

CRUISE
NUMBER

9911

DAILY LOG
INSTITUTE OF OCEAN SCIENCES
OCEAN PHYSICS

DATE

May 3 - 13 / 99

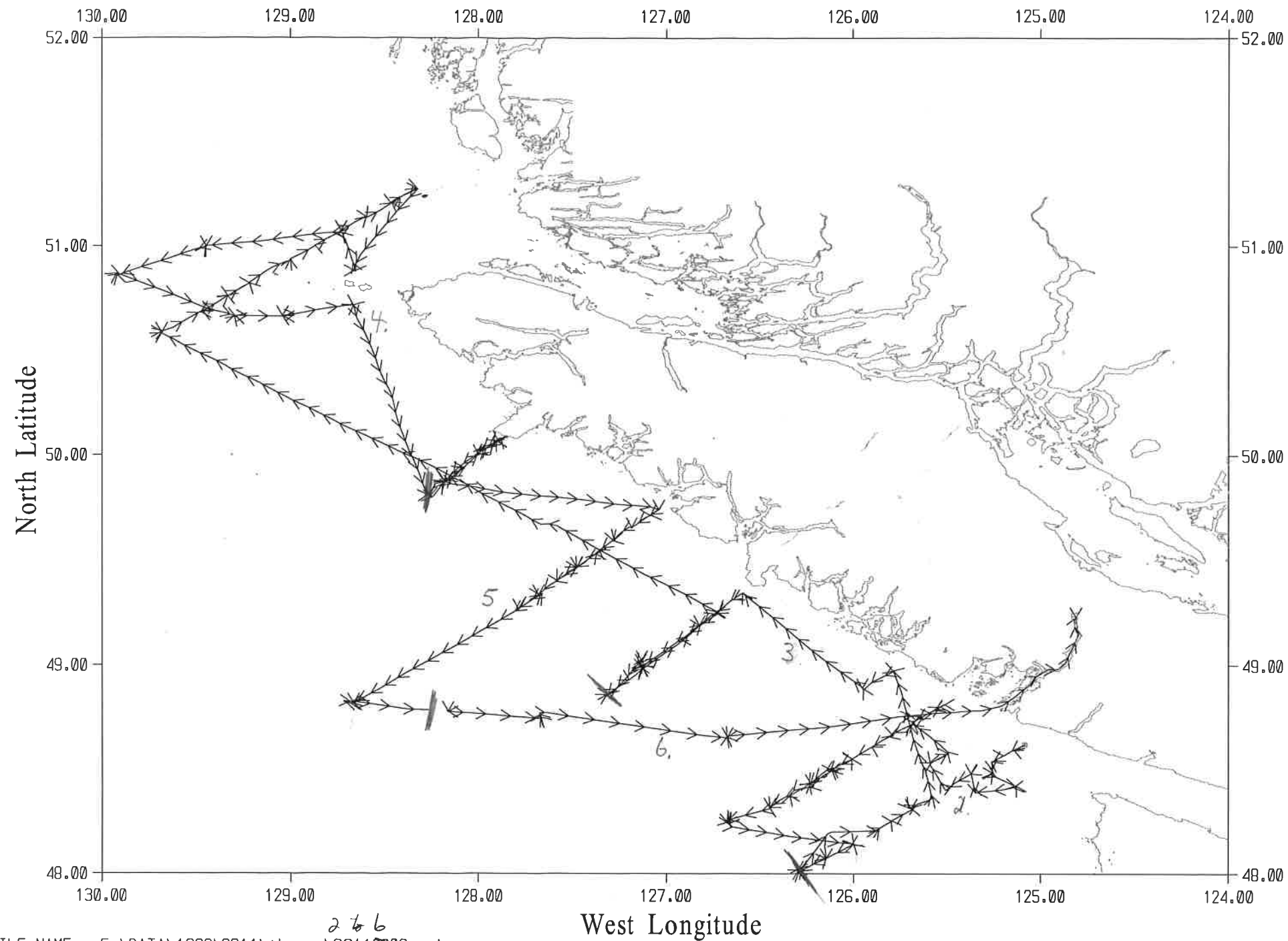
VESSEL

J. P. Tully

PROJECT

WCVI

1999-11 thermo



FILE NAME: E:\DATA\1999\9911\thermo\99110006.spk

START TIME: UTC 1999/05/12 03:28:35 END TIME: 0

Linguanti, Joe

From: CCGS, John P.Tully
Sent: Monday, May 10, 1999 8:33 AM
To: Linguanti, Joe
Subject: TULLY CTD

Joe:
The Seabird CTD you asked about is only backup for this cruise. Doug A knew about the offset on Masson's cruise, but does not think the sensor is cracked.

