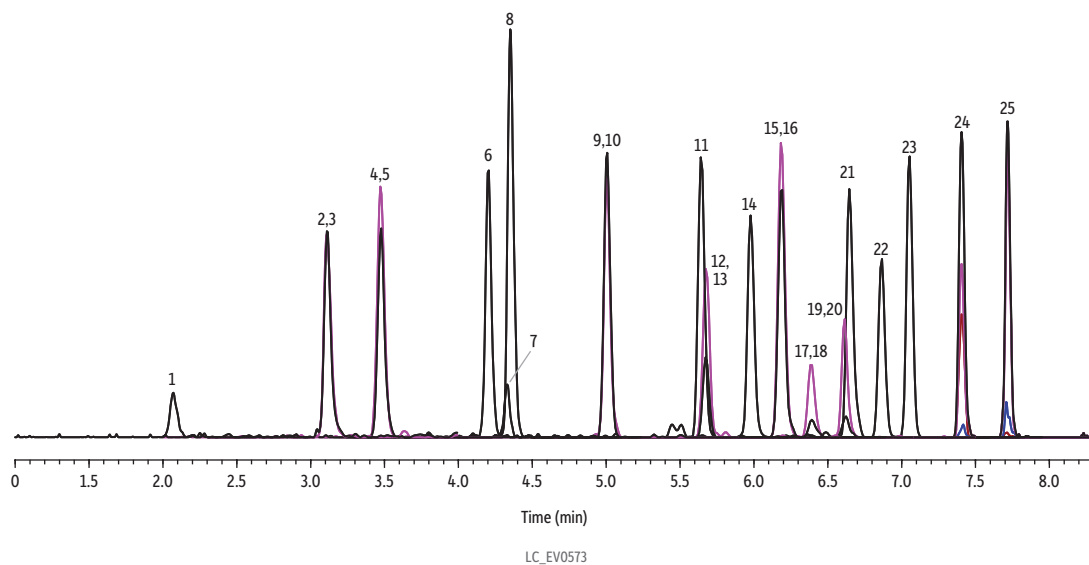
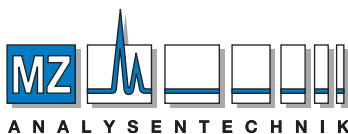


## Laboratory Fortified Blank (LFB) at Midrange (40 ppt) for EPA 537.1 on Raptor C18

- Excellent resolution of fluorochemicals in short total cycle times.
- Workflow meets EPA Method 537.1 requirements.
- Unique, robust Raptor C18 column design increases instrument uptime.



