

**Modernized Royalty Framework: Formulas**  
**Conventional Oil, Pentane Plus (extracted and in-stream component) and Field**  
**Condensate**  
**For wells spud on or after January 1, 2017**

R% = Price Component ( $r_p$ ) + Quantity Adjustment ( $r_q$ )

R% has a minimum of 5% and maximum of 40%

<b>Royalty Parameters</b>		
	<b>Price (C\$/m<sup>3</sup>)</b>	<b>% Change (%/m<sup>3</sup>)</b>
<b>P1</b>	251.70	0.07100%
<b>P2</b>	409.02	0.03900%
<b>P3</b>	723.64	0.02000%

<b>Price Component (<math>r_p</math>)</b>	
<b>Price (\$/m<sup>3</sup>)</b>	<b><math>r_p</math></b>
PP<=251.70	10%
251.70<PP<=409.02	((PP-251.70)*0.00071+0.10000)*100
409.02<PP<=723.64	((PP-409.02)*0.00039+0.21170)*100
PP>723.64	((PP-723.64)*0.00020+0.33440)*100
Maximum	40%

<b>Maturity Threshold</b>		
	<b>Q</b>	<b>% Change</b>
<b>Q oil equivalent volumes</b>	194.0 (m <sup>3</sup> e/month)	0.1350% (%/m <sup>3</sup> e/month)
<b>Quantity Adjustment (oil equivalent volume)</b>		
<b>Quantity (m<sup>3</sup>e/month)</b>	<b><math>r_q</math></b>	
Q >=194.0	0%	
Q <194.0	(Q-194.0)*0.1350%	
Note: Quantity is calculated at a well level, where m <sup>3</sup> e/month = m <sup>3</sup> equivalent per month.		
Note: $r_q$ is 0 or negative		

A well will pay 5% royalty rate until revenue equals C\*(\$). R% applies once a well's revenues exceed C\* (post-C\* phase). The minimum royalty rate in the post-C\* phase is 5%.