We have been using Seabird #0437. Sensor serial numbers are: Primary C #1729, primary T #2023, secondary C#1762, secondary T #2142. The secondary pair has been tracking salinity calibration samples very well (to within about 0.001-0.002 psu). Data from the primary have been offset low by about 0.014 psu, but this offset has been stable throughout the cruise.

Dave Mackas

DAILY LOG

ECOLOGY/
OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR 1999			MONTH MAY			SHIP TULLY				CRUISE 9911				PAGE 1	OF 1
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
4	Gower	ROS			001				104 m					TEST CAST	
4	Gower	ROS			001										
4	Gower	ROS	0945		001	48 39.24	123 29.34							-all bottles tested	
4	Gower	NET	1000		002	48 39.2	123 29.2		93	70				Bongo-cable for Gower mooring	
4	PLEI	CTD	2020		3	48 31.73	125 3.75		116	106				LBA1	
4	LB02	ROS	2156		4	48 39.00	125 02.16		57	50	1-5	5		Longitude jumping 65E → 125W see notes over	
4	LB03	CTD	2241		5	48 37.29	125 5.36		95						
4	LB04	ROS	2319	BE	006	48 35.67	125 08.71		114	103				GPS Longitude jumping.	
4	LB04	ROS	2322	BO	006	48 35.69	125 08.72				6-12	6			
4	LB04	ROS	2329	EN	006	48 35.68	125 08.66								
5	LB05	CTD	00:04	BE	007	48 34.01	125 11.98		103					GPS long jumping.	
5	LB05	CTD	00:06	BO	007	48 34.02	125 11.94			94					
5	LB05	CTD	00:08	EN	007	48 34.01	125 11.91								
5	LB06	ROS	00:41	BE	008	48 32.22	125 15.45		116		13-19	7			
5	LB06	ROS	00:44	BO	008	48 32.26	125 15.46			105					
5	LB06	ROS	00:52	EN	008	48 32.30	125 15.57								
5	C1	ROS	0136	BE	009	48 28.94	125 15.37								
5	C1	ROS		BO	009	-	-				20-31	12			

S

C1

ROS

BOT -
CTD -
MOR -bottle cast
ctd
mooring

EN

ROS -
NET -
DRF -Psette
net haul
drifter

USW - sea water loop

48 28.95

125 15.30

TIME CODE -

BE -
BO -
EN -beginning time of cast
bottom time of cast
end of castDE -
MR -
RE -deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -RADAR
GLOBAL
LORAN

- Longitude never stabilized throughout this cruise. All avenues were explored:

- entire ~~cable~~ cable changed
- both connectors changed
- tried several data strings
- different deck unit/computer

NOTHING WORKED!

- Therefore - if a header has no longitude or it is obviously very wrong - use the value in the header notes.

