

Cruise: ABACO, Eastern Boundary Current
Ship: R/V Ronald H. Brown
Dates: February 11 – 14, 2003
Expocode: 33RO20030206
Chief Scientist: Molly Baringer
Equipment: 24 bottle CTD with dual C, T, and O₂ sensors and LADCP
Number of Stations: 54

Sample Collection

DIC:

5 stations, 62 samples each 500-ml, 6 sets of duplicate samples
PI: Dr. Rik Wanninkhof, AOML
Analyzed by: Esa Peltola, AOML

O₂: O₂ in umol/kg

Sample Analysis

DIC:

Analysis Date: February 7 – 14, 2003.
Coulometers used: AOML1 and AOML2
Blank range: 12.0-29.8 counts/min
CRM # used and assigned value (include both DIC and salinity): Batch 42, c:1985.1 umol/kg, S:33.364; and Batch 43, c:1988.64 umol/kg, S:33.598.

CRM value measured: AOML 1: offset 0.9 umol/kg (1985.99 umol/kg, Batch 42)
AOML-2: offset 2.2 umol/kg (1982.9 umol/kg, Batch 42);
offset 1.7 umol/kg (1983.4 umol/kg, Batch 43)

The average run time was 9 minutes, the minimum run time was 8 minutes and the maximum run time was 20 minutes.

Reproducibility: (# samples and average difference): 6 sets of duplicate samples, average difference 2.1 umol/kg.

CRM, salinity and HgCl₂ correction applied: yes

Remarks-

The salinity sensor did not work on AOML1.

Comments

The Sample_ID is the rosette niskin bottle number from which the discrete samples were drawn.

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.