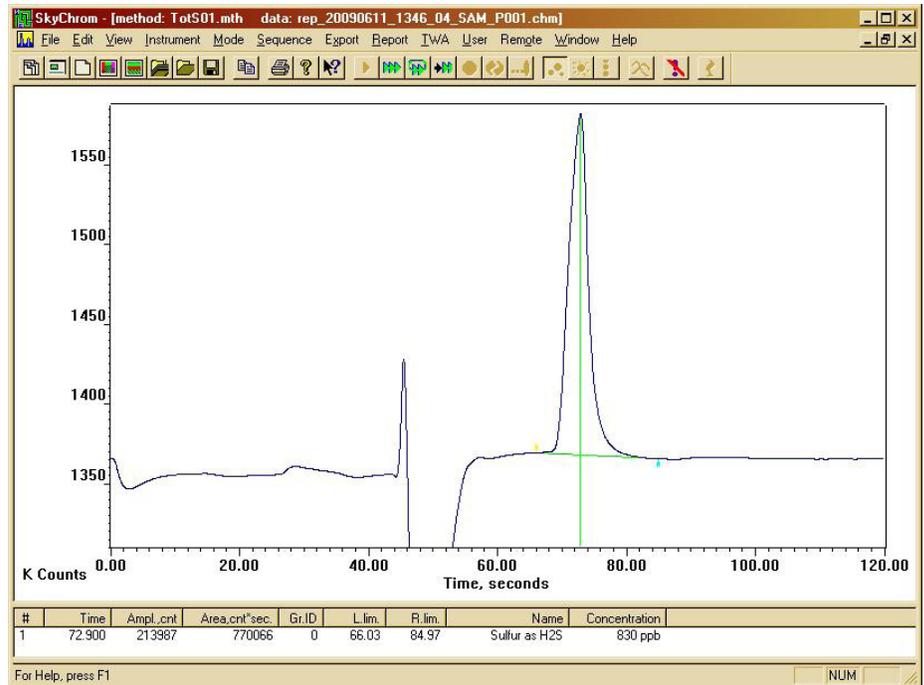


Analyzer

The BevAlert Model 8900 provides a total sulfur measurement for sulfur compounds in Carbon Dioxide. The measurement includes organic sulfides, Sulfur Dioxide, Carbonyl Sulfide, and Hydrogen Sulfide.

The instrument is utilized by Specialty Gas Manufacturers and the Food and Beverage Industry to monitor sulfur compounds in CO₂ used in carbonated beverages.

The sample entering the GC is passed through a proprietary catalyst where sulfur containing compounds are reduced to Hydrogen Sulfide. The BevAlert Model 8900 employs a photoionization detector (PID) for detection of the H₂S in the reduced sample stream. 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 the H₂S elutes to the analytical column. Contaminants are then backflushed to vent. Hydrogen Sulfide is separated from potentially interfering components on the analytical column and elutes to the detector for analysis.



Application

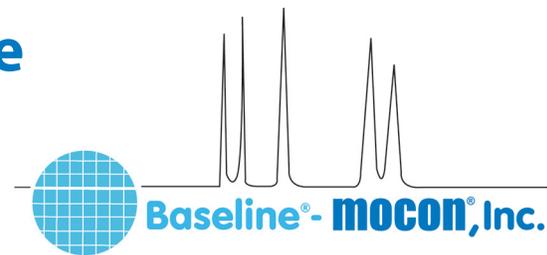
- Measuring total sulfur content in beverage grade carbon dioxide

Features

- Total measurement of organic sulfides, SO₂, COS, and H₂S
- Interference free response
- Automatic baseline adjustment for long-term stability
- Automatic calibration
- Analog output ranges are user selectable
- Concentration and diagnostic alarm relays
- Multipoint sampling options
- Graphic display of current or historical concentrations
- RS-232 and optional LAN

BevAlert™ 8900GC Application Note

Total Sulfur in CO₂



Specifications

Analysis Time: <90 seconds

Detector: PID (High-sensitivity PID Optional)

Column: Capillary

Oven Temperature: 85 °C, Nominal

Carrier Gas: Hydrogen, 6 cc/min, 30 cc/min for reactor, Nominal

Lower Detection Limit: <20 ppb as Hydrogen Sulfide (High-sensitivity PID <1 ppb as Hydrogen Sulfide optional)

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: (1) 0-20ma or 4-20ma loop power supplied, isolated. Selectable for: gas concentration, unintegrated detector signal. Options for up to 20 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

A015.5

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