

# ***New Applications on a Revolutionary Point-of-Use Instrument***

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Robert L. Cook***



**ABB**

# Introduction PGC 1000 Design Elements

- Point-of-Use

  - Greatly Reduce Sample Lines & Requires No Shelter
  - NEMA-4 Construction & Four Stream Capability

- Price Point

  - Very Competitive Pricing

- Small Size & Low Weight

  - Roughly 7"X16"X9" & 47 Pounds

- Low Consumables

  - Around 10 ml/min Each Carrier & Sample

- Power Options

  - 12 or 24 VDC, Max 4 amp, nominal 4 watts can be
  - Solar Powered in a General Purpose Area

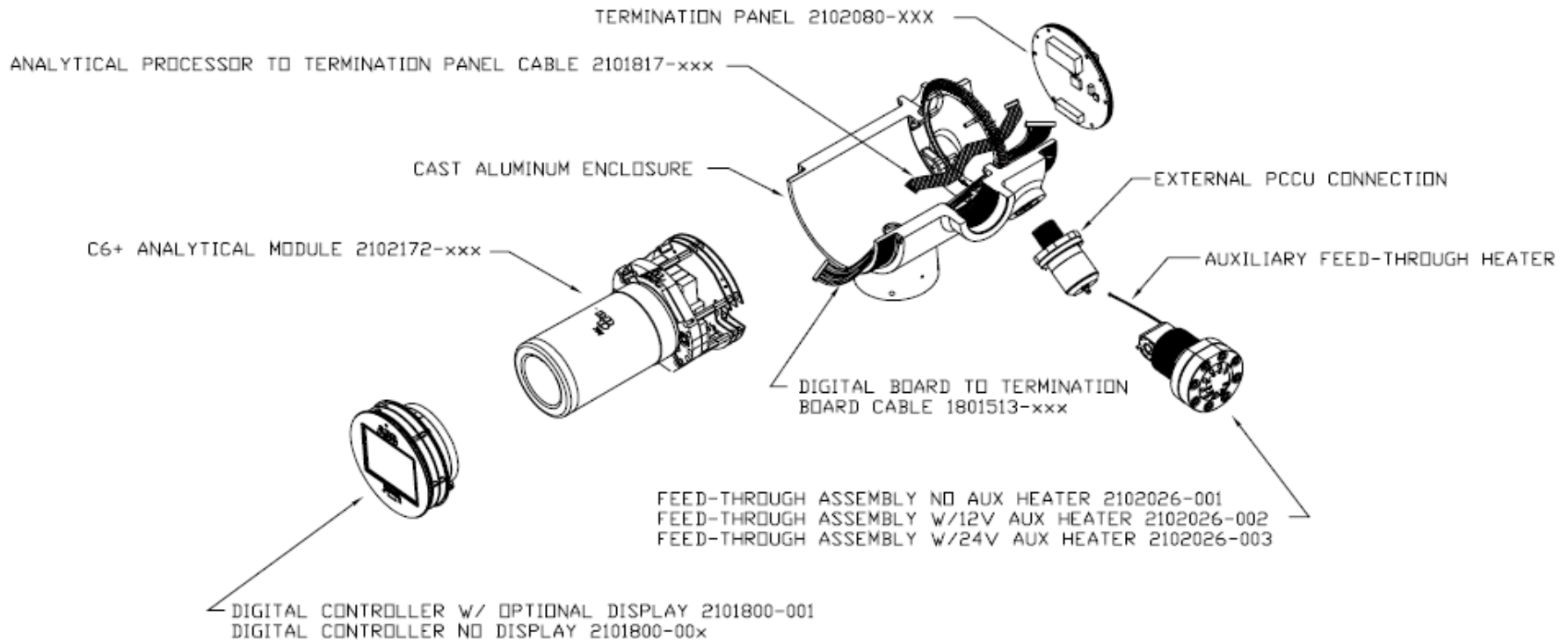
- Selectable Communication Options

  - RS-232, RS-422, RS-495,
  - TCPIP, Modbus, VistaNET compatible



# Analyzer – Expanded View

## ■ Analyzer – Modular Elements and Connections



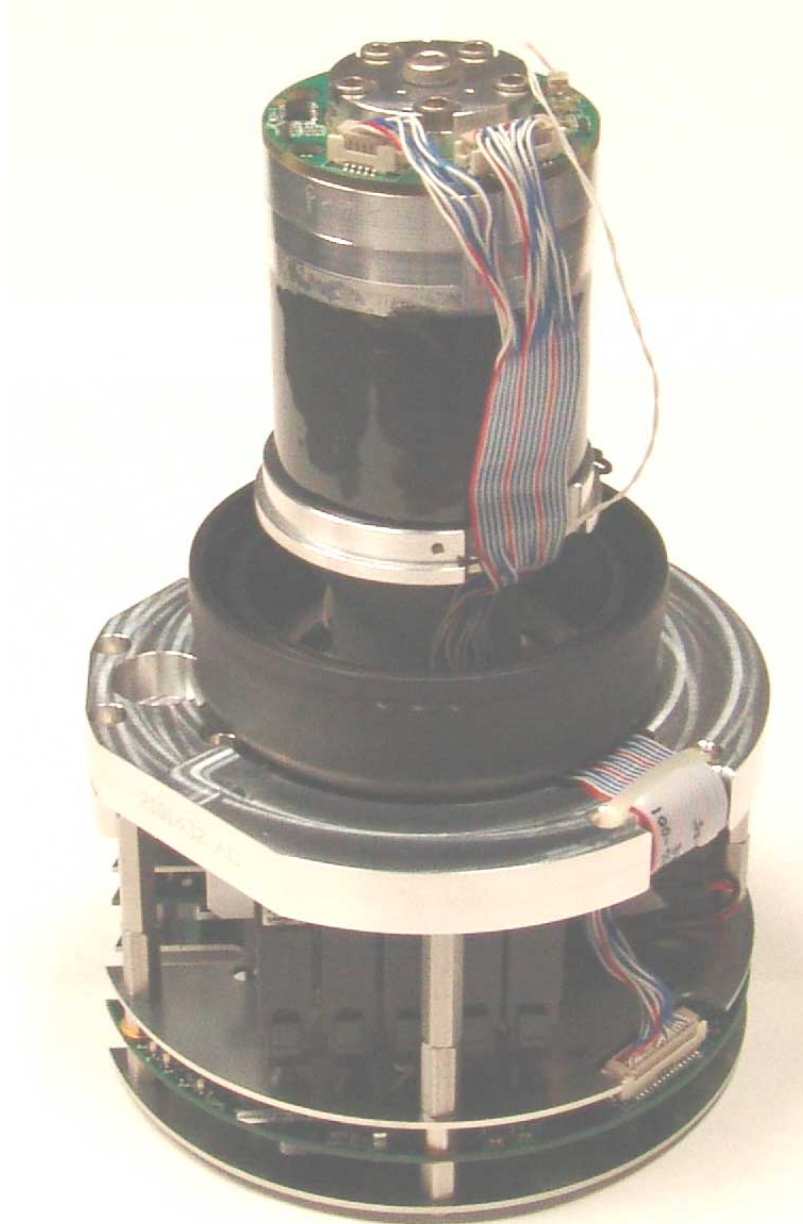
# Analytical Module Assembly

- Major Sub-assembly that removes with one bolt from the Feedthrough
- Very useful for quick repair of existing analyzer applications or for the quick change to a new application on the same instrument platform



