

Bring PFAS testing in house with SCIEX and Phenomenex

Save time and money by setting up LC-MS/MS testing in your water lab

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Under the Safe Drinking Water Act, Public Water Suppliers are required to monitor the contaminants published on the Unregulated Contaminants Monitoring Rule (UCMR). Testing must be performed 2-4 times per year at each point of entry to the water distribution system. The UCMR compound lists are updated every five years, and the next version, UCMR5, is expected to include several per- and polyfluorinated alkyl substances (PFAS). The cost of third-party analysis of organic contaminants, such as PFAS, can quickly add up to several hundred dollars per sample, especially with the risk of resampling requirements due to sample contamination by these ubiquitous compounds.

Labs monitoring PFAS in drinking water must follow the EPA Methods 537.1 or 533. These methods require solid-phase extraction of a 250 mL water sample followed by LC-MS/MS (liquid chromatography/ tandem mass spectrometry) analysis. Materials required for both methods are listed in Table 1. This list includes consumables and apparatus needed to run these methods.

Together, SCIEX and Phenomenex offer professional expertise on PFAS method setup, method customization, and on troubleshooting contamination in your lab to achieve high-quality PFAS results with short run times and minimal downtime. The list in Table 1 includes a Success Program that includes access to online training programs and on-site training with a SCIEX PFAS expert.

Conclusions

- Together, SCIEX and Phenomenex offer a unique combination of industry leading expertise, analytical equipment systems, and consumables that are thoroughly tested to provide robust and high-quality PFAS analysis.
- Contact SCIEX for more information on setting up your lab for PFAS analysis.

Table 1. Equipment systems and consumables required for PFAS analysis following EPA Method 537.1 and/or 533

Qty	Item	Part Number SCIEX	Part Number Phenomenex
1	SCIEX Mass Spectrometry System	Varies	
1	ExionLC™ AC System	5036665	
1	ExionLC AC Column Oven 120V	5036659	
1	SCIEX University™ Success Master Success Program (includes 3 days of onsite training with a SCIEX PFAS expert)	TRNLP003	
1	SCIEX PFAS Analysis Pump Conversion Kit with Gemini C18 HPLC column and Luna® 5 µm C18(2) delay column	5079982	
1	SPE 24-Position Vacuum, Manifold Set		AH0-6024
5	EPA 537.1: Strata® SDBL 100 µm Styrene-divinylbenzene, 500 mg/6 mL Tubes (30 pack)		8B-S014-HCH
5	EPA 533: Strata™-XL-AW 100 µm 500 mg / 6 mL (30 pack)		8B-S051-HCH
1	SPE Sample Reservoir 75 mL		AH0-7005
1	SPE Adaptor Caps		AH0-7191
5	Polypropylene Vials and Caps (300 µL inserts)		AR0-9995-12-C

References

1. <https://www.epa.gov/sites/production/files/2019-10/documents/ucmr5-stakeholdermeeting-190830.pdf>
2. EPA Method 537.1: https://cfpub.epa.gov/si/si_public_record_Report.cfm?dirEntryId=343042&Lab=NERL
3. EPA Method 533: <https://www.epa.gov/dwanalyticalmethods/method-533-determination-and-polyfluoroalkyl-substances-drinking-water-isotope>