

# GC.IRD

## Application Note: Forensics 1

Determination of  
Methamphetamine,  
Cocaine and Heroin



Use arrow keys to navigate through presentation.

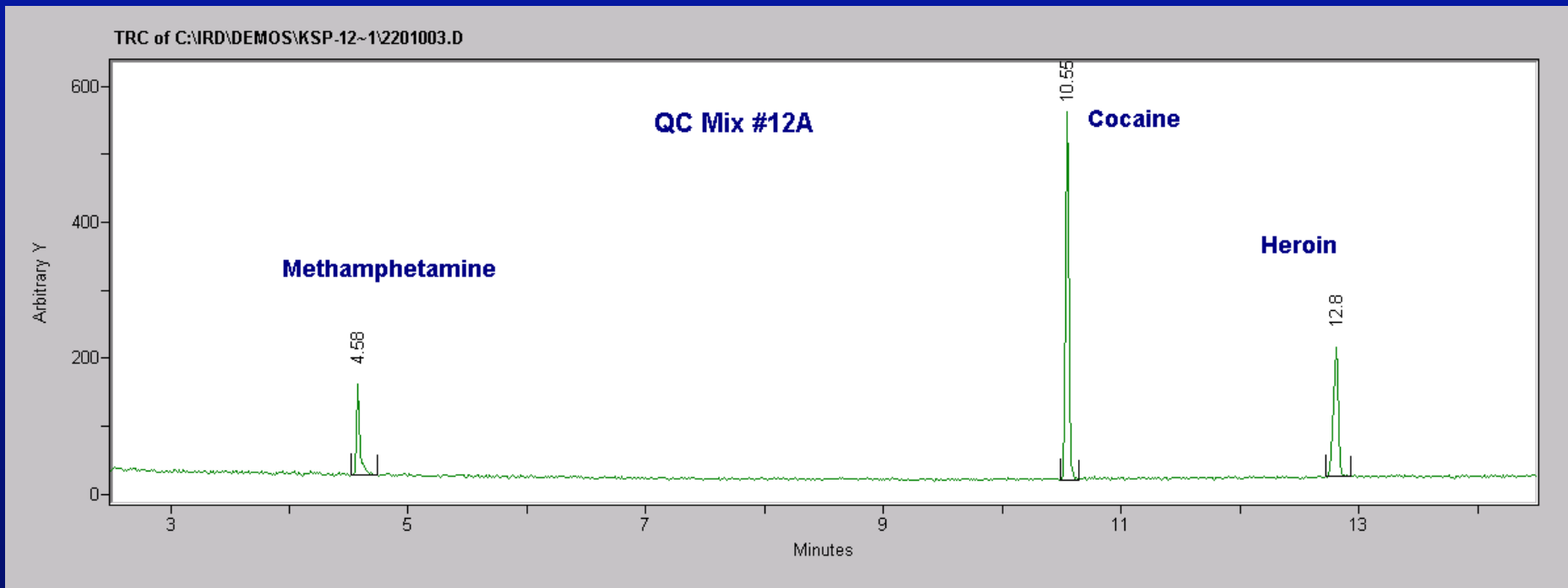
# Drug Analysis Demo

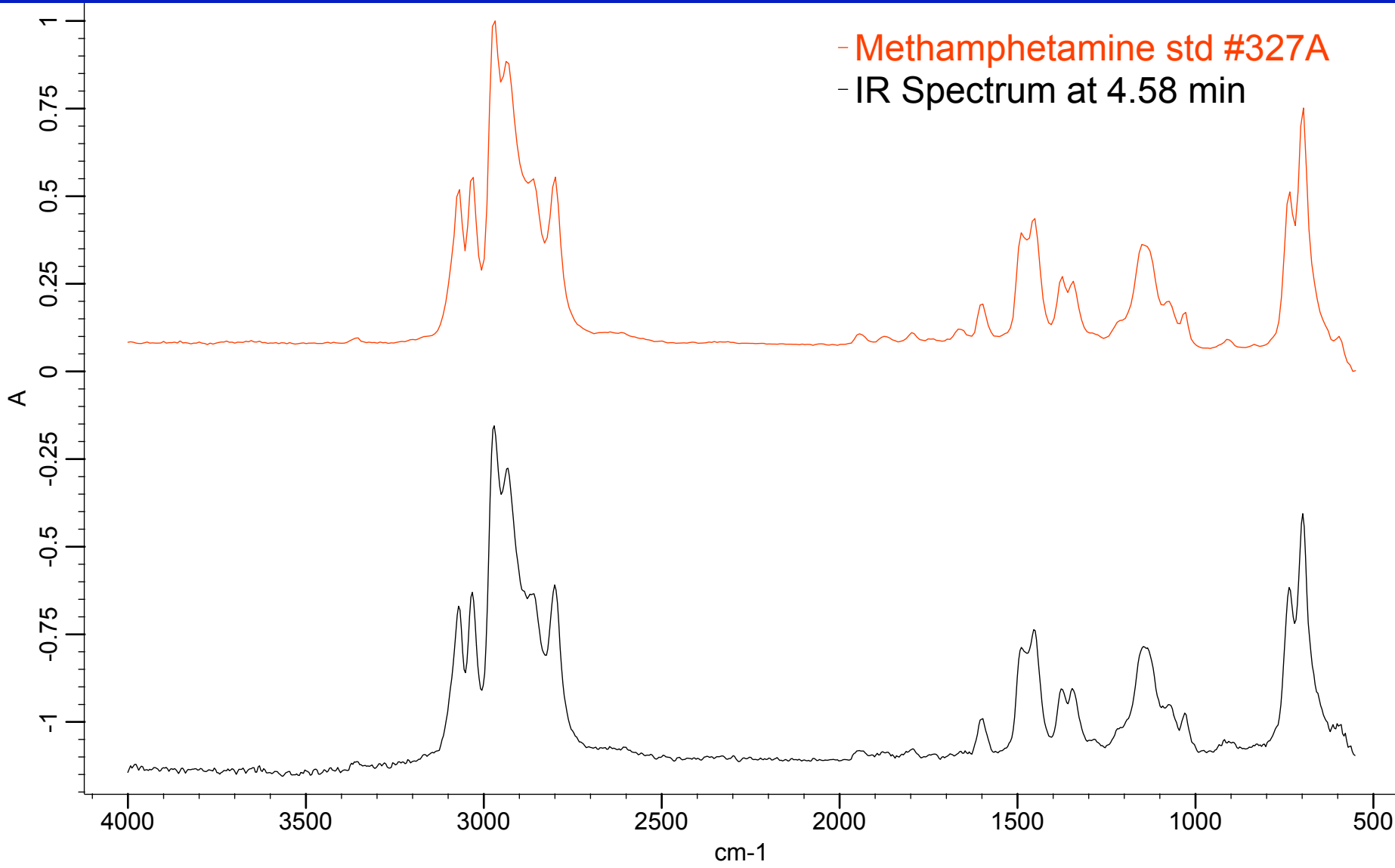
- Samples analyzed at ASAP LLC, Covington, KY, 12 Dec 2006
- Samples provided by Kentucky State Police, Northern Lab, Cold Spring, KY
- Samples dissolved in Methanol, concentration ~ 1mg/mL

# Conditions

- Agilent 6890 GC
- ASAP IRD II
- HP-5 2.0 mL/min
  - 30m x .25mm ID x .25 $\mu$ m coating
- 1.0  $\mu$ L Splitless
  - 80 mL/min Purge @ 0.75 min
- Inlet: 250° C
- Oven: 80° C (1 min)
  - 20° C/min to 280° C
  - Final Hold 13.00 min
- IRD II
  - Transfer Lines and Flow Cell: 280° C
  - Sweep regulators at 5 psig.