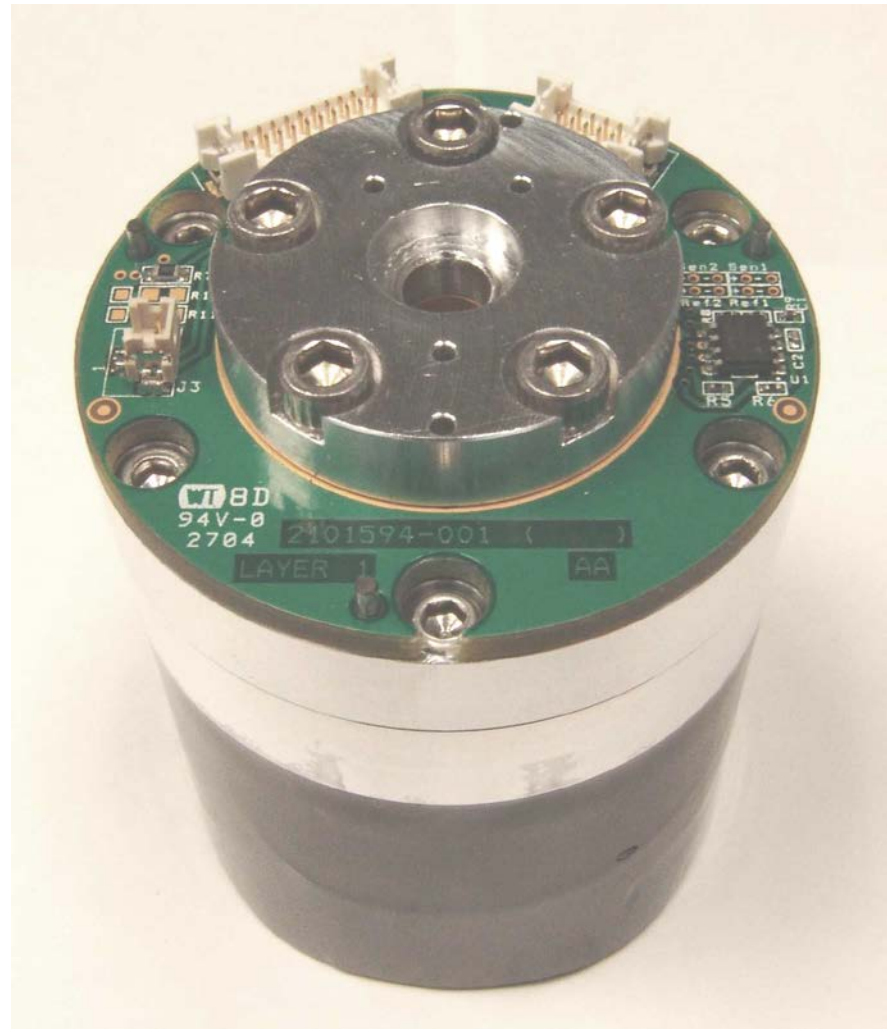
# Analytical Module Assembly w/o Dewar Flask

What's inside?

