

CRUISE
NUMBER

9924

9925

DAILY LOG

INSTITUTE OF OCEAN SCIENCES

OCEAN PHYSICS

DATE

3

JULY

1999

VESSEL

CCGS "SIR WILFRED LAURIER"

PROJECT

N. PACIFIC & ARCTIC.

3) July 1999 - ON BOARD ~ 10 AM - WORK ON GUIDELINE CTD SYSTEM - PRESSURE SIGNAL COMPLETELY ERRATIC
10:30 - 11:30 FIRE DRILL INCLUDING 'ABANDON SHIP' → LIFEBOAT LAUNCH
~ 12:45 - LEFT THE CG BASE TO SINK COMPASS OFF ESQUIMAULT
WITH DOUG SIEBERG ABOARD WORKING ON GUIDELINE: PRESSURE SENSOR REPLACED
BY 1500 PSI I FOUND AT IOS → 'FLOATING GROUND' ON ORIGINAL WAS FAULTY
NEW UNIT NOT CALIBRATED!! SURFACE ≈ 17 dB, 50 m WIRE OUT = 110 dB
→ APPROX LINEAR OFFSET/SLOPE: $Z = (P - 17) * 50 / (110 - 17)$

- 'SPARE' 87107 DECK UNIT DOES NOT WORK --- NO MANUALS -
- 'SPARE' PRESSURE TRANSDUCERS WRONG TYPE, CONNECTOR, CONFIG -- BUT DOUG MATCHED THE INTERNAL BRIDGE CHARACTERISTICS AND THE CIRCUIT SEETS QUIETER.
- TEST CASTS SHOW MASSIVE AMOUNTS OF NOISE - NO CHEATER CABLE SO NO TEST WITHOUT WINCH - APPARENTLY NO NOISE WHEN NOT RUNNING WINCH -
- NOISY IN TEST CASTS - DOUG WENT OVER ALL CONNECTIONS THEN WAS TAKEN ASHORE BY HELI FROM BASE!

DINNER - PASSING RACE ROCKS ~ 7 PM - ANDY & TIM ARE RE-DOING SLIPRING CONNECTIONS

BEFORE WE SAILED, GILLES ARFEVILLE BROUGHT THE FSI MCTD #1534 ON BOARD
SO I INTEND TO USE THAT AS BACKUP, AND DO CASTS WITH THE SPB19-1030 STRAPPED TO
THE GUIDELINE -

TEST WITH RE-WIRED SLIPRING CONNECTORS STILL SHOWS NOISE - SHIP IS UNDERWAY SO ONLY
ON-DECK TESTS - I LOOKED OVER THE CRUISE PLAN AND WILL PRINT COPIES FOR
PARTICIPANTS

YEAR	1999	MONTH	JULY	SHIP	SIR WILFRID LAURIER	CRUISE	9922	PAGE	0	OF	
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YEAR	1999	MONTH	JULY	SHIP	SIR WILFRID LAURIER	CRUISE	9922	PAGE	0	OF	
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YEAR	1999	MONTH	JULY	SHIP	SIR WILFRID LAURIER	CRUISE	9922	PAGE	0	OF	
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YEAR		MONTH			SHIP			CRUISE			PAGE		OF	
1999		JULY			SIR WILFRID LAURIER			9922			0		0	
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDR CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
SUNDAY 4 JULY 99 - GREY AND COLD (FOR JULY AT THIS LATITUDE) - STEAMING TOWARDS BARANOFF LINE														
- SHIPBOARD NETWORK IS <u>NOT</u> FUNCTIONING I.E. THERE ARE NO "OPTICAL MODEMIS" INTERFACE CARDS SO WE CANNOT PLUG IN ANY PC OR INSTRUMENT OUTPUT, NOR IS THERE SHIP'S INFO (NO GPS, NO WIND-AIRTEMP, BAROM) → CANNOT GET SAIL SYSTEM "ON LINE"														
- OUR TRIMBLE - GPS (SCIENCE LAB) EXTERNAL ANTENNA DOES NOT FUNCTION - UNIT WORKS OUTSIDE. SO CAN BE USED W/ BATTERIES														
- WE ARE MISSING INFO ON INTER OCEAN DECK UNITS → NO MANUALS. EMAIL SENT TO IOS REQUESTING ASSISTANCE (PROVIDE INSTRUCTION LIST FOR PAPPING IOS MOORINGS)														
- SHIP'S EMAIL SYSTEM IS NOT CONNECTING TO SERVER → PREVIOUS MESSAGE WAS NOT (YET) SENT														

CAST TYPE -	BOT -	bottle cast	ROS -	rosette
	CTD -	ctd	NET -	net haul
	MOR -	mooring	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
	LOB -	LOBAN

KAYAK / CAPE ST. ELIAS / SEWARD
MOORING RECOVERIES JULY 99

DATE
8 July 99

TIME = UTC
CS-1 @ SURFACE 14:57 UTC 59°55.34'N 144°0.55'W
OUT OF WATER: RCM4 @ 15:08 RCM4 @ 15:09 1090 IO. @ 15:11
#638 #1511 #265

8 July 99

CS-2 @ SURFACE 18:10 RCM4 @ 18:19 RCM4 @ 18:21 1090 IO & TG @ 18:23
#4294 #6014 #404 #1000
BENT CABLE

~~8 July 99~~

* XPOND RANGES INCORRECT BUT DEFINITE RESPONSES →
BACKED OFF 2 CABLES → STILL NO RANGE > DEPTH!

