Hydrocarbons, C_6 - C_9

Reference method for monitoring systems for analysis of hydrocarbons in environmental air

Application Note

Environmental

Authors

Agilent Technologies, Inc.

Introduction

Monitoring VOCs in air is controlled by automated systems, based on thermal desorption techniques. A good separation of a standard solution of unleaded gasoline in CS_2 is obtained on the Agilent CP-Sil 5 CB column. The peak profile matches the chromatogram of city air in application note 1527, indicating clearly that the air pollution is due to the heavy trafic in that area.

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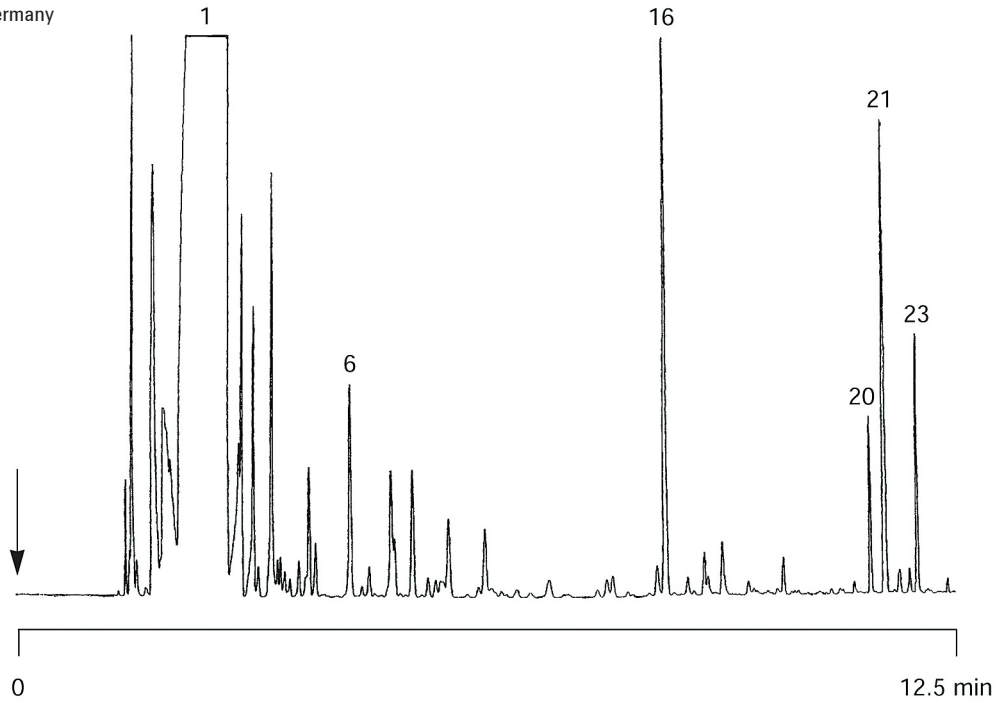
Conditions

Technique	:	GC-capillary
Column	:	Agilent CP-Sil 5 CB, 0.25 mm x 25 m (df = 0.4 µm) (Part no. CP7709)
Temperature	:	35 °C (7.5 min) ⟶ 55 °C, 20 °C/min; 55 °C ⟶ 80 °C, 12.5 °C/min; 80 °C ⟶ 120 °C, 20 °C/min
Carrier Gas	:	He
Injector	:	Split, T = 200 °C
Detector	:	FID T = 200 °C
Sample Size	:	10 µL
Concentration Range	:	3 - 26 µg/m^3
Sample Solvent	:	CS_2
Courtesy	:	G. Hackspacher, Umwelttechnik MCZ, Ober Mörlen, Germany

Peak identification

1. carbon disulfide
6. benzene
16. toluene
20. ethylbenzene
21. m/p-xylene
23. o-xylene



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