

Royalty Formulas – Conventional Oil Effective January 1, 2011

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

AFR (2011): R% has a minimum of 0% and a maximum of 40%

Transition: R% has a minimum of 0% and a maximum of 50%

Royalty Parameters				
	Price (\$/m ³)		% Change (%/\$/m ³)	
	ARF (2011)	Transition Wells	ARF (2011)	Transition Wells
P₁	190.00	210.00	0.06%	0.035%
P₂	250.00	250.00	0.10%	0.01%
P₃	400.00	350.00	0.05%	0.005%
P₄	535.00	--	0.03%	--
	Q (m ³ /month)		% Change (%/m ³ /month)	
	ARF (2011)	Transition Wells	ARF (2011)	Transition Wells
Q₁	106.4	30.4	0.26%, 0.10%	0.13%
Q₂	197.6	152.0	0.07%	0.08%
Q₃	304.0	273.6	0.03%	0.02%

Price Component (r_p)			
Alberta Royalty Framework (2011)		Transition Wells	
Price (\$/m ³)	r_p	Price (\$/m ³)	r_p Transition Wells
PP ≤ 250.00	$((PP - 190.00) * 0.0006) * 100$	PP ≤ 250.00	$((PP - 210.00) * 0.00035) * 100$
250.00 < PP ≤ 400.00	$((PP - 250.00) * 0.0010) + 0.0360) * 100$	250.00 < PP ≤ 350.00	$((PP - 250.00) * 0.00010) + 0.0140) * 100$
400.00 < PP ≤ 535.00	$((PP - 400.00) * 0.0005) + 0.1860) * 100$	PP > 350.00	$((PP - 350.00) * 0.00005) + 0.0240) * 100$
PP > 535.00	$((PP - 535.00) * 0.0003) + 0.2535) * 100$	--	--
Maximum	35%	Maximum	35%

PP is the par price for the month in \$/m³

Note: r_p can be negative

Quantity Component (r_q)			
Alberta Royalty Framework (2011)		Transition Wells	
Quantity (m ³ /month)	r_q	Quantity (m ³ /month)	r_q Transition Wells
Q ≤ 106.4	$((Q - 106.4) * 0.0026) * 100$	Q ≤ 30.4	$((Q - 30.4) * 0.0013) * 100$
106.4 < Q ≤ 197.6	$((Q - 106.4) * 0.0010) * 100$	30.4 < Q ≤ 152.0	$((Q - 30.4) * 0.0013) * 100$
197.6 < Q ≤ 304.0	$((Q - 197.6) * 0.0007) + 0.0912) * 100$	152.0 < Q ≤ 273.6	$((Q - 152.0) * 0.0008) + 0.1581) * 100$
Q > 304.0	$((Q - 304.0) * 0.0003) + 0.1657) * 100$	Q > 273.6	$((Q - 273.6) * 0.0002) + 0.2554) * 100$
Maximum	30%	Maximum	35%

Q is the monthly production in m³

Note: r_q can be negative

Examples

Price (\$/m ³)	Quantity (m ³ /month)	ARF (2011)			Transition Wells		
		r_p	r_q	R%	r_p	r_q	R%
400.00	50.0	18.60%	-14.66%	3.94%	2.65%	2.55%	5.20%
400.00	200.0	18.60%	9.29%	27.89%	2.65%	19.65%	22.30%
600.00	50.0	27.30%	-14.66%	12.64%	3.65%	2.55%	6.20%
600.00	200.0	27.30%	9.29%	36.59%	3.65%	19.65%	23.30%