9 JULY-99

CS-3 @ SURFACE 22:02 UTC
RCM4 @ 22:09 1090 IO. @ 22:12
#336 #251

INSTRUMENTS OPENED / STOPPED / DOWNLOADED BY ANDY ROACH (APL/UW)

SEVERAL GRAY WHALES AT SURFACE ~ 59°40'N, 144°0.00'W

DAILY LOG

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YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1999		JULY		SIR WILFRID LAURIER		9922		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
8	KY-1	CTD	1520	007	007	59 55.2	144 01.0		SOUND 51 m	50				SBE ONLY AT FLOORING SITE CS1
8	KY-2	"	1625	"	008	59 47.04	144 0.01		105	100				
8	KY-3	"	1710	"	009	59 39.89	144 0.08		121	120				
8	KY-4	"	1825	"	010	59 38.19	144 0.23		111	105				@ CS2 after recovery
8	KY-4	"	1915	"	011	59 31.90	144 0.21		SIMRAD 1325	600				
8	KY-5	"	2020		012	59 24.98	144 0.17		2706	600				
8	KY-6	"	2143	"	013	59 17.06	143 59.91		-	600	@ 600m SAL	1		also SBE. AUCS for Whitney
8	KY-7		2300		014	59 09.99	144 0.19		-	600	-	0		
9	SW-9	"	1035		015	58 42.71	147 36.64		-	600	SAL@600			DARK WINDS ~ 25-30 knots (STOP IN UPCAST TO FREE CABLE FROM OVERHEAD DRIFT ~ 31 mi OVER CAST)
9	SW-8		1220		016	58 50.81	147 46.92			600		0		
9	SW-7		1404		017	58 59.998	147 57.80		281	275	-			RAIN / 25-30 knot wind
9	SW-6		1523		018	59 08.33	148 07.79		137					
9	SW-5		1627		019	59 16.54	148 17.69		110	105			TAW	
9	SW-4		1754		020	59 24.923	148 28.221		110	100			TAW	Recheck GPS position.
9	SW-3		1850		021	59 33.06	148 38.01		91	85				
9	SW-2		2001		022	59 41.18	148 48.53		181	175				
9	SW-1		2110		023	59 50.07	148 59.19		123	120				
9	SW-1	CTD	2222		024	59 49.65	148 51.09		182	180				AT FLOORING SITE

add 6m for depth from SFC

CAST TYPE -

BOT - CTD
MOR - mooringROS - ROSE
NEI - net haul
DRF - drifter

TIME CODE -

BE -
BO -
EN -begin time of cast
bottom time of cast
end of castDE -
MR -
RE -deployment time
messenger release
recover mooringPOSITION CODE -
RAD -
GPS -
LOR -
LORAN

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1999		JULY		LAURIER		9922		3						
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
12	KD-0	CTD	0506	UTC	025	57 32.616	152 04.980		78	70				
12	KD-1	"	0546	"	026	57 30.097	152 0.014		56	50				
12	KD-2	"	0640	"	027	57 24.948	151 50.033		65	60				
12	KD-3	"	0743	"	028	57.19.048	151 40.063		65	60				
12	KD-4	"	08:34	"	029	57 14.036	151 31.039		72	65				
12	KD-5	"	09:37	"	030	57 08.061	151 21.064		137	130				
12	KD-6	"	10:44	"	031	57 02.997	151 11.104		522	510				
12	KD-7	"	12:00	"	032	56 58.049	151 01.092		730	600			R	
12	KD-8	"	13:15	"	033	56 53.005	150 50.890		-	600			R	
12	KD-9	"	14:50	"	034	56 47.096	150 39.792		-	600	nut@stc sal@depth		R	
14	UN-8	"	14:25	"	035	53 38.257	163 47.699		-	650 ^{WIRE}	sal@625 ^{WIRE}		Ju	REPLACED BATTERIES BEFORE THIS CAST
14	UN-7	"	15:45	"	036	53 43.990	163 55.759		1138	600			TAW	Depth from B'n's sounder.
14	UN-6	"	16:43	"	037	53 48.482	164 03.758		89	85			TAW	
14	UN-5	"	17:32	"	038	53 52.919	164 11.042		78	75			TAW	
14	UN-4	"	18:23	"	039	53 57.448	164 19.650		109	110 ^{wire aft}			Ju	Rain,
14	UN-3	"	19:15	"	040	54 02.407	164 27.721		96	100 ^{wire}			J.	
14	UN-2	"	2008	"	041	54 06.647	164 36.062		91	90			R	
14	UN-1	"	2105	"	042	54 11.332	164 43.345		69	70			J.	

