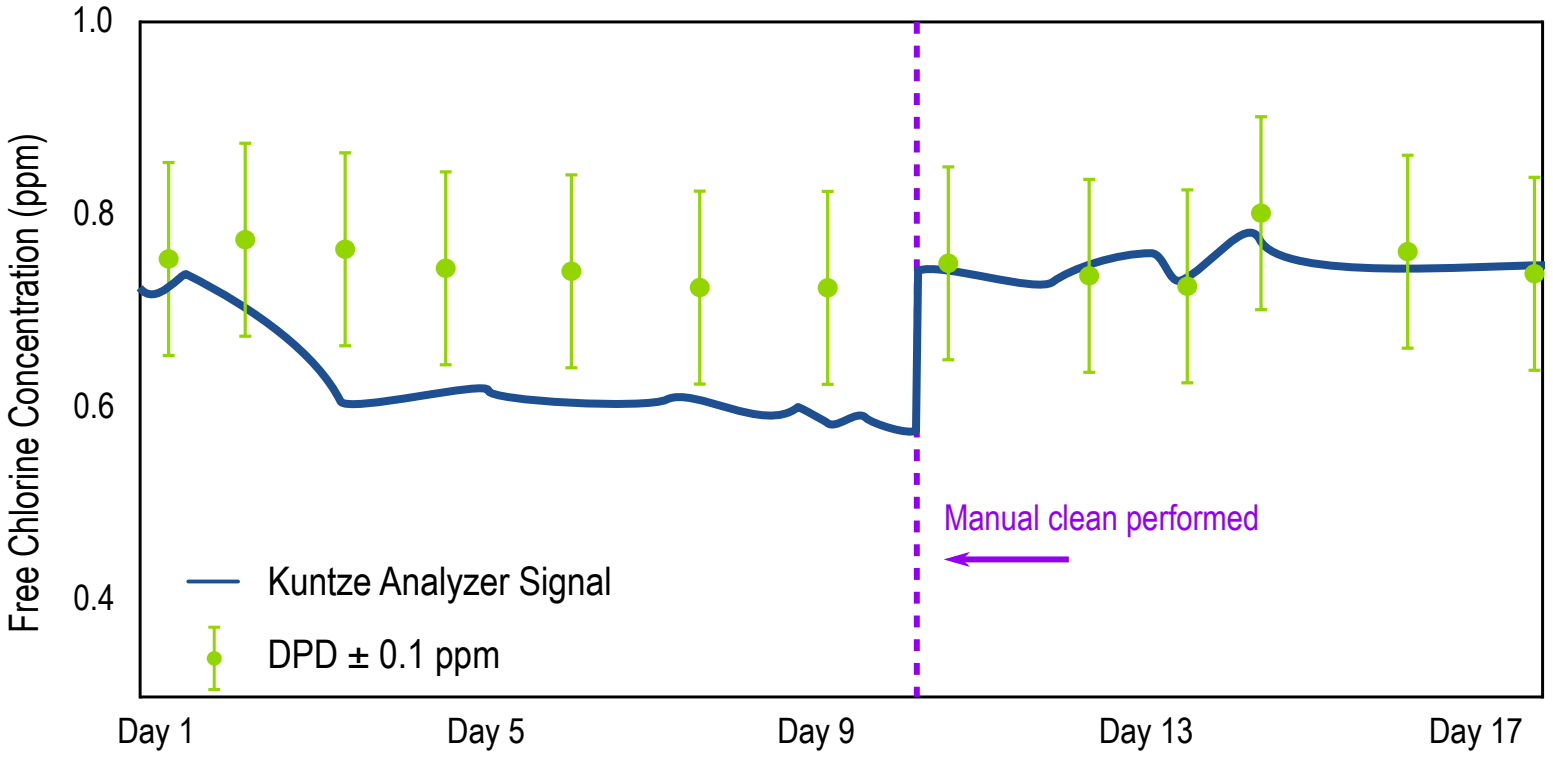
# Insights Case Study: When to Perform a Manual Clean

**Background Information**

> This analyzer was installed in a drinking water application using free chlorine chemistry.
> The customer noticed that the analyzer signal was consistently lower than their reference measurements.
> According to USEPA 334.0, their analyzer signal had to be within ± 0.1 ppm of their reference measurements to stay in compliance.
> After using Cloud Connect® to view and analyze the data, Kuntze Trial Managers instructed the customer to perform a manual clean of their Zirkon® DIS probe.




**Results**

> Before the manual clean, the analyzer signal (blue) was lower than the reference measurements (green circles).
> On Day 10, the customer removed their Zirkon® DIS probe, manually cleaned it using a granular detergent, and reinstalled it **without** performing a calibration.
> After the manual clean was performed, the analyzer signal matched the reference measurements.
> This recommendation could not have been made without using Cloud Connect® to visualize the data.

> Learn how to perform a best practices manual clean at kuntzeusa.com/free-chlorine.
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