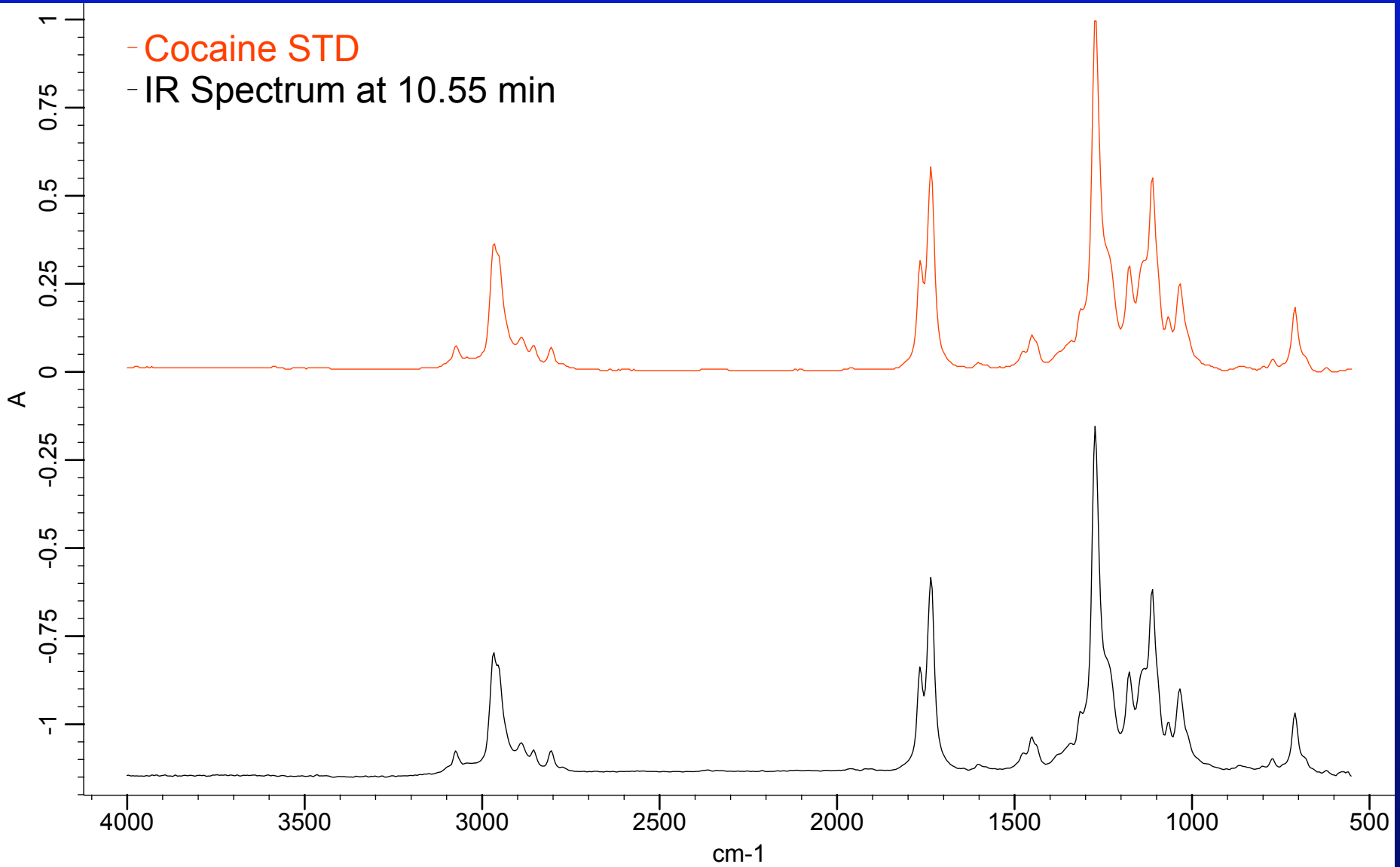
# Infrared Chromatogram (Gram-Schmidt Reconstruction)