ECOLOGICAL

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

DAILY LOG

YEAR				MONTH		SHIP				CRUISE			PAGE		OF	
1999				May		TULLY				9911			2			
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS		
S	C1	Bongo	0210	UTC	010	48 28.9	125 15.3	GPS	153	150						
5	C2	CTD	0310	BE	011	48 25.402	125 07.798	GPS	121	110				810pm		
5	C2	CTD		BO	011	48 25.23	125 07.75	GPS								
5	C2	CTD	0330	EN	011	48 25.291	125 07.955	GPS	135					Bongo 830pm - 845pm		
5	C3	CTD	0448	BE	012	48 23.42	125 20.87		125	115				GPS long. # 64°E		
5	C3	CTD	0451	BO	012	48 23.43	125 20.88							** file name 12110011		
5	C3	CTD		EN	012											
5	C3	BONGO	0500			48 23.417	125 20.842		123					Bongo. Lu STN. 1015pm		
5	LB7	CTD	0600	BE	013	48 28.78	125 22.199		157	150				CTD - GPS not working		
5	LB7	CTD	0605	BO	013	48 28.77	125 22.16									
5	LB7	CTD	0608	EN	013	48 28.77	125 22.11									
5	LB8	ROS	0703		14	48 25.28	125 28.74		141	130	32-39	8		GPS, caveing more problems.		
5	B7	CTD	0845		15	48 31.96	125 35.48		80							
5	B7	NET	0901		16	48 31.98	125 35.44		82					Bongo		
5	B8	CTD	0949		17	48 34.76	125 29.95		115	112						
5	B8	NET	1009		18	48 34.52	125 29.73		114					Bongo		
	LC4	NET	1137	BE	19	48° 43.39	125 40.87		167					Neuston tow, Ruben Verkleind		
	LC4	NET	1202	BE	20	48° 43.40	125 40.80		169					0-50 dbl. bongo, " "		

CAST TYPE -

BOT - bottle cast
CTD - ctd
MOR - mooring

ROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE -

BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE -

RAD - RADAR
GPS - GLOBAL
LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR				MONTH			SHIP			CRUISE				PAGE	OF
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
5	LC02	ROS	1315	BE	21	48 48.71	125 30 08		111						
5	LC02	ROS	1319	BO	21	48 48.72	125 30 08			100	40-46	7.			
5	LC02	ROS		EN	21										
5	LC03	CTD	1402	BE	22	48 46 77	125 34 80		136						
5	LC03	CTD	1405	BO	22	48 46 98	125 34 09			125					
5	LC03	CTD	1407	EN	22	48 46 98	125 34 09								
5	LC04	ROS	1459	BE	23	48 43 42	125 40 63		166		47-57	11.			
5	LC04	ROS		BO	23	48 43 38	125 40 64								
5	LC04	ROS		EN	23	48 43.346	125 40 651								
5	LC5	CTD	1607	BE	24	48 39 91	125 47.43		64	60					
	LC5		1610	BO	24	48 39 88	125 47 43								
	LC5		1614	EN	24	48 39 87	125 47 43								
	LC5	NET	1625		25	48 39 777	125 47 209		64						BONGO
	LC6	CTD	1721	BE	26	48 36 47	125 54 12		92	90	58-67				CTD ONLY
	LC6	CTD	1724	BO	26	48 36 46	125 54 12								changed Rosette to LC7
	LC6	CTD	1730	EN	26	48 36 46	125 54 12								
	LC7	ROS	1815	BE	27	48 33 02	126 00 56		127	120	58-67	10			CTD/Rosette/Bongo
	LC7	ROS	1822	BO	27	48 33 01	126 00 55								

CAST TYPE -

BOT -

bottle cast

CTD -

ctd

MOR -

mooring

ROS -

rosette

NET -

net haul

DRF -

drifter

USW -

sea water loop

TIME CODE -

BE -

beginning time of cast

BO -

bottom time of cast

EN -

end of cast

DE -

deployment time

MR -

messenger release

RE -

recover mooring

POSITION CODE -

RAD -

RADAR

GPS -

GLOBAL

LOR -

LORAN

YEAR			MONTH			SHIP			CRUISE					PAGE	OF
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
5	LC7	ROS CTD			27	48 33 06	126 00 51		129						
5	LC7	NET	1910		28	48 32 927	126 00 270		127	90 (cal)				Bongo	
5	LC8	ROS			29	48 29 55	126 7.14		196	190	68-79	12		Large wire angle - no time net bottom	
	LC8	NET			30	"	"								
5	LC9	ROS	2259		31	48 25 92	126 13.83		626	500					
5	LC9	ROS	2308		31	48 25.98	126 13.75				79-95	17			
5	LC9	ROS			31										
5	LC9	NET			32									Bongo UNH 0-250	
5	LC9	NET			33									Bongo 061 0-50	
5	LC9	NET			34									Neuston	
6	LC10	CTD	1:54	BE	35	48 22.44	126 20.14		1250						
6	LC10	CTD	2:11	BO	35	48 22.46	126 20.13			1240					
6	LC10	CTD	2:31	SH	35	48 22.41	126 20.12								
6	LC11	ROS	0328	BE	36	48 18 99	126 26 47		1440					*17 O-ring gone	
6	LC11	ROS	0347	BO	36	48 19 03	126 26 60				96-113	18			
6	LC11	ROS	0430	EN	36	48 18 93	126 26 61								
6	LC12	CTD	0600	BE	37	48 15 01	126 40 21		2085					#17 o-ring repaired	
6	LC12	CTD	0630	BO	37	48 14 73	126 39 97								

