ETO Monitoring System

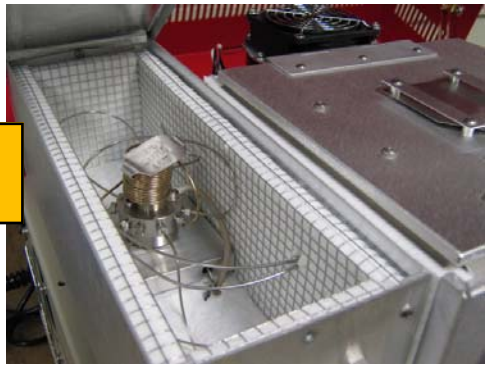
December 2013

The SRI ETO monitoring system consists of an 8610C Gas Chromatograph and a special sub-chassis which contains the valves and hardware to select 1 of 20 separate sample streams under control of the included PeakSimple software.

The GC sits securely on top of the valve chassis to minimize the bench space required, and to allow easy shipment of the GC or valve chassis independently should service be required. Both the GC and valve chassis are supplied with heavy duty shipping containers for quick easy packing and shipment, and can even be checked as airline baggage.

Shipping container

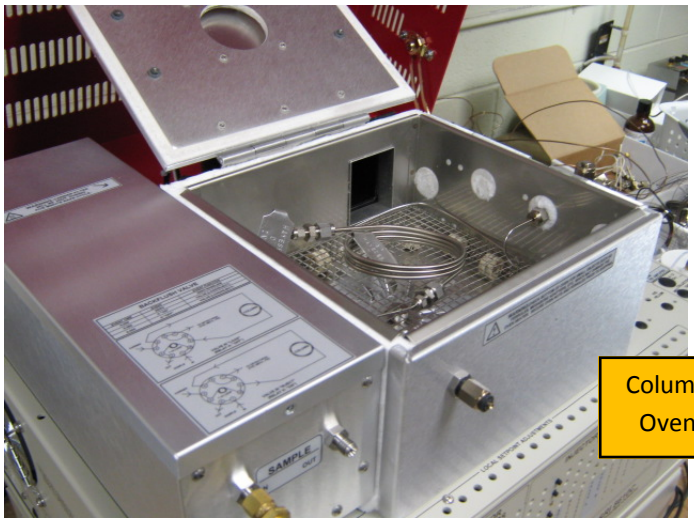
The GC itself is equipped with a single FID detector, a 3 foot Haysep-N column and a 10port gas sampling valve configured to automatically inject and backflush the column.



