



Agilent Case Study: Power Supply Failure

Predictive Insights Stop Power Supply Failures Before They Escalate

Agilent
CrossLab
From Insight to Outcome

Agilent CrossLab Connect suite monitors LC/MS performance

Transforming monitoring into actionable intelligence

In early 2022, a large clinical testing laboratory in the United States deployed the CrossLab Connect suite to monitor the performance of a group of LC/MS instruments. The goal was to gain accurate visibility into utilization and capacity while identifying workflow issues that could increase test volume once addressed.

The first warning signs

Soon after deployment, CrossLab Connect detected recurring irregularities in the power draw of one mass spectrometer (MS). Over the next few weeks, these anomalies persisted and correlated with instrument fault codes, which were reported to the laboratory operations director. Eventually, the MS power supply failed and required replacement, resulting in several days of unplanned downtime.

Pattern recognition in action

Months later, the platform flagged the same irregular power draw pattern on a different MS system and immediately notified the laboratory service manager. Because this behavior had already been cataloged, CrossLab Connect generated targeted alerts and recommendations, advising that the second MS unit was likely experiencing the same power supply issue.

From guesswork to precision diagnosis

The service technician confirmed the diagnosis during inspection. By leveraging historical data and predictive analytics, the CrossLab Connect suite accurately identified the problem and recommended corrective action before failure occurred. This proactive approach helped the lab avoid another costly period of downtime and production losses.

Operational gains that matter

By detecting early warning signs and applying predictive insights, CrossLab Connect enabled the lab to shift from reactive repairs to proactive maintenance. This capability not only prevented repeat failures but also safeguarded productivity and improved operational resilience.

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