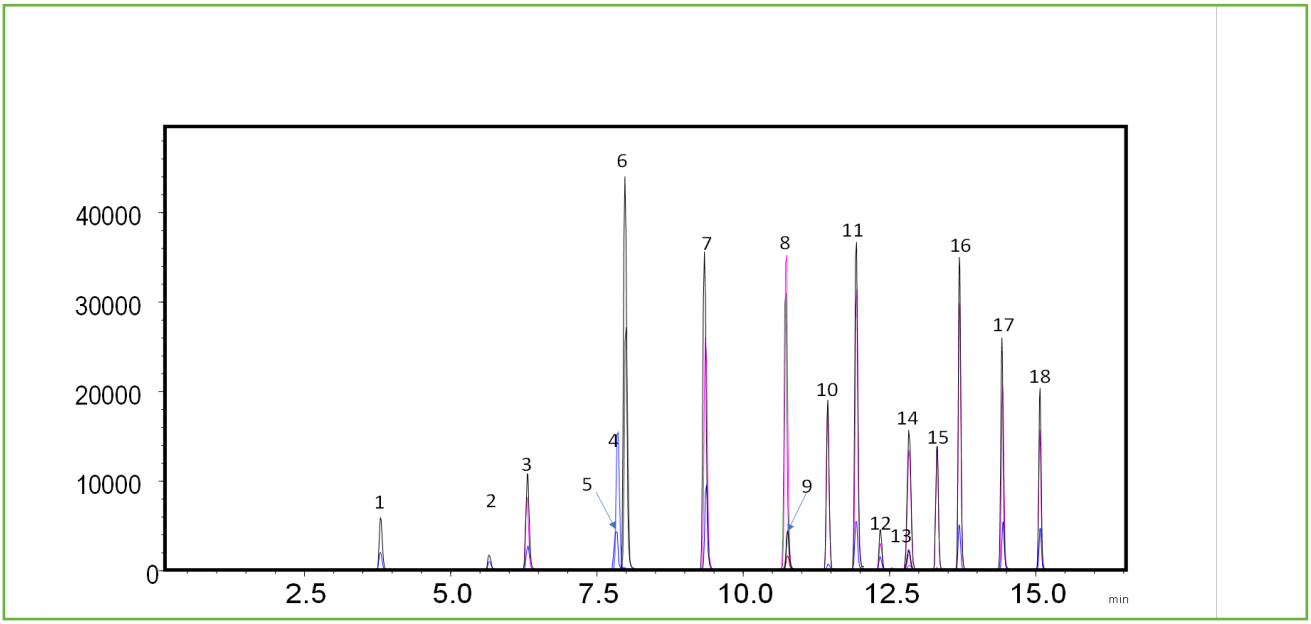
HALO®

ENVIRONMENTAL

PFAS Analysis According to EPA 537.1

244-PF



Peak #	Compound	Transition	t_R (min)	Peak #	Compound	Transition	t_R (min)
1	PFBS	299.0000>80.0000	3.789	10	9Cl-PF3ONS	530.9000>351.0000	11.439
2	PFHxA	313.0000>269.0000	5.639	11	PFDA	513.0000>469.0000	11.857
3	HFPO-DA	285.0000>169.0000	6.307	12	N-MeFOSAA	570.0000>419.0000	12.336
4	PFHpA	363.0000>319.0000	7.723	13	PFUnA	563.0000>519.0000	12.822
5	PFHxS	399.0000>80.0000	7.936	14	N-EtFOSAA	584.0000>419.0000	12.827
6	ADONA	377.0000>250.9000	7.978	15	11Cl-PF3OUdS	630.7000>451.0000	13.311
7	PFOA	413.0000>369.0000	9.368	16	PFDoA	613.0000>569.0000	13.690
8	PFNA	463.0000>419.0000	10.715	17	PFTrDA	663.0000>619.0000	14.435
9	PFOS	499.0000>80.0000	10.762	18	PFTeDA	713.0000>669.0000	15.083

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TEST CONDITIONS:

Analytical Column: HALO® PFAS, 2.7 µm, 2.1 x 100 mm
Part Number: 92812-613
Delay Column: HALO® PFAS Delay, 3.0 x 50 mm
Part Number: 92113-415
Mobile Phase A: 10 mM Ammonium Acetete
Mobile Phase B: Methanol

Gradient:

Time	%B
0.0	33
18	98
18.1	100
21.0	100
21.1	33
26.0	End

Flow Rate: 0.4 mL/min
Initial Back Pressure: 485 bar
Temperature: 35 °C
Injection Volume: 2.0 µL
Sample Solvent: Methanol (96%) Water (4%)

EPA Method 537.1 is used for the quantitation of 18 PFAS in drinking water, using solid phase extraction (SPE) and liquid chromatography/tandem mass spectrometry (LC/MS/MS). The method stipulates two columns be used for chromatography, one to be used as a delay column to mitigate PFAS contamination from the HPLC, and the other to be used as the analytical column and perform the separation. Here we present this high resolution separation on the HALO® PFAS delay column and the HALO® PFAS analytical column.

MS Conditions:

Detection: -ESI MS/MS
LC System: Shimadzu Nexera X2
ESI LCMS System: Shimadzu LCMS-8040
Spray Voltage: -2.0 kV
Nebulizing Gas: 2 L/min
Drying Gas: 15 L/min
DL Temperature: 250 ˚C
Heat Block: 400 ˚C