

# 310 Soil Gas GC System



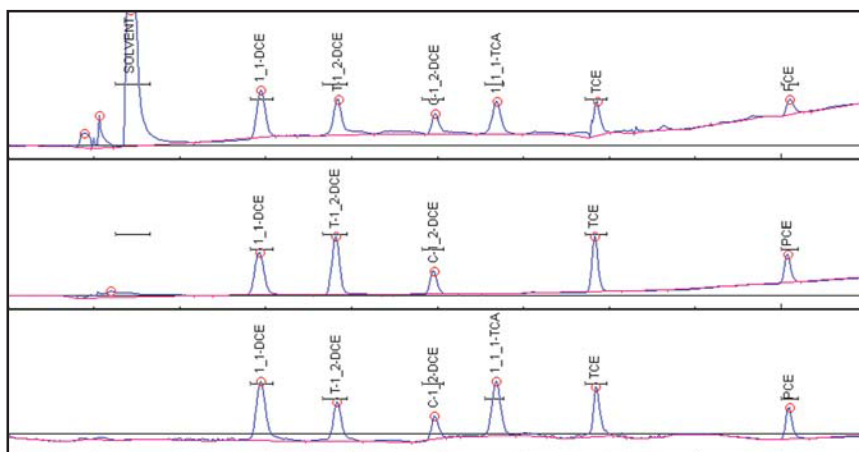
- **PID and FID/DELCD Detectors**
- **Built-in “whisper quiet” Air Compressor**
- **4 channel PeakSimple Data System**
- **30 meter Capillary Column**
- **On-Column Injector**
- **...on the ultra compact 310 chassis**

The 310 Soil Gas GC System is similar to the Environmental GC, except that it is more compact and does not include a Purge & Trap. This configuration has been approved by the Japanese Ministry of the Environment for the analysis of VOCs in soil and water samples by direct headspace injection. The only sample

preparation required is to place the soil sample with water into a vial, and heat it or let it equilibrate at room temperature, then take a headspace sample and inject it into the On-Column injector.

The sensitive, nondestructive PID detector responds to carbon double bonds and aromatics. The combination FID/DELCD detector may be operated in regular (simultaneous operation) or high sensitivity mode (FID hydrogen off, DELCD only). The FID responds linearly to all hydrocarbons, while the DELCD responds to chlorinated and brominated molecules. The built-in air compressor provides a nearly silent supply of FID combustion air, eliminating the need for air cylinders. The 30 meter, 0.53mm capillary column can efficiently separate hydrocarbons up to C<sub>40</sub><sup>+</sup>.

To obtain these three chromatograms, a 50ppb Japanese VOC standard was placed into a VOA vial with water, and allowed to equilibrate at room temperature for 45 minutes. The FID chromatogram shows all the components and the solvent. The PID does not detect the 1,1,1-TCA, while the DELCD is blind to the solvent.



**0310-0045**

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OPTIONS & UPGRADES: 6 channel USB PeakSimple data system, H<sub>2</sub>-50XR hydrogen generator, split/splitless and PTV injectors. (VOLTAGE: for 110VAC, use 0310-0045-1; for 220VAC, use 0310-0045-2)