

2009 S&T
Water Sampling for Pesticides

Problem Statement

- Pesticides analyzed by AXYS and CDFG
 - Chlorpyrifos and diazinon extracts sent to CDFG
 - Stopped in 2006
 - 2006 and 2007 extracts on hold
- CDFG
 - Issues with TPP surrogate
 - Unclear whether it was related to spiking or extraction

2008 Demonstration Project

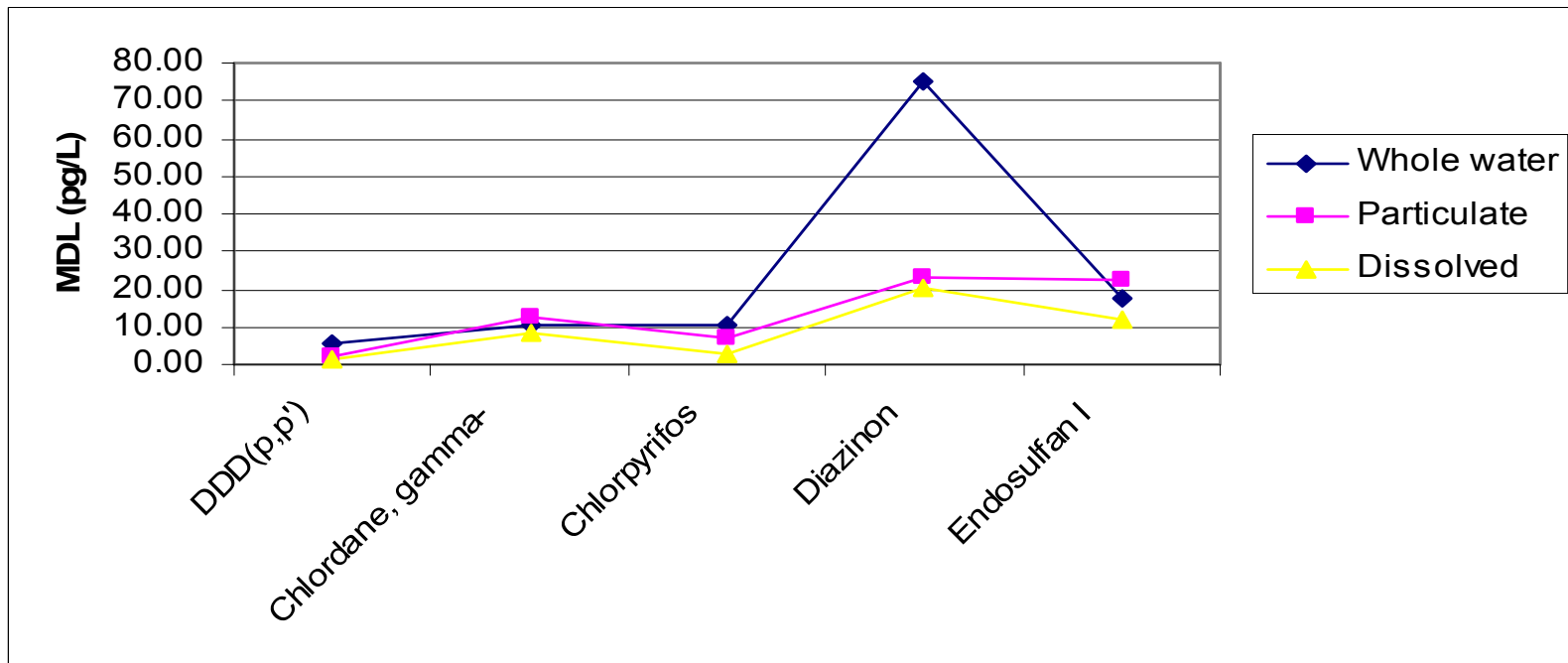
- Conducted analysis of whole water (8 L) using MRES and 100 L samples using MRES at 6 sites
 - Confirmation that MDLs are sufficient to detect compounds
 - Comparison between collection methods to evaluate accuracy of method and potential for using MRES to analyze archived extracts

