



SCIENCE & ENGINEERING

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## Compressed Breathing Air Analysis

**R**PC's air quality laboratory employs highly qualified scientists and utilizes cutting edge technology for the analysis of compressed breathing air. This analysis is carried out for many clients across Canada including fire departments, diving shops, and many industries involved with painting and sandblasting.

The air quality laboratory at RPC is accredited by the Standards Council of Canada for the analysis of compressed breathing air to the requirements of the CAN/CSA Z180.1-13 standard. This standard requires that a breathing air source be tested for safety and purity at least every six months.

Following a prompt analysis of your sample, RPC's air quality laboratory will provide a certificate of analysis which indicates the sample's conformance or non-conformance to the requirements of the standard. Furthermore, the laboratory analysts will provide a friendly reminder of when your certificate expires and will arrange a retest. This ensures that you, as our valued client, do not have to be concerned about your certificate expiring before resampling. An example of RPC's certificate of analysis can be seen below.

### EXAMPLE REPORT Compressed Breathing Air Analysis to CAN/CSA Standard Z180.1-13

Component	Allowable Maximum	Sample
Oxygen	20-22%	21%
Nitrogen and rare gases	78-80%	79%
Carbon Monoxide	5 ppm	< 0.5 ppm
Carbon Dioxide	600 ppm	5 ppm
Methane	10 ppm	2 ppm
Volatile Non-Methane Hydrocarbons	5 ppm	< 0.5 ppm
Volatile Halogenated Hydrocarbons	5 ppm	< 0.5 ppm
Oil, Particulates and Condensates	1 mg/m <sup>3</sup>	< 0.1 mg/m <sup>3</sup>
Dew Point (water)	-53 °C	-77 °C
Odour	Slight odour	None

**Based on the above analysis, the submitted sample MEETS the requirements of the Standard.**

#### Contact

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*RPC's Quality Management System is registered to ISO 9001:2015.*