



## Driving Productivity and Increasing the Speed of Analysis

South West Water is responsible for maintaining and monitoring the quality of drinking and bathing waters and the sewage

system network in a region of England. They do this effectively through a central analytical facility. In early 2010, as part of the rolling replacement programme, the ICP-MS instrument was identified as due for renewal. The analytical team were looking for an instrument that could be relied upon to have minimum downtime and be a workhorse for high sample throughput; but also offer flexibility to adapt to changing business requirements and complete investigative work if required. After the evaluation of the top three suppliers, the NexION® 300 ICP-MS from PerkinElmer was selected. The flexibility offered by NexION having both a collision and dynamic reaction cell ensures that the lab is future proofed. Being fully prepared to handle any changes in sample matrices and still benefit from sensitive, reproducible results day in day out.

“As PerkinElmer have a lot of credibility and a strong track record in the area of environmental analysis we were not nervous about being one of the first to buy the new NexION ICP-MS. PerkinElmer delivered what they promised; low background, less maintenance and less downtime.”

Alan Clark, Section Leader Chemistry, South West Water, UK.

### Fast and easy user maintenance with QID and TCI technology

South West Water can be assured of maximum uptime and unsurpassed reliability with NexION. The innovative Triple Cone Interface (TCI) generates a tight beam and helps to eliminate maintenance whilst the patented Quadrupole Ion Deflector (QID) ensures that only ions are introduced into the cell; giving a stable signal. “It is really easy to get the cones out, and how the QID works is significantly different from other manufacturers” comments James Thomas, Analytical Team Leader. Alan continues, “NexION has clearly been designed with the user in mind, with minimal and fast maintenance”.

### Efficient operation and reduced cycle times

The analysts at South West Water found it easy to streamline their old methods to cover the required 28 elements on the NexION, without increasing samples times. Using the FAST system, it is possible to further reduce cycle times, as they have done in the past. The team find the system easy to use and that by tuning the auto lens it gives the best sensitivity. The view of the analytical team leader, James, is that the scheduler is a great tool for pre-condition testing and will be beneficial during routine operations, saving them time and ensuring consistent operating conditions.

### Company: South West Water

**Size:** Over 1,225 employees across the South West of England.

**Business:** South West Water, part of the Pennon Group plc, was formed as a result of the privatisation of the water industry in the UK in 1989. South West Water is responsible for maintaining and monitoring the quality of drinking water, sewerage systems and bathing waters in line with the stringent UK and EU standards. Analytical services for the company are coordinated from a central laboratory.

**1997:** ELAN® 6000 ICP-MS installed and used for routine analysis.

**2000:** One of the first to order Optima™ 4300 DV ICP-OES which proved to be robust and rugged.

**2008:** Replaced the ICP-OES system with an Optima 5300 DV ICP-OES

**2010:** First UK customer to order a NexION 300 ICP-MS

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