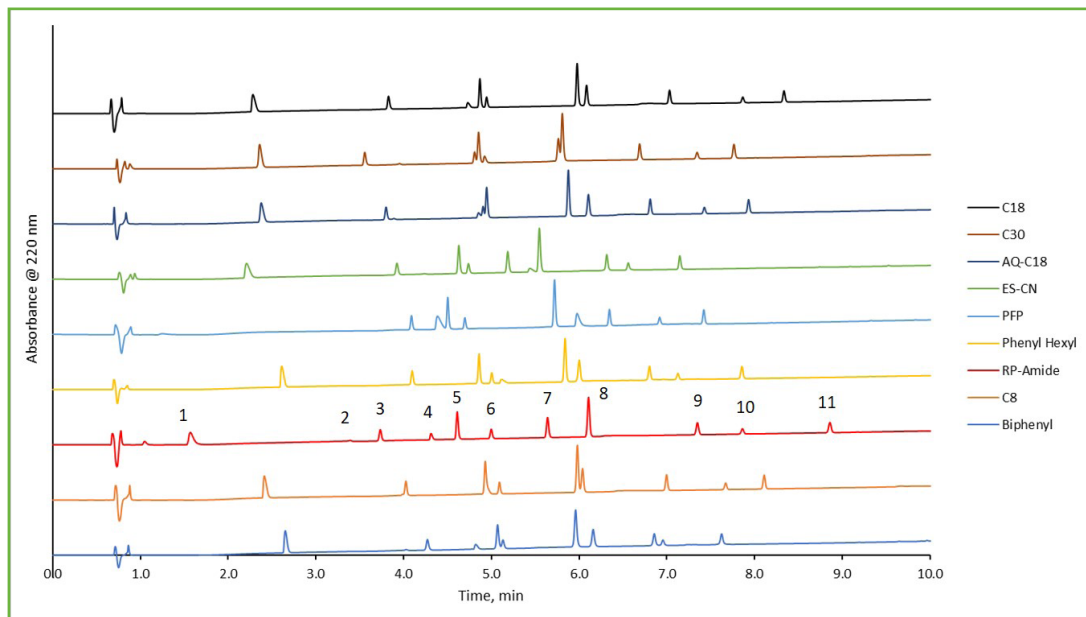




## Pharmaceutical and Personal Care Products Column Screening

331



### PEAK IDENTITIES

1. Trimethoprim
2. Enalapril
3. Sulfamethoxazole
4. Fluoxetine
5. Carbamazepine
6. Phenytoin
7. Diazepam
8. Naproxen
9. Diclofenac
10. Gemfibrozil
11. Triclosan

### TEST CONDITIONS:

Column: 2.7  $\mu$ m, 2.1 x 100 mm

Mobile Phase A: Water, 0.1% Formic Acid

Mobile Phase B: Acetonitrile, 0.1% Formic Acid

Gradient:	Time	%B
	0.0	10
	10.0	100

Flow Rate: 0.3 mL/min

Temperature: 30 °C

Back Pressure: 213 bar

Detection: UV 220 nm, PDA

Injection Volume: 0.5  $\mu$ L

Sample Solvent: 90/10 Water/ Acetonitrile

Data Rate: 100 Hz

Response Time: 0.025 sec.

Flow Cell: 1  $\mu$ L

Instrument: Shimadzu Nexera X2

Common pharmaceutical and personal care products (PPCPs), such as over-the-counter medications, veterinary prescriptions, soaps, lotions, and even insect repellents, have become a growing concern to our environment. A column screening study was performed based on EPA 542 in order to increase resolution and show differences in selectivity. It is important to screen multiple stationary phases in order to get the overall best separation of any given mixture. For this particular mix of compounds, the HALO® RP-Amide gives the best resolution out of all of the other phases that were screened.

