



Chromatography Solutions for Biodiesel Quality Analysis

**UCONN Biofuel Symposium
April 1, 2007**

Approaching Analytical Solutions Differently...



Forensics



Environmental



Biofuels



Food & Beverages

Be the global leader in application-focused measurement solutions to improve the quality of our environment, food, energy sources and new materials, for global and human health and well being



**Pharmaceutical
Development &
Manufacturing**

**Chemicals &
Hydrocarbon
Processing**



**Material
Characterization**



Semiconductor

... measuring the ecosystems



ecoanalytix



Food Safety

- Farm to table
- Melamine, pesticides, lead mercury, cadmium, pesticides, etc



Water Quality

- Rain to field or glass
- Lead, mercury, arsenic PAH, pesticides, etc



Biofuel Development

- Field to engine tank
- Biodiesel, bio-ethanol, feedstocks, bio-content

... solving problems in water quality, food safety & biofuel development

- **Provide an integrated solution for biodiesel quality analysis**
 - **Free and Total Glycerin (En 14105, ASTM D6584)**
 - **Residual Methanol (En 14110)**

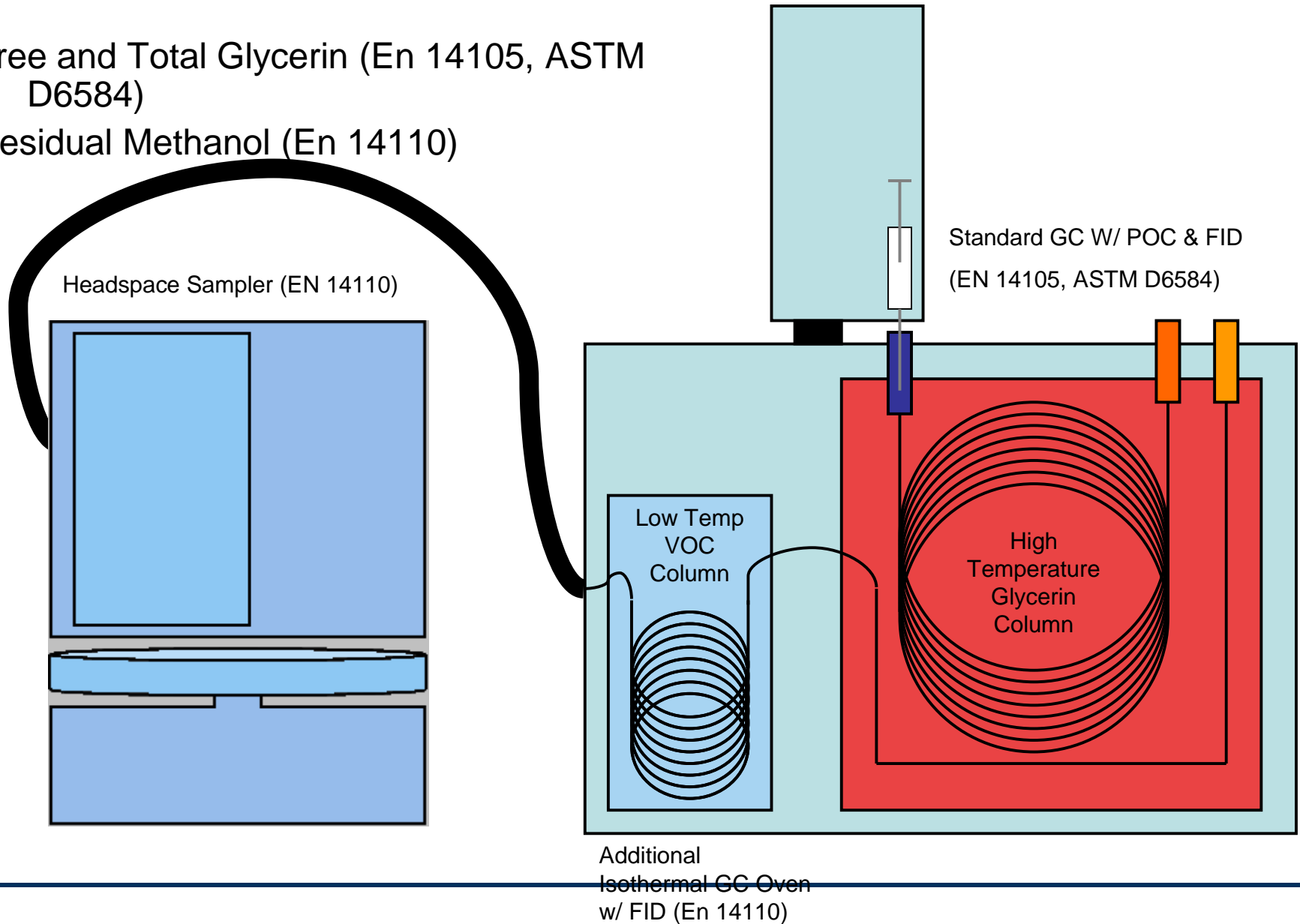
- **GC methods require the use of 2 different GC columns**
 - **Free and Total Glycerin requires 380 °C+ oven temperature**