CAST TYPE - BOT - bottle cast
CTD - ctd
MOR - mooring

ROS - rosette
NET - net haul
DRF - drifter

USW - sea water loop

TIME CODE - BE - beginning time of cast
BO - bottom time of cast
EN - end of cast

DE - deployment time
MR - messenger release
RE - recover mooring

POSITION CODE - RAD - RADAR
GPS - GLOBAL
LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
99		MAY		Tully		9911								
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
6	LC12	CTD	0707	EN	37	48 14.43	126 39.87		2080	5m	—	1		bottle from 5m (Ruben)
6	LC12	NET	0716		38	48 14.45	126 39.78		2000+	250				Bongo
6	LC12	NET	0800		39	48 14.04	126 39.28		"	50				oblique bongo
6	LB14	ROS	1135	BE	40	48 08.49	125 59.97		1181					
6	LB14	ROS	1151	BO	40	48 08.43	125 59.94			1183	114-131	18		
6	LB14	ROS	1235	EN	40	48 08.42	126 00.20							
6	LB15	CTD	1338	BE	41	48 04.36	126 08.42		1556					
6	LB15	CTD	1403	BO	41	48 04.37	126 08.41							
6	LB15	CTD	1421	EN	41	48 04.36	126 08.47							
6	LB16	ROS	1531	BE	42	48 0.50	126 17.12		1785		132-144	13		
6	LB16	ROS	1554	BO	42	48 0.69	126 17.20		1778					
6	LB16	ROS		EN	42	48 01.10	126 17.36							
6	LB16	ROS	1736	BE	43	48 0.55	126 17.11		1773		145-156	12		
6	LB16	ROS	1741	BO	43	48 0.60	126 17.16							
6	LB16	ROS		EN	43									Ham run into Uetuelet
6	LB12	ROS	2004		44	48 12.87	125 51.86		515		157-171	15		
6	LB11	CTD	2121		45	48 15.03	125 47.70		215	208				
6	LB10	ROS	2223		46	48 18.66	125 41.43		153	150	172-180	9	PAR	

CAST TYPE -

BOT -

bottle cast
ctd
mooring

ROS -

rosette
net haul
drifter

USW -

sea water loop

TIME CODE -

BE -

beginning time of cast
BO -
bottom time of cast
EN -
end of cast

DE -

deployment time
MR -
messenger release
RE -
recover mooring

POSITION CODE -

RAD -

GPS -
LOR -
RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR			MONTH			SHIP			CRUISE				PAGE		OF	
1999			MAY						9911							
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS		
7	LB9	CTD	0006	BE	47	48 22.08	125 34.89		151							
7	LB9	CTD	0010	BO	47	48 22.05	125 34.89			142						
7	LB9	CTD	0012	EN	47	48 22.02	125 34.96									
7	LD2	ROS	0417	BE	48	48 58.34	125 47.03		44							
7	LD2	ROS	0419	BO	48	48 58.34	125 47.03				181-185	5				
7	LD2	ROS	0425	EN	48	48 58.33	125 47.02									
7	LD2	NET	0439	BE	49	48 58.33	125 47.02							Bongo		
7	LD4	ROS	0553	BE	50	48 53.23	125 56.96		64	53						
7	LD4	ROS	0554	BO	50	48 53.25	125 56.90				186-192	7				
7	LD4	ROS	0603	EN	50	48 53.30	125 57.10									
7	LD4	NET		BE	51	48 53.466	125 57.233							Bongo 2330 - run to LG		
7	LG1	ROS	1015		52	49 20.58	126 35.13		53	48	193-197	5				
7	LG2	ROS	1058	BE	53	49 18.73	126 38.23		102							
7	LG2	ROS	1100	BO	53	49 18.75	126 38.34			92	198-204	7		Data error flow on deck unit.		
7	LG2	ROS	1105	EN	53	49 18.77	126 38.35									
7	LG3	NET	1200	BE	54	49 14.90	126 43.90							OBLIQUE BONGO		
7	LG3	NET	1210	BE	55	49 14.99	126 43.95							15m NEUSTON TOW		