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

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YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1999		JULY		CCGS "SIR WILFRID LAURIER"		9922		4		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
15	BS-1	CTD	0210	UTC	043	54 40.638	165 39.946	GPS	322	330 ^{WIRE}			J	
15	BS-2	"	0635	"	044	54 53.626	166 50.110	"	201 ^{depth}	195				
15	BS-3	"	1030	"	045	55 17.457	167 43.954	"	192	185				
15	BS-4	"	1404	"	046	55 38.056	168 34.916	"	220	215				
15	BS-5	"	1744	"	047	56 15.177	168 43.747	"	182 ^{depth}	175 ^{wire}				
16	BS-6	"	0040	"	048	57 24.03	169 02.10	(bridge)	69 ^{sonar}	70 ^{wire}				
16	BS-7	"	0700	"	049	58 31.538	169 21.867	GPS	69 ^{depth}	65				
16	BS-8	"	1301	"	050	59 29.472	169 37.985	"	57 ^{depth}	52				
16	BS-9	"	1825	"	51	60 24.461	169 47.060	"	51	45				
16	BS-10	"	2306	"	52	61 14.021	169 20.942	"	40	35				
17	BS-11	"	0440		53	62 10.556	168 49.008	TEMPLE	34	30				
17	BS-12	"	0905		54	62 57.989	168 25.923	GARDIN	41	36				
17	BS-13	"	1410		55	63 51.459	168 33.648	"	35					
17	UT-BS3	"	1746	"	56	64 16.5	168 49.5	BRIDGE	40	37				Time, Cuts & Log from bridge. CTD, came up 10m from bottom, then back down 10m to trip wire in bottle
17	UT-BS4	"	2105	"	57	64 41.0	169 06.0	BRIDGE	45	43				
18	UT-BS5	"	0043	"	58	64 40.03	169 55.336	GARDIN	45	42			J	
18	UT-BS4	"	0330	"	59	64 57.576	169 52.986	"	46				J	
18	UT-BS1	"	0644		60	64 59.394	169 07.968	"	49	45			J	

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A2 mooring - recover A2-98 / deploy A2-99 (log sheets to Andy Roach)
released 1500 UTC 18 July 99 for recovery

A3 mooring: recovery failed - dragged to surface once
dragging from 3 pm until 0100 with various patterns!
then moved 2 miles north to new site to deploy A3-99
with Kelly's Sampler →

NEW
LOCATION A3-99

GPS $66^{\circ}19.71'N$
 $168^{\circ}58.10'W$

in 57.7 m water at 0805 UTC on 19 July 1999

(→ additional CTD stations near (before/after) A3
as requested by T. Wagner for Kelly Falkner)

25 July: from Bridge Log (Jackie // Leel // Seel Moore on board for science)

UTC ^{26 July} local?
2150 14:30 UTM-8 Sta Grab (CTD?) $71^{\circ}24.0'N$ $157^{\circ}00.1'W$ 15m depth off Colville River
0105 18:00 UTM-9 $71^{\circ}22.76'$ $156^{\circ}02.028'$

UTM	Stn	Time	Cast	LatN	LongW	depth	
UTM-12		2154	079	$70^{\circ}39.1'$	$150^{\circ}27.9'$	15	no data?
UTM-12a			080	$70^{\circ}39.1'$	$150^{\circ}27.9'$	15	(re-done)
UTM-12c		0540	081	"	"	15	Repeat -
UTM-13		1440	082	$70^{\circ}31.37'$	$148^{\circ}22.47'$	12	no data?
UTM-13B		1530	083	"	"	15	repeat!

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YEAR		MONTH		SHIP		CRUISE										PAGE		OF	
1999		JULY		LAURIER		9922										5			
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			
18	B5A2	CTD	1535	UTC	061	65	46.810	168	34.691	GPS	49	49				AT MORNING SITE			
18	B5TR-1	"	2110	"	062	66	13.688	168	55.299	"	59	55 wire	1 bottle @ 12m above CTD			AFTER RECOVERY			
18	" 1A	"	2135	"	063	"	"	"	"	none	"	20 m	2 bottles @ 10 m & 20 m			4 miles from A3 - mooring (bottle @ 1.5m above CTD)			
18	B5TR-2	"	2223	"	064	66	16.03	168	57.06	bridge GPS	58	55 wire	2 bottles @ 1.5m & 11.5m above CTD			→ repeat cast did not close! sampling for Kelly F.			
19	B5TR-A3	"	0805	"	065	66	19.71	168	58.10	bridge	57		cast w/o CTD: 2 bottles @ 10m & 20m below str.			2 miles from A3 (South)			
19	B5TR-4	"	0836	"	066	66	23.8	168	52.6	"	57	52 wire	2 bottles Ba/Nuts/Sal			new mooring site 2 mi N of old (A3-98)			
19	UTN-1	"	1057	"	067	66	42.5	168	24.0		34		2 bottles Ba/Nuts/Sal			[samples from 1.5m above CTD Press sensor @ bottom and 10m below surface]			
19	UTN-2	"	1532	"	068	67	03.08	168	43.96		47		sed: 5 grabs, 3 cores, 2 Niskins (~1 1/2 hrs)						
19	UTN-3	"	1742	"	069	67	20.0	168	59.9		47					drizzle, fog			
19	UTN-4	"	2012	"	070	67	30.06	168	54.80		51								
20	UTN-5	"	0031	"	071	67	39.97	168	57.348		54	50							
20	UTN-6	"	0203	"	072	67	44.256	168	26.405		50	45							
20	UTN-7	"	0500	"	073	67	59.827	168	54.809		59								
22	Barrow	"	1730	"	074	71	17.73	156	49.66	from bridge log	15								
25	UTN-8		2156		75	71	24.014	157	00.1	"	113					test cast for Jackie & Lee (UTN)			
26	UTN-9		0105		76	71	22.76	156	02.028	"	12					*CASTS 75 → 83 BY JACKIE & LEE			
26	UTN-10		0235		77	71	23.4	156	3.96	"	12								
26	UTN-11		2337		78	70	44.03	151	35.56	"	11.5								