Staff Recommendation

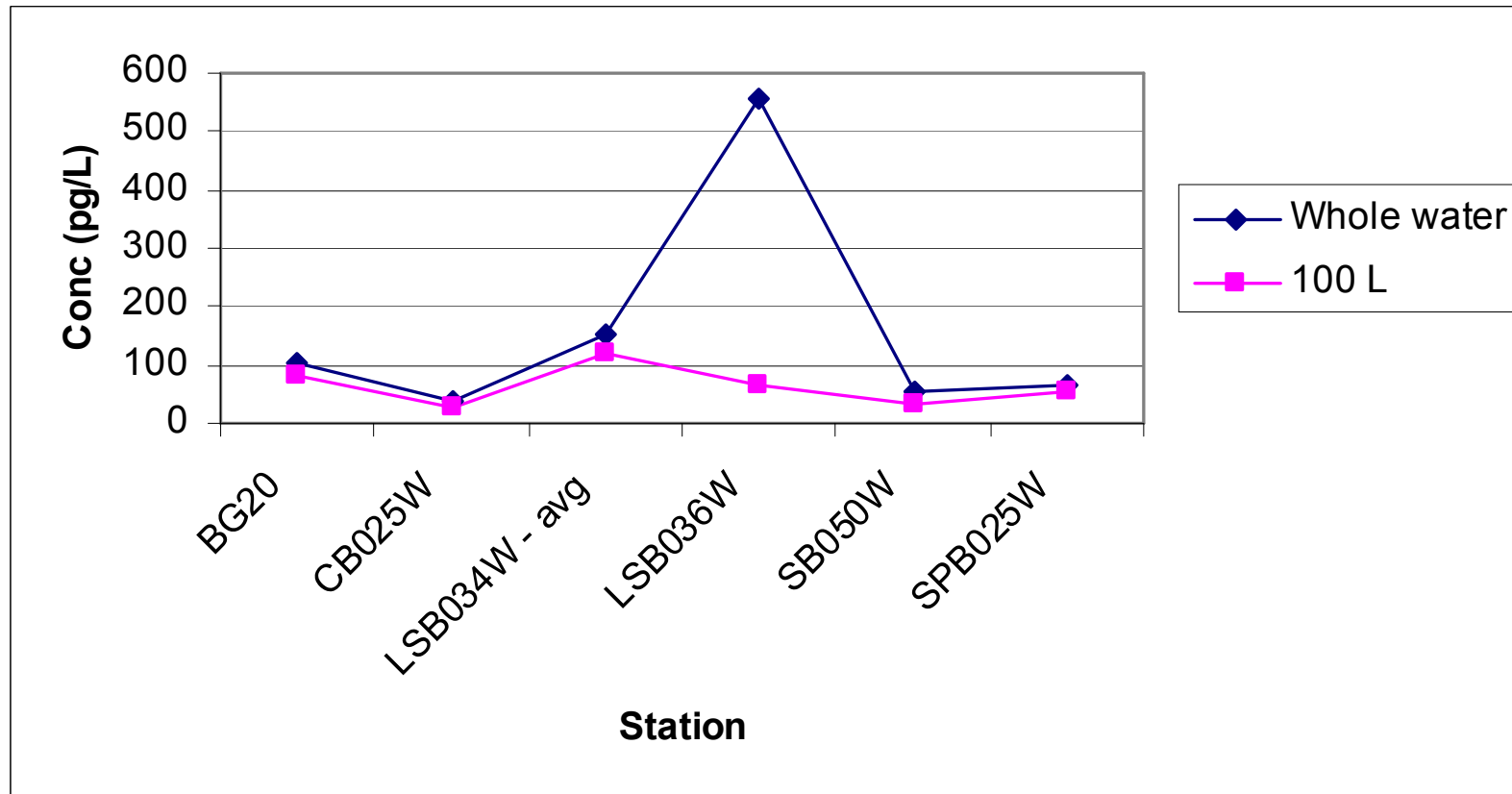
- Have all pesticide analyses conducted by AXYS Analytical using MRES method on 100 liter infiltrix system
- Slight increase to program cost (~\$100/sample)