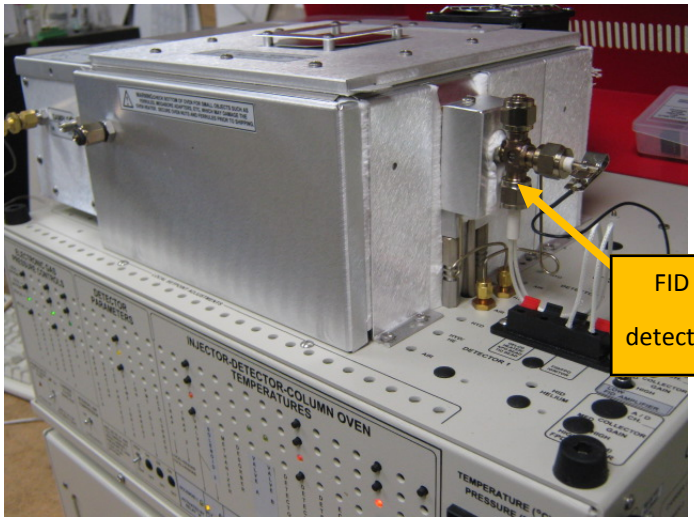
Valve oven

8610C GC

Valve chassis



Column Oven



FID detector

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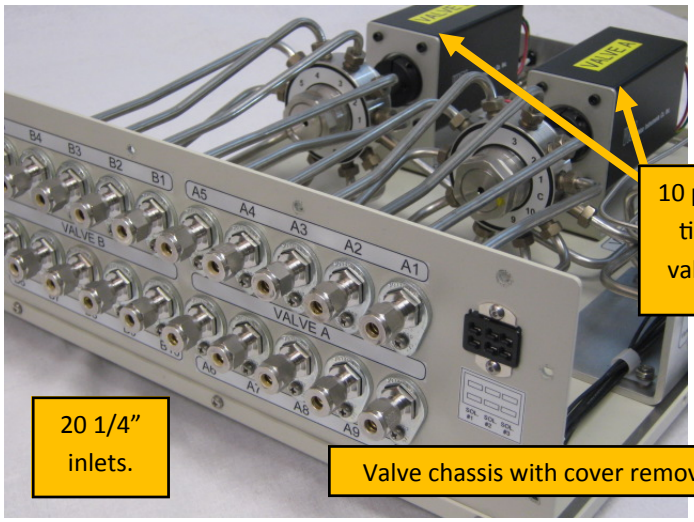
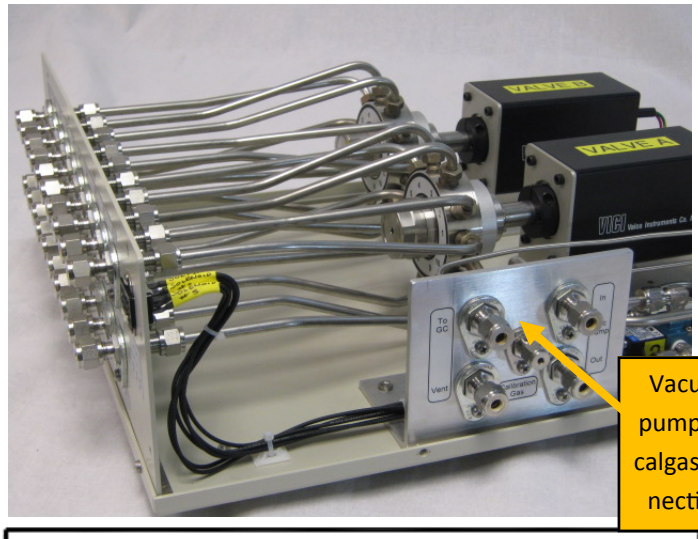
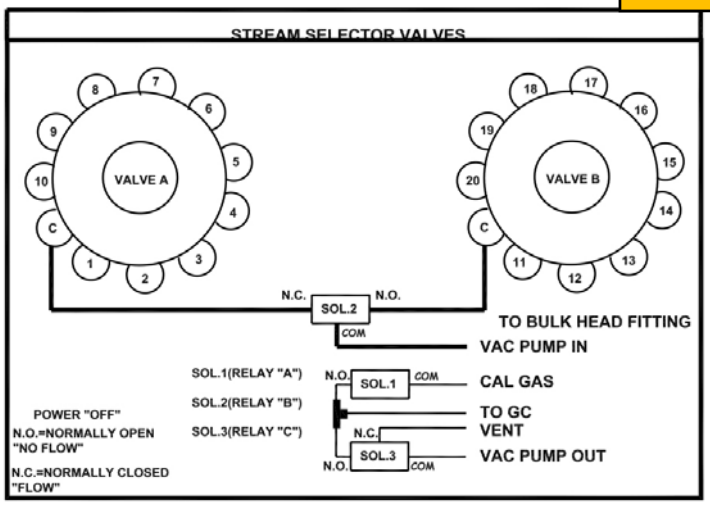
The valve chassis contains two Valco 10 stream selector valves and a solenoid valve to switch between the two. These valve use massive 1/4" diameter tube connections so the vacuum pump is not flow restricted. This allows the vacuum pump (customer supplied) to pull fresh air samples from long distances (hundreds of feet). The vacuum pump runs constantly 24/7 and is always pulling sample from one of the twenty ports.



The vacuum pump and calibration gas connections are on the front. A separate port is provided so the calibration gas can be run (and the calibration updated) as part of a sequence (queue).



The plumbing schematic is shown at right.



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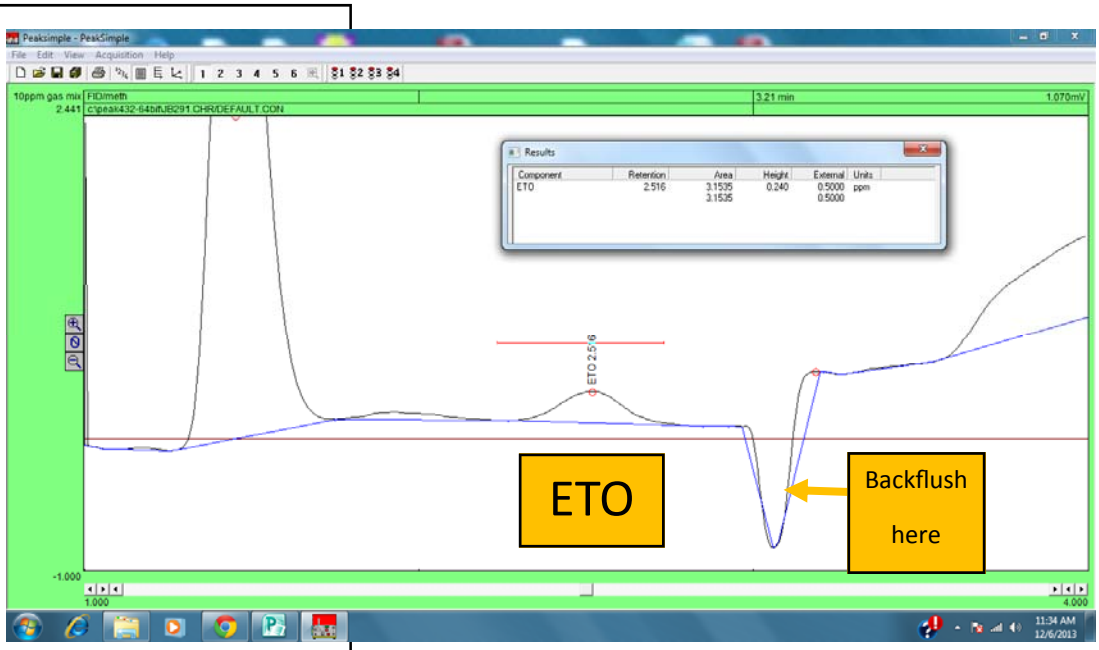
Shown at right is the chromatogram of a .5ppm ETO standard.

The results from an unlimited number of time and date stamped test runs accumulate inside PeakSimple's log file.



At any time, you can copy and paste the log file into Excel, or another computer, or the user can load the file directly from Excel.

You can also display the results of many test runs graphically in a 3D display.