

**FRANKLIN CRUISES FR 8/90, 5/92 AND 8/93
DATA DOCUMENTATION
JGOFS WESTERN EQUATORIAL PACIFIC PROCESS STUDY**

[1] General:

Parameter: Hydrology Analysis of Seawater
Level 1: Yes
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List of Parameters: Salinity, dissolved oxygen, reactive silicate, nitrate plus nitrite, nitrite, dissolved inorganic phosphate (orthophosphate)

List of Units: salinity (psu – practical salinity units), dissolved oxygen ($\mu\text{mol/L}$), silicate ($\mu\text{mol/L}$), nitrate+nitrite ($\mu\text{mol/L}$), nitrite ($\mu\text{mol/L}$), phosphate ($\mu\text{mol/L}$)

[2] Sampling:

Gear (e.g. CTD, pump, etc.): CTD; 10 litre niskin bottles
Standard Depths: Hydrochemistry depths: see Hydrochemistry data
Chemicals used: As per methods cited below
Special Procedures: Standard hydrochemistry sampling procedures followed. Nutrient samples were frozen after collection and analysed within 7 days of collection.
Comments and Notes: None

[3] Analysis:

Instrument: Salinity – Yeokal Inductive Salinometer
Dissolved oxygen – manual Winkler titration
Nutrients (silicate, nitrate/nitrite, phosphate) – Technicon AAll.
Method: Salinity – See Yeokal Inductive Salinometer
Dissolved oxygen – CSIRO Division of Fisheries and Oceanography Report 51
Nutrients – CSIRO Marine Research Hydrochemistry Manual (in preparation).
Precision: Salinity 0.003 psu
Dissolved oxygen 1%
Nutrients estimated as 3%
Comments: None

[4] Results:

Quality of Data: Quality of data was good for FR 8/90, Fr 5/92 & FR 8/93

[5] Brief description of analytical method

Major, G.A., Dal Pont, J., Klye, J., and B. Newell (1972). Laboratory techniques in marine chemistry. CSIRO Division of Fisheries and Oceanography Report 51, 1972.

[6] Comments:

At some sites, nitrite was measured separately to nitrate. The nitrate results at these depths are the sum of nitrite plus nitrate.