



TRI Air Testing Analytical Methods

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 Technical Document TD-01- Rev 4

ANALYTE	ANALYTICAL METHOD	ACCURACY	PRECISION	LLOQ	ULLOQ
Carbon Monoxide	Gas Chromatography w/ catalytic conversion followed by FID	5% or ± 0.5 ppm whichever is greater	$\pm 3\%$	0.5 ppm	2,000 ppm
Carbon Dioxide	Gas Chromatography w/ catalytic conversion followed by FID	5% or ± 0.5 ppm whichever is greater	$\pm 3\%$	20 ppm	50,000 ppm
Methane	Gas Chromatography w/ FID	5% or ± 1 ppm whichever is greater	$\pm 3\%$	1 ppm	2,000 ppm
Total Gaseous Hydrocarbons	Gas Chromatography w/ FID	5% or ± 1 ppm whichever is greater	$\pm 5\%$	1 ppm	2,000 ppm
Oxygen	Gas Chromatography w/ TCD	$\pm 2\%$ of concentration or 0.5% of absolute	$\pm 2\%$	0.5% (0.25% special request)	100%
Nitrogen	Gas Chromatography w/ TCD	$\pm 2\%$ of concentration or 0.5% of absolute	$\pm 2\%$	0.5% (0.25% special request)	100%
Condensed Hydrocarbons (Oil Mist and Particulates)	Gravimetric w/ hexane extraction for oil mist wash	± 0.01 mg/m ³ or 10% whichever is greater	$\pm 1\%$	0.01 mg/m ³	variable
Moisture Dewpoint	Color indicator tube	$\pm 4^\circ$ F at -65° F $\pm 30\%$	$\pm 30\%$	-95° F (-70° C)	20° F (-6° C)
Moisture ppmv	Color indicator tube	± 8 ppm at 24ppm $\pm 30\%$	$\pm 30\%$	2 ppm	3500 ppm
Nitrogen Dioxide	Color indicator tube	$\pm 30\%$	$\pm 20\%$	0.1 ppm	1.0 ppm
Sulfur Dioxide	Color indicator tube	$\pm 30\%$	$\pm 20\%$	0.1 ppm	3 ppm
Halogenated Solvents (Freon TF, methyl chloroform)	Gas Chromatography w/ ECD	$\pm 10\%$	$\pm 10\%$	0.1 ppm	10 ppm
Halogenated Hydrocarbons (Freon TF, methyl chloroform)	Gas Chromatography w/ ECD	$\pm 10\%$	$\pm 10\%$	0.1 ppm	variable