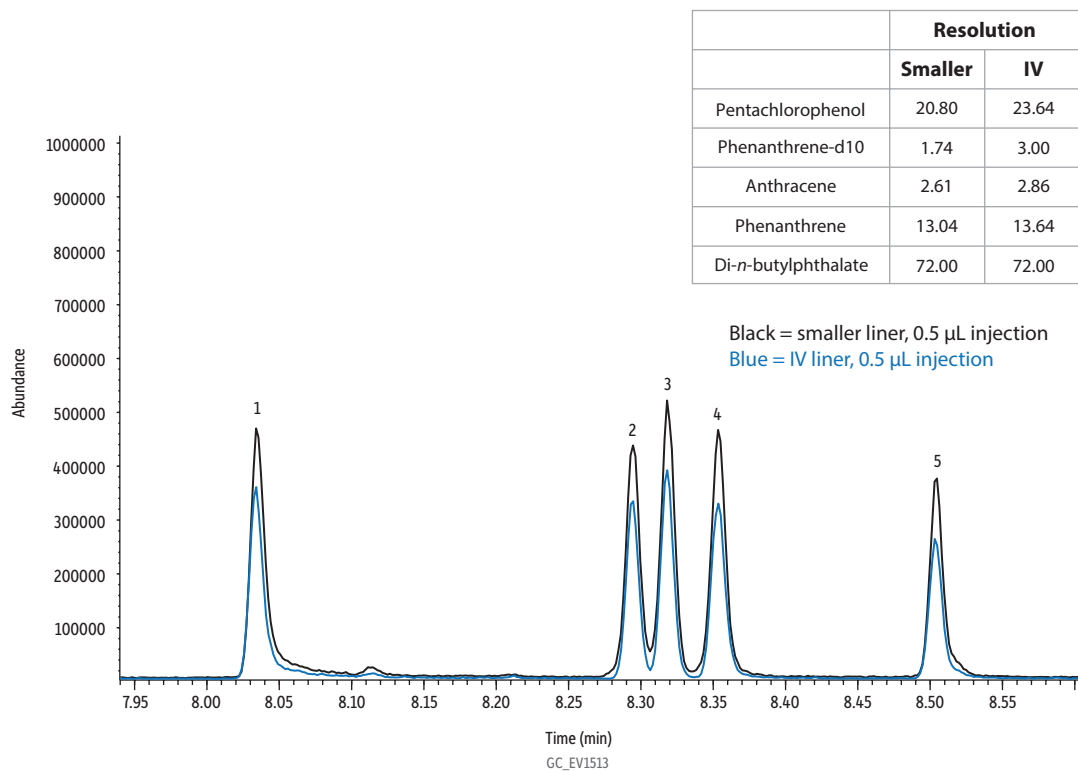


## Comparison: PAHs on Narrow-Bore Rxi-PAH - IV Liner Article Figure 8

### Improved Peak Symmetry and Resolution When Using an IV Liner



| Peaks                           | tr (min) | Conc. (µg/mL) |
|---------------------------------|----------|---------------|
| 1. Pentachlorophenol            | 8.03     | 1             |
| 2. Phenanthrene-d10             | 8.29     | 1             |
| 3. Anthracene                   | 8.32     | 1             |
| 4. Phenanthrene                 | 8.35     | 1             |
| 5. Di- <i>n</i> -butylphthalate | 8.5      | 1             |

**Column** Rxi-PAH GC capillary column, 40 m, 0.18 mm ID, 0.07 µm (cat.# 49316)  
**Standard/Sample** Method 525.2 semivolatiles mix (revised), acetone, 1 mL/ampul (cat.# 31899)  
 EPA Method 525.3 PAH IS mix, 500 µg/mL ea. in acetone, 1 mL/ampul (cat.# 32547)  
 Acetone

**Diluent:**

**Injection**

Inj. Vol.: 0.5-1 µL splitless (hold 3 min)

Liner: Three Topaz single taper, splitless inlet liners with quartz wool and premium deactivation were compared. All were 78.5 mm long with a 6.5 mm OD and the following IDs: 2.0 mm (cat.# 23316); 3.0 mm (cat.# 27231); and 4.0 mm (cat.# 23303).

Inj. Temp.: 250 °C

Purge Flow: 15 mL/min

**Oven**

Oven Temp.: 35 °C (hold 0.5 min) to 350 °C at 30 °C/min (hold 4 min)

**Carrier Gas** He, constant flow

Flow Rate: 1.44 mL/min

Linear Velocity: 37.587 cm/sec @ 35 °C

Dead Time: 1.77 min @ 35 °C

**Detector**

Mode: MS

Scan Program:

| Group | Start Time (min) | Scan Range (amu) | Scan Rate (scans/sec) |
|-------|------------------|------------------|-----------------------|
| 1     | 1.5              | 50-550           | 9.9                   |

Transfer Line Temp.: 250 °C

Analyzer Type: Quadrupole

Source Type: Extractor

Source Temp.: 230 °C

Quad Temp.: 150 °C

Electron Energy: 929 eV

Solvent Delay Time: 1.5 min

Tune Type: PFTBA

Ionization Mode: EI

**Instrument** Agilent 7890A GC & 5975C MSD

**Sample Preparation** 3 µL of cat.# 31899 and 6 µL of cat.# 32547 were added to 2991 µL of acetone.

Splitless injections were performed with a 10 µL SGE autosampler syringe (cat.# 24795).