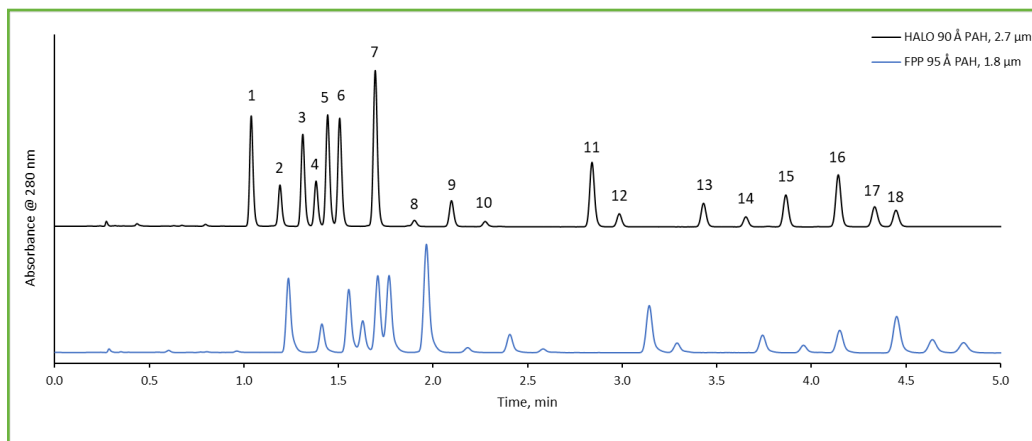




### Comparison of HALO® PAH vs. FPP column for 18 PAH Compounds

230-P



#### PEAK IDENTITIES

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

#### TEST CONDITIONS:

**Column:** HALO 90 Å PAH, 2.7 μm, 4.6 x 50 mm

**Competitor Column:** FPP 95 Å PAH, 1.8 μm, 4.6 x 50 mm

**Part Number:** 92844-412

**Mobile Phase A:** Water

**B:** Acetonitrile

Gradient:	Time	%B
	0.0	50
	4.0	100
	5.0	100
	5.01	50

**Flow Rate:** 1.8 mL/min

**HALO® Back Pressure:** 256 bar

**Competitor Back Pressure:** 344 bar

**Temperature:** 30 °C

**Detection:** 280 nm

**Injection Volume:** 2 μL

**Sample Solvent:** Methanol

**Data Rate:** 100 Hz

**Response Time:** 0.025 sec

**Flow Cell:** 1 μL

**LC System:** Shimadzu Nexera

Polycyclic Aromatic Hydrocarbons (PAHs) are a group of more than 100 chemicals released from the combustion of coal, oil, gasoline, tobacco, and wood. They can also be found in cooked food. PAHs are persistent chemicals and must be closely regulated for early detection/monitoring to minimize hazardous exposure in the environment and/or use of contaminated raw materials in different industries. A separation of eighteen PAH compounds is performed on a HALO® PAH column and a FPP PAH competitor column. The HALO® column shows excellent peak resolution, along with a lower overall back pressure compared to the competitor's unresolved peaks and peak tailing.

