

GreenHouse Gas GC configuration

November 2008

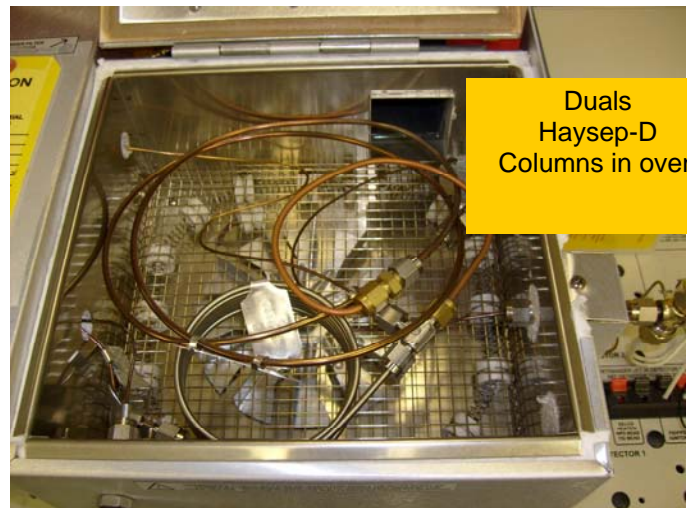
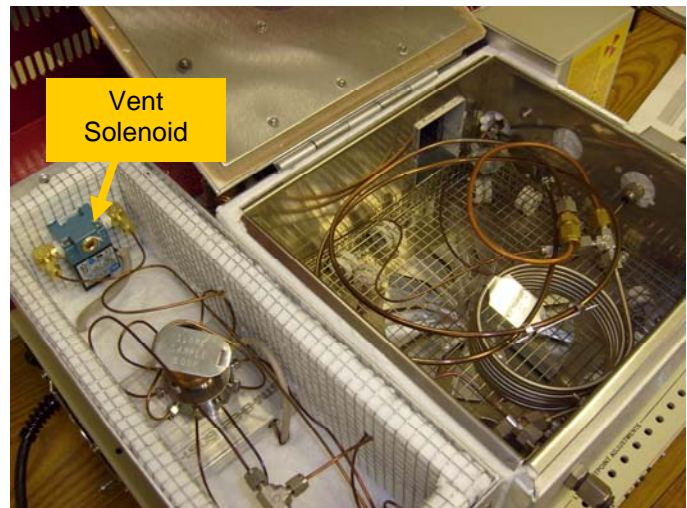
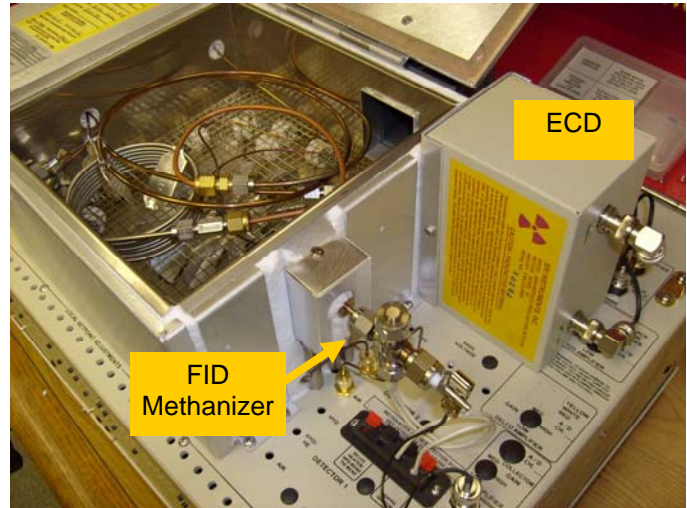
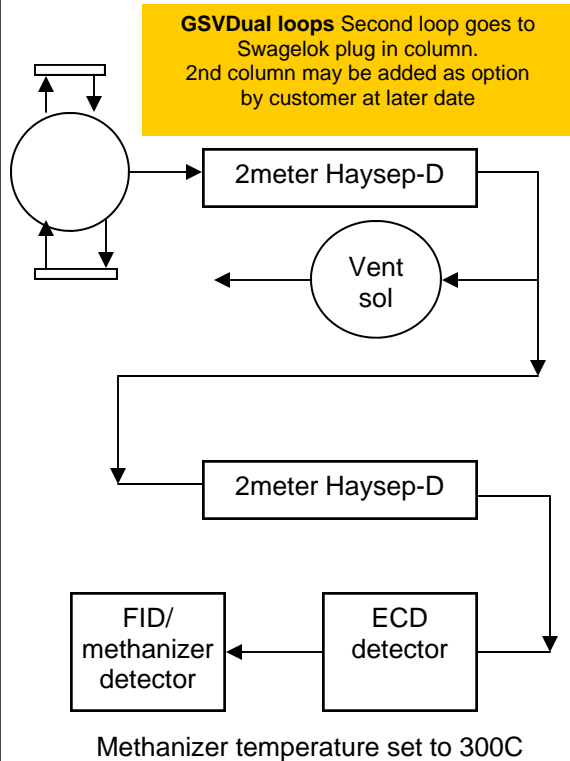
The SRI GreenHouse Gas GC configuration consists of an Electron Capture Detector (ECD) and a Flame Ionization Detector (FID) plus Methanizer.

The ECD detects Nitrous Oxide (N₂O) while the FID/Methanizer detects methane (CH₄) and Carbon Dioxide (CO₂).

Based on field experience over the last few years, we have changed the plumbing and columns slightly to improve the analysis.

As of August 2008 we now suggest a combination of a 2 meter Haysep-D column in series with another 2 meter Haysep-D column..

The system is operated on Nitrogen carrier at 20 psi with NO makeup gas provided for the ECD to keep the flow to the FID in the normal range (although makeup gas may be utilized if desired). Makeup gas may make the FID flame harder to light since the total flow will then be higher. Hydrogen and Air are supplied to the FID/Methanizer as normal.



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The oven temperature is set to 100C isothermal for 8 minutes.

The Event table is set to open the vent solenoid at 0.00 minutes (Relay E on) and then close the solenoid at .6 minutes (Relay E off) once the Oxygen peak has passed through the Haysep-D column, but prior to the Methane, CO2 and N2O peaks leaving the Haysep-D column and passing into the Shincarbon column.

