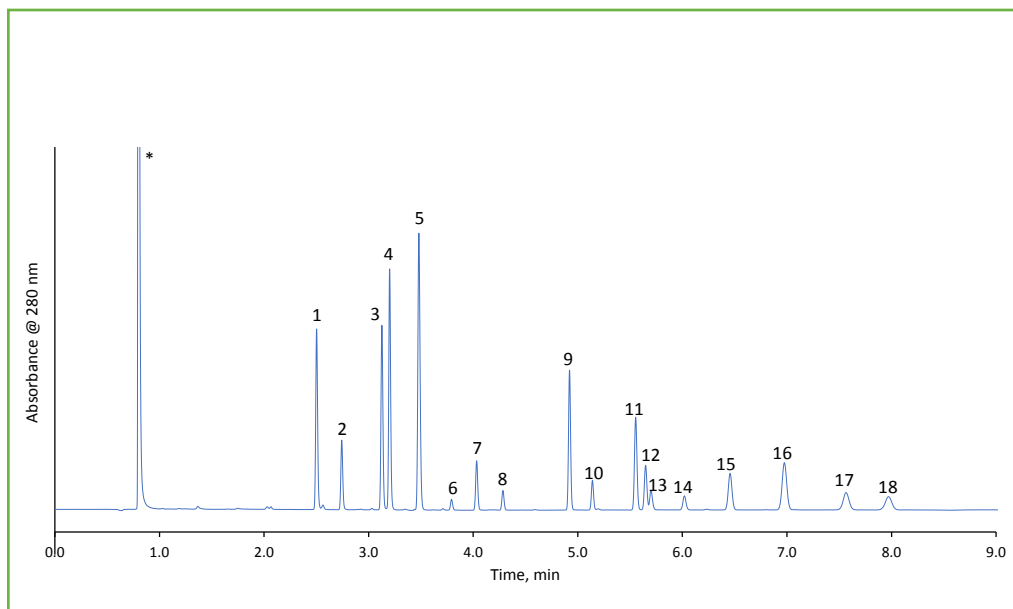




## Separation of EPA 610 + Benzo[e]pyrene + Perylene using HALO® PAH

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### PEAK IDENTITIES:

1. Naphthalene
2. Acenaphthylene
3. Acenaphthene
4. Fluorene
5. Phenanthrene
6. Anthracene
7. Fluoranthene
8. Pyrene
9. Benzo[a]anthracene
10. Chrysene
11. Benzo[e]pyrene
12. Benzo[b]fluoranthene
13. Perylene
14. Benzo[k]fluoranthene
15. Benzo[a]pyrene
16. Dibenzo[a,h]anthracene
17. Benzo[g,h,i]perylene
18. Indeno[1,2,3-c,d]pyrene

\* acetone from sample solvent

### TEST CONDITIONS:

**Column:** HALO 90 Å PAH, 2.7 µm, 4.6 x 150 mm

**Part Number:** 92844-712

**Mobile Phase A:** Water

**B:** Acetonitrile

Gradient:	Time	%B
	0.0	50
	4.5	100
	9.0	100
	9.5	50
	14.0	50

**Flow Rate:** 1.8 mL/min

**Initial Back Pressure:** 416 bar

**Temperature:** 30 °C

**Detection:** 280 nm

**Injection Volume:** 5 µL

**Sample Solvent:** 80/20 Methanol/Acetone

**Data Rate:** 40 Hz

**Response Time:** 0.05 sec.

**Flow Cell:** 1 µL

**LC System:** Shimadzu Nexera X2

Polycyclic Aromatic Hydrocarbons (PAHs) are a group of more than 100 chemicals generated from the combustion of coal, oil, gasoline, tobacco, and wood. They can also be found in grilled food. These compounds are ubiquitous and exposure to them can cause irritation, mutation, and cancer. Due to the negative health effects, government agencies have established methods for detection and reporting. This rapid separation of the 16 compounds specified in EPA 610 along with benzo[e]pyrene and perylene demonstrates excellent speed and resolution with the HALO® PAH column.

