

### Emissions - Approximate Conversion Factors

#### lbs/mmbtu to ppm (ref. 3% O<sub>2</sub>, dry)

	Natural Gas	Propane	#2 Oil	#6 Oil
NO <sub>x</sub> :	833	711	780	777
CO:	1368	1169	1282	1277
SO <sub>x</sub> :	599	511	561	559
UBHC / VOC:	2394	2045	2244	2235

Example: NO<sub>x</sub> = 0.15 lbs/mmbtu firing natural gas

$$\text{NO}_x \text{ in ppm} = 0.15 * 833 = 125 \text{ ppm}$$

#### lbs/mmbtu to mg/nm<sup>3</sup> (ref. 3% O<sub>2</sub>, dry, 1 atm, 0°C)

	Natural Gas	Propane	#2 Oil	#6 Oil
	1704	1676	1619	1576

#### lbs/mmbtu to mg/nm<sup>3</sup> (ref. 5% O<sub>2</sub>, dry, 1 atm, 0°C)

	Natural Gas	Propane	#2 Oil	#6 Oil
	1532	1489	1442	1404

#### lbs/mmbtu to mg/nm<sup>3</sup> (ref. 11% O<sub>2</sub>, dry, 1 atm, 0°C)

	Natural Gas	Propane	#2 Oil	#6 Oil
	952	935	887	880

Example: NO<sub>x</sub> = 0.15 lbs/mmbtu firing natural gas

$$\text{NO}_x \text{ in mg/nm}^3 = 0.15 * 1704 = 226 \text{ mg/nm}^3 \text{ (ref. 3\% O}_2\text{, dry, 1 atm, 0C)}$$

- Notes:
1. UBHC / VOC conversion based on methane, CH<sub>4</sub>.
  2. NG conversions based on analysis: CH<sub>4</sub>: 95%, C<sub>2</sub>H<sub>6</sub>: 5%, N<sub>2</sub>: 5%
  3. #2 oil conversions based on analysis: C: 87.7%, H: 12.1%, N: .02%, S: 0.2%
  4. #6 oil conversions based on analysis: C: 88.2%, H: 10.4%, N: 0.4%, S: 1%
  5. Propane conversions based on analysis: C<sub>3</sub>H<sub>8</sub>: 100%