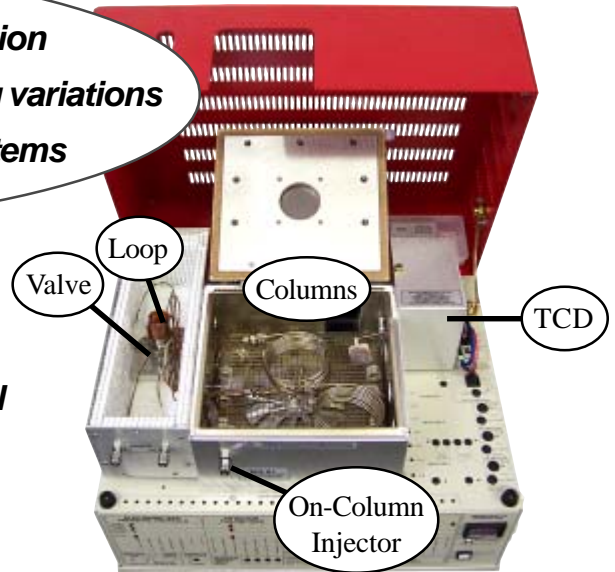


Multiple Gas Analyzer #1 GC Systems

- *Separates multiple gases with a single injection*
- *Very tolerant of user adjustments and timing variations*
- *Simpler than other multiple gas capable systems*

The basic model includes:

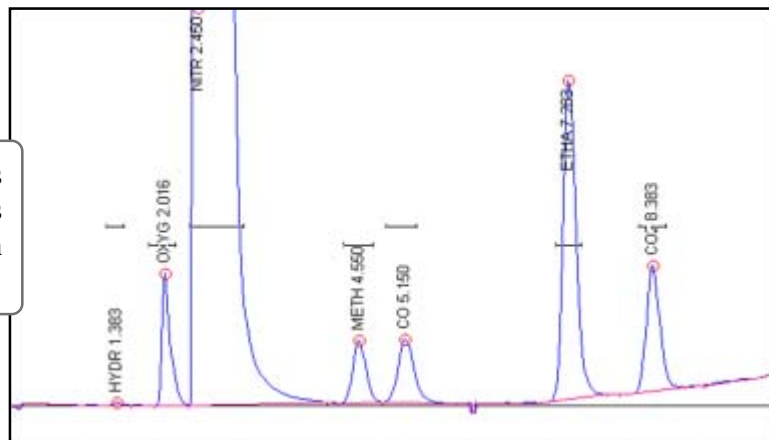
- *TCD Detector*
 - *Two Columns - MoleSieve 13X & Silica Gel*
 - *10-port Gas Sampling Valve and Loop*
 - *1 channel PeakSimple Data System*
- ...on the compact 910 chassis*



The Buck Multiple Gas Analyzer #1 GC System (MG#1) can separate multiple gases with a single injection. It is pre-plumbed and ready to resolve H₂, O₂, N₂, Methane, CO, Ethane, CO₂, Ethylene, NO_x, Acetylene, Propane, Butanes, Pentanes, and C₆-C₈. The MG#1 is very tolerant of user adjustments and timing variations because it is simpler than other multi-gas capable systems. Unlike complicated and timing-critical gas analysis configurations with three or four columns and three or four valves, the Buck Multiple Gas Analyzer uses a single 10-port gas sampling valve and two packed columns: a 2-meter Molecular Sieve 13X and a 2-meter Silica Gel.

The basic Multiple Gas Analyzer #1 is equipped with a TCD detector for detection limits in the 200-500ppm range. The second option is a TCD-Methanizer-FID configuration, which provides 5ppm detection limits for CO, CO₂, and all hydrocarbons. The third option is a TCD-HID detector combination for detection limits in the 10ppm range for all analytes.