CAST TYPE -	BOT - CTD - MOR -	bottle cast ctd mooring	ROS - NET -	rosette net haul	USW -	sea water loop	TIME CODE -	BE -	beginning time of cast	DE -	deployment time	POSITION CODE -	SIG -
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CAST TYPE -

BOT -

bottle cast

ROS -

rosette

USW -

sea water loop

TIME CODE -

BE -

beginning time of cast

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deployment time

POSITION CODE -

RAD -

RADAR

CTD -

ctd

NET -

net haul

BO -

bottom time of cast

MR -

messenger release

GPS -

GLOBAL

MOR -

mooring

DRF -

drifter

EN -

end of cast

RE -

recover mooring

LOR -

LORAN

CONT'D
(FROM SHIP'S LOGBOOK)

27/06: Cast #12. B52, Lots of drift, An ice flow stuck in the cable $\rightarrow$ bring the Rosette up, boat go backward, ok, but bottom ^{depth} variability, had to bring up Rosette few times up to avoid to hit the bottom. Have to check bottle fides to know when they closed!!!

7157.55
9612.96N

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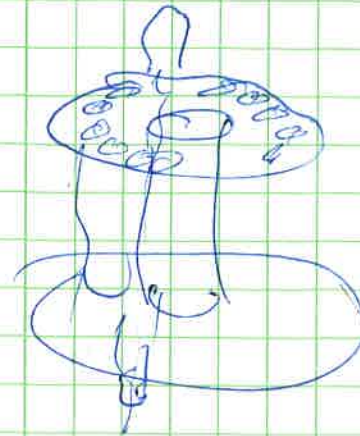
YEAR		MONTH			SHIP		CRUISE					PAGE		OF	
1999		AUGUST			LAURIER		9924					6		6	
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	STD/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS	
25/08	Test	CTD Rosette	UTC	0147	9924000	71 07.13	97 16.18	GPS	160	60m				test! Don't close the bottles	
25/08	Test PS3	CTD Rosette	UTC	0240	9924001	71 07.22N	97 13.35W	GPS	150	55m				test! Bottles closed not sure if depth right!!! OK	
25/08	FT1	CTD Rosette	UTC	1420	9924002	71 57.50 N	96 27.81 W	GPS	121	101	1-12	12		Everything fine	
26/08	FT2	CTD	UTC	1446	9924003	71 57.49 N	96 27.93 W	GPS	386m	376				offset 0.6 at surface for the CTD increasing with depth	
"	FT3	CTD	UTC	15:12	9924004	71 57.47N	96 12.85 W	GPS	462m					start guideline at 100m only SBE19 was off	
"	FT3	CTD Rosette	UTC	16:53	9924005	71 57.54N	96 12.93W	GPS	463m	455	13-24	12		Redid the previous cast OK (FT3-2)	
"	FT3	CTD Rosette	UTC	18:59	9924006	71 57.5N	96 12.5W	GPS	465m	455	25-36	12		Redid the previous with the different depths (FT3-3)	
"	FT4	CTD Ros	UTC	21:28	9924007	71 57.5 N	95 50.0 W	GPS	430m	424m	37-48	12			
"	FT5	CTD	UTC	2232	9924008	71 57.46N	95 30.07W	GPS	197m	196m					
27	FT6	CTD	UTC	00:02	9924009	71 57.5N	95 20.3W	GPS	155m	155m				hit the bottom! Sounder Depth was wrong! Stopped at right time! Infrared OK!	
"	FT7	CTD Rosette	UTC	00:46	9924010	71 57.5N	95 14.9 W	GPS	137m	120m	49-58	10			
27/08	BS1	CTD Rosette	UTC	14:55	9924011	71 58.45	95 03.15 W	GPS	371m	360m	59-70	12			
27/08	BS2	CTD Ros	UTC	16:18	9924012	72 00.56	94 36.00 W		145	142	71-82	12		lots of drift; see comment	
27/08	BS3	CTD Ros	UTC	17:24	9924013	71 59.19N	94 22.08W	GPS	94m	88m	Random Test Cast				
28/08	PS1	CTD	UTC	02:36	9924014	71 45.07N	96 09.25W	GPS	404	396m				W	
28/08	JR1	CTD ROS	UTC	1418	9924015	70 15.02N	97 04.98W	GPS	104	96m	92			1 surface bottle	
"	JR2	CTD	UTC	1458	9924016	70 15.00N	97 00.94 W	GPS	98m	89m	93			Bottle didn't trip	
"	JR3	CTD	UTC	15:33	9924017	70 14.96	96 56.54	GPS	98.2	90m	94			Bottle didn't trip	

