Dissolved Nickel – values in nmol/kg
Consensus values (± 1 std. dev.) for North Atlantic GEOTRACES Reference Samples as of May 2013

GEOTRACES GS = 2.08 ± 0.06 nmol/kg

GEOTRACES GD = 4.00 ± 0.10 nmol/kg

These above concentrations are considered to be the consensus values for the GEOTRACES reference samples as of May 2013.

Labs participating in the analysis of the North Atlantic GEOTRACES reference samples to determine consensus values for dissolved Ni:

Yoshiki Sohrin (U. Kyoto, Japan):
Off line concentration using an EDTriA-type chelating resin with subsequent analyses by ICP-MS using the method of Sohrin et al. (2008).
Michael Ellwood (Australian National U, Australia):
Dissolved Ni was concentrated by solvent extraction (Bruland et al.,1979) and analyzed by ICPMS.
Peter Croot/Peter Streu (IMF/GEOMAR, Germany);
Samples were analyzed by solvent extraction with DDC/Freon and ICP-MS according to the method described in Kremling and Streu (2001).
Angie Milne/Bill Landing (FSU, U.S.):
Off-line extraction using IDA Toyopearl AF-Chelate-650 M resin followed by analysis using isotope dilution ICP-MS (Milne et al. 2010).
Christa Pohl (Warnemunde, Germany):
Samples were analyzed according to the method described in Kremling and Streu (2001). The final extracts with the metals were measured by electrothermal atomic absorption spectrometry.
Geoff Smith/Ken Bruland (UCSC, U.S.):
On-line flow injection analysis of 4 ml of sea water using an EDTri-A-type chelating resin (Sohrin et al., 2008) followed by detection with ICPMS.
Dondra Biller/Ken Bruland (UCSC, U.S.):
Off-line concentration using an EDTri-A-type chelating resin with subsequent analyses by ICP-MS (Biller and Bruland, 2012) based upon the method of Sohrin et al. (2008).
Christian Schlosser and Eric Achterberg (Plymouth, UK)
Off-line extraction using a WAKO chelating resin (Kagaya, 2009) followed by analysis on an Element XR ICP-MS. Samples were UV digested for 3 hours.
Rob Middag and Ken Bruland (UCSC, US)
Off-line extraction with Nobias PA-1 chelating resin and analysis on an Element XR ICP-MS Middag et al., submitted).
Maria Lagerstrom and Rob Sherrell (Rutgers University, US)

On-line flow injection with a modified seaFAST system, the Nobias PA-1 resin, isotope dilution and ICP-MS detection.

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