**Cruise:** Reykjafoss August 2010

**Ship:**  Reykjafoss

**Dates:** August 21 – August 24, 2010

**Chief Scientist:** Sampled by French observer

**Equipment**: sampled from underway line on Reykjafoss

**Total number of stations:** 0 all underway

***Sample Collection***

The discrete samples were collected by a French observer hired by Gilles Reverdin. Surface samples were collected from intake on the Reykjafoss that is tapped from the ship’s engine intake on board.

Sampling collection followed SOP 1 in Dickson et al., (2007).

**DIC:**

10Sampled by French observer ??? locations, 20 samples, each 500-ml, 10 sets of duplicate samples

PI: Dr. Rik Wanninkhof

Analyzed by: Robert Castle

**TAlk:**

10 locations, 20 samples, each 500-ml, 10 sets of duplicate samples

PI: Dr. Rik Wanninkhof

Analyzed by: Leticia Barbero

***Sample Analysis***

**DIC:**

Analysis date: 12/09/2010

Coulometer used: AOML2 (SOMMA #2)

Blank: min=12 counts/min; max = 20 counts/min; average = 17 counts/min

CRM # used and assigned value (include both DIC and salinity):

Meas CRM cert CRM meas sal cert sal batch

1986.74 2000.44 32.984 33.326 85

Run time: min=9 min; max = 15 min; average = 10 min

Reproducibility: (# samples and average difference): 10 sets of duplicate samples, average difference 1.7 umol/kg +- 1.3 umol/kg

CRM, salinity and HgCl2 correction applied: Salinity correction was applied using TSG salinity

Remarks-

The volume correction was applied due to added HgCl2 (Measured DIC\*1.00037).

The first CRM of each cell was used for a CRM correction.

match up with the underway DIC and TA samples

**TAlk:**

The results posted are duplicate analyses from the same sample bottles used for DIC.

Analysis date: 12/17/2010

Titration system used: Open cell

CRM # used and assigned value:

Meas CRM cert CRM batch

2169.01 2214.49 80

Reproducibility: (# samples and average difference): 10 sets of duplicate samples, average difference 2.2 umol/kg ± 3.8 umol/kg

CRM correction applied

The first and last CRMs were used for a CRM correction.