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POSITION CODE - RAD - RADAR
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YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
99		Aug		SWL		9924		7		7				
DAY (UTC)	STATION ID	CAST TYPE	TIME (UTC)	TIME CODE	SID/HYDRO CONSEC #	LATITUDE	LONGITUDE	POSITION CODE	BOTTOM DEPTH (m)	MAX SAMPLING DEPTH (m)	CONSEC SAMPLE #	# OF BOTTLES	INIT	COMMENTS
28/08	JR4	CTD ROS	UTC	16:04	9924018	70 15.01 N	96 53.01 W	GPS	103	94m	95			OK for bottles! Test with 12 bottles
28/08	JR5	CTD ROS	UTC	16:34	9924019	70 15.05 N	96 49.01 W	GPS	96	86m	101-112	12		ok! So need 600 Baud Rate to communicate between AFT and CTD
28/08	JRL1	CTD ROS	UTC	18:50	9924020	70 15.00 N	96 44.9 W	GPS	94m	86m	96	1		Changed CTD's batteries
28/08	JRL2	CTD ROS	UTC	19:20	9924021	70 14.97 N	96 40.88 W	GPS	79m	80m	97	1		surface bottles
28/08	JRL3	CTD ROS	UTC	19:51	9924022	70 15.05	96 36.85	GPS	56m	46m	98	1		
28/08	JRL4	CTD ROS	UTC	20:20	9924023	70 15.01 N	96 35.95 W	GPS	39m	30m	99	1		
28/08	JR6	CTD ROS	UTC	22:16	9924024	70 09.46 N	97 19.97 W	GPS	78m	72m	113-122	10		
28/08	JR7	CTD ROS	UTC	23:50	9924025	70 01.50 N	97 38.99 W	GPS	35.5m	25.5m				Test cast? Set up of clock in UTC
31	Q11	CTD	UTC	04:20	26	68 17 32 N	100 37 58 W	GPS	85m	65m	108-118			
31	CC1	CTD	UTC	15:3	27									
31	CC2	CTD												
31	CC3	CTD/R	UTC	15:35	27	68 48.96 N	105 16.89 W	GPS	61m	51	127-135	9		
	CC4	CTD												
	CC5	CTD												
02	TP1	ROS	UTC	06:15	28	68 39 03	108 16 91		29	24	136-141	6		CTD/rosette 0028.HCX → 9924028.hx
02	TP2	CTD	UTC	07:02	29	68 41 01	108 21 05		77	70m				CTD only
02	TP3	ROS	UTC	07:45	30	68 44 05	108 26 13		125	120	142-150	9		CTD/Rosette
02	TP4	CTD	UTC	08:30	31	68 47 04	108 32 02		118	110				CTD only

CAST TYPE -

BOT -

bottle cast
CTD - ctd
MOR - mooring

ROS -

rosette
NET - net haul
DRF - 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

Aug 29 - Giles on "Tempest" CHANTREY INLET CTDs
Ed & Fran on Mako5 up to back room - CTD/chem $\approx$ 1130

Test Casts / Rosette

20 meters of water

Anchor 1. AFM upcast press enable 5m
press change 1m
no bottom
3 bottles 15, 10, 2

no bottles tripped, .AFM files show #3 (2m confirmed)

Anchor 2. AFM press enable 5m
press ch 1m
bottom btl yes (1m / 5m)

3 bottles fire when straggly, 10m / 2m

Save Setup
[CUT] F10 2 times da
F4 prog
F7 run

recoun - 3 bottles tripped

F6
F3
[CUT] F10
F9 upload file
Cast number 2

Anchor 2. HEX

.AFM = 3 bottles tripped Scans 1-485 2-745 3-762

DateNW

ensure input file has .AFM/.Hex file trap

Variables - pts L% Sc.#

up & down cast

Skip 0

water btl data yes

water btl setup

Select bot .CAN & .POS (output file select)

Source of Scan Range

ESC

F10

AFM 0, Z offset (duration)

DURS (-275)

output to the file

ESC

explore = Anchor2 - b1

Anchor2 - CNV

Anchor2 - POS

1 = 485

2 = 745

3 = 762

18.619m

9.175m

1.336m

3.1°C

18.49 sal

485 745 762 (Scan Range)

Consumed cast

bottom = 18.619m

10m = 9.175m

2m = 1.336m

Anchor 3
cast 3

Same as above, slower up cast (.5m/s)

FLC

F10

F9

anchor 3

cast 3

Dur 5 = offset -2.0
= duration 5.0

Dur 2 = offset -1
= dur 2

Dur 0 = offset 0
dur 0

Anchor 4 - Fast Cast up

cast 4

bottom 1m/m
15, 10, 5, 1

up 1m/sec

22:22:03

18.71m 14.52m 9.35m 4.3.44m

Anchor 5 slow up - 18.86 14.7 9.62 4.72 .71

Re-uploaded anchor 2 from AFM to see what .AFM file it attaches to cast. Used cast #2 from STD

It sent up current AFM file (5 bottles Anch. 4 cast)