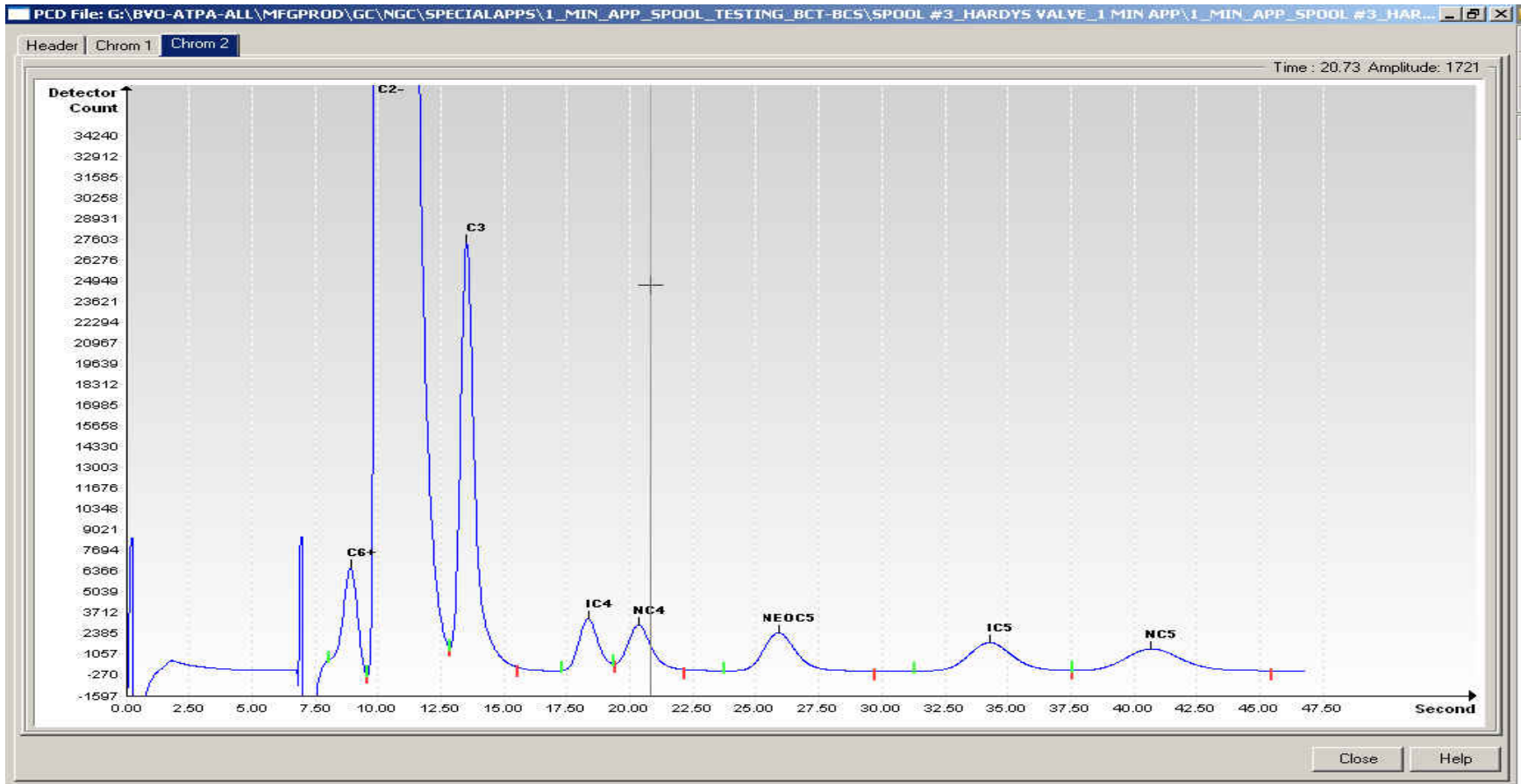


# GC Module

- GC Valve Assembly
  - Contains detectors
  - 2 Pressure Regulator Sensors
  - 1 Sample Pressure Sensor
  - EEPROM for Calibration and Configuration Storage
  - Connectors going to analytical processor
  - Connector for Oven Temp Sensor
  - Single bolt connection for all gas pathways