- **The advantages of a 2 in 1 solution:**
 - **Reduce instrument expense**
 - **Small foot print**
 - **No column swapping**
 - **Single “Do it All” Solution**

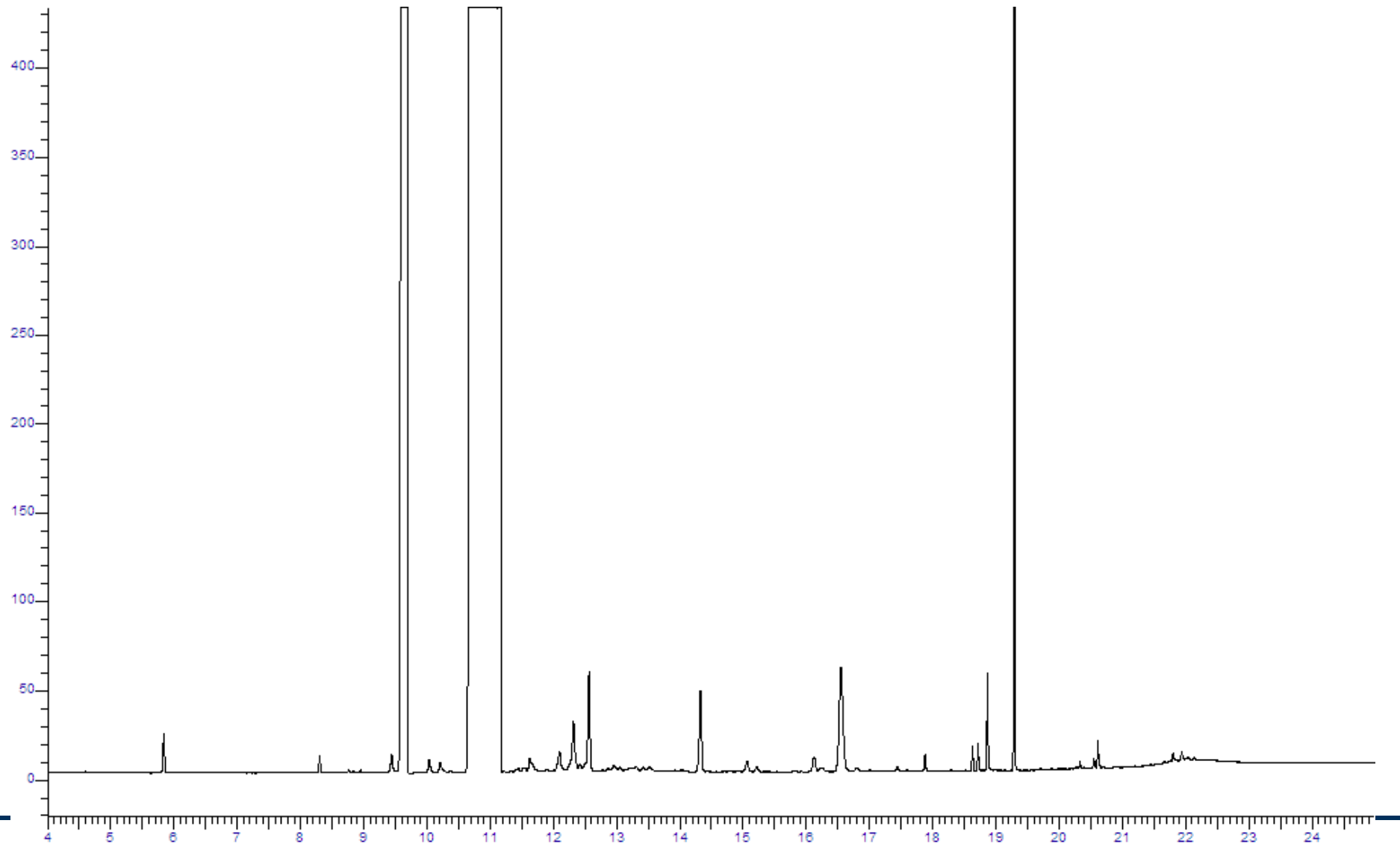
What does this analyzer look like?

Free and Total Glycerin (En 14105, ASTM D6584)

Residual Methanol (En 14110)



Free and Total Glycerin



Residual Alcohol

