

CRN

90-14

DAILY LOG

INSTITUTE OF OCEAN SCIENCES
OCEAN PHYSICS

DATE

Oct. 1 - 12, 1990

VESSEL

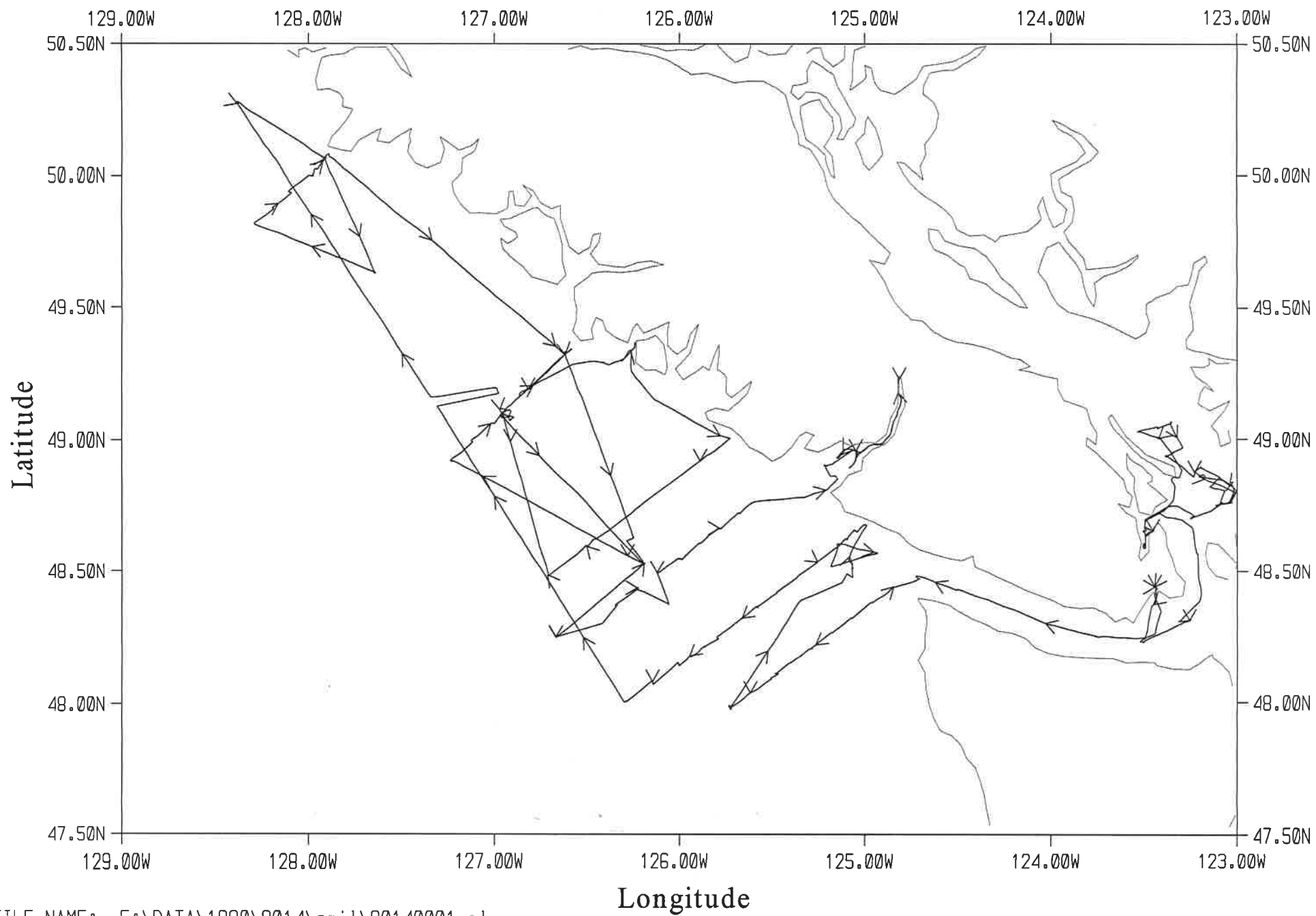
Parizeau

PROJECT

La Perouse, Georgia Str. Deep Water
Renewal

PLOTTED: 2000/02/29 14:18:52

Mission 90-14



FILE NAME: E:\DATA\1990\9014\sail\90140001.cln

START TIME: UTC 1990/10/01 20:14:07 END TIME: o

12-4 Captain: P. Frost
Second Officer: B. PENNELL

4-8 First Officer: J. Campbell
8-12 Third Officer: P. MURPHY

Cruise Participants/Agencies: Ocean Physics, Ocean Ecology
Ocean Chemistry, Arctic Sciences Ltd.