CAST TYPE -

BOT -
CTD -
MOR -bottle cast
ctd
mooringROS -
NET -
DRF -rosette
net haul
drifter

USW -

sea water loop

TIME CODE -

BE -
BO -
EN -beginning time of cast
bottom time of cast
end of castDE -
MR -
RE -deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR				MONTH		SHIP			CRUISE					PAGE	OF
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
7	LG4	ROS	1311	BE	56	49 11 34	126 49 53		148						
7	LG4	ROS	1314	BO	56	49 11 35	126 49 51			141.	205-213	9.	PAR		
7	LG4	ROS	1325	EN	56	49 11 39	126 49 38								
7	LG4	NET	1345		57	49 11.40	126 49.42		149	142				Bongo UNH	
7	LG5	CTD	1437	BE	58	49 07.39	126 55.41		258						
7	LG5	CTD	1443	BO	58	49 07.42	126 55.42			265					
7	LG5	CTD	1448	EN	58	49 07.43	126 55.39								
7	LG7	ROS	1611	BE	59	48 59.42	127 7.57		1040						
7	LG7	ROS	1621	BO	59	48 59.53	127 7.85				214-229	16.	PAR		
7	LG7	ROS	1649	EN	59	48 59.79	127 8.65								
7	LG7	NET	1723		60	48 59.42	127 7.57							Bongo UNH	
7	LG7	NET			61									Bongo ONH	
7	LG7	NET			62									Newton	
7	LG7	ROS	1822		63	49 0.30	127 8.08		1700	1690	230-241	12.		49° 00.965 1700m	
7	LG7	ROS	1853		63	49 0.90	127 7.93							127° 07.927	
7	LG9	ROS	2124		64	48 51.28	127 19.43		2068	1000	242-257	16.	PAR	nutrients only	
7		NET	2135		64	48 51.67	127 18.65		2068	250				255M Bongo	

CAST TYPE -

BOT -

bottle cast

CTD -

ctd
mooring

ROS -

rosette
net haul

DRF -

drifter

USW -

sea water loop

TIME CODE -

BE -

beginning time of cast

BO -

bottom time of cast

EN -

end of cast

DE -

deployment time

MR -

messenger release

RE -

recover mooring

POSITION CODE -

RAD -

RADAR

GPS -

GLOBAL

LOR -

LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1999		MAY		TULLY		9911								
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
8	LG3	ROS	2:02	BE	65	49 15.07	126 43.75		126 m		258-269	12		
8	LG3	ROS	2:05	BO	65	49 15.12	126 43.87			112				
8	LG3	ROS	2:07	EN	65	49 15.21	126 43.95							
8	LG3	NET			66									Bongo VNH
8	CS1	ROS	1717		67	50 34.96	129 41.27		2135		270-283	15	PAR	
8	CS1	ROS	1727		67	50 35.03	129 41.26							
8	CS1	ROS			67									
8	CS1	NET			68					50				Bongo VNH 50-0
8	CS1	NET	1825		69	50 35.364	129 41.291		2096	250				Bongo VNH 250-0
8	CS2	CTD	1936		70	50 41.25	129 28.00		1917	500	284-285	2		
8	CS2	NET	2000		71	50 41.25	129 28.35		1921	50				Bongo 50-0 m
8	CS2	NET	2014		72	50 41.20	129 28.53		1921	250				Bongo 250-0 m
8	CS3	ROS	2130		73	50 45.70	129 20.00		232	200	284-294	11	PAR	sleep bottom
8	CS3	NET	2202		74	50 45.69	129 19.95		220	50				Bongo 50-0
8	CS3	NET	2210		75	50 45.67	129 19.84		220	200				Bongo 200-0
8	CS4	CTD	2309	BE	76	50 49.26	129 12.96		99					
8	CS4	CTD	2311	BO	76	50 49.27	129 12.94		1	14				
8	CS4	CTD	2313	EN	76	50 49.26	129 12.96							

