Permanent gases

Analysis of permanent gases at ppm level

Application Note

Environmental

Authors

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Introduction

Gas chromatography with a custom-made Agilent CP-Molsieve 5Å column separates eight permanent gases at the ppm level in nine minutes.

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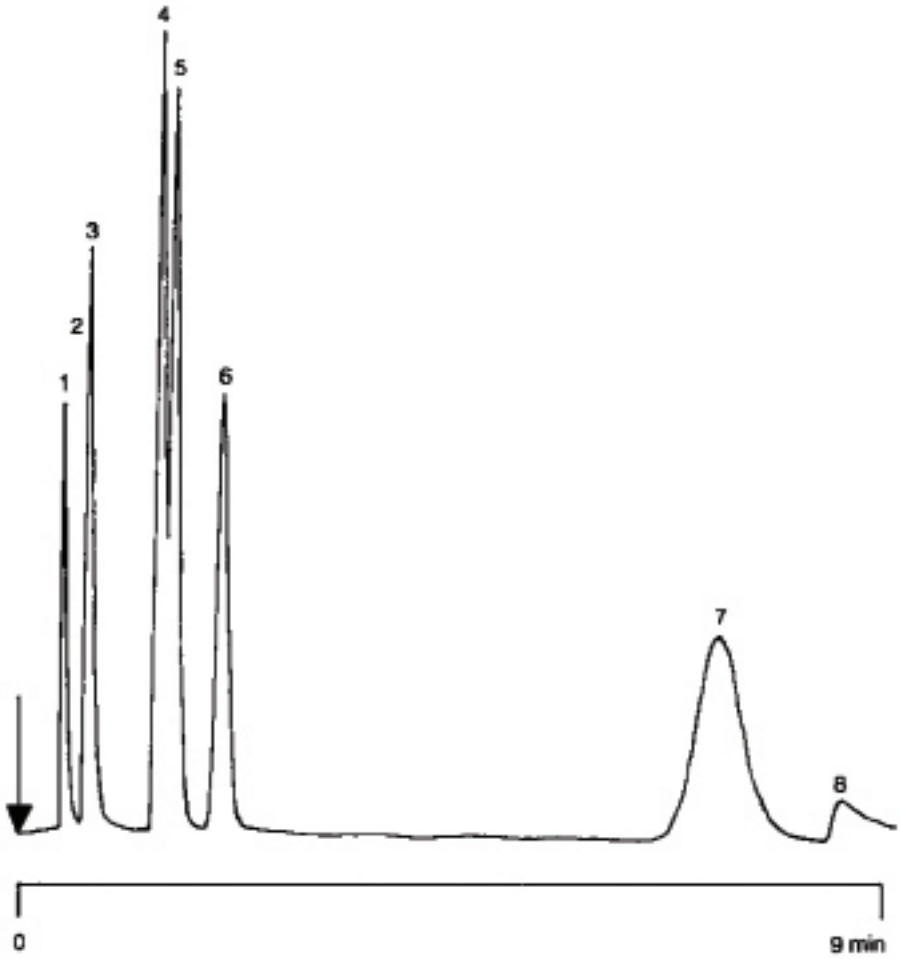
Conditions

Technique	: GC-capillary
Column	: Agilent CP-Molsieve 5Å, 0.53 mm x 25 m fused silica PLOT Molsieve 5Å (df = 50 µm) (Part no. CP7538)
Temperature	: 31 °C
Carrier Gas	: He, 80 cm/s
Injector	: Direct T = 50 °C
Detector	: Discharge Ionization Detector T = 75 °C
Sample Size	: 1000 µL

Peak identification

1. hydrogen (2.8 ppm)
2. argon (0.81 ppm)
3. oxygen (0.45 ppm)
4. nitrogen (2.8 ppm)
5. krypton (1.1 ppm)
6. methane (0.9 ppm)
7. xenon (1.6 ppm)
8. carbon monoxide (1.0 ppm)



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