Scientific Personnel:			Party Chief: <u>T. Juhász</u>			8-12+ <u>A</u>		
name	watch	cabin	name	watch	cabin	name	watch	cabin
<u>R. Bigham</u>		<u>G</u>	<u>P. Kimber</u>	<u>0800-1600</u>	<u>F</u>			
<u>L. Spearing</u>		<u>C</u>	<u>N. Delacretaz</u>	<u>0800-1600</u>	<u>F</u>			
<u>B. Minkley</u>		<u>B</u>	<u>J. Love</u>					
<u>D. Tucke</u>		<u>E</u>	<u>R. Bellegay</u>					
<u>D. Sieberg</u>		<u>D</u>	<u>T. Soutar</u>					
<u>R. Birch</u>		<u>E</u>	<u>A Thorne</u>					

second leg of cruise: Party Chief: T. Juhász 8-12+ A

as above with:

<u>R. Brown</u>	<u>2000-0800</u>	<u>F</u>
<u>R. Forbes</u>	<u>0800-2000</u>	<u>F</u>

third leg of cruise: Party Chief: Ocean Ecology D. Mackas

DATA LOGGING SYSTEM: Unit number: 2 program ver. 1.10
CTD deck unit make: Guildline model: 87107 serial no.: 57160
Computer make: HP model: Vectra serial no.: 2938A05390
monitor make: NEC model: 2A serial no.:
printer make: Star model: Radix 10 serial no.: CL5004000266

1st CTD make: Guildline model: 8709 serial no.: 41226
temperature sensor model: serial no.:
coefficients: slope: offset:
conductivity sensor model: serial no.:
coefficients: slope: offset:
pressure sensor range: psi serial no.:
coefficients: FSP: dB offset:
transmissometer model: serial no.:
coefficients: slope: offset:
Comments:

2nd CTD make: _____ model: _____ serial no.: _____
 temperature sensor model: _____ serial no.: _____
 coefficients: slope: _____ offset: _____
 conductivity sensor model: _____ serial no.: _____
 coefficients: slope: _____ offset: _____
 pressure sensor range: _____ psi serial no.: _____
 coefficients: FSP: _____ dB offset: _____
 transmissometer model: _____ serial no.: _____
 coefficients: slope: _____ offset: _____
 Comments: _____

WINCHES:

CTD make: Swann model: 410 serial no.: 1433
 counter make: Sytech model: _____ serial no.: _____
 HYDRO make: Swann model: 310 serial no.: 1083
 counter make: Reulis model: _____ serial no.: _____
 Spooling make: not on board model: _____ serial no.: _____
 Drag make: Swann model: 329 serial no.: 1483
 other Hydro make: _____ model: _____ serial no.: _____

Salinometer make: N/A model: _____ serial no.: _____

SAIL System:

program version: B Sail time zone: GMT
 sampling interval: 60 sec.
 CTF module no.: 13 serial no.: 104
 remote temperature model: _____ serial no.: _____
 flow sensor model: _____ serial no.: _____
 Other sensors: (special for this cruise)
 name: Barometer module I.D.: _____ serial no.: _____
 name: Wind Speed + Direction module I.D.: _____ serial no.: _____
 Comments: no doppler running wind speed is not true ship speed is added in.

ADCP Setup:

Program version: Loan 2RD, Com number of depth bins: 60
 time zone: GMT bin length (2^x): 3
 sampling interval: 300 sec. pulse length: 8
 blank beyond transmit: 1.0 pings per ensemble: 1
 pulse cycle time: 1.00
 percent pings good threshold: 50
 Comments: NAV DEVICE: FURUNO LC90.

Cruise 9014

1315 PDT - launched COCC test mooring
- Ron Bellegay + Tim Soutar for details.

1350 - Test cast with CTD in Saanich Inlet.
(PDT) - 90140001 upcast * header is LA02 with appropriate
Lat. + Long.
- transmissometer not attached.

1430 (PDT) J. Love
T. Soutar
R. Bellegay
A. Thane
R. Lasciavo } leave ship via ML Wind. to I.O.S.

Winches (1) - spooling winch 1450 was rejected by ship
as being unsafe

- the drive gear disengaged by itself
- the brake is failed

(2) 329 #1233 Ecology CTD winch leaks hydraulic
oil very badly, est'd 1 l/hr.

Onsite AS01-B1737 PDT Oct. 1, 90.

- range 220 m, 252 m
406 m, 257, 243
415 m
423 m

- ranges indicate we are over mooring
- moving off 2 cables

- ranges 687, 1114, 1041, 816, 945, 867, 887
747, 715, 589, 718, 775, 949, 994 drifted off

- moving closer again 747, 778, 678, 555, 495
- release response positive.

- range 569, 390, 372, 309, 309, 317, 457
267, 398, 389

- release again - response positive

- range 357, 225, 220, 228, 325
280, 272, 200

Recovery ASOI cont'd.

- 590, 656
- after many ranges and several more release attempts the mooring surfaced at 1847 PDT
- the final solution seemed to be rearming and releasing again
- the mooring surfaced app 200m off starboard bow. on station acc. Loran TD's.

