

Application Report 390

Separation of Fixed Gases by Molecular Sieve 5A column

The separation of hydrogen from air and other fixed gases is easily attained by the use of a packed molecular sieve 5A column. Hydrogen response is minimal using helium carrier with a TCD.

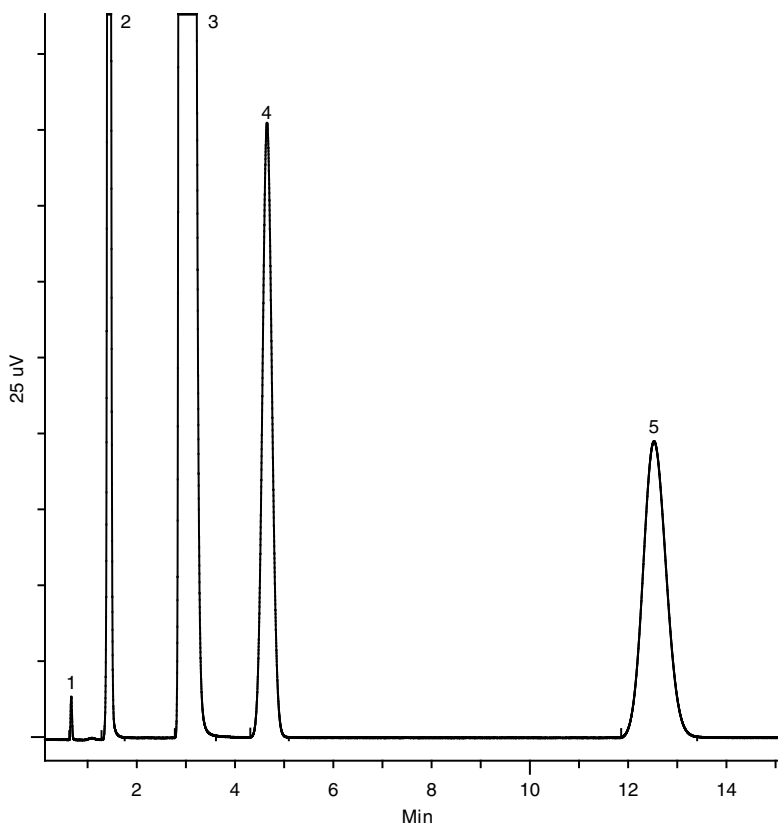
Key Words

Molecular Sieve 5A, fixed gases, TCD

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Acquisition System: 5731

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G003532

Conditions

column: 60/80 Molecular Sieve 5A, 9 ft. x 1/8 in. O.D. x 0.084 in. I.D. 304 SS,
10 μ L 316 SS screen terminations (custom)
oven: 60 °C
inj.: 150 °C
det.: TCD, 150 °C
carrier gas: helium, 30 mL/min. @ 60 °C
injection: 250 μ L, direct
liner: 1 mm I.D., direct
sample: nitrogen balance with 4% of each of several other gases

Peak IDs

1. Hydrogen
2. Oxygen
3. Nitrogen
4. Methane
5. Carbon Monoxide