Questions Rand

CEM calcs

ppm → #/mbtu basis for conversion tph * HHV or just gas flow

What info did Jerry give you?

CO conversion: ppm → lb/mbtu

$$lb/MBTU = \underbrace{2.59 \times 10^{-9} (MW)}_{lb/scf} \times [ppm]_{dry}$$

F factor

$$\times\ 9780\ dscf/10^6\ BTU \times \frac{20.9}{20.9 - O_2\%}$$

correction

Stack Backgrd Grid

$$lb/HR = 2.59 \times 10^{-9} (MW) \times [ppm] \times \text{Flow (SCFH)}$$

lb/scf

100 ppm .298 35.5

CO Result

converted dry measured @ stack

$$[CO]_s = [CO]_m (1 - CO_2)$$

ppm ppm % Fraction

measurement correction

EPA reference method 10 eliminate interface w/ CO2 CFR part 60 app a

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