CAST TYPE -

BOT -
CTD -
MOR -bottle cast
ctd
mooringROS -
NET -
DRF -rosette
net haul
drifter

USW -

sea water loop

TIME CODE -

BE -
BO -
EN -beginning time of cast
bottom time of cast
end of castDE -
MR -
RE -deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR				MONTH			SHIP			CRUISE				PAGE	OF
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
8	CS4	NET		BE	77	50 49 61	129 12 78							0-50 bongo	
8	CS4	NET	2340	EN	78	50 49 61	129 12 78							0-100 bongo	
9	CS5	ROS	0041	BE	79	50 56 09	128 59 93								
9	CS5	ROS	0043	BO	79	50 56 05	128 59 92			58	295-300	6	PAR		
9	CS5	ROS	0050	EN	79	50 56 11	128 59 98							Bongo 55M	
9	CS6	CTD	0153	BE	80	51 00 09	128 52 10		67						
9	CS6	CTD	0155	BO	80	51 00 11	128 52 08			58	295-300	6			
9	CS6	CTD	0157	EN	80	51 00 12	128 52 08								
9	CS6	NET	0210	EN	81	51 00 24	128 52 78								
9	CS7	ROS	0254	BE	82	51 04 517	128 43 955		66	57.	301-306	6			
9	CS7	ROS		BO	82										
9	CS7	ROS		EN	82										
9		Net			83									Bongo VNH	
9		Net			84									Bongo QNH	
9	CS8	BE	0412		85	51 08 45	128 36 00		145	141				CTD only	
	CS8	BO			85										
	CS8	EN			85										
	CS8	Net			86										

CAST TYPE -

BOT -
CTD -
MOR -bottle cast
ctd
mooringROS -
NET -
DRF -rosette
net haul
drifter

USW -

sea water loop

TIME CODE -

BE -
BO -
EN -beginning time of cast
bottom time of cast
end of castDE -
MR -
RE -deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR			MONTH			SHIP			CRUISE					PAGE	OF
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
9	CS8	NET			86									Bongo 50m	
9	CS8	NET			87									Bongo 135m	
9	CS9	ROS			88	51 12 503	128 28 045		197	179.	307-317	11.		CTD / Rosette	
9	CS9	ROS			88										
9	CS9	ROS			88										
9	CS9	Net			89	51 12 198	128 28 343		198					0-50	
9	CS9	Net	0610		90	51 12 186	128 28 334		198					0-190 2310	
9	CS10	CTD	0708		91	51 16.53	128 19.96		81	76					
9	CS10	CTD	0712		91	51 16 51	128 19.96								
9	CS10	CTD	0712		91	51 16.51	128 19.96							← they - they're the same!	
9	CS10	NET	0722		92	51 16 46	128 19.88			75				bongo	
9	CS1B	ROS	1015		93	50 52.97	128 39.95		72	68	318-323	6.			
9	CS1B	NET	1048		94	50 52.83	128 39.36			60				bongo	
9	CS3B	ROS	1551		95	50 59.93	129 27.10		224	213.	324-334	11.		CTD - Rosette	
9	CS3B	ROS	1557		95	50 59.93	129 27.13						PAR	Aft hyd. problems	
9	CS3B	ROS			95	50 59.97	129 27.068							Rosette weight link damaged	
9	CS3B	NET			96	50 59.97	129 27.07							Bongo 50-0	
9	CS3B	NET			97	50 59.97	129 27.07							Bongo 215 - 0	

CAST TYPE -

BOT -
CTD -
MOR -bottle cast
ctd
mooringROS -
NET -
DRF -rosette
net haul
drifter

