

Summary of Consensus Values for samples collected on the 2009 GEOTRACES Intercomparison Cruise

The consensus values for 6 elements are reported here from results submitted by 14 participating laboratories worldwide. Values were submitted to James Moffett over an approximately 3 year period from mid-2016 to mid-2019. Data have been submitted for at least 6 other elements, but only from one or two labs. The exception is aluminium, for which we will have enough data to release a value soon. I encourage anyone interested in aluminium who has not reported data to do so soon.

Some data were excluded because they were outside the standard deviation of the mean values. I looked at these data and often found issues with other elements as well. I am in contact with those laboratories.

To date, contamination of these bottles does not appear to be a widespread problem. One group reported different values for contamination prone elements between bottles. But the good consensus between values suggests that most bottles are fine. They were collected by the Bruland lab (Geoff Smith) who has a good track record based on the SAFe samples.

Please note that the metadata for these samples, including the locations, hydrographic parameters and sampling dates, are available at BCO-DMO.

A. GSP		All concentrations in nmol L-1							
		Mn	Fe	Ni	Cu	Zn	Cd	Pb	
Lab									
	number of samples	9	11	11	9	10	4	11	
	Mean concentration	0.778	0.155	2.595	0.574	0.030	0.002	0.062	
	SD	0.034	0.045	0.100	0.053	0.052	0.002	0.005	
B. GSC									
		Mn	Fe	Ni	Cu	Zn	Cd	Pb	
Lab									
	number of samples	8	13	7	11	12	9	9	
	Mean concentration	2.180	1.535	4.393	1.099	1.433	0.364	0.039	
	SD	0.075	0.115	0.205	0.149	0.103	0.022	0.004	