Results - MDLs

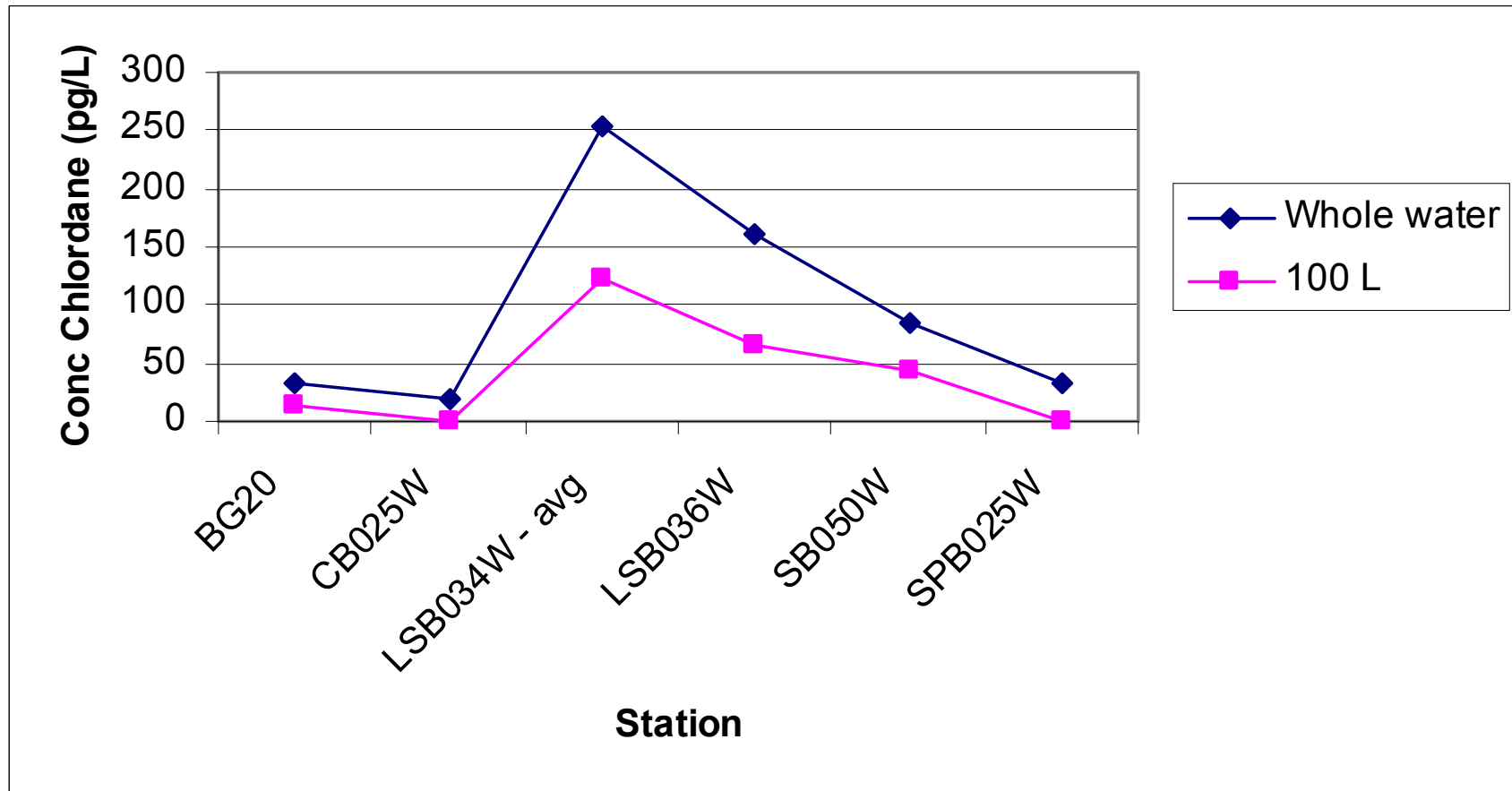
- In general whole water have higher MDLs than 100 L; most within a factor of two