USW -

sea water loop

TIME CODE -

BE -
BO -
EN -beginning time of cast
bottom time of cast
end of castDE -
MR -
RE -deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
99		MAY		Tully		9911								
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
9	ODAS	CTD	1853		98	50 51.62	129 55.14		2136	500				
	✓				98									
	✓				98									
9	ODAS	NET	1920		99	50 51.91	129 55.37		2140	50				Bongo 50-0 5434 7110 L00
9	ODAS	NET	1940		100	50 52.12	129 55.42		2140					Bongo 250-0
9	J122	ROS	2239		101	50 39.94	129 18.05		1526	500	335-349	15	PAR	
9	J122	NET			102									Bongo 50-0
9	J122	NET			103									Bongo 250-0
10	LQ03	ROS	0058	BE	104	50 39.73	129 02.00		750		350	1		
10	LQ03	ROS	0105	BO	104	50 39.80	129 02.24			500				SALM TAKEN @ 480 m
10	LQ03	ROS	0119	EN	104									
10	LQ03	NET	0127	BE	105	50 39.91	129 02.63							0-50 Bongo
10	LQ03	NET	0135	BE	106	50 39.97	129 02.50							0-250 Bongo
10	CPEZ	ROS	0329	BE	107	50 43.09	128 40.24		125	117.	350-357	8	PAR	Rosette CTD
		ROS		BO	107									
		ROS		EN	107									
		NET	0400		108									Bongo 50-0
		NET	0413		109									Bongo 135-0

CAST TYPE -

BOT -
CTD -
MOR -bottle cast
ctd
mooringROS -
NET -
DRF -rosette
net haul
drifter

USW -

sea water loop

TIME CODE -

BE -
BO -
EN -beginning time of cast
bottom time of cast
end of castDE -
MR -
RE -deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
99		May		Tully		9911								
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
10	LBP8	ROS	1008		110	49 48.63	128 16.45		2090	2080	358-378	21		* Extra bottle tripped at surface.
10	LBP7	Neuse Tow	1034		111	49 52.40	128 11.20							UVic
10	LBP7	CTD	1249	BE	112	49 52.43	128 11.26		2250					1 - Bott @ 5m for Reuben
10	LBP7	CTD	1317	BO	112	49 52.44	128 11.05			2216				
10	LBP7	CTD	1351	EN	112	49 52.37	128 10.97							
10	LBP7	NET	1400	BO	113	49 52.47	128 10.73			50m				Oblique bongo - UVic
10	LBP6	ROS	1449	BE	114	49 56.29	128 05.29		740		379-394	16		No GPS logged
10	LBP6	ROS	1501	BO	114	49 56.33	128 04.99			720				
10	LBP6	ROS		EN	114	49 56.484	128 04.744							
10	LBP5	CTD	1605	BE	115	50 00.129	127 59.960		1297					CTD
10	LBP5	CTD	1624	BO	115	49 59.98	128 00.00			1290				
10	LBP5	CTD	1640	EN	115	50 00.00	127 59.90							
10	LBP5	NET		Net	116									Bongo 250-0
10	LBP4	BE	ROS	Time?	117	50 01.56	127 58.17		910	910	395-411	17		
10	LBP4	BO	ROS		117									
10	LBP4	EN	ROS		117	50 01.612	127 57.919							
10	LBP2	ROS			118	50 4.00	127 54.10		98	90	412-421	10		
10	LBP2	NET	1935		119	50 4.22	127 53.90		88	82				Bongo

