### 1. Risk Component

#### Risk Factors

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Rock</td>
<td>Evaluated from well drilling data, mud weights, indications of tight hole</td>
</tr>
<tr>
<td>Charge</td>
<td>Evaluated from well drilling data, mud weights, indications of tight hole</td>
</tr>
<tr>
<td>Migration / Timing</td>
<td>Evaluated from petrophysical analysis, petrophysical properties, interpreted thermal maturity</td>
</tr>
<tr>
<td>Reservoir Rock</td>
<td>Evaluated from well drilling data, mud weights, indications of tight hole</td>
</tr>
<tr>
<td>Trap / Containment</td>
<td>Evaluated from well drilling data, mud weights, indications of tight hole</td>
</tr>
</tbody>
</table>

#### Reservoir Depth

- **Upper Windsor Group – Horton Bluff Shale**
  - **Upper Horton Bluff**
    - Cretaceous
    - Cd
    - Carbonate
    - Reservoir Pressure (MPa)
    - Reservoir overpressuring (x hydrostatic)
    - Reservoir Temperature (°C)
    - Fractional fill of Untested Play Traps
    - Fraction of Total Play in Trap
    - Developable Fraction of Total Play
    - Untested Play Area (sqkm)
    - Tested Play Area (sqkm)

#### Untested Plays

- **Upper Windsor Group – Horton Bluff Shale**
  - **Untested Play Area**
    - **Area**: Low to high range
    - **Net_Pay**: Low to high range
    - **NTG**: Low to high range
    - **Net_Pay/NTG**: Low to high range

### 2. Hydrocarbon Volume Component

#### GRV

- **Gas Volume Factor (z)**
- **Reservoir Pressure (MPa)**
- **Reservoir overpressuring (x hydrostatic)**
- **Reservoir Temperature (°C)**
- **Reservoir Pressure Gradient (kPa/m)**
- **Temp. Gradient (°C/m)**

#### Migration / Timing

- **Migration Mechanisms**
- **Net Pay**: Low to high range
- **Source Rock**: Low to high range
- **Proximity to Horton Bluff Shale**

#### Source Rock

- **Risk Component**
- **Risk Factor**
- **Area**: Low to high range
- **Net_Pay**: Low to high range
- **NTG**: Low to high range
- **Net_Pay/NTG**: Low to high range

#### Charge

- **Risk Component**
- **Risk Factor**
- **Area**: Low to high range
- **Net_Pay**: Low to high range
- **NTG**: Low to high range
- **Net_Pay/NTG**: Low to high range

#### Migration / Timing

- **Risk Component**
- **Risk Factor**
- **Area**: Low to high range
- **Net_Pay**: Low to high range
- **NTG**: Low to high range
- **Net_Pay/NTG**: Low to high range

#### Reservoir Rock

- **Risk Component**
- **Risk Factor**
- **Area**: Low to high range
- **Net_Pay**: Low to high range
- **NTG**: Low to high range
- **Net_Pay/NTG**: Low to high range

#### Untested Plays

- **Risk Component**
- **Risk Factor**
- **Area**: Low to high range
- **Net_Pay**: Low to high range
- **NTG**: Low to high range
- **Net_Pay/NTG**: Low to high range

#### Tested Plays

- **Risk Component**
- **Risk Factor**
- **Area**: Low to high range
- **Net_Pay**: Low to high range
- **NTG**: Low to high range
- **Net_Pay/NTG**: Low to high range

#### Total Play Area

- **Risk Component**
- **Risk Factor**
- **Area**: Low to high range
- **Net_Pay**: Low to high range
- **NTG**: Low to high range
- **Net_Pay/NTG**: Low to high range
### Adsorbed Gas Parameters

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>avg. Net Pay (m)</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
<td>Values calculated from GEP/NTG/Area</td>
</tr>
<tr>
<td>avg. Porosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Matrix Porosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Natural Fracture Porosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Hydrocarbon Saturation in matrix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Rock matrix density (kg/m³)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Total Organic content (TOC, % wt)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Rock matrix density (kg/m³)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Natural Fracture Porosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Hydrocarbon Saturation in matrix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>avg. Rock matrix density (kg/m³)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes
1. **Deformative Fractures of Total Play**
   - This parameter is applicable to unconventional plays where no conventional f/f trapping mechanisms is present. This requires information from seismic and many appraisal wells to enable rigorous quantification. No such information is available across these basins.
   - Upside limited by consideration of P01 value
2. **Adsorbed Gas Parameters**
   - These are only used in Shale Gas and Coal bed methane plays. Parameters are used to calculate adsorbed gas content as a function of depth.