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YEAR	90	MONTH	Oct	TIME ZONE	UTC	SHIP	PARIZEAU	CRUISE	9014	PAGE	1	OF															
DAY		STATION IDENTIFICATION		DEPTH SOUNDING (m)		SHIP STOP/START TIME		LATITUDE/LONGITUDE		STD CONSEC. #		STD TIME		HYDRO CONSEC. #		MESSENGER TIME		HYDRO SALINITY #		OXYGEN #		SURFACE TEMPERATURE/SALINITY		LOOP SALINITY #		NOTES	
1				Saanich Inlet Test Cast		1																					
2	D01A	205	0225 49°01.76 0245 123°17.79		2	0237	\																				
2	D01B	302	0312 49°02.87' 0406 123°26.02'		3	0317	3	0353	\	1001 1020		1.															
2	D01C	197	0452 49°04.08 0459 123°21.40'		4	0453	\																				
2	D02C	173	0539 48°58.38 0549 123°17.73		5	0541	\																				
2	D02B	197	0609 48°57.04 0647 123°20.83		6	0611	6	0635	\	1022 1033		2															
2	D02A	161	0704 48°56.11 0715 123°23.07		7	0708	\																				
2	D03A	93	0809 48°51.90 0816 123°14.39		8	0811	\																				
2	D03B	199	0829 48°52.5 0905 123°13.66		9	0832	9	0856	\	1034 1046		3															
2	D03C	133	0922 48°53.84 0931 123°11.62		10	0925	\																				
2	D04C	156	1002 48°51.68 1012 123°05.73		11	1004	\																				

90/10/2 PDT

0237: RDI on D:PINGDATA.000 EWS 134; 9.26 MB left.

On Station AS02-B 0800 Oct. 2, 90 PDT

- after several ranges received one audio signal without a range indicating mooring is far away

- check position and moved acc Loran T.D's

- on station - no responses to ranging

- ship stopped, prop in neutral.

- try pinger receiver pinger in water is 37 kHz not compatible with receiver unit. (27 kHz)

Loran 48 51.30 123 10.82 1 mi SE.

- no responses to ranges

- ship stopped in neutral

- tried IO transducer in addition to ships transducer.

NB: Head back to position to try again

- found out from files #537 release has Xpd On/Off option. This was not noted in the deployment logs which led to the confusion

On station

- sent BDH transpond on

- ranges 240 m 240 m, 240 m,

- moving off station we are right on top of mooring.

0913 PDT -282 m, 299 m release sent
release confirmed.

0915 PDT sighted on surface.

On station AS03-B 1055 PDT Oct. 2, 90

- range 356, 360
- release 1100 PDT response positive
- on surface 1101 PDT.
- O₂ sensor flooded top endplate missing

90/10/2/1212 pdt:
PDI on D:PINGDATA.000 ENS.249; 9.15 Mb left.

Oct. 2, 1550 PDT returned to I.O.S. Jetty

- pending loading O. Ecology equipment & offloading Arctic Sciences
- P. Kimber
- M. Delarue
- R. Birch

} depart from ship

1552 ADCP turned off.

YEAR	90	MONTH	10	TIME ZONE	UTC	SHIP	PARIZEAU	CRUISE	9014	PAGE	2 OF		
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE/ LONGITUDE	STD CONSEC. #	STD TIME	HYDRO CONSEC. #	MESSANGER TIME	HYDRO SALINITY #	OXYGEN #	SURFACE TEMPERATURE/ SALINITY	LOOP SALINITY #	NOTES
2	D04B	231	1027 48 50.49 1103 123 07.30	12	1029	12	1055	\	1047 1060		4		
2	D04A	125	1115 48 49.32 1123 123 08.79	13	1119	\					\		GPS
2	D05A	107	1149 48 48.34 1156 123 03.77	14	1152	\							GPS
2	D05B	216	1208 48 49.60 1244 123 02.34	15	1211	15	1235	\	1061 1080		5		GPS
2	D05C	195	1254 48 50.57 1304 123 01.18	16	1257	\							GPS
2	D06A	230	1334 48 45.83 1344 123 02.41	17	1336	\							GPS
2	A502												
2	D06B		48 45.45 1706 123 05.49	18		18	1850 UTC		1082 1092		6		Recover moorings GPS
2	D07A	173	1730 48 43.86 1743 123 08.54	19	1935	\							GPS
2	D08A	355	2014 48 42.12 2103 123 15.15	20	2016	20	2053	\	1093 2009		7		GPS. 2030 - steam back to str.
3	D09A	293	0001 48 34.11 0012 123 13.12	21	0003	\							GPS
3	D10A	109	0239 48 18.89 123 15.21	22	0241	22	0306	\	332 392		8		Loran

- Load O. Ecology 0800 - 1300 Oct 3, 90

- Depart for COCC Test mooring 1300 Oct 3, 90
- recovered mooring
- returned to I.O.S. Jetty to offload
COCC equipment + personnel

- Depart I.O.S. jetty for Haro Str. Stn's, AS04 + Colwood
fuelling jetty 1445 PDT

- Rod Forbes leaves ship along with COCC personnel.

- ADCP restarted 1417 PDT Oct. 3, 90

On Stn. AS04-B 1850 PDT Oct. 3, 90

- call ping response good
385 m. 411 m ranges good response.

- moved closer.

