:40:32 PM
Instrument No. 1306862
Date Recorded 06/27/2011
Document Type AGR
Pages Recorded 24
Book-Page 24-466
Recording Fee $24.00
Additional $8.00

06/26/2015
4. The Assigned Interests herein are assigned and conveyed to and are owned by Assignees in the following undivided proportions:

<table>
<thead>
<tr>
<th>Company</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Exploration &amp; Development LLC</td>
<td>80%</td>
</tr>
<tr>
<td>Radler 2000 Limited Partnership</td>
<td>20%</td>
</tr>
</tbody>
</table>

5. Save and except the Assigned Interests, all other rights, titles and interests owned by Assignor in, to and under the Leases and the Lands are expressly reserved by Assignor and are not herein conveyed or assigned to Assignee.

The terms, covenants and conditions hereof shall be binding upon and shall inure to the benefit of Assignor and Assignee and their respective successors and assigns; and such terms, covenants and conditions shall be covenants running with the Assigned Interests, and with each subsequent transfer or assignment thereof.

This Assignment is executed by Assignor on the date indicated in its acknowledgment included herewith.

AB RESOURCES LLC, ASSIGNOR

By: Gordon O. Yonel
Its: Chief Executive Officer

NPAR, LLC, ASSIGNOR

By: Gordon O. Yonel
Its: Chief Executive Officer
ASSIGNEES

CHIEF EXPLORATION & DEVELOPMENT LLC

By: [Signature]

Its: [Signature]

RADLER 2000 LIMITED PARTNERSHIP

By: [Signature]

Its: [Signature]

ACKNOWLEDGMENTS

State of Ohio                        

County of Cuyahoga                  

On this [ ] day of June 2011, personally appeared Gordon O. Yonel, Chief Executive Officer of 
AB Resources LLC, to me personally known, who, being by me duly sworn, did say that he has 
exercised the foregoing document for the purposes described herein for and on behalf of such 
limited liability company.

WITNESS MY HAND AND SEAL this [ ] day of June 2011.

My Commission Expires: [ ]

[Signature]

Notary Public
State of Ohio

County of Cuyahoga

On this 14th day of June 2011, personally appeared Gordon O. Yonel, Chief Executive Officer of NPAR, LLC, to me personally known, who, being by me duly sworn, did say that he has executed the foregoing document for the purposes described herein for and on behalf of such limited liability company.

WITNESS MY HAND AND SEAL this 14th day of June 2011.

My Commission Expiration Date: November 9, 2013

PATRICIA A. GILL
NOTARY PUBLIC
STATE OF OHIO
STARK COUNTY
My Comm. Expires November 9, 2013

Notary Public

State of Texas

County of Dallas

On this 22nd day of June 2011, personally appeared Glynn Milden, the Sr. VP-Land of Chief Exploration & Development LLC, to me personally known, who, being by me duly sworn, did say that he has executed the foregoing document for the purposes described herein for and on behalf of such limited liability company.

WITNESS MY HAND AND SEAL this 22nd day of June 2011.

My Commission Expiration Date: July 01, 2013

MARIE G. MCHIT
My Commission Expires July 01, 2013

Notary Public

06/26/2015
State of Texas                                       )

County of Dallas                                    ) ss:

On this 24th day of June 2011, personally appeared Michael G. Radler, the
General Partner of Radler 2000 Limited Partnership, to me personally known,
who, being by me duly sworn, did say that he has executed the foregoing document for the
purposes described herein for and on behalf of such limited partnership.

WITNESS MY HAND AND SEAL this 24th day of June 2011.

My Commission Expires:

Notary Public

PREPARED BY:
AB RESOURCES LLC

AFTER RECORDING RETURN TO:
AB RESOURCES LLC
6802 W. Snowville Rd., Suite E
Brecksville, OH 44141
PH 440.922.1250