PROTECT
WATER QUALITY AND SAFETY

The Measure of Confidence

EMERGING CONTAMINANTS ANALYSIS IN WATER

Harness the power of accurate mass for identifying non-target contaminants

Reliable peak identification and compositional data are essential, whether you are detecting and quantitating known contaminants or identifying emerging threats to our water supply – such as pharmaceuticals, personal care products (PCPs), pesticides or their metabolites, and endocrine disrupters.

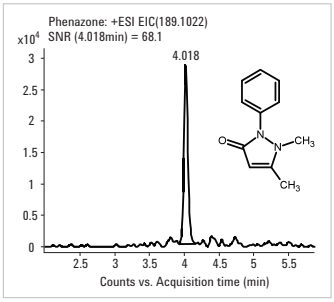
For known contaminants, Agilent LC/QQQ systems, combined with HPLC columns, are ideal. They provide the limits of detection and quantitation you need for concentrations well below 1 ppb, and method reporting limits ranging from 0.1 to 15 ppt.

Now, it is also possible to identify emerging contaminants

Confidently detect the identities of unanticipated compounds – or compounds that may not be on a pre-defined target list – with the **Agilent 6500 Series Quadruple Time-of-Flight (Q-TOF) LC/MS**, along with our **Accurate Mass Libraries and LC/MS Application Kits**. Together, they measure ions with sub-ppm mass accuracy – revealing the full picture of the compounds present in your sample. In addition, you can:

- Confirm contaminants using accurate mass databases and libraries
- Implement high-quality methods quickly with Agilent Application kits, which include on-site support
- Selectively remove interferences with Agilent sample preparation products
- Increase speed, resolution, and sensitivity by using Agilent HPLC columns

Analysis of pharmaceutical compounds in surface water by direct aqueous injection



Extracted ion chromatogram of phenazone at the 10 ng/L level, with the compound structure (inset). The Agilent 6550 iFunnel Q-TOF LC/MS system maximizes sensitivity for water analysis, while accurate Mass MS/MS libraries let you identify compounds that may not be found on a pre-determined target list. Direct aqueous injection allows the analysis of trace organics without the time and expense of solid phase extraction (SPE) and concentration.

You'll find the complete Application Note in our Emerging Contaminants information kit. Request yours at agilent.com/chem/contaminantskit

Emerging Contaminants information kit – with applications

Identify target and non-target compounds with utmost certainty. Includes:

- Analyze Pharmaceutical Compounds in Surface Water by Direct Injection Application Note
- An Application Kit for Multi-Residue Screening of Pesticides using LC/TOF or Q-TOF with a Pesticide Personal Compound Database Application Note
- Analysis of Environmental Samples with Ultra High Definition LC/Q-TOF MS and Accurate Mass: How Much Resolving Power is Enough? Application Note
- High Sensitivity HPLC Analysis of Contaminants of Emerging Concern (CEOs) in Water Using the Agilent 6460 Triple Quadrupole LC/MS System Application Note
- Water Analysis Brochure

Recorded eSeminar

Analysis of Environmental Samples with Ultra High Definition LC/Q-TOF MS and Accurate Mass: How Much Resolving Power is Enough?

Request these materials now at agilent.com/chem/contaminantskit

Agilent Technologies

Explore all of our emerging contaminants product offerings

Confidently perform screening and identification of compounds you didn't know were there.

APPLICATION KITS

Simplify your broad-range screening for non-target compounds

Each user-friendly Application Kit combines pretested analysis methods and powerful software tools with accurate mass databases and libraries. Together, they simplify the setup of applications – enabling even high-volume labs to perform truly comprehensive screening for large numbers of target and non-target compounds. On-site support is also available to address specific method customization needs.

1290 INFINITY LC

The ideal complement to LC/Q-TOF and LC/QQQ systems

The Agilent 1290 Infinity LC produces narrower, taller peaks for increased low-level resolution between compounds. You also get the confidence that comes with high-performance features like binary pump, active damping, and Infinity Diode Array Detector.

SAMPLE PREPARATION

Get accurate, reliable SPE with Bond Elut

Agilent Bond Elut sample preparation products allow you to *efficiently and quantitatively* extract the analytes you're looking for from any water sample – including surface water, wastewater, river water, and tap water. So you can ensure accurate, reproducible results right from the start.

POROSHELL 120 COLUMNS

Rugged, fast LC performance for water analysis

Achieve speed and resolution comparable to sub-2 µm columns. Agilent Poroshell 120 columns feature uniquely designed, superficially porous particles that produce high speed and resolution with lower backpressure. They deliver reproducibility and rugged performance, and are engineered with a 2 µm frit, which is more forgiving for dirty samples – a common challenge for environmental labs.

In addition, Poroshell 120 phases are the same (or very similar) to ZORBAX family phases for easy scalability and method transfer. Tip: to help your columns last longer, without sacrificing performance, use Agilent Fast Guards for UHPLC.

SERVICES

Solve problems quickly and increase your uptime

With service center operations in 65 countries, a global dispatch system, and call centers ready to assist you with Agilent and other brands of instruments, Agilent provides the tailored support you need for greater efficiency, productivity, and confidence.

Make Agilent your partner in emerging contaminants analysis. Visit **agilent.com/chem/envirocontaminants** for your information kit, and to learn more.

To contact your Agilent Representative or Agilent Authorized Distributor **agilent.com/chem/contactus**

Equip yourself to protect our water, soil, and air with Agilent's extensive applications expertise. Visit **agilent.com/chem/environmental**

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