Hydrocarbons, C_1 – C_6, other gases

Analysis of hydrocarbons C_1 - C_6, CO_2, H_2S and water

Application Note

Energy & Fuels

Authors

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Introduction

Gas chromatography using an Agilent PoraPLOT Q column separates 11 C_1 to C_6 hydrocarbons and other gases in six minutes.

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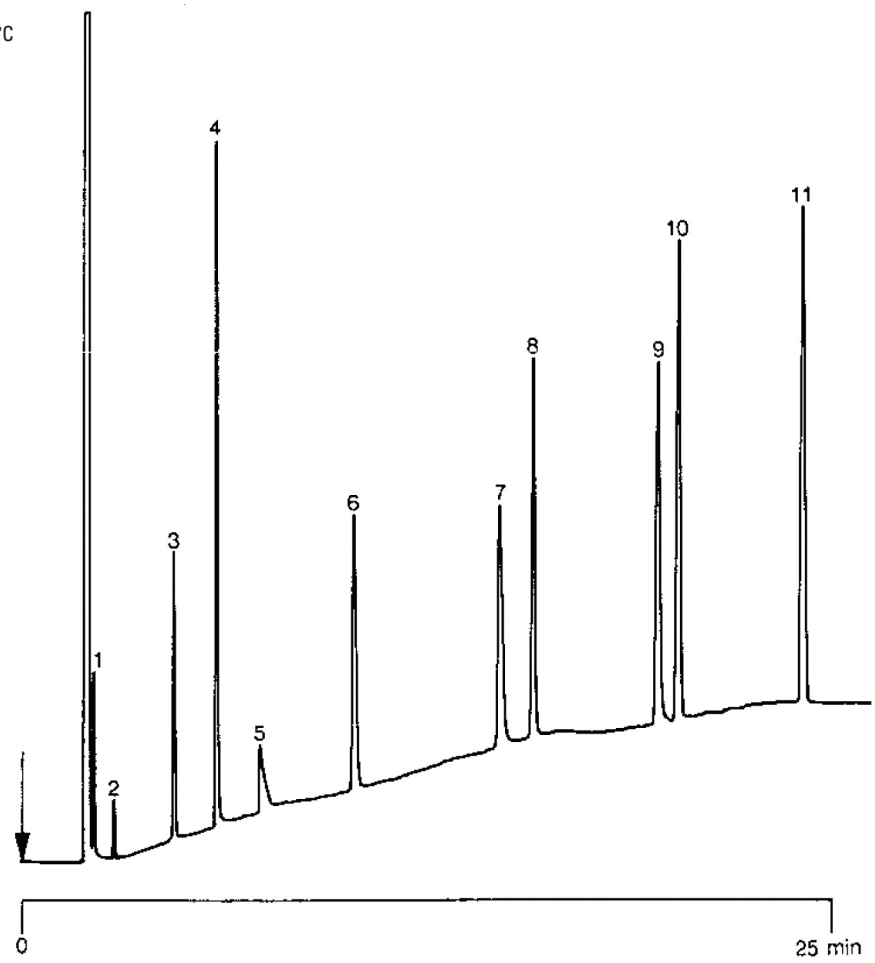
Conditions

Technique	:	GC-capillary
Column	:	Agilent PoraPLOT Q, 0.53 mm x 25 m fused silica PLOT PoraPLOT Q (df = 20 µm) (Part no. CP7554)
Temperature	:	40 °C → 200 °C, 10 °C/min
Carrier Gas	:	He, 120 kPa (1.2 bar, 17 psi), 7 mL/min
Injector	:	Splitter T = 200 °C
Detector	:	µ-TCD, x4 T = 220 °C, filaments T = 280 °C
Sample Size	:	0.5 mL
Courtesy	:	GL-Sciences, Japan

Peak identification

1. methane
2. carbon dioxide
3. ethane
4. hydrogen sulfide
5. water
6. propane
7. isobutane
8. n-butane
9. isopentane
10. n-pentane
11. n-hexane



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