Anchor 5 - slow cast up
cast # 5

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
99		Sept		SWL		9924		8		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
2	TP5	ROS	UTC	9 ¹⁵	32	68 48.98	108 35.92		83	75m	151-158	8		Mug. Switch on CTD between casts - 0032-HEX
2	EI 1	ROS	UTC	14 ¹⁷	33	68 27.56N	110 57.08W		70	60m	159-170	12		Bottles #2 leaking badly #10 leaking
2	EI 2	CTD	UTC	15 ⁰⁹	34	68 26.15N	110 58.6 W		117m	110m				
2	EI 3	CTD	UTC	15 ⁵⁰	35	68 23.79	111 01.82W		146m	136m				Location!
2	EI 4	CTD	UTC	17 ⁰⁴	36	68 18.36	111 08.40W		203m	190m				
2	EI 5	ROS	UTC	17 ⁵⁶	37	68 15.96N	111 11.81W		209m	210m	171-182	12		Bottom Rised!!! Touch the bottom
2	EI 6	CTD	UTC	19 ²¹	38	68 08.23N	111 14.80W		118m	110m				
2	EI 7	ROS	UTC	20 ¹⁹	39	68 02.75N	111 17.02W		338-308m		183-194	12		Had to go only to 300m, and go up again - bottom rising!!
2	EI 8	CTD	UTC	22 ⁰⁸	40	68 58.36N	111 18.63W		272m	260m				
2	EI 9	ROS	UTC	23 ⁰⁴	41	67 54.00W	111 19.91W		397m	390m	195-206	12		bottom hit 0041-HEX
3	EI 10	ROS	UTC	00 ⁴⁸	42	67 52.16	111 17.25		176	161	207-215	9		Rosette - 161m 0042-HEX
3	EI 11	CTD	UTC	01 ³⁴	43	67 51.01	111 15.2		81	75				CTD only
3	EI 16	CTD	UTC	02 ⁰³	44	67 52.8	111 11.9		227.7	220				Gulldine CTD cast #72
3	EI 17	CTD	UTC	03 ⁰⁹	45	67 53.3	111 10.8		243	210				Gulldine CTD cast #73
3	EI 18	CTD	UTC	03 ⁴²	46	67 52.97	111 06.43		85	75				Crashed @ 117m - rebot 134m #74
3	CI 1	ROS	UTC	15 ⁰¹	47	68 49.11N	113 42.47W		26.7	20m	216	1		Test for ROS! OK, no Alm file
3	CI 2	CTD	UTC	15 ³⁷	48	68 42.48N	113 50.47W		50m	39m				
3	CI 3	ROS	UTC	16 ²⁶	49	68 45.60N	114 03.89W		47m	40m	217-222	6		

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

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

same 2 m water main 4/ Feb/05
 there are two Guidline CTD casts at this location
 cast # 81, cast # 82 18:15 → 18:18 and 18:21 → 18:24 UTC

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			
3	CI4	CTD	UTC	1702	50	68 44.05N	114 10.40W		43m	37m							
3	CI5	CTD	UTC	18 ²²	51	68 42.57N	114 25.30W		20m	16m							
4	AG1	ROS	UTC	1505	52	69 52.31N	122 56.22W		92m	80m	223-231	9					
4	AG2	CTD	UTC	1617	53	69 58.11N	122 56.19W		207m	195m							
4	AG3	CTD	UTC	1706	54	70 02.62N	122 55.98W		290m	280m				Cast #2			
4	AG4	ROS	UTC	1852	55	70 10.56N	122 56.36W		397m	396m	244-254	12		2 bottles at ~350m I didn't close			
4	AQ5	ROS	UTC	22:20	56	70 33.77N	122 56.2W		645m	642m		12		Bottles didn't close - changed A/R batteries!			
4	AQ5	ROS	UTC	23:45	57	70 33.77N	122 56.2W		637m	630m	232-243	12		everything ok!			
5	AG6	CTD	UTC	16:29	58	70 45.99N	122 56.12W		432m	422m				CTD Only			
5	AG7	CTD	UTC	18:09	59	70 54.9N	122 56.07W		458m	452m				CTD Only			
5	AG8	CTD	UTC	19:09	60	70 58.25N	122 56.13W		277m	271m				CTD Only {Front ?}			
5	AG8b	CTD	UTC	19:54	61	71 01.26N	122 56.55W		275m	265m				CTD Only			
5	AG9	ROS	UTC	20:34	62	71 02.80	122 59.07W		211m	201m	254-266	12					
5	AG10	CTD	UTC	21:50	63	71 04.05	122 56.88W		144m	135m							
6	JB1	ROS	UTC	1322	64	71 58.51N	119 01.13W		28m	30m	267-270	4		check Depth			
6	JB2	CTD	UTC	1411	65	72 00.24N	119 17.44W		90m	81m				CTD Only			
6	JB3	ROS	UTC	1502	66	72 02.11N	119 34.39W		118m	110m	271-280	10					
6	JB4	CTD	UTC	1558	67	72 03.70N	119 51.37W		92m	82m				100% from Ice Margin.			

CAST TYPE -

BOT -

bottle cast

ROS -

rosette

USW -

sea water loop

TIME CODE -

BE -

beginning time

DE -

depth

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



Set up time in the AFM, wrong since we changed the batteries, check Lithium battery!

