



## TRI Analytical Methods

Analyte	Analysis Method	Level of Accuracy	Level of Precision	Minimum Detection Limit	Maximum Detection Limit
Carbon Monoxide	Gas Chromatography with catalytic converter followed by flame ionization detector	5% or $\pm 0.5$ ppm, whichever is greater	$\pm 3\%$	0.5 ppm	2,000 ppm (100% special request)
Carbon Dioxide	Gas Chromatography with catalytic converter followed by flame ionization detector	5% or $\pm 5$ ppm, whichever is greater	$\pm 3\%$	20 ppm (1ppm special request)	50,000 ppm (100% special request)
Methane	Gas Chromatography with catalytic converter followed by flame ionization detector	5% or $\pm 1$ ppm, whichever is greater	$\pm 3\%$	1 ppm	2,000 ppm (100% special request)
Total Gaseous Hydrocarbons	Gas Chromatography with flame ionization detector	5% or $\pm 1$ ppm, whichever is greater	$\pm 5\%$	1 ppm	2,000 ppm (100% special request)
Oxygen	Gas Chromatography with thermal conductivity detector	$\pm 2\%$ of concentration or 0.5% absolute whichever is greater	$\pm 2\%$	0.5%	100%
Nitrogen	Gas Chromatography with thermal conductivity detector	$\pm 2\%$ of concentration or 0.5% absolute whichever is greater	$\pm 2\%$	0.5%	100%
Condensed Hydrocarbons (Oil Mist and Particulates)	Standard Gravimetric, with hexane extraction for oil mist if results are within 90% of specification	$\pm 0.1$ mg/m <sup>3</sup> or 10% whichever is greater	$\pm 1\%$	0.1 mg/m <sup>3</sup> (less on request)	Varies
Moisture Dewpoint	Color indicator tube with critical orifice to measure air flow	$\pm 4^\circ\text{F}$ at $-65^\circ\text{F}$ $\pm 30\%$	$\pm 30\%$	$-95^\circ\text{F}(-70^\circ\text{C})$	$20^\circ\text{F}(-6^\circ\text{C})$
Moisture ppmv	Color indicator tube with critical orifice to measure air flow	$\pm 8$ ppm at 24 ppm $\pm 30\%$	$\pm 30\%$	2 ppm	3500 ppm
Nitrogen Dioxide	Color indicator tube with critical orifice to measure air flow	$\pm 30\%$	$\pm 20\%$	0.1 ppm	1.0 ppm
Sulphur Dioxide	Color indicator tube with critical orifice to measure air flow	$\pm 30\%$	$\pm 20\%$	0.1 ppm	3 ppm
Halogenated Solvents (Freon TF, 111-Trichloroethane, and others)	Gas Chromatography with electron capture detector	$\pm 10\%$	$\pm 10\%$	0.01 ppm	10 ppm
Halogenated Hydrocarbons (Freon TF, 111-Trichloroethane, and others)	Gas Chromatography with electron capture detector	$\pm 10\%$	$\pm 10\%$	0.1 ppm	Varies

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