

# PFAS Testing

Detecting a rapidly emerging contaminant



*Advanced PFAS analysis of  
Water, Soil, Biota & Food Matrices*

**Symbio**  
LABORATORIES  
*Environmental*



## What is PFAS?

Per- & Poly-fluoroalkyl substances (PFAS) comprises a family of over 6,000 fluorinated organic compounds with unique and complex properties.

PFAS has been widely used in a range of industrial and consumer products, such as:

- Firefighting Aqueous Film Forming Foams (AFFF)
- Oil & water resistant finishes on paper, textiles, carpeting & cookware, i.e. non-stick pans
- Electroplating mist suppressants
- Semiconductor manufacture
- Aerospace and electronics applications

The two best known compounds, Perfluorooctane Sulfonate (PFOS) and Perfluorooctanic Acid (PFOA), are the most regulated, due to emerging health concerns in Australia and internationally.

Their complex properties and common locations of use, means PFOS/PFOA leave persistent traces and are mobile in soil, leaching into groundwater.

Their water solubility and bioaccumulative nature allow uptake into plants and animals commonly used as food, and with long half lives pose a risk to humans and the environment.

### Half Lives of PFOS/PFOA:

	Water	Humans
PFOS	41 years	~5 years
PFOA	92 years	~4 years

## Symbio's Capabilities

Symbio Laboratories employs advanced analytical tools using High Resolution LCMS (currently targeting 34 PFAS compounds) in water, soil, biota and food matrices.

ENVIRONMENTAL & FOOD MATRICES LORS					
WATER - STANDARD	WATER - LOW	WATER - TRACE	SOIL/SEDIMENT	FOAM/AFFF	BIOTA/FOOD
0.01 µg/L to 0.05µg/L	0.001 µg/L to 0.005µg/L	0.0001 µg/L to 0.005µg/L	0.5 µg/kg	0.2 mg/kg to 0.4 mg/kg	0.1 µg/kg to 1 µg/kg

## The Symbio Difference

Symbio Laboratories is an Australian owned and operated provider of analytical laboratory services with over 20 years of experience.

### Quality Systems, Accreditations & Approvals

Symbio Laboratories' technical knowledge is backed by accreditations, approvals and comprehensive quality systems, including NATA accreditation, ISO/IEC/17025, DAWR/AQIS approved testing provider for export, APVMA licensed, and participation in internal and external proficiency programs.

### Expert Advice, Technical & Testing Services

The Symbio Laboratories team includes experienced professionals with direct industry experience, supported by fully equipped NATA accredited laboratories across Australia, dedicated IT support, expert customer service team, and an online eResults tool.

Feel confident in partnering with a highly trusted and experienced national laboratory.

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