- ranges 119 m
release sent at 1904 PDT

- double ping response good
hook away response good.

- on surface 1906 PDT sighted.

0912 - STOP ON STN D11A

0913 - CTD TO 168 m (bottom)

096 -

2300 PDT Oct. 3, 90 tie up at Colwood fuel
jetty.

0830 PDT Oct. 4, 90 commence fuelling at Colwood

4 Oct.

1120 change SAIL update interval from 15 sec to 30 sec. Data from 1st & 2nd Oct show Loran data not available over 50% of the time.

1300 PDT - fuelling completed

- remain at fuelling jetty pending delivery of 331 winch for dragging to replace the 329 on the well deck.
- the 329 does not hold a load i.e. it creeps out and the brake can not stop it.
- J. Bradbury was informed earlier and came out 1130 PDT to replace the brake valve. This did not solve the problem. (We lifted 2 train wheels and the winch would not hold the load).
- this winch is considered unsafe for the dragging operations that will be required.
- dragging capability is required for this cruise. We will not be out on La Perouse until Apr. - May. I expect to drag for the bottom of E03-K and other moorings(?) given the past history of summer La Perouse deployments.

- P. Frost, G. Winterburn, and J. Bradbury coordinating delivery of new winch.

- the existing plan is to cross load using the 250 crane/barge

1400 PDT - by change of plan Parizeau will meet truck with winch at B1 jetty for cross loading.

1550 PDT - received 329 replacement winch with app. 1300m $\frac{1}{2}$ " wire

1600 PDT - depart Jetty B1

1635 PDT - Test Bioness + Rosette for O. Ecology.

YEAR		MONTH	TIME ZONE		SHIP		CRUISE		PAGE		OF			
DAY		STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE/ LONGITUDE	STD CONSEC. #	STD TIME	HYDRO CONSEC. #	MESSENGER TIME	HYDRO SALINITY #	OXYGEN #	SURFACE TEMPERATURE/ SALINITY	LOOP SALINITY #	NOTES
4	D11A	168	0412	48°14.04	23	0413								
				123°30.23										
5	D12A	169	0236	48 15.26	24	0243	24	0305		332		9		program bombed. Reset disk unit, started program.
			0319	123 45.54						412				
5	D13A	183	0410	48 17.907	25	0411								GPS
			0420	124 00.061										
5	D14A	183	0521	48 22.135	26	0523	26	0546		418		10		GPS NB: large quantity of Red Tide was sighted on surface.
			0553	124 15.103						485				
5	D15A	233	0703	48 25.96	27	0706								LC.
			0717	124 30.12										
5	LA01	260	0835	48 29.01	28	0840	28	0912		496		11		GPS
			0924	124 43.32						1046				
5	LA02	312	1030	48 26.40	29	1036	29	1126		1047		12		GPS WIND: 20 kt @ 290°
			1143	124 50.91						1061				
5	LA02				30	1052				33.847		13	160 m.	CALIBRATION BOTTLE 4m above probe.
5	LA03	110	1223	48 22.78	31	1225								GPS
			1232	124 57.57										
5	LA04	195	1314	48 19.22	32	1315	32	1343		1062		14		GPS
			1353	125 04.05						1080				
5	LA05	115	1429	48 15.917	33	1431								G Wind 21 kt @ 321°
			1437	125 10.468										
5	LA06	109	1513	48 12.482	34	1515	34	1531		2048		15		GPS.
			1538	125 17.187						2054				

90/10/5 PDT

0000 - RDI on D:PINGDATA.002 ENS 404 ; 8.68 Mb left.

0418 - 160m CTD CAL BOTTLE STN LA02 #30

T431 : 7.665°C
7.645

29341 : 20.0 / 7.950

20.5 / 7.93

5957 : 20.1 / 7.930

20.8 / 7.92

CTD @ 156 7.664
33.926

1025 PDT

- Beuthos pinger is not functioning for cast 36
at LA08 - to be repaired.

1127 - Beuthos pinger repaired and used for cast 37
at LA09

CTD @ 160 15.439 32.287 @ 20 15.434 32.295

1316 - 20m CTD CAL BOTTLE STN LA10 #39

T431 - 15.443°C
15.443°C

15.443

29341 - 18.3 15.55

18.3 15.55

22.2 / 15.61

5957 - 18.3 15.50

18.3 15.50

22.4 / 15.59

1319 - RDI on D:PINGDATA.002 ENS 564 ; 8.52 Mb left.

