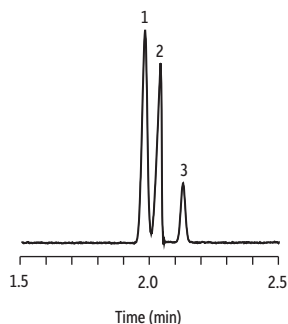
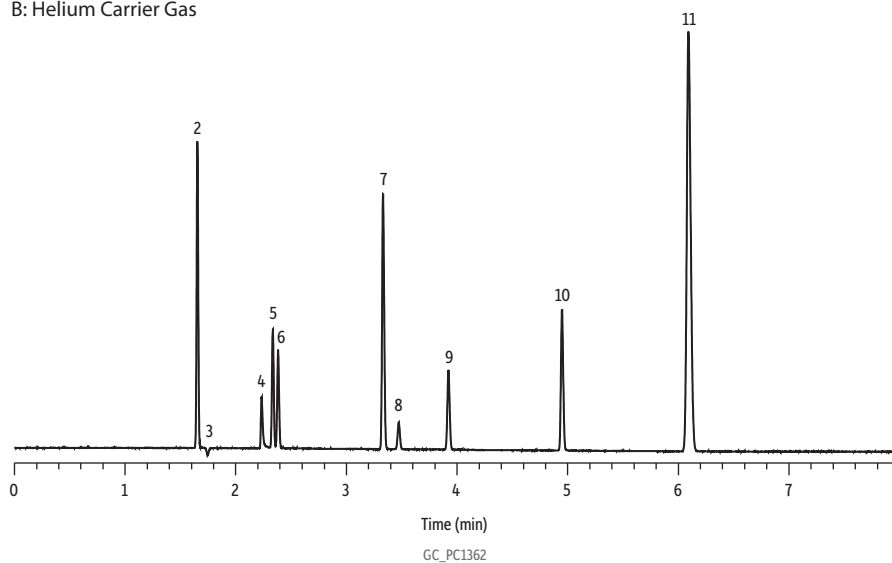


# Noble and Permanent Gases on Rt-Msieve 5A

A: Nitrogen Carrier Gas



B: Helium Carrier Gas



- Peaks**
1. Helium
  2. Neon
  3. Hydrogen
  4. Sulfur hexafluoride
  5. Argon
  6. Oxygen
  7. Nitrogen
  8. Krypton
  9. Methane
  10. Carbon monoxide
  11. Xenon

**Column** Rt-Msieve 5A, 30 m, 0.53 mm ID, 50  $\mu$ m (cat.# 19723)  
**Sample** Noble and permanent gas standard  
**Conc.:** 2-10 mol%  
**Injection**  
**Inj. Vol.:** 200  $\mu$ L split (split ratio 10:1)  
**Liner:** Topaz 2.0 mm ID straight inlet liner (cat.# 23313)  
**Inj. Temp.:** 150 °C  
**Oven**  
**Oven Temp.:** 35 °C (hold 1 min) to 150 °C at 30 °C/min (hold 5 min)  
**Carrier Gas** He, constant flow  
**Flow Rate:** 5 mL/min  
**Detector** TCD @ 250 °C  
**Instrument** Agilent 7890B GC  
**Notes** Chromatogram A Analysis Conditions:  
**Inj. Vol.:** 50  $\mu$ L split (split ratio 50:1)  
**Conc.:** 33 mol%  
**Inj. Temp.:** 150 °C  
**Oven Temp.:** 35 °C isothermal  
**Carrier Gas:** N<sub>2</sub> constant flow  
**Flow Rate:** 3 mL/min  
**Detector:** TCD @ 250 °C