

Cruise: Reykjafoss_2010

Ship: Reykjafoss

Expocode: 64RJ20100821

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:

10 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 \pm 3.8 umol/kg

CRM correction applied

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

UPDATE:

Between March and June of 2021, all of the data for the discrete samples was put into a uniform format. The supporting information was checked for accuracy, especially the expocode, date, time, and positions.