YEAR	MONTH		TIME		ZONE	SHIP		CRUISE		PAGE	OF		
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE/ LONGITUDE	STD CONSEC #	STD TIME	HYDRO CONSEC #	MESSANGER TIME	HYDRO SALINITY #	OXYGEN #	SURFACE TEMPERATURE/ SALINITY	LOOP SALINITY #	NOTES
5	LA07	108	1619 48 09.035 1627 125 23.807	35	1621	\							GPS
5	LA08	137	1722 48 05.644 1749 125 30.264	36	1724	36 1741	\	2055 2063		16			GPS
5	LA09	331	1827 48 02.262 1839 125 36.828	37	1829	\							GPS depth entered wrong in header should be 331 not 165
5	LA10	940	1917 47 58.92 125 43.35	38	1924	\						20m	CAL. BOTTLE 4 m. ABOVE PROBE.
5	LA10	\	2008	39	2003	\					17		
5/6	LBA3	118	2343 48 23.26 00:07 125 20.59	40	2344	\							wind 23 K GPS 2920
6	PC01	147	0105 48 29.00 125 15.11	41	0107	\							Touched bottom GPS plankton haul.
6	LBAZ	107	0212 48 25.36 0234 125 07.56	42	0215	\							GPS wind - 24 km Plankton haul 2870
6	LBA1	104	0333 48 32.003 0432 125 03.889	43	0350	\							GPS wind Plankton haul
6	LB01	25	0528 48 40.685 0545 124 59.335	44	0531	44 0542		1001 1005		18			nutrients, chl (10,30) phyto (10,30) GPS
6	LB02	51	0602 48 39.207 0621 125 02.437	45	0603	45 0616		1008 1014		19			GPS
6	LB03	88	0647 48 37.29 125 05.77	46	0649	\							Loran.

YEAR	MONTH	TIME ZONE	SHIP	CRUISE	PAGE	OF									
90	10	UTC	PARIZEAU	9014											
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE	LONGITUDE	STD CONSEC #	STD TIME	HYDRO CONSEC #	MESSENGER TIME	HYDRO SALINITY #	OXYGEN #	SURFACE TEMPERATURE	SALINITY	LOOP SALINITY #	NOTES
6	LB04	106	0715	48 35.97		47	0719			1013	32.226			20	GPS. HYDRO CAST CANCELLED BY SEARCH + POSITIVE CALL
			0730	125 08.68						1025					
6	LB04	105	1005	48 36.02						1016					
			1025	125 08.59		47	1017			1025					GPS
6	LB05	105	1055	48 34.11											
				125 11.81	48	1056									GPS
6	LB06	110	1126	48 32.27		49	1127	49	1145	1026				21	GPS Hydro/Loop Bottles to 105m
			1150	125 15.35						1033					
6	LB07	155	1234	48 28.66		50	1236	/	/	/					GPS
			1240	125 22.21											
6	LB08	130	1322	48 25.16		51	1323	51	1340	1034				22	GPS Hydro/Loop
			1348	125 28.47						1043					
6	LB09	145	1423	48 21.78		52	1424	52	1444	1044				23	GPS Hydro/Loop
			1452	125 34.85						1052					
6	LB10	151	1531	48 18.348		53	1533	/							GPS
			1538	125 41.434											-depth entered in header incorrectly as 195m depth is 151m.
6	LB11	207	1614	48 15.016		54	1616	54	1637	1054				24	GPS
			1650	125 47.691						1066					
6	LB12	515	1717	48 12.769		55	1719	55	1750	332				25	GPS
			1804	125 51.845						444					-depth on header is 505 should be 515m.
6	LB13	945	1827	48 10.465		56	1829	/							GPS
			1848	125 56.099											
6	LB14	1180	1913	48 08.38		57	1916	57	2027	451				26	GPS, nutrients - no phyto / no chlorophyll
			2054	125 59.99						1009					

90/10/6 PDT

0011: RDI on D: PINGDATA.003 ENS.695 ; 8.38 Mb left.
0030: LB04 CTD COMPLETE. SHIP CALLED TO
SEARCH + RESCUE BEFORE HYDRO CAST STARTED.
0305: Arr. LB04 FOR HYDRO CAST.

1520: Renewed EPC paper, replaced stylus belt.
- Every cloth cleaned contacts of stylus - print delay works properly and bottom shows properly again.

1548: RDI on D: PINGDATA.003 ENS.882 ; 8.19 Mb free.

Recovery Mooring M11-L.

On station ~ 0841 PDT Oct. 7, 90 2 cables off.

- no ranges received
- sent CDFC7 - no ranges received.
- moved directly over mooring site.
 - no ranges immediately
 - discovered ranging unit is not working
 - heard pinger strong signal.
- strong signal received through IO command unit without using ranging unit.
- move off 1 cable for release. 0900 PDT.
- sent release 0905 positive response.
- on surface 0907 PDT
- all on board 0950 PDT.

