

$$GHG_i = \sum_i (V_{ve} - V_{CO_2-N_2} - V_{res})_j \times MF_i \times \rho_i \times 0.001$$

Where:

GHG_i = Annual emissions of greenhouse gas *i* attributable to gas well venting during completions or workovers, in metric tons;

j = Gas well;

V_{ve} = Quantity of natural gas vented from well *j*, determined in accordance with paragraph 1 of QC.33.4.6, in cubic metres at standard conditions;

V_{CO2-N2} = Quantity of CO₂ or nitrogen (N₂) injected into well *j* during completion or workover, in cubic metres at standard conditions;

V_{res} = Quantity of natural gas from well *j* sent to the transmission or distribution system during completion or workover, in cubic metres at standard conditions;

MF_i = Molar fraction of greenhouse gas *i* in the gas vented from reciprocating compressor, determined in accordance with paragraph 3 of QC.33.4;

ρ_i = Density of greenhouse gas *i* that is 1.893 kg per cubic metre for CO₂ and 0.690 kg per cubic metre for CH₄ at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

i = CO₂ or CH₄;