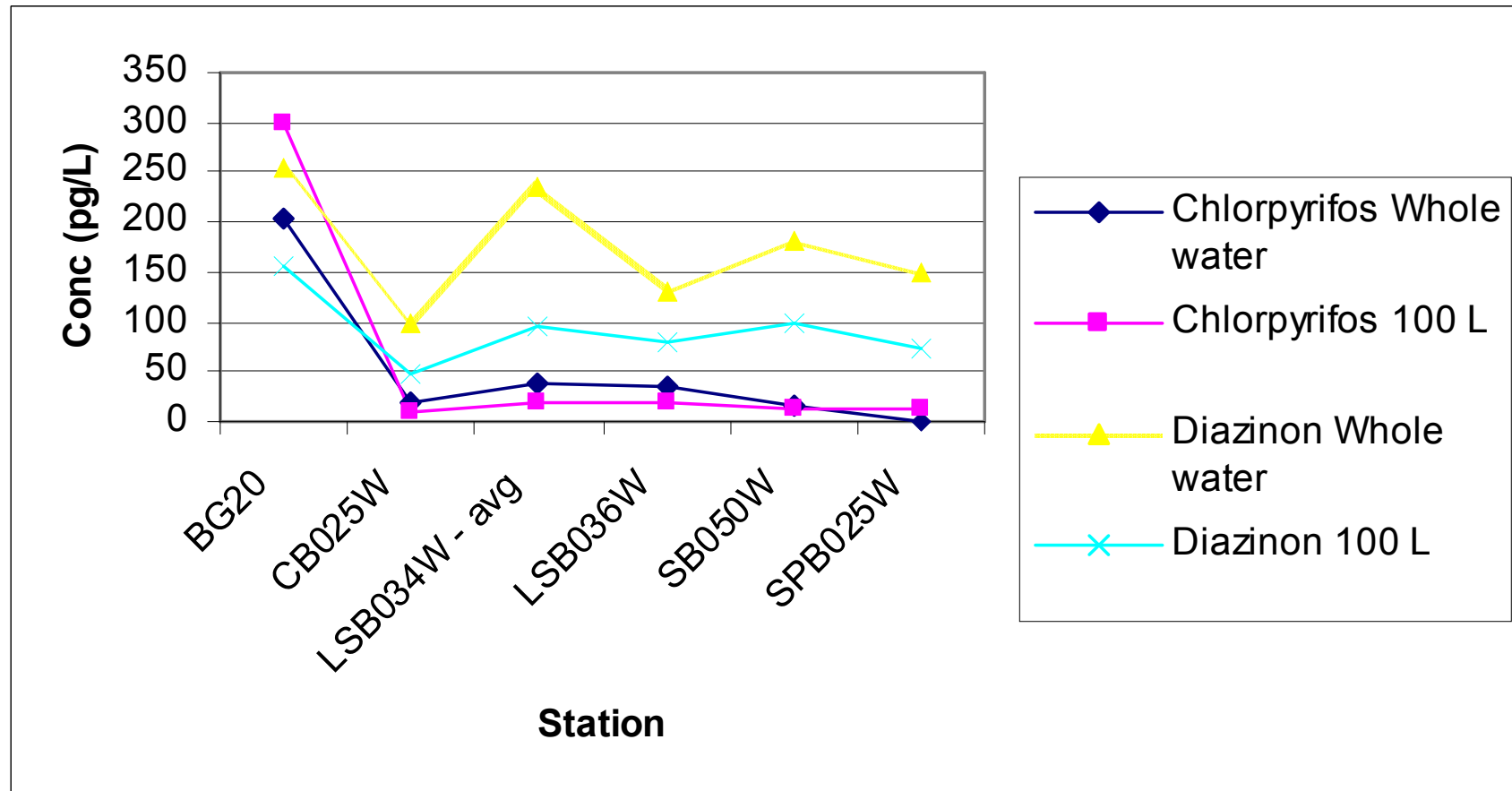
Results - Comparison Whole Water to 100 L (DDD (p,p'))



Comparison - Whole Water to 100L (Chlordane - gamma)



Comparison - Whole Water to 100L (Diazinon / Chlorpyrifos)



Comparison to Historical Data