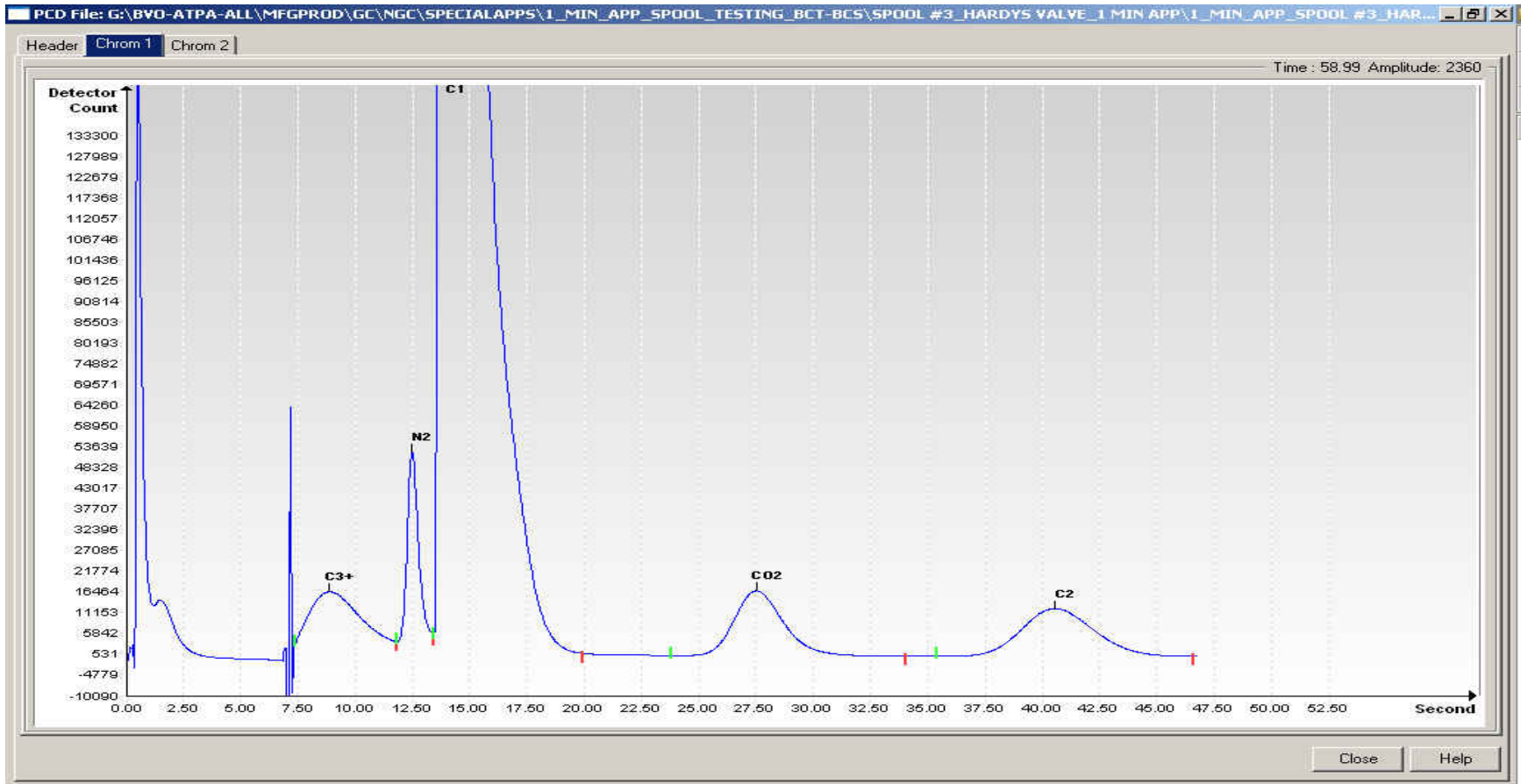


# Chromatogram: 1 minute BTU C6+, C3 thru NC5



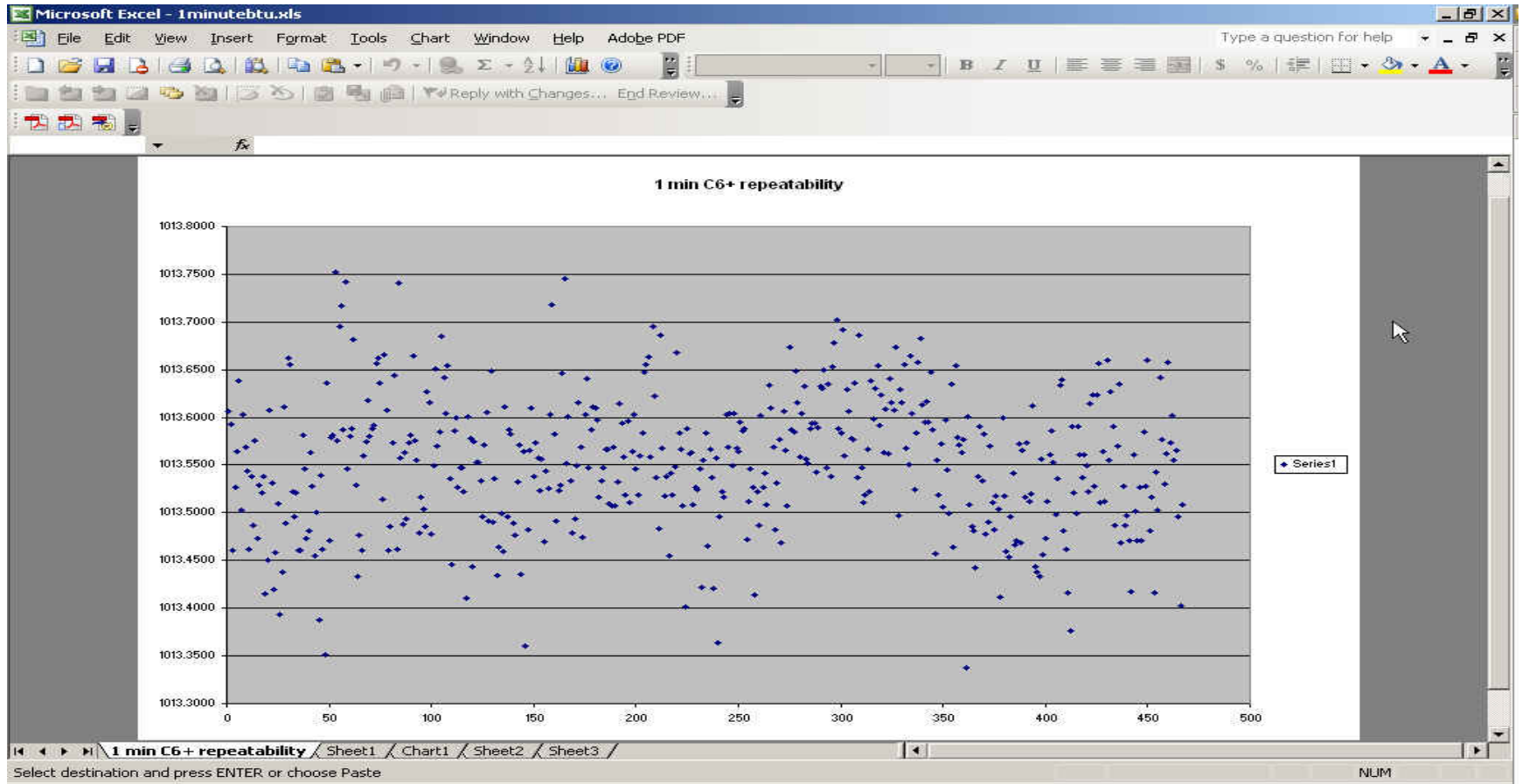


# Chromatogram: 1 minute BTU, N2 thru C2

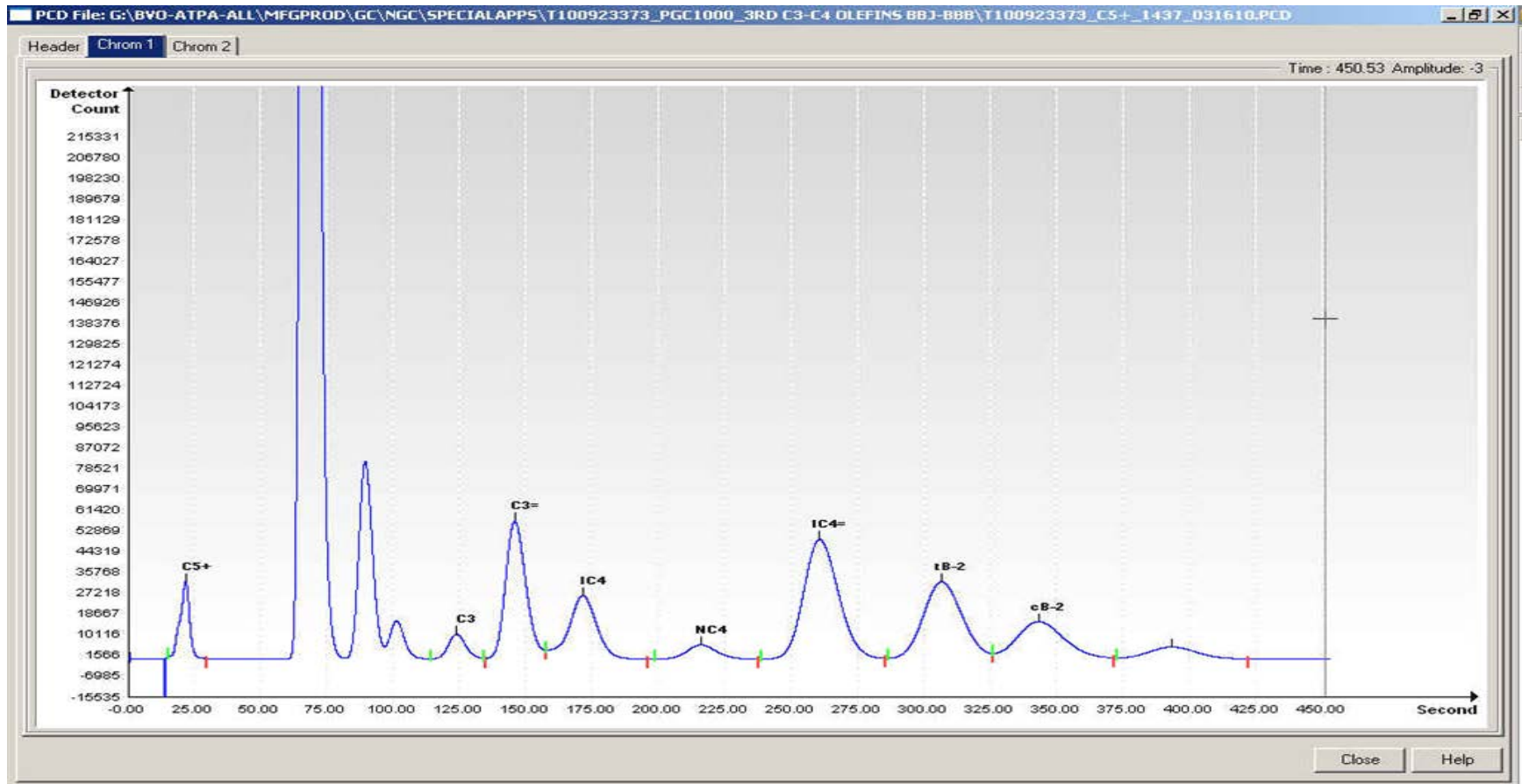




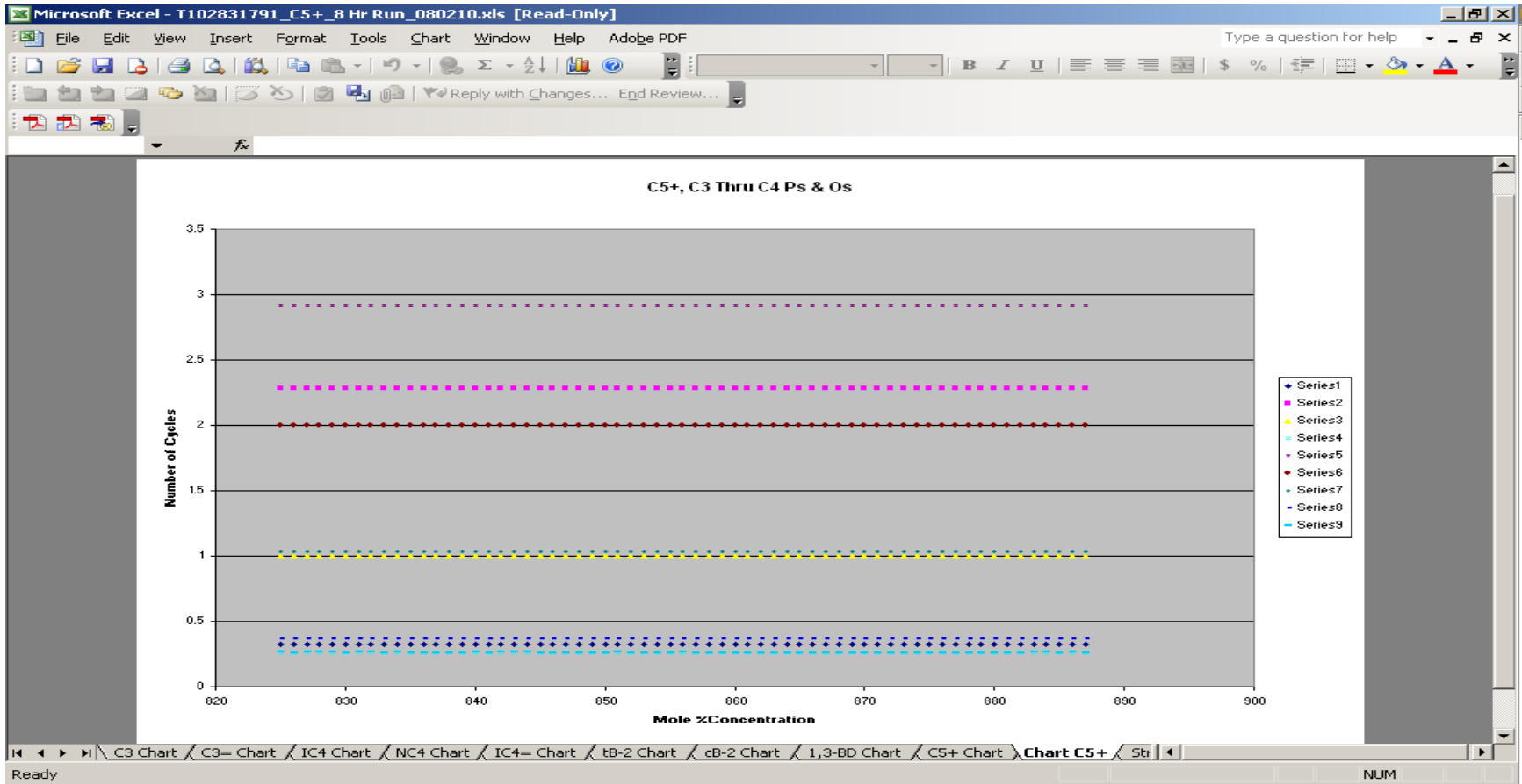
# 1 Minute BTU 8 Hour Repeatability



# Chromatogram, C5+, C3 & C4 Ps & Os