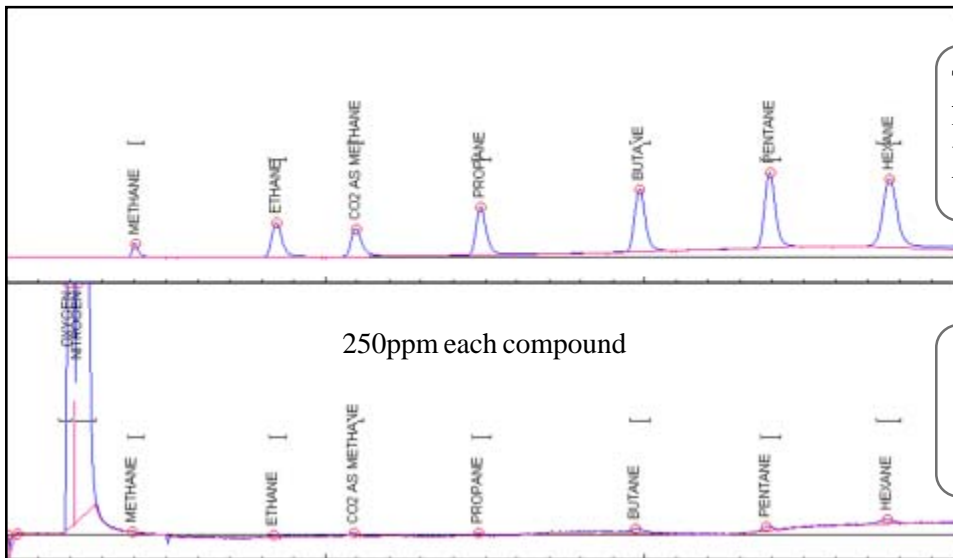
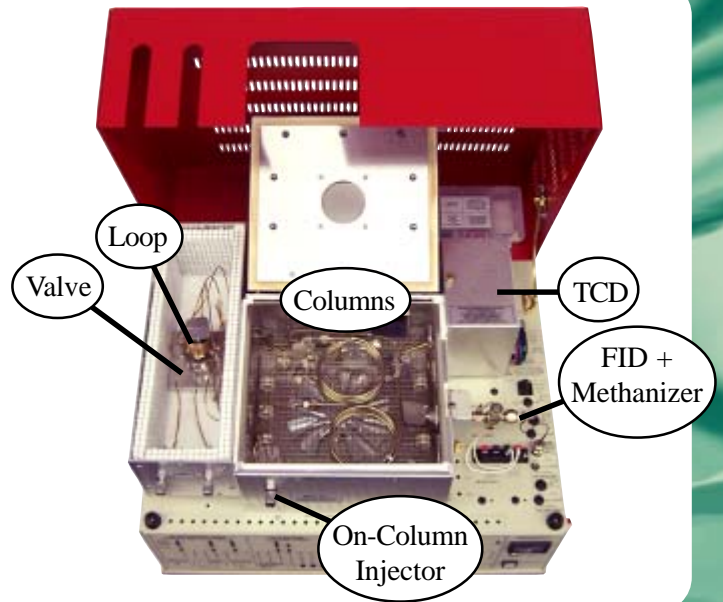
This chromatogram shows the separation of a 1% Gas Mix + 2% ethane sample on a basic TCD equipped MG#1



Multiple Gas Analyzer #1 *continued*

This optional model includes:

- **TCD Detector**
- **FID-Methanizer**
- **Two Packed Columns**
- **10-port Gas Sampling Valve and Loop**
- **4 or 6 channel PeakSimple Data System**



The FID measures the C_1 - C_6 hydrocarbons, plus CO and CO_2 , which are converted to methane by the Methanizer in the FID jet.

The TCD measures hydrogen, oxygen, nitrogen, methane, and other compounds whose concentrations are at least 200-500ppm.

- 910-0070 Multiple Gas Analyzer #1 with TCD detector and 1 channel PeakSimple data system
- 910-0071 Multiple Gas Analyzer #1 with TCD, Methanizer, FID, built-in "whisper quiet" air compressor, and 4 channel PeakSimple data system
- 910-0072 Multiple Gas Analyzer #1 with TCD and HID detectors, and 4 channel PeakSimple data system



OPTIONS & UPGRADES: 6 channel USB PeakSimple Data System, H_2 -50 hydrogen generator, additional Gas Sampling Valve, additional detectors