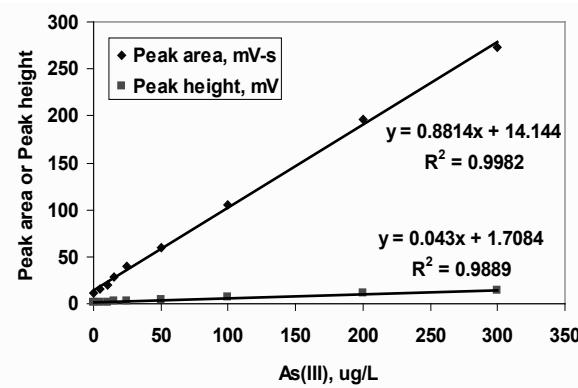
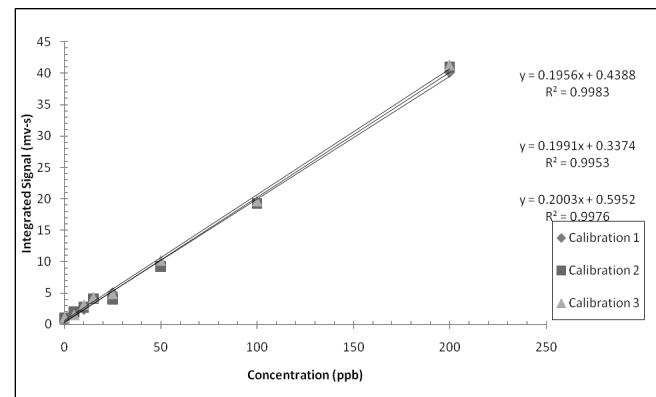


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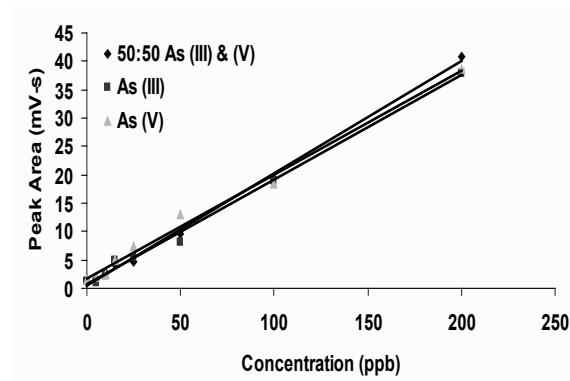
## Supplemental Data



**Figure S-1.** Comparison of peak area and peak height based calibrations without background subtraction.

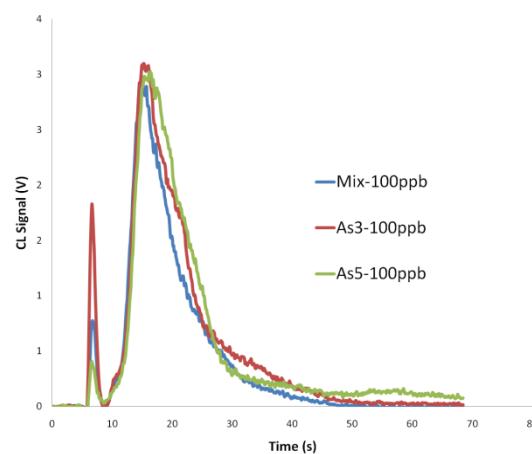


**Figure S-2.** Concentration calibrations in three consecutive days.

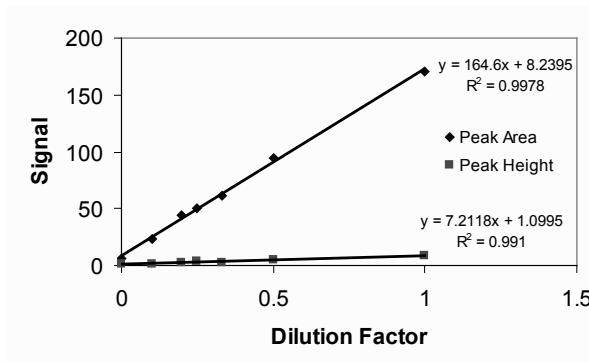


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**Figure S-3.** Concentration calibrations for arsenic species. Calibration parameters are listed in Table 1

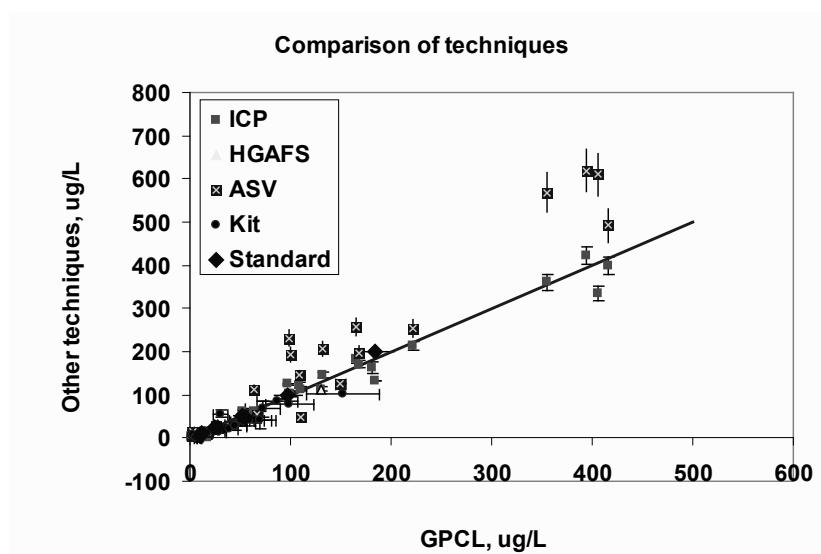


**Figure S-4.** Transient signal reproducibility of As(III), As(V), and the mixture superimposed upon each other



**Figure S-5.** Dilution experiment with a groundwater sample. Peak area shows better linearity compared to peak height. The lowest dilution factor 0.1 corresponds to 26.8 µg/L As(total).

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**Figure S-6.** Linear plot of field sample analysis comparison