

**Modernized Royalty Framework: Formulas  
Propane (extracted and in stream component)  
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 36%

<b>Royalty Parameters</b>		
	<b>Price (C\$/m<sup>3</sup>)</b>	<b>% Change (%/m<sup>3</sup>)</b>
<b>P1</b>	88.10	0.20250%
<b>P2</b>	143.16	0.11130%
<b>P3</b>	253.28	0.05900%

<b>Price Component (<math>r_p</math>)</b>	
<b>Price (\$/m<sup>3</sup>)</b>	<b><math>r_p</math></b>
PP ≤ 88.10	10%
88.10 < PP ≤ 143.16	((PP-88.10)*0.00202+0.10000)*100
143.16 < PP ≤ 253.28	((PP-143.16)*0.00111+0.21122)*100
PP > 253.28	((PP-253.28)*0.00059+0.33347)*100
Maximum	36%

<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)*0.001350]*100	
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%.