Dissolved Gas Analyzer (DGA) GC System

By reconnecting a few tubing lines, the DGA GC can be configured to prepare dissolved gas standards. A Tedlar

bag (or other container) filled with gas standard at a known concentration is connected to the standard pump. The standards preparation vessel is filled with sample liquid, such as seawater or wastewater. The standard pump bubbles gas standard into the standards preparation vessel, equilibrating the liquid over time to the known concentration. Equilibration takes about one hour.

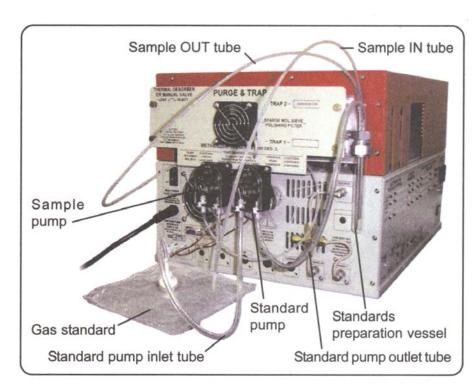
Solubility of Gases in Water at 1%:

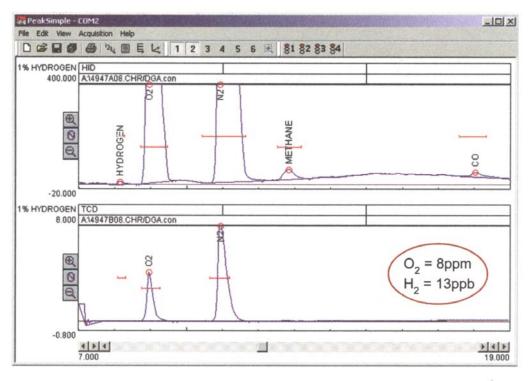
Hydrogen

0.016ppm

Oxygen

0.43ppm





To obtain these chromatograms, the DGA GC standards preparation module was used to create 13ppb hydrogen gas by weight in water: 1% hydrogen gas standard was pumped through water in the standards preparation vessel for a length of time sufficient to achieve equilibration. The water in the standards preparation vessel was then pumped into the gas extraction loop and run as the sample. The TCD quantifies the large oxygen and nitrogen peaks, while the sensitive HID detects hydrogen down to 13ppb.

8610-0035 8610-0036 DGA GC System with HID Detector & 1 channel data system DGA GC System with TCD & HID Detectors, & 4 channel data system



OPTIONS & UPGRADES: additional detectors, 6 channel USB PeakSimple data system. (VOLTAGE: for 110VAC, use 8610-5405-1; for 220VAC, use 8610-5405-2)

Preconfigured GC Systems

