PERMIT MODIFICATION APPROVAL

October 23, 2013

NOBLE ENERGY, INC.
333 TECHNOLOGY DRIVE, SUITE 110
CANONSBURG, PA 15317

Re: Permit Modification Approval for API Number 5101655, Well #: SHL 13CHS Casing Extended

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
Regulatory/Compliance Manager
Office of Oil and Gas
July 25, 2013

West Virginia Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304-2345

Re: SHL 13 API# 47-5101638 – 47-05101639 -47-05101655 – 47-05101640-47-05101641
47-05101642- 47-05101643

Dear Laura:

Enclosed please find modifications to the casing string for the above referenced well. We would like to extend the 13 3/8" to 1200' if order to try and avoid red rock issues. This change has been approved by the state inspector. This well is located in Marshall County, WV.

Should you have any questions, or desire any additional information, please do not hesitate to contact me at 724-820-3061 or via email at dswiger@nobleenergyinc.com.

Sincerely,

Dee Swiger
Regulatory Analyst
DS/
Enclosures:
### CASING AND TUBING PROGRAM

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Size</th>
<th>New or Used</th>
<th>Grade</th>
<th>Weight per ft.</th>
<th>FOOTAGE: For Drilling</th>
<th>INTERVALS: Left in Well</th>
<th>CEMENT: Fill-up (Cu. Ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor</td>
<td>30&quot;</td>
<td>N</td>
<td>J55</td>
<td>94.0</td>
<td>40'</td>
<td>40'</td>
<td>CTS</td>
</tr>
<tr>
<td>Fresh Water</td>
<td>20&quot;</td>
<td>N</td>
<td>J55</td>
<td>94</td>
<td>400'</td>
<td>400'</td>
<td>CTS</td>
</tr>
<tr>
<td>Coal</td>
<td>13 3/8&quot;</td>
<td>N</td>
<td>J55</td>
<td>54.5</td>
<td>1200'</td>
<td>1200'</td>
<td>CTS</td>
</tr>
<tr>
<td>Intermediate</td>
<td>9 5/8&quot;</td>
<td>N</td>
<td>J55</td>
<td>36.0</td>
<td>3218'</td>
<td>3218'</td>
<td>CTS</td>
</tr>
<tr>
<td>Production</td>
<td>5 1/2&quot;</td>
<td>N</td>
<td>P110</td>
<td>20.0</td>
<td>12486'</td>
<td>12486'</td>
<td>200' above 9.625&quot; shoe</td>
</tr>
<tr>
<td>Tubing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### CEMENT TYPE

<table>
<thead>
<tr>
<th>TYPE</th>
<th>Size</th>
<th>Wellbore Diameter</th>
<th>Wall Thickness</th>
<th>Burst Pressure</th>
<th>Cement Type</th>
<th>Cement Yield</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conductor</td>
<td>30&quot;</td>
<td>36&quot;</td>
<td>.25</td>
<td></td>
<td>Type 1</td>
<td>CTS</td>
</tr>
<tr>
<td>Fresh Water</td>
<td>20&quot;</td>
<td>26&quot;</td>
<td>.438</td>
<td>2730</td>
<td>Type 1</td>
<td>1.18</td>
</tr>
<tr>
<td>Coal</td>
<td>13 3/8&quot;</td>
<td>17 1/2&quot;</td>
<td>.380</td>
<td>2730</td>
<td>Type 1</td>
<td>1.18</td>
</tr>
<tr>
<td>Intermediate</td>
<td>9 5/8&quot;</td>
<td>12 3/8&quot;</td>
<td>.352</td>
<td>3520</td>
<td>Class A</td>
<td>1.19</td>
</tr>
<tr>
<td>Production</td>
<td>5 1/2&quot;</td>
<td>8 3/4&quot;</td>
<td>.361</td>
<td>12640</td>
<td>Class A</td>
<td>1.27</td>
</tr>
<tr>
<td>Tubing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PACKERS

| Kind:          | |
| Sizes:         | |
| Depths Set:    | |

[Stamp: Received JUL 29 2013]
Blue Mountain Engineering

FILE #: SHL13CHS
DRAWING #: SHL13CHS
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/2500
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT
ELEVATION: 1498.81'

FILE #: SHL13CHS
DRAWING #: SHL13CHS
SCALE: 1" = 2000'
MINIMUM DEGREE OF ACCURACY: 1/2500
PROVEN SOURCE OF ELEVATION: U.S.G.S. MONUMENT
ELEVATION: 1498.81'

DATE: MAY 7, 2013
OPERATOR'S WELL #: SHL13CHS
API WELL #: 47
STATE: 51
COUNTY: 1655 HGA
PERMIT: 1555 HGA
ACREAGE: 121.65
ACREAGE: 172.45

Well Type: Oil
Watershed: Turkey Run
County/District: Marshall / Sand Hill
Quadrangle: Valley Grove, W. Va.
Surface Owner: Paul H. & Anniette A. Hemsley
Oil & Gas Royalty Owner: See Attached WM-641
Drill: Convert
Plug Off Old Formation
Clean Out & Replug
Drill Deeper
Redrill
Perforate New Formation
Other Change
Fracture or Stimulate
Scaffold
Jet out & Abandon

Target Formation: Marcellus
Estimated Depth: TVD: 6781'; TVD: 10,313'

Place Seal Here

Lithograph, hereby certify that this plat is correct to the best of my knowledge and belief and shows all the information required by law and the regulations issued and prescribed by the Department of Environmental Protection.

Signed: [Signature]

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 the regulations issued and prescribed by the Department of Environmental Protection.

Signed: [Signature]

Well is located on topo map 13,640' feet south of Latitude: 40° 02' 30".

Well is located on topo map 10,037 feet west of Longitude: 80° 30' 00".

Notes:
1. There are no water wells or developed springs within 200' of proposed well.
2. There are no existing buildings within 650' of proposed well.
3. Proposed well is greater than 100' from perennial stream, wetlands, pond, reservoir or lake.
4. There are no surface or near-surface streams within 300' of proposed well.
5. Proposed well is greater than 100' from shallow groundwater table or public water supply.
6. It is not the purpose of intention of this plot to represent surveyed locations of the surface or mineral parcels depicted herein. The location of the boundary lines, as shown, are based on record deed descriptions, field reconnaissance, and/or tax map position, unless otherwise noted.