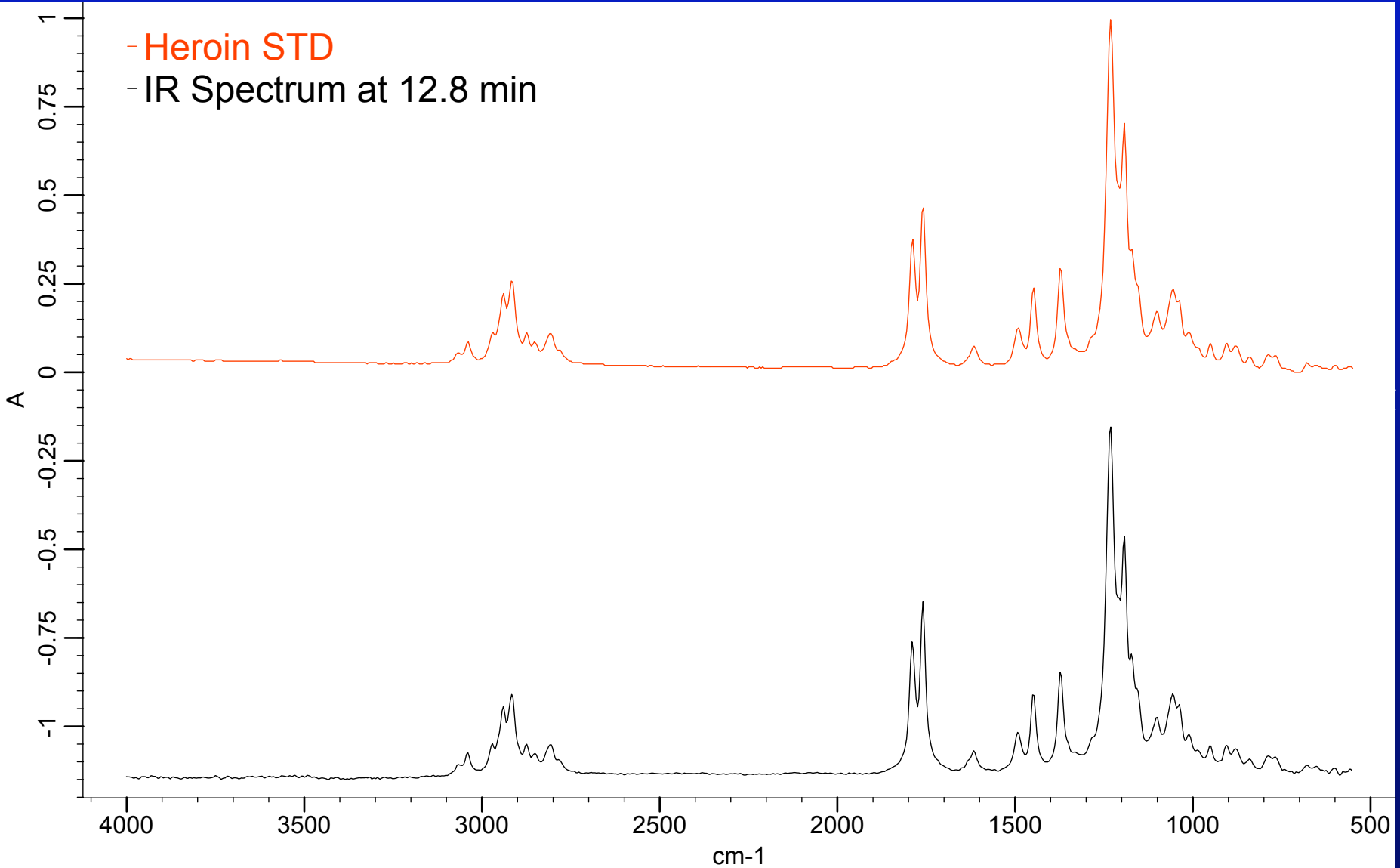
Library Search versus Peak #1 Data

- Cocaine STD  
- IR Spectrum at 10.55 min

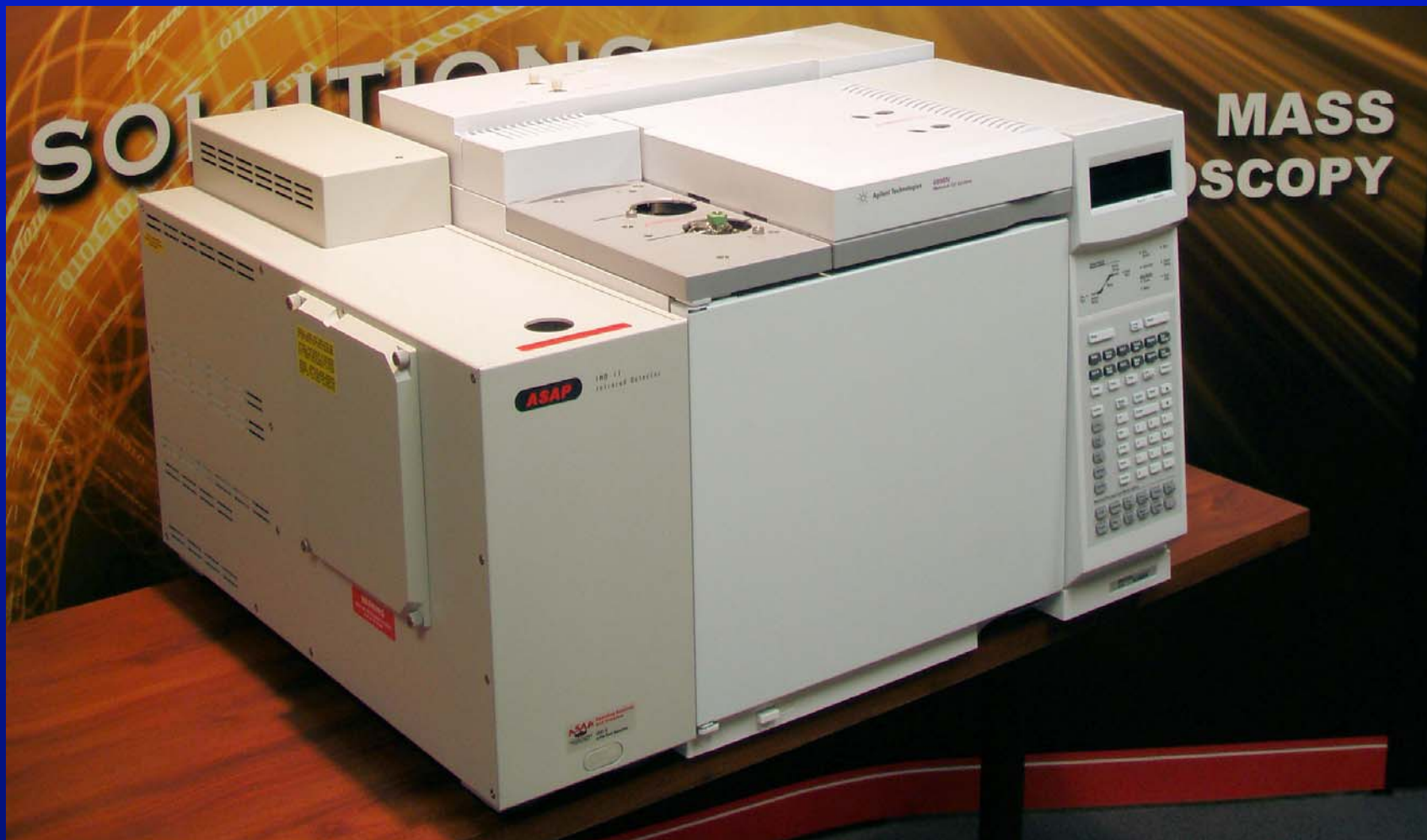


Library Search versus Peak #2 Data

- Heroin STD  
- IR Spectrum at 12.8 min



Library Search versus Peak #3 Data



**ASAP IRD II Now Available**  
**Call 1-877-987-2800**



Press <esc> to conclude presentation.