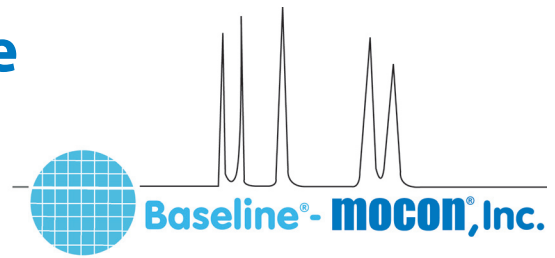


# BevAlert™ 8900GC Application Note

## Acetaldehyde, Methanol, and Benzene in CO<sub>2</sub>

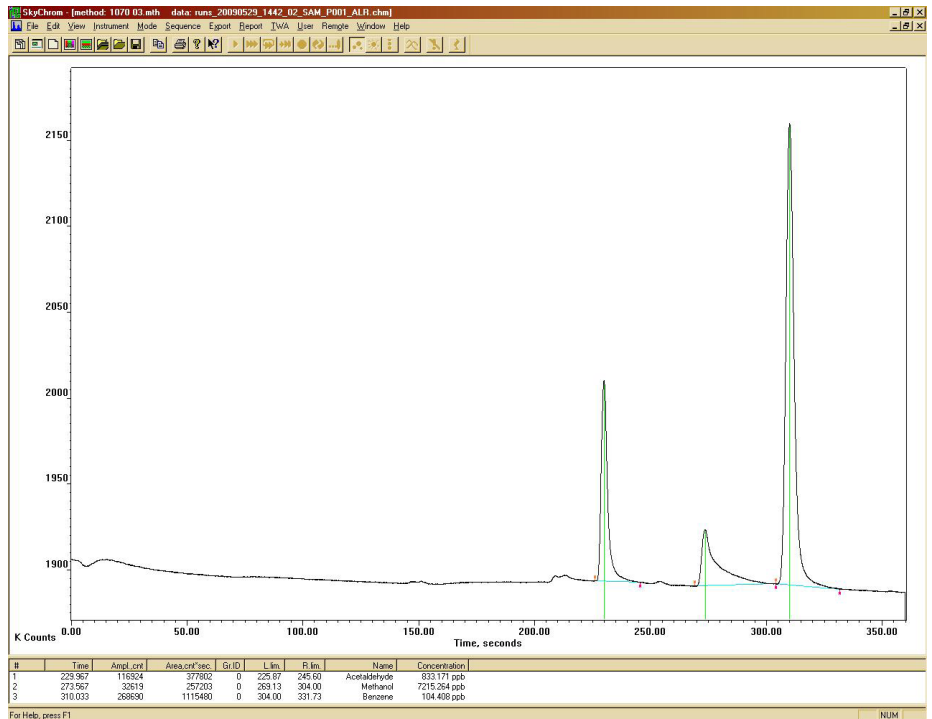


### Analyzer

The BevAlert Model 8900 provides direct measurement of Acetaldehyde, Methanol, and Benzene (AMB) in Carbon Dioxide.

The instrument is utilized by Specialty Gas Manufacturers and the Food and Beverage Industry to monitor trace impurities in CO<sub>2</sub> used in carbonated beverages.

The BevAlert Model 8900 employs a photoionization detector (PID). The AMB in the gas sample are physically separated using proprietary GC columns. A dual-column configuration with timed backflush to vent is used to strip off moisture and heavier gases. At sample injection, a fixed volume of sample is carried through the pre-cut column. The backflush is timed so that primarily the AMB and other similar compounds continue on to the analytical column. Contaminants are then backflushed to vent. Acetaldehyde, Methanol, and Benzene are separated from potentially interfering components on the analytical column and elute to the detector for analysis.



### Application

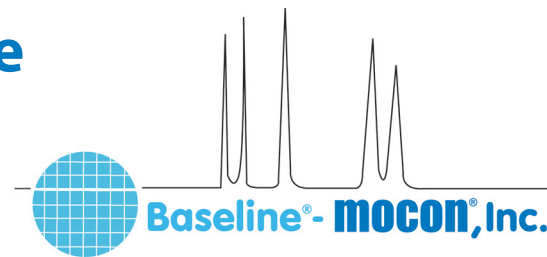
- Measurement of AMB in beverage grade carbon dioxide

### Features

- Direct measurement of Acetaldehyde, Methanol, and Benzene in Carbon Dioxide
- Interference free response
- Automatic baseline adjustment for long-term stability
- Automatic calibration
- Analog output ranges are user selectable
- Concentration and diagnostic alarm relays
- Graphic display of current or historical concentrations
- Multipoint sampling options
- RS-232 and optional LAN

# BevAlert™ 8900GC Application Note

## Acetaldehyde, Methanol, and Benzene in CO<sub>2</sub>



### Specifications

**Analysis Time:** <360 seconds

**Detector:** PID (High-sensitivity PID Optional)

**Column:** Capillary

**Oven Temperature:** 100 °C, Nominal

**Carrier Gas:** Nitrogen, 15 cc/min, Nominal

**Lower Detection Limit:** <50ppb Acetaldehyde, <2ppm Methanol, <2ppb Benzene

**Accuracy:** 1% of Full-scale

**Precision:** 2% of Measured Value

**Span Drift (24HR):** <2% of Full-scale

**Sample Flow Rate:** 250-500cc/min, typical

#### Output:

**Analog:** (5) 0-20ma or 4-20ma loop power supplied, isolated. Selectable for: gas concentration, unintegrated detector signal. Options for up to 16 additional programmable 0-20ma, 4-20ma or voltage outputs: 0-1V, 0-5V, or 0-10V.

**Digital:** RS-232, optional Local Area Network

**Relays:** (5) User programmable relays for concentration and diagnostic alarms (1A @ 30Vdc). Options for up to 32 additional relays available.

**Inputs:** Optional digital input board for 3 contact closure inputs. Supports start analysis, start calibration, and analyze calibration gas sample.

This application note is an only an example based on customer or market specifications. These parameters are variable and therefore do not reflect all of the versatility and options of Series 8900 GC. Please contact Baseline regarding your specific application

A025.3

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