

**Modernized Royalty Framework: Formulas
Butane (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%

Royalty Parameters		
	Price (C\$/m ³)	% Change (%/m ³)
P1	176.19	0.10130%
P2	286.31	0.05540%
P3	506.55	0.03130%

Price Component (r_p)	
Price (\$/m ³)	r_p
PP ≤ 176.19	10%
176.19 < PP ≤ 286.31	((PP-176.19)*0.00101+0.10000)*100
286.31 < PP ≤ 506.55	((PP-286.31)*0.00055+0.21122)*100
PP > 506.55	((PP-506.55)*0.00031+0.33235)*100
Maximum	36%

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