Cust #60 Temperature Data

CTD @ 1481 2.561 34.599
1477 2.579 34.595

RHL 2.574
2.574

29341
17.7 2.90
17.7 2.90

5957
20.0 2.91
20.0 2.90

Calibration Cust #63 Temp. Data

T431

29341

SY5957

2.445
2.445

14.2 2.69
14.8 2.70

14.4 2.69
15.1 2.70

CTD @ 1500 2.437 34.594
@ 1495 2.445 34.593
1497 2.443 34.593

YEAR	1990	MONTH	10	TIME ZONE	UTC	SHIP	PARIZEAU	CRUISE	9014	PAGE	OF		
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE/ LONGITUDE	STD CONSEC.	STD TIME	HYDRO CONSEC.	MESSENGER TIME	HYDRO SALINITY	OXYGEN	SURFACE TEMPERATURE/ SALINITY	LOOP SALINITY	NOTES
6	LB15	1565	2142 48 04.28 2235 126 08.51	58 2147	\								
6	LB16	1825	2322 48 00.47 126 17.15	59 2325	\			27			27		48 00.43 } GPS 126 17.00 } CTD 1825
7	LB16		0019 1540	60		2351		28 34.512					calibration cast #1500 db mg #2400
7	Recovery		NJ1-L mooring.										
7	NJ1-L	745	1540 50 16.66 128 22.83	61 1650	\								CTD Header written as "Test" 90140061.
8	JET1	563	0114 49 37.87 0132 127 38.31	62 0116	\								GPS
8	LBP8	2088	0412 49 48.481 0506 128 16.700	63 0418	\			29 34.521			30		GPS CTD Cal. Cast to 1500m Mess. dropped 0437 10%L
8	LBP7	2218	0539 49 52.358 0619 128 10.823	65	\								Couse #64 aborted.
8	LBP6	775	0656 49 56.13 0727 128 05.30	66 0659	\								GPS INCORRECT DEPTH IN HEADER -SHOULD BE 775.
8	LBP5	1225	0807 49 59.88 127 59.40	67 0810	\						31		CAL. BOTTLE 4m ABOVE PROBE. GPS
8	LBP5		0905	68 0839	\			32 34.422				1150 m	wind 9 kt @ 135°
8	LBP4	865	0918 50 01.29 0951 127 57.54	69 0920	\								- CTD clock is GPS 1 min, 37 sec. slow

90/10/7 PDT

1205- RDI on D:PINGDATA.m4 ENS.1126 ; 7.94 Mb left.

1240 PDT On station BP1-L

- range 1071 m 127 54.8 wrong Long.
- moving closer 127 53.8
- range 620, 647
- moving closer
- range 432 m 460 m
- moving closer
- range 366 m 381 m

1255

1256

- release sent positive response.
- sighted on surface.
- recovered BP1 without problems
- prepared BP1 for redeployment.

1417 PDT -deployed BP1-L

50° 03.9 N

127° 54.1 W.

sounder shows 104 m

29748.4

13999.9

* -check Notice to mariners + reissue if necessary.

1730 PDT On station J1-L

- range 691 m 695 m on top
- moved off.
- range 1042 m.
- moved closer
- range 758

1742 PDT

-sent release - response positive

1816 PDT-completed CTD at Jet1

1835 - headed for Brookes Peninsula Line for CTD's

90/10/8 PDT

0028: RDI on D:PINGDATA.005 ENS 1274 ; 7.73 M6 free.
- Lower lab drain buckets emptied.

0255: 1150 m CAL BOTTLE STN LBR5: #68

T431: 3.048 3.048

CTD 1147 $\downarrow$ 6

29341: 17.5 3.34

3.041

17.6 3.35

34.508

5957: 18.2 3.34

18.3 3.34

1032 PDT

On Station E01-K mooring.

- ranges 343 m 330 m 319 m

1035 PDT

- release sent response positive

1037 PDT

- on surface

- Mooring recovered without problems with the exception of the witness buoy #3734 which had leaked during the deployment period and contained app. 1L of water. All components were extensively corroded indicating leakage probably on deployment.

- proceed to mooring A1

1605 PDT

On station mooring A1-K.

- range 547 m 549 m right on top

- moving off. 1-2 cables

- range 631 m, 662 m, 681 m, 697 m,

1614

- sent release - positive response

- Mooring recovery without problems with the exception of the witness buoy #3735, which leaked.

App 1 cup of water was found inside buoy.

LG08 CALIBRATION BOTTLE Cast #73

SERIAL T431 29341 5957

2.544 13.3 2.76 13.7 2.76

2.544 13.8 2.79 14.2 2.78

14.4 2.79

CTD@ 1493 2.532 34.604

2.559 34.598 ← meter average file

YEAR	1990	MONTH	10	TIME ZONE	UTC	SHIP	PARIZEAU	CRUISE	9014	PAGE	OF				
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE	LONGITUDE	STD CONSEC.	STD TIME	HYDRO CONSEC.	MESSENGER TIME	HYDRO SALINITY	OXYGEN	SURFACE TEMPERATURE	SALINITY	LOOP SALINITY	NOTES
8	LBP3	162	1008 50 03.14 1018 127 54.87	70	1009	\									GPS
8	LBP2	95	1027 50 04.04 127 54.23	71	1029	\									GPS
8	LBP1	50	1045 50 04.74 1049 127 53.09	72	1046	\						33			GPS
9	LG08	2077	0437 48 55.263 0528 127 13.160	73	0441	\			34 34.509			35			GPS CTD Cal Cast to 1500m
9	LG07	1778	0611 48 59.51 0648 127 07.06	74	0644	\									Loran
9	LG06	845	0726 49 03.62 0845 127 00.74	75	0729	75	0825			1001 1026		36			GPS
9	LG05	265	0921 49 07.47 126 55.15	76	0924	\									GPS
9	LG05	\	0945	77	0936	\			37 33.944 @ 195m				195m		CAL. BOTTLE 4 M ABOVE PROBE.
9	LG04	140	1021 49 11.35 1105 126 49.18	78	1024	78	1044			1027 1034		38			GPS
9	LG03	115	1135 49 15.00 1145 126 43.56	79 80	1137	\									GPS rain wind 15 @ 1250
9	LG02	95	1218 49 18.65 1242 126 38.05	81	1220	81	1236			1035 333		39			GPS rain wind 14.9 @ 1190
9	LG01	52	1300 49 20.41 1317 126 35.05	82	1301	82	1312			337 380		40			GPS rain wind 19.3 @ 1550

