



CVAA versus Direct Mercury Analysis

Cost Saving Comparison

Many laboratories around the world are currently using traditional techniques like Cold Vapor Atomic Absorption to analyze the mercury content for various matrices such as soils, sediments, fish. Determination of total mercury content using CVAA technique requires traditionally labor intensive and time consuming sample preparation steps, which could lead to Hg losses. With the cost of reagents and their disposal continually rising it is important for

laboratories to find more cost effective ways to do mercury analysis.

With this in mind, Milestone has created a cost comparison to show the benefits of using our DMA-80 evo Direct Mercury Analyzer, which doesn't require any preliminary step, offers more than double the productivity of traditional cold vapor techniques at a fraction of the cost and is suitable for a wide range of samples.

	DMA-80 evo	CV-AA
Calibration during analysis	63\$ / DORM3 <i>Valid for thousands of samples</i>	62.37\$ /EPA Method 7471B <i>Daily calibration is required</i>
Time per sample <i>See table 1</i>	6 minutes	12 minutes
Daily sample analysis	80 samples	40 samples
Labor cost <i>Based on 8 hour working day*</i>	160\$	160\$
Labor cost per sample	2\$	4\$
Reagent cost per sample	0.30\$	4.50\$
Reagent cost per day <i>Based on 80 samples</i>	24\$	180\$
Total cost <i>Labor cost + calibration + reagents</i>	273\$	562.37\$
Total cost per sample	2.30\$	8.50\$

* Labor cost at \$20/h

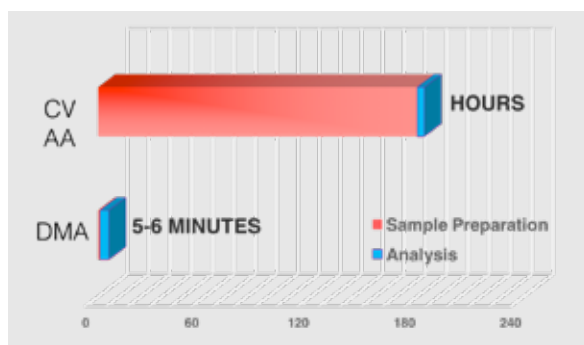


Table 1: Time comparison

Total saving per sample	6.20\$
Total saving per day	496\$

The DMA-80 evo offers a monthly cost saving of 9920\$ compared to CVAA!