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

\[ \text{SAFe S} = 2.28 \pm 0.09 \text{ nmol/kg} \]

\[ \text{SAFe D2} = 8.63 \pm 0.25 \text{ nmol/kg} \]

\[ \text{SAFe D1} = 8.58 \pm 0.26 \text{ nmol/kg} \]

These above concentrations are considered to be the consensus values for the SAFe reference samples as of May 2013. There does not appear to be a significant difference between samples that were UV-oxidized or non UV-treated.

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

**Mike Gordon/Kenneth Coale (MLML, U.S.):**  
Dissolved Ni was concentrated by solvent extraction (Bruland et al., 1979) and subsequently analyzed by ICP-MS.

**Yoshiki Sohrin (U. Kyoto, Japan):**  
Off line concentration using an EDTri-A-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).

**Pete Morton/John Donat/Bill Landing (ODU/FSU, U.S.):**  
Use of 8-hydroxyquinoline chelating resin off-line with subsequent analysis by ICP-MS.

**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.

**Kristen Buck/Kathy Barbeau (SIO/UCSD, U.S.):**  
Adsortptive cathodic stripping voltammetry on UV oxidized samples (Saito et al., 2004).

**Antonio Cobelo-Garcia (IIM-CSIC, Spain):**  
Adsortptive cathodic stripping voltammetry on UV oxidized samples (Cobelo-Garcia et al., 2005).

**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.

**References:**