| Peaks  | tr (min) | Conc. (ng/L) | Precursor Ion | Product Ion | Column                        | Diluent:   | Conc.:        | Inj. Vol.: | Mobile Phase                    | Detector | Ion Mode: | Mode: | Instrument | Notes  |
|--|----------|--------------|---------------|-------------|-------------------------------|--|---------------|------------|---------------------------------|----------|-----------|-------|------------|--|
| 1. Perfluorobutanesulfonic acid (PFBS)   | 2.08     | 40           | 299.0         | 80.0        | Raptor C18 (cat.# 9304-A52)   | 96:4 Methanol:water  |               | 2 µL       | A: Water, 5 mM ammonium acetate | MS/MS    | ESI-      | MRM   | HPLC       | A PFAS delay column (cat.# 27854) was installed before the injector. The sample was prepared using Resprep S-DVB SPE cartridges (cat.# 28937) mounted on a Resprep vacuum manifold (cat.# 29298-VM) following the procedure in U.S. EPA Method 537.1. While internal standard concentrations varied, all target analytes were fortified at 40 ppt. |
| 2. Perfluoro- <i>n</i> -[1,2- <sup>13</sup> C <sub>2</sub> ]hexanoic acid ( <sup>13</sup> C <sub>2</sub> -PFHxA)           | 3.11     | 20           | 315.1         | 270.1       | Dimensions: 50 mm x 2.1 mm ID |  |               |            | B: Methanol                     |          |           |       |            |  |
| 3. Perfluorohexanoic acid (PFHxA)  | 3.11     | 40           | 313.2         | 269.0       | Particle Size: 2.7 µm         |  |               |            |                                 |          |           |       |            |  |
| 4. Tetrafluoro-2-heptafluoropropoxy- <sup>13</sup> C <sub>3</sub> -propanoic acid ( <sup>13</sup> C <sub>3</sub> -HFPO-DA) | 3.47     | 20           | 332.1         | 287.3       | Pore Size: 90 Å               |  |               |            |                                 |          |           |       |            |  |
| 5. Hexafluoropropylene oxide dimer acid (HFPO-DA)  | 3.47     | 40           | 328.9         | 284.9       | Temp.: 40 °C                  |  |               |            |                                 |          |           |       |            |  |
| 6. Perfluoroheptanoic acid (PFHpA)   | 4.19     | 40           | 363.2         | 319.2       | Sample                        | 5-20 ng/mL in the final solution after sample preparation (equivalent to 20-80 ppt in laboratory reagent water sample prior to extraction) |               |            |                                 |          |           |       |            |  |
| 7. Perfluorohexanesulfonic acid (PFHxS)  | 4.34     | 40           | 399.2         | 79.9        | Diluent:                      |  |               |            |                                 |          |           |       |            |  |
| 8. 4,8-Dioxa-3H-perfluorononanoic acid (ADONA)   | 4.34     | 40           | 376.9         | 251.0       | Conc.:                        |  |               |            |                                 |          |           |       |            |  |
| 9. Perfluoro-[1,2- <sup>13</sup> C <sub>2</sub> ]octanoic acid ( <sup>13</sup> C <sub>2</sub> -PFOA)                       | 5.00     | 20           | 414.9         | 370.0       | Mobile Phase                  |  |               |            |                                 |          |           |       |            |  |
| 10. Perfluorooctanoic acid (PFOA)  | 5.00     | 40           | 413.1         | 369.1       | A:                            | Water, 5 mM ammonium acetate   |               |            |                                 |          |           |       |            |  |
| 11. Perfluorononanoic acid (PFNA)  | 5.64     | 40           | 463.1         | 419.0       | B:                            | Methanol   |               |            |                                 |          |           |       |            |  |
| 12. Perfluorooctanesulfonic acid (PFOS)  | 5.66     | 40           | 499.2         | 80.1        | Time (min)                    | 0.00   | Flow (mL/min) | 0.4        | %A                              | 70       | %B        | 30    |            |  |
| 13. Perfluoro-1-[1,2,3,4- <sup>13</sup> C <sub>4</sub> ]octanesulfonic acid ( <sup>13</sup> C <sub>4</sub> -PFOS)          | 5.67     | 60           | 503.1         | 80.2        | 8.00                          | 0.4  | 10            | 90         |                                 |          |           |       |            |  |
| 14. 9-Chlorohexadecafluoro-3-oxanone-1-sulfonic acid (9Cl-PF3ONS)  | 5.97     | 40           | 531.0         | 350.9       | 8.01                          | 0.4  | 70            | 30         |                                 |          |           |       |            |  |
| 15. Perfluoro- <i>n</i> -[1,2- <sup>13</sup> C <sub>2</sub> ]decanoic acid ( <sup>13</sup> C <sub>2</sub> -PFDA)           | 6.18     | 20           | 515.2         | 470.1       | 10.00                         | 0.4  | 70            | 30         |                                 |          |           |       |            |  |
| 16. Perfluorodecanoic acid (PFDA)  | 6.18     | 40           | 512.9         | 468.9       |                               |  |               |            |                                 |          |           |       |            |  |
| 17. N-methyl perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)   | 6.38     | 40           | 570.2         | 419.0       | Detector                      | MS/MS  |               |            |                                 |          |           |       |            |  |
| 18. N-deuteriomethylperfluoro-1-octanesulfonamidoacetic acid (d3-N-MeFOSAA)  | 6.38     | 80           | 573.1         | 419.1       | Ion Mode:                     | ESI-   |               |            |                                 |          |           |       |            |  |
| 19. N-deuterioethylperfluoro-1-octanesulfonamidoacetic acid (d5-N-EtFOSAA)   | 6.61     | 80           | 589.2         | 419.1       | Mode:                         | MRM  |               |            |                                 |          |           |       |            |  |
| 20. N-ethyl perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)  | 6.62     | 40           | 583.8         | 418.9       | Instrument                    | HPLC   |               |            |                                 |          |           |       |            |  |
| 21. Perfluoroundecanoic acid (PFUnA)   | 6.64     | 40           | 563.2         | 519.1       | Notes                         |  |               |            |                                 |          |           |       |            |  |
| 22. 11-Chloroeicosfluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)  | 6.86     | 40           | 630.8         | 451.1       |                               |  |               |            |                                 |          |           |       |            |  |
| 23. Perfluorododecanoic acid (PFDoA)   | 7.05     | 40           | 613.1         | 569.1       |                               |  |               |            |                                 |          |           |       |            |  |
| 24. Perfluorotridecanoic acid (PFTrDA)   | 7.40     | 40           | 663.0         | 619.2       |                               |  |               |            |                                 |          |           |       |            |  |
| 25. Perfluorotetradecanoic acid (PFTA)   | 7.71     | 40           | 713.1         | 669.0       |                               |  |               |            |                                 |          |           |       |            |  |



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