

WHP Ref. No.: PR5/PR6/PRS1
Last updated: 11 July 1994

CRUISE REPORT

Repeat hydrography on Lines PR5, PR6, PRS1

- A. Cruise narrative
 - a. WOCE designation: PR5, PR6, PRS1
 - b. Expedition designation: 18DD9402/1
 - c. Chief scientist: Frank Whitney
 - d. Ship: John P. Tully
 - e. Ports of call: Patricia Bay, B.C.
 - f. Cruise dates: May 10 to 25, 1994

A.2. Cruise Summary Information

a. Geographic boundaries: Following a WOCE training session in coastal waters on May 10 and 11, we sailed along Line PR6 to Ocean Station Papa (PRS1). After completing a 3 day program at PRS1, the ship returned along Line PR5, sampling 3 stations.

b. Stations occupied: Table of Stations by type

Sample type:	No. Stations:	Max. Depth:
CTD casts 24	3000ødbar	
Rosette casts 94	304ødbar	
Loop samples 345 m		

c. Floats and drifters deployed:

Six Argos drifters (3 drogued at 15 m and 3 at 120 m) were deployed within a 0.5 nm box at station PS1. A drifting sediment trap array (9 traps to 1000 m) was deployed at PRS1 for 3 days, also a productivity drifter for 8 h.

d. Moorings deployed or recovered:

One current meter mooring was recovered at station P20.

One sediment trap was recovered and redeployed at P4.

Three traps (200, 1000 and 3800 m) were recovered and redeployed at PRS1.

A.3. List of Principal Investigators

Howard Freeland	Climate change	IOS
C.S. Wong	Climate chemistry	IOS
Ron Perkin	Physical measurements	IOS
Frank Whitney	Chemical measurements	IOS

A.4. Scientific Programme and Methods

Surface seawater (uncontaminated sea water, USW), CTD and rosette casts were completed at standard stations along Line PR6. Samples were analyzed onboard ship for salinity, oxygen, nutrients, CFCs, chlorophyll a and alkalinity. Others were preserved for total CO₂, 13C, 18O and DOC at selected sites. JGOFS sampling for plankton and productivity studies was completed at 5 stations. We had time to complete 3 casts along PR5 as we returned to IOS.

A.5. Major Problems and Goals Not Achieved

Power interruptions to our CTD fragmented several casts.