

# MATES III Laboratory Analysis

Volatile Organic Compounds (VOCs)  
and  
Carbonyls

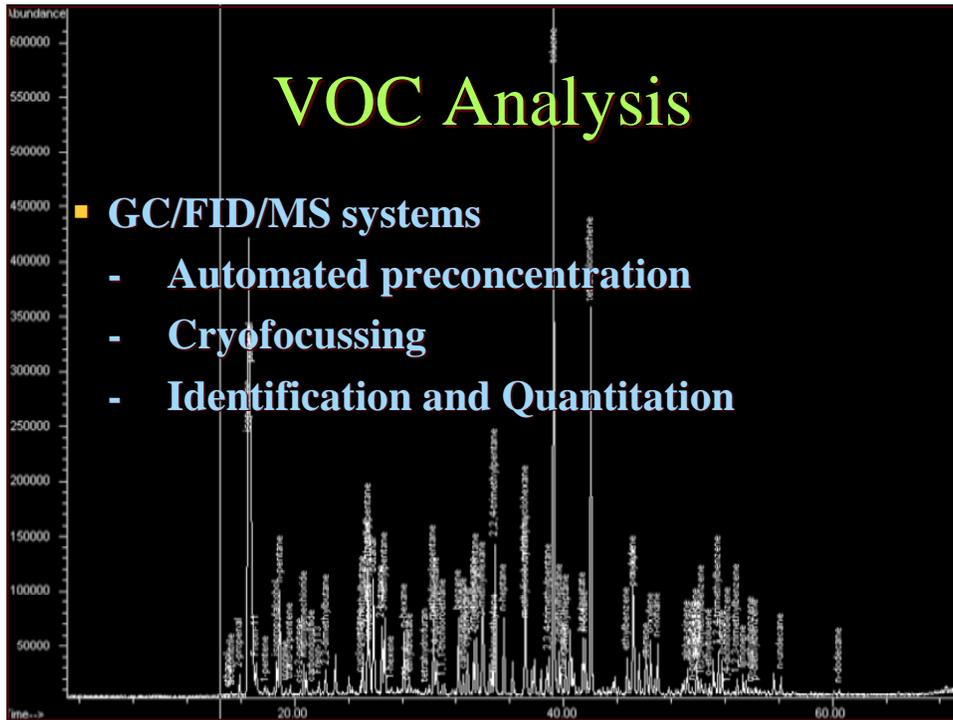


South Coast Air Quality Management District  
December 9<sup>th</sup>, 2003

## VOC Sampling

- Based on U.S. EPA methods TO-14 and TO-15
- Summa-Polished Canisters (6L)
  - Automated samplers fill canisters with ambient air
  - Constant rate
  - Integrated 8-hour and 24-hour sampling
  - Canisters cleaned and analytically checked before released for sampling





## Carbonyl Sampling

- Based on U.S. EPA method TO-11
- DNPH (2,4-dinitrophenylhydriene) Cartridges
  - Automated samplers flow ambient air through cartridges
  - Constant rate
  - Integrated 8-hour or 24-hour sampling

# Carbonyl Analysis

- Solvent extraction
- HPLC analysis with photodiode array detection

