

## **Sulfur gases**

# Analysis of sulfur compounds in natural gas

## Application Note

Energy & Fuels

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### **Introduction**

The separation of COS of any propane occurring in natural gas is critical to the correct determination of COS. Propane can quench the PFPD causing a loss of COS signal. By starting at -20 °C, the quenching is avoided using the thickfilm Agilent CP-Sil 5 CB column.



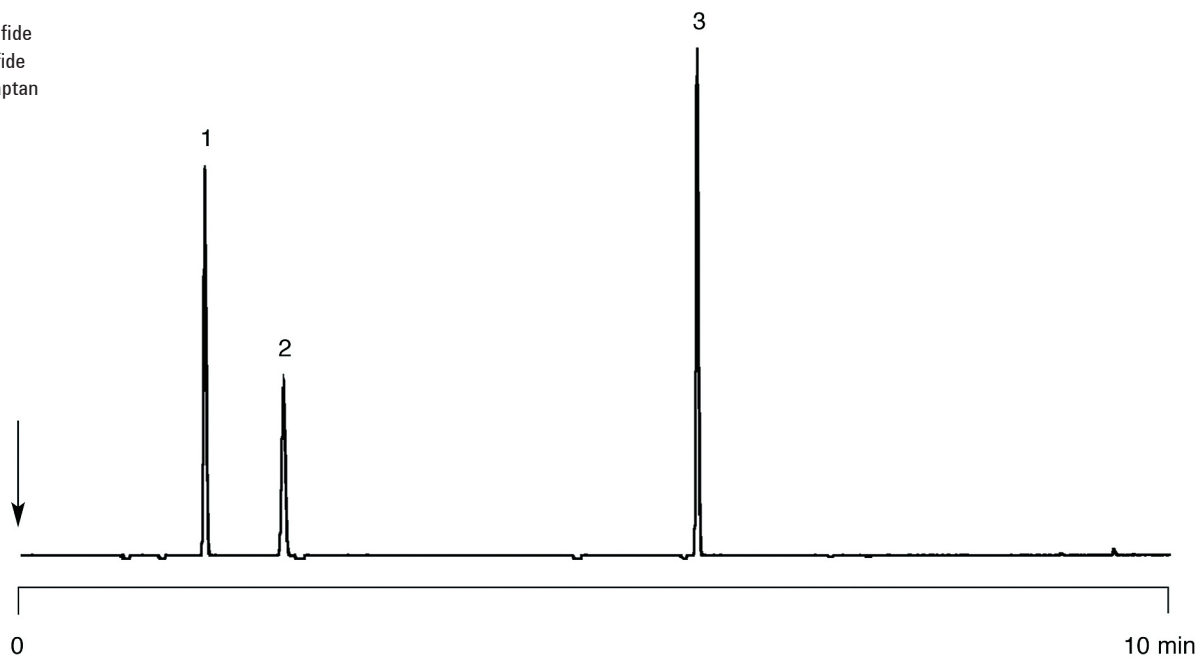
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## Conditions

Technique : GC-capillary  
Column : Agilent CP-Sil 5 CB, 0.32 mm x 50 m fused silica  
WCOT (df = 5.0  $\mu\text{m}$ ) (Part no. CP7690)  
Temperature : -20 °C (2 min)  $\rightarrow$  200 °C, 100 °C/min  
Carrier Gas : He, 60 kPa (0.6 bar, 8 psi)  
Injector : Gas sampling valve  
Detector : PFPD  
T = 250 °C  
Concentration Range : 1 ppm sulfur in natural gas

## Peak identification

1. hydrogen sulfide
2. carbonyl sulfide
3. methylmercaptan



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This information is subject to change without notice.

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