YEAR			MONTH			SHIP			CRUISE			PAGE			OF
1999			Sept			LAURIER			9924						
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	JDS	ROS	utc	1731	68	72 05.35N	120 06.97W		49m	42m	281-286	6		100m after the ice-edge (open water)	
7 ^{Sept}	TY1	CTD	utc	2049	69	69 34.9N	120 36.25W		89m	80m					
9 ^{Sept}	CM1	CTD	utc	14:37	70	67 50.8N	115 08.74W		27.5m	22m				Head of Coppermine river / Wind North 30 kts	
10	SC1	CTD	utc	1408	71	68 43.11N	108 55.93W		95m	87m				Test the 2 SBE CTD	
10	CC2	CTD	utc	2339	72	68 46.9N	105 22.2W		45m	36m				"	
11	CC1	CTD ROS	utc	00:24	73	68 45.07N	105 25.76W		33m	26m	287	1		6'8 and Salinity bottle	
11	CC4	CTD	utc	01:33	74	68 51.5N	105 12.9W		68m	65m					
11	CC5	CTD	utc	02:08	75	68 53.07N	105 09.05W		64m 53m					Hit the Bottom at 53m, Ship's Sonar was giving 65m!	
11	IL1	CTD	utc	16:02	76	68 44.18	101 20.16W		39m	29m					
11	RG1	CTD	utc	20:02	77	69 04.40N	101 07.2W		55m	44m				} few sparsed ice floes!	
11	RG2	CTD	utc	21:01	78	69 02.58N	100 52.28W		63m	54m					
11	RG3	CTD	utc	21:39	79	69 01.4N	100 45.86W		44m	35m					
12	AI1	CTD	utc	00:48	80	69 23.10 N	100 20.20 W		50m	40m					
12	AI2	CTD	utc	01:35	81	69 20.90 N	100 08.13W		27m	18m				changed CTD's battery	
12	CF1	CTD	utc	13:19	82	70 01.08	98 23.50W		100m	92m				} Ta = -1.5°C few sparse ice floes ice edge on the west of the channel, less ice floes going East	
12	CF2	CTD	utc	14:32	83	69 57.4N	98 12.15W		113m	104m					
12	CF3	ROS	utc	15:32	84	69 55.72N	98 06.10W		89m	79m	288	1			
12	CF4	ROS	utc	16:07	85	69 54.62N	98 04.45W		34	29m	289	1			

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	
14	RS 1	CTD	21:02	utc	86	68 43.23N	94 58.75W		59m	55m				Ta +2°C, CTD cleared wind Tw = 3.2°C	
15	ET 1	CTD	19:17	utc	87	68 32.8 N	97 24.0 W		5m					worked on the Mark 5 wind NNW 30 kts (340°) tide: flooding	
15	ET 2	CTD	19:21	utc	88	68 32.6 N	97 24.2 W		15m						
15	ET 3	CTD	19:26	utc	89	68 32.4 N	97 24.4 W		24m						
15	ET 4	CTD	19:31	utc	90	68 32.2 N	97 24.6 W		18m						
15	ET 5	CTD	19:37	utc	91	68 32.0 N	97 24.8 W		5m						
18	CP 1	CTD	17:18	utc	92	68 36.3 N	97 37.5 W		7m	6m				CTD lowered by hand. No pump descent rate	
18	CP 2	CTD	17:23	utc	93	68 36.1 N	97 38 W		13m	12m					
18	CP 3	CTD	17:29	utc	94	68 35.8 N	97 38.5 W		16m	15m					
18	CP 4	CTD	17:34	utc	95	68 35.5 N	97 39.2 W		17m	16m					
18	CP 5	CTD	17:41	utc	96	68 40 N	97 35 W		22m	21m					
18	CP 6	CTD	17:51	utc	97	68 34.2 N	97 43.5 W		10m	9m				low tide Supposedly ebb tide going East Obs: 4 to 7 kts prevailing current → eastward	
19	TEST	CTD	14:33	utc	98	68 34.58N	97 38.50W		20m	15m					
20	CC 2	CTD	14:14	utc	99	68 47.03	105 22.22W		20 m	52m	Touch Bottom!!!				
20	CC 1	CTD	14:36	utc	100	68 45.92	105 25.22W		33m	22m					
20	CC 3	CTD	15:19	utc	101	68 48.97N	105 17.01W		62m	55m				All the bottles closed Test ok. Ta = 3.5°C, low pressure system winds weak, foggy Did cc line again to confirm presence of Boundary Boundary	
20	CC 4	CTD	15:52	utc	102	68 51.55N	105 12.98W		68m	58m					
20	CC 5	CTD	16:21	utc	103	68 53.08N	105 08.95W		62m	52m					

