



# Hydrocarbons

## Analysis of hydrocarbons C<sub>1</sub>-C<sub>3</sub> and chloromethane

### Application Note

Energy & Fuels

#### Authors

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#### Introduction

Gas chromatography with Agilent PoraPLOT U and PoraPLOT Q columns separate seven C<sub>1</sub> to C<sub>3</sub> hydrocarbons and chloromethane in 12 minutes.



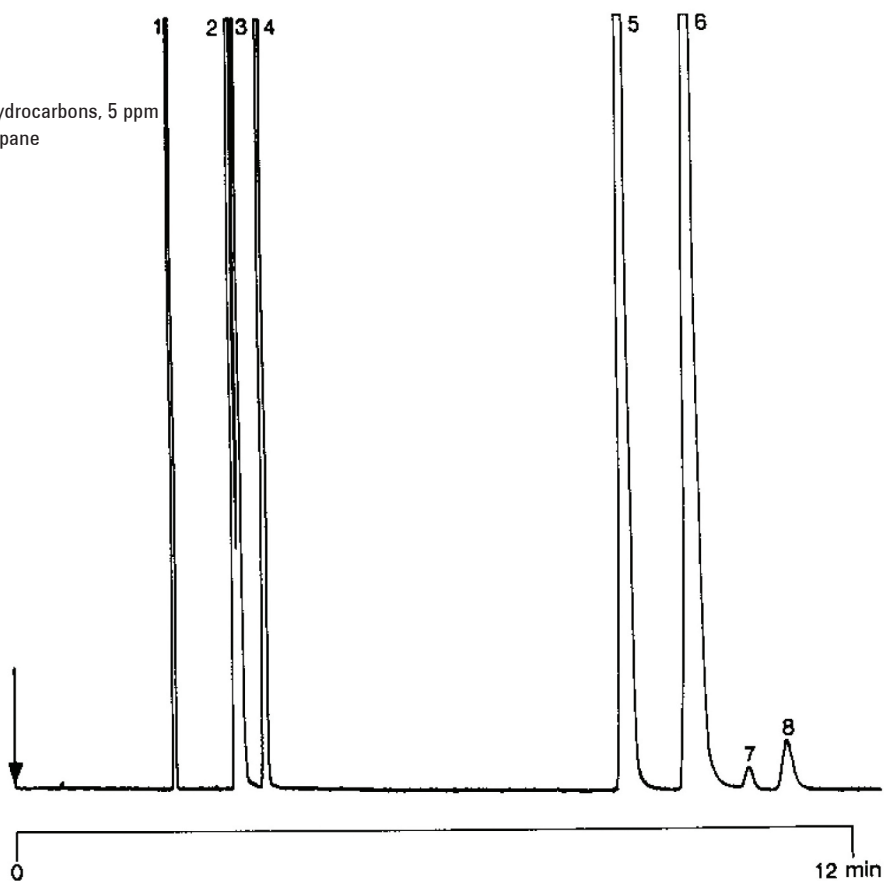
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## Conditions

Technique : GC-capillary  
Column : Agilent PoraPLOT U and Q, 0.53 mm x 3 m fused silica PLOT PoraPLOT U (df = 20  $\mu$ m) (*this column is available as a 10 m column under Part no. CP7583*) connected with a Quick-Seal connector to a 0.53 mm x 25 m fused silica PLOT PoraPLOT Q (df = 20  $\mu$ m) (Part no. CP7553)  
Temperature : 70 °C (15 min)  
Carrier Gas : He, 70 kPa (0.7 bar, 10 psi)  
Injector : Splitter, 1:50  
T = 200 °C  
Detector : FID  
T = 300 °C  
Sample Size : 1 mL  
Concentration range : 1000 ppm for the aliphatic hydrocarbons, 5 ppm chloromethane and cyclopropane  
Courtesy : Dow Chemical Canada,  
Western Canada Division,  
R & D Lab., Jim Luong

## Peak identification

1. methane
2. ethylene
3. acetylene
4. ethane
5. propylene
6. propane
7. chloromethane
8. cyclopropane



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This information is subject to change without notice.

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