90/10/9 PDT

0010: PDT on D: PINGDATA.005 ENS 1559; 7.49 M6 left
- lower lab buckets emptied.

0410: 195m CALIBRATION BOTTLE, STD LG05: #77

T431: 7.074 7.074

29341:	18.0	18.0	CTD = 7057
	7.30	7.30	34.031
5957:	18.4	18.4	194.06
	7.30	7.30	

0910 PDT Launched mooring E01-L at
GPS 49°19.232, 126°37.267 in 92m

0915 PDT proceed to mooring E03-K for recovery

1050 PDT -call for emergency search + rescue operation
to escort a fishing boat with broken
stabilizer pole into Hot Spring Cove.

1530 PDT -proceed to Line LD for CTD/Hydro.

[illegible]

90/10/10 PDT

0013: RDI on D:PINGDATA.DOG run 1847 ; 7.19 Mb left.

0500: CALIBRATION SAMPLE, 1450 m, STN LD11:
T431: 2.683

Canl #95

T431

29341

5957

hll	2683	177	3.00	18.0	3.00	34.493
	2683	177	3.00	18.1	2.99	
CTD =	2.682	34.585				

CTD Cal. Cost #96

T431

29341

5957

2.554

13.9 2.80

14.1 2.80

2.554

14.1 2.81

14.3 2.80

CTD cal bottle 34.505

CTD Cal. Cost #99

T431

29341

5957

11.655

17.9 11.81

18.2 11.81

11.655

17.9 11.82

18.3 11.81

CTD cal bottle 32.350

YEAR	1990	MONTH	10	TIME ZONE	UTC	SHIP	PARIZEAU	CRUISE	9014	PAGE	OF				
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE	LONGITUDE	STD CONSEC.	STD TIME	HYDRO CONSEC.	MESSENGER TIME	HYDRO SALINITY	OXYGEN	SURFACE TEMPERATURE	SALINITY	LOOP SALINITY	NOTES
10	LD11	\	1157	\	95	1133	\		45	34.493				1400	CAL BOTTLE 4m ABOVE PROBE
11	LC12	2545	0448 0614	48 15.01 126 40.12	96	0450	\		46	34.505			47		Net Haul CTD Cal. Cast to 1500m Loran
11	LC11	1377	0718 0922	48 18.86 126 26.23	97	0922	97 0847		1001 1029				48		GPS WIND: 8 kt @ 310°
11	LC10	1248	1004	48 22.36 126 20.08	98	1007	\						\		GPS
11	LC10	\	1055	\	99	1049	\		49	32.350			\	20m	CAL. BOTTLE 4m ABOVE PROBE.
11	LC09	982	1135 1310	48 25 93 126 19 41	100	1142	100 1221		1030 1047				50		GPS CTD, Hydro, Net haul Bridge Sounding - 580m Sounding unclear in lab
11	LCB6	370	1357 1432	48 22.59 126 03.49	101	1400	/	/							CTD Net haul GPS
11	LC08	198	1521 1613	48 29.38 126 07.106	102	1523	102 1605		1048 1060				51		GPS Net Haul, Hydro,
11	LC07	127	1645	48 32.942 126 00.210	103	1647	103 1700		1061 1068				\		GPS Hydro.
11	LC06	88	1758 1818	48 36.555 125 53.614	104	1759	/	/					52		GPS Net Haul
11	LC05	60	1850 1915	48 40.050 125 47.162	105	1852	/	/							GPS BONGO NET HAUL
11	LC04	167	1952 2028	48 43.55 125 40.64	106	1956	106 2019		1001 1014				53		GPS 25 kt @ 147°

Oct. 10, 90

0945 PDT

on station E03-K = Stn #1

Stn #1 ranges.

- no response from acoustic release
- try pinger receiver
- no pinger signal heard

Stn #2 1 mile perpendicular to contours

- no response from acoustic release
- no signal from pinger

Stn #3 1 mile from mooring on 400m contour to the south

- no response from acoustic release
- possible pinger signal

Stn #4 1 mile from #3 to southeast along 400m contour

- 8914, 3222, 1614 no conclusive ranges
- no signal from pinger

Stn #5 1 mile radius from #4 and intersection of 300 m contour

- 1007, 4418 no response from acoustic release
- no signal from pinger

1107

Stn #6 1 mile radius from mooring site #1 and intersection of 500 m contour to south

- no response from release
- no pinger signal

Stn #7 1 mile radius from mooring site #1 and intersection of 500m contour to north.

