

Modernized Royalty Framework: Formulas – C* For wells spud on or after January 1, 2017

C* is a proxy for a well's drilling and completion costs. It is defined by a well's parameters (TVD, TLL, TPP):

Where:

- TVD = True Vertical Depth (m)
- TLL = Total Lateral Length (m)
- TPP = Total Proppant Placed (tonnes)

For wells with TVD shallower than or equal to 2,000 metres

$$C^* (\$) = 1,170*(TVD-249) + 800*TLL + 0.6*TVD*TPP$$

For wells with TVD deeper than 2,000 metres

$$C^* (\$) = 1,170*(TVD-249) + 3,120*(TVD-2,000) + 800*TLL + 0.6*TVD*TPP$$

A well will pay 5% royalty rate until revenue equals C*(\$).

Note: Revenue from the well will be determined by multiplying volumes of the various hydrocarbons by their respective par prices. For conventional oil this is produced volumes and for natural gas and by-products this is allocated volumes.

MRF will apply to all crude oil and natural gas wells outside the designated oil sands areas. It will also apply to non-project oil sands wells that pay royalties based on crude oil formulas.

