

$$GHG_i = \sum_j (GLR \times F_L \times MF_i \times t)_j \times \rho_i \times 0.001$$

Where:

GHG_i = Annual emissions of greenhouse gas i vented during well testing, in metric tons;

j = Well tested;

GLR = Gas to liquid ratio for well j , determined in accordance with paragraph 1 of QC.33.4.11, in cubic metres of natural gas per cubic metre of liquid at standard conditions;

F_L = Liquid flow rate in well j , in cubic metres per hour;

MF_i = Molar fraction of greenhouse gas i in gas in well j , determined in accordance with paragraph 3 of QC.33.4;

t = Duration of testing of well j , in hours;

ρ_i = Density of greenhouse gas i that is 1.893 kg per cubic metre for CO_2 and 0.690 kg per cubic metre for CH_4 at standard conditions;

0.001 = Conversion factor, kilograms to metric tons;

i = CO_2 or CH_4 ;