# Component 8 Hour Repeatabilities



# 20 to 1000 ppm CyC3, PD & MA in Propylene

Microsoft Access - [Trains, Carriers, Components]

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Change Document No: 2103004 Current Rev: AE Review Change Document

**Trains and Carriers**

Train: BCN

Part No.: 2103004-002 Train BCN, C4+, CYC3, PD, MA low range.

Carrier: Helium Sample Size: 80 ul

Not Yet Released By Chem.  Target Component: MA

Not Yet Released By Eng.  Private Notes Target Retention Time: 270 Seconds

Cycle Time: 300 Seconds Inject Time: 15 Seconds Variance: ± 10 %

Sort Order: 242 Oven Temperature: 60 Deg. C

Flow Rate: 4.3 ML/Min ± 15 %

Switch View

Component	Component	RangeBottom	RangeTop	Repeat (±%)	MDL	GateOn	PeakRetentionTi	GateOff	Slope (Run)	Slop
1	Butane Plus	0.01	0.1	5	0.002	0	27	0	30	
2	Cyclopropane	0.002	0.1	3	0.001	152	161	173	30	
3	Propadiene	0.002	0.1	3	0.001	180	194	205	30	
4	Methylacetylene	0.002	0.1	3	0.001	252	270	284	30	

Record: 1 of 4

Record: 37 of 53

Form View

NUM

# Questions?