- no response from release
- possible pinger signal *received on 18 kHz

1155

Stn #8 1 mile radius from mooring site #1 and intersection of 400m contour to north

- no pinger signal.

1211

Stn 8 - transmitted release code ABCD * 3. No response.

- transmitted alarm + release * 2. No response.

- no signal heard using pinger receiver.

90/10/10 PDT

1222 - lv Stn. 8 for Stn. 1.

1232 - arr Stn. 1.

- transmitted ABCD release code x 3. No response.
- transmitted CDFG + ABCD x 2. No response.
- listened on pinger receiver - Nothing audible.

1247 - lv Stn. 8 for Stn. 3.

1301 - arr Stn. 3.

- transmitted ABCD release code x 3. No response.
- transmitted CDFG + ABCD x 2. No response.
- listened on pinger receiver - Nothing audible.

1318 - lv Stn. 3

1325 - proceed to site of new E03-L mooring
app. 1 mile SSE of original mooring on the
500m contour.

1400 - deploy mooring E03-L in 500m water at
49° 04.900' 126° 57.082' (GPS)
49° 04.800' 126° 57.40' (Loran)
- proceed to mooring A1 site

1905 - deploy mooring A1-L in 500m water at
48° 31.79' 126° 11.70' (Loran)
48° 31.682' 126° 11.566' (GPS)

- proceed to LD 12 CTD/Plankton station.

90/10/11 PDT

0030: RDI on D: PINGDATA.007 eus 2139; 6.89 Mb left.
- buckets emptied.

1235: RDI on D: PINGDATA.008 eus 2284; 6.74 Mb left.

1400: West Coast work cancelled due to hurricane warning.
Proceed to Barclay Sl - Alberni Inlet Stations.

11 Oct 90

2005 changed SAIL sampling interval from every minute to every two minutes. Loran data missing a great deal of the time. Data line only has RCV error.

PA 12 - Thermometers : 9.145
Con #113 { 14.5
 { 9.29
 { 15.0
 { 9.30
CTD sal bottle 32.217

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR	1990	MONTH	10	TIME ZONE	UTC	SHIP	PARIZEAU	CRUISE	9014	PAGE	OF			
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP START TIME	LATITUDE / LONGITUDE	STD CONSEC.	STD TIME	HYDRO CONSEC.	MESSENGER TIME	HYDRO SALINITY	OXYGEN	SURFACE TEMPERATURE	SALINITY	LOOP SALINITY	NOTES
11	IE01	104	2330 0714 0250	48 54.17 125 13.00	107	2333	107	2351	1042 1048					
12	JP01	237	0753 0836	48 57.04 125 01.52	108	0718	108	0743	1049 1062			54		GPS.
12	PA32	237	0836 124 54.69	48 58.83	109	0838	109	0917	1063 1080			55		GPS
12	PA32		0923		110	0856		56 33.015				185 m.		CAL BOTTLE 4 m ABOVE PROBE
12	PA22	265	1008 1046	49 03.33 124 50.97	111	1010	111	1040	1082 1092			57		GPS
12	PA22		1046		112	1023		57 33.026				230 m		CAL BOTTLE 4 m ABOVE PROBE
12	PA12	122	1127 1153	49 08.20 124 48.39	113	1133	113	1136	59 1093 32.217 2005			58		GPS Cal. bottle 100m Cal bottle 4m above CTD
12	PA8	108	1213 1240	49 10.00 124 48.78	115 116	1218	115	1233	60 2006 32.191 1004					GPS Cal. bott. 90m mess. trip 12:22
12	PA5	66	1308 1324	49 11.86 124 49.11	117	1309	116	1320	1005 1020					GPS
12	PA3	30	1339 1352	49 12.90 124 49.24	118	1339	118	1348	1022 1031					GPS
12	PA2	22	1404 1420	49 13.48 124 49.18	119	1405	118	1414	1033 332					GPS
12	LO14	18	1424	49 13.00 124 49.27	120	1426	120	1437						GPS Log in PA02 10/14/90

90/10/12 PDT

0118: PDT on D:PINGDATA.008 auc 2436 ; 6.58 Mb left.
- Lower labr buckets emptied.

0230: PA 32 CALIBRATION SAMPLE, 185 m # 110
CTD cal bottle @ 185m 33.015

T431: 8.304 8.304

29341: 15.0/8.47 15.1/8.47

5957: 15.4/8.45 15.6/8.46

0355: PA 22 CALIBRATION SAMPLE, 230 m # 112
CTD cal bottle @ 230m 33.026

T431: 8.258 8.258

29341: 14.4/8.40 14.5/8.40

5957: 14.9/8.40 15.0/8.40

0930 PDT - recovered O₂ sensor chain from
log boom off M+B plywood mill
Polly Pt.
- sensors were kept immersed in
seawater in buckets until protective
caps arrive.

[illegible]