CAST TYPE -
 BOT - bottle cast
 CTD - ctd
 MOR - mooring

ROS - rosette
 NET - net haul
 DRF - drifter

USW - sea water loop

TIME CODE -

BE - beginning time of cast
 BO - bottom time of cast
 EN - end of cast

DE - deployment time
 MR - messenger release
 RE - recover mooring

POSITION CODE -

RAD - RADAR
 GPS - GLOBAL
 LOR - LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR			MONTH			SHIP			CRUISE					PAGE	OF
									412-421						
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
10	LBP1	CTD	2034	BE	120	50 04 905	127 52 800		47	42				.bl, .con, .dat, .hdr files all changed names 119 → 120	
10	LBP3	CTD		BO	121	50 3.24	127 55.36		163	158				same 120 → 121	
10	LBP3	NET	1420	BO	122	50 3.17	127 55.40		1160	160				Bongo	
10	LBP7	ROS	23:37	BE	123	49 52.43	128 11.19		2200						
			23:46	BO		49 52.44	128 11.16			500	422-437	16	PAR		
			0003	EN		49 52.46	128 11.12							Bongo - 160m	
11	LJ1	ROS	0537	BE	124	49 44 31	127 2 46		61	56	438-443	6	PAR		
	LJ1	ROS		BO	124										
	LJ1	ROS		EN	124	49 44 358	127 02 419								
	LJ2	ROS	0628	BE	125	49 42 72	127 5 18		82	72	444-449	6	PAR		
	LJ2	ROS		BO	125										
	LJ2	ROS		EN	125										
	LJ2	NET		BE	126									Bongo	
11	LJ3	CTD	0739		127	49 39.17	127 11.16		127	121					
11	LJ4	ROS	0842		128	49 35.53	127 16.90		162	150	450-458	9			
11	LJ4	NET	0245		129	49 35.59	127 16.68			155				Bongo	
11	LJ5	CTD	1015		130	49 31.70	127 22.51		1069	1063					

CAST TYPE - BOT - bottle cast
 CTD - ctd
 MOR - mooring

ROS - rosette
 NET - net haul
 DRF - drifter

USW - sea water loop

TIME CODE - BE - beginning time of cast
 BO - bottom time of cast
 EN - end of cast

DE - deployment time
 MR - messenger release
 RE - recover mooring

POSITION CODE - RAD - RADAR
 GPS - GLOBAL
 LOR - LORAN

YEAR			MONTH			SHIP			CRUISE					PAGE	OF
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
11	LJ6	ROS	1141	BE	131	49 27.84	127 28.58		~ 1050						
11			1158	BO		49 27.89	127 28.60			1000.	459-475	17			
11			1228	EN		49 27.90	127 28.60								
11	LJ6	NET	1302	Bo	132	49 27.90	127 28.57							BONGO to 250m	
11	LJ7	CTD	1405	BE	133	49 24 10	127 34.82		1816						
11	LJ7	CTD	1417	BO	133	49 24 07	127 34.75			1000					
11	LJ7	CTD	1431	EN	133	49 24.06	127 34.72								
11	LJ8	ROS	1541	BE	134	49 20.15	127 40.91		1711	1000	476-492	17			
11	LJ8	ROS	1557	BO	134	49 20.22	127 40.79								
11	LJ8	ROS	1629	EN	134	49 20.20	127 40.32								
11	LJ8	NET	1759	BO	135	49 20.20	127. 40.3							Bongo 250-0m	
11	LJ9	CTD	1801	BE	136	49 16.05	127. 47.25								
11	LJ9	CTD	1814	Bo	136	49 16.06	127 47.29								
11	LJ9	CTD	1825	EN	136	49 16.07	127 47.34								
11	P8	ROS	2327	BE	137	48 48.99	128 40.08		2440						
11	P8	ROS	2341	Bo	137	48 48.99	128 40.13			1000	493-509	17			
11	P8	ROS	00 14	EN	137	48 49 10	128 40.46								
11	P8	NET			138									Bongo 150m	

CAST TYPE -

BOT -
CTD -
MOR -

bottle cast
ctd
mooring

ROS -
NET -
DRF -

rosette
net haul
drifter

USW -

sea water loop

TIME CODE -

BE -
BO -
EN -

beginning time of cast
bottom time of cast
end of cast

DE -
MR -
RE -

deployment time
messenger release
recover mooring

POSITION CODE -

RAD -
GPS -
LOR -

RADAR
GLOBAL
LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

[illegible]

CAST TYPE -	BOT -	bottle cast	ROS -	rosette	USW -	sea water loop
	CTD -	ctd	NET -	net haul		
	MOR -	mooring	DRF -	drifter		

TIME CODE -	BE -	beginning time of cast	DE -	deployment time
	BO -	bottom time of cast	MR -	messenger release
	EN -	end of cast	RE -	recover mooring

POSITION CODE -	RAD -	RADAR
	GPS -	GLOBAL
	LOR -	LORAN