CAST TYPE -

BOT -

bottle cast

ROS -

rosette

USW -

sea water loop

TIME CODE -

BE -

beginning time of cast

DE -

deployment time

POSITION CODE -

RAD -

RADAR

CTD -

cid

NET -

net haul

BO -

bottom time of cast

MR -

messenger release

GPS -

GLOBAL

MOR -

mooring

DRF -

drifter

EN -

end of cast

RE -

recover mooring

LOB -

LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1999		SEPTEMBER		SIR WILFRID LAURIER		9925		1		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
24	RI1	CTD	0055	utc	9925001	68° 17.30	100° 36.06	BRIDGE Sounding GPS	93 m	80	START 18:54:56			Test for hydro. people! SBE-ON @ 1849:30 LOCAL
26	BI1	CTD	1339	utc	9925002	70 36.76N	127 56.44W		20	17.5	CBAILLIE IS. 2 (TEST) (STOP FOR FUEL CACHE)			1851:50 GUIDANCE TEST AFTER REPL. LITHIUM (Afr)
27	AGJ99	CTD	0123	UTC	9925003	71 33.92	130 33.19	Depth fr Surface	260	251	on GUIDANCE 280 cable out			NEAR AGJ-99 MOORING
27	SX5	RDS	1430	utc	04	71 07.64N	133 47.42	Brdg GPS	503	490	466 GUIDANCE 1-12	12		brief stop @ 450m, bottom 1445
27	K1	CTD	1542	UTC	05	71 01.7N	133 44.6W		206	195				light wind
27	Site 2	CTD	1743	utc	06	70 56.36N	133 41.05W		86m	81				
27	K2	CTD	1911	utc	07	70 46.5N	133 42.0W		72m	68m				
27	K3	CTD	2002	utc	08	70 38.6N	133 41.0W		72m	67m				
27	K4	CTD	2056	utc	09	70 31.89	133 36.89W		68m	64m				
27	K5	RDS	2158	utc	10	70 26.4N	133 36.85W		67m	62m	13-18	6		return to deck; check valves
27	K6	CTD	2233	utc	11	70 23.75	133 40.9 W		65m	55				
27	Site 1	CTD	2349	utc	12	70 20.0N	133 44.72		57m	52m				
27	K9	postponed but made labels for 5 bottles						(winds over 35 knots, steep chop, no RASOTEC cast!)						
30	TEST	CTD	21:08	utc	13A2B	70 23.75N	133 40.90		12m					TEST near Tuk
1 Oct	M2	CTD	1307	utc	14	69 56.7	138 17.9		222					
1	M3	CTD	14:04	utc	15	69 53.3	138 07.3		181	171				
1	M4	CTD	14:54	utc	16	69 49.89	137 56.91		135	127				
1	M5	RDS	1543	utc	17	69 46.54	137 46.44		83	77	36-42	7		

CAST TYPE -	BOT -	bottle cast	RDS -	rosette	JSW -	sea water loop	TIME CODE -	BE -	beginning time of cast	DE -	deployment time	POSITION CODE -	RAD -	RADAR
	CTD -	ctd	NET -	net haul				BO -	bottom time of cast	MR -	messenger release		GPS -	GLOBAL
	MOR -	mooring	DRF -	drifter				EN -	end of cast	RE -	recover mooring		LOR -	LORAN

CAST TYPE -

BOT -

bottle cast

CTD -

cid

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		October				LAURIER				9925							
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	
Oct 1	M6	CTD	1630	wlc	18	69	44.9N	138	00.8W		140	132m					
Oct 1	M7	RDS	1717	wlc	19	69	43.47N	138	16.21W		156m	151	43-50	8			
1	M8	CTD	1811	wlc	20	69	42.0N	138	29.74W		165	155					
1	M9	CTD	1859	wlc	21	69	40.58N	138	43.79W		103	93	51-57	7			
1	M10	CTD	1937	wlc	22	69	45.35N	138	40.48W		174	164					
1	M11	CTD	2028	wlc	23	69	50.28	138	36.93W		193	183					
1	M12	CTD	2107	wlc	24	69	55.18	138	33.60W		237	227					
1	MC99	RDS	2142	wlc	25	69	59.98	138	30.02		266	256	24-35	12			
1	MC1	CTD	2315	wlc	26	70	00.27	138	27.93		260	250				CTD @ Mooring Posit ^o	
3	NSB5	CTD	2215	wlc	27	70	36.34	139	57.41		1175	1150	bottom			Changed CTD → SBE-19 #1030	
9	NSB1	CTD	1656	wlc	28	70	54.34	146	42.41		86m	75m	73m			45m 1700 → lag 36m	
9	BFS98	CTD	1810	wlc	29	70	57.03	146	38.98		490m	485m					
9	NSB3	CTD	2118	wlc	30	71	00.72	146	40.34		1380	1330					
10	BFR99	CTD	1745	wlc	31	71	23.42	152	05.56		120	110				Changed CTD → SBE-19 #2688	
10	BC99	CTD	2327	wlc	32	71	45.26N	155	04.17W		291m	280					
12	BS15	CTD	2337	wlc	33	65	41.76	168	34.37		52m	45m				wind: 30-35 kts North-East	
13	BS14	CTD	0515	wlc	34	64	47.98	168	36.01		45m	35m					
13	BS13	CTD	1101	wlc	35	63	51.56	168	33.81		32						

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	
1999		OCTOBER			LAURIER			9925								
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		
13	BS12	CTD	16:06	w/c	36	62 57.99	168 26.00		41m							
13	BS11	CTD	21:01	w/c	37	62 10.55	168 48.9		37m	27m						
14	BS11A	CTD	00:00	w/c	38	61 43.04	169 05.45		40m	30m	58 (bottom)			Salinity bot. One station added to the line (had more time)		
14	BS10	CTD	03:02	w/c	39	61 13.97	169 21.08		41m	35m						
14	NI1	CTD	11:01	w/c	40	60 12.03	167 35.99		41					31.04m 7.20°		
14	NI2	CTD	11:44	w/c	41	60 09.3	167 43.9		33	25m				31.0 7.20'		
14	NI3	CTD	12:22	w/c	42	60 06.77	167 50.87		31	27m	59 (surface)			31.12 7.07		
14	NI4	CTD	13:20	w/c	43	60 02.00	168 04.09		30	23m						
14	NI5	CTD	15:13	w/c	44	59 51.52	168 34.00		40	33m						
14	NI6	CTD	17:23	w/c	45	59 40.05	169 08.03		46							
14	BS8	CTD	19:27	w/c	46	59 29.55	169 38.14		57	48				Last station w/ the NI Line NI7 = BS8		
15	BS7	CTD	01:44	w/c	47	58 31.47	169 22.2		69					SB5-19 not on		
15	BS7B	CTD	02:13	w/c	48	58 29.35	169 21.40		67					6 Redone the cast		
15	BS5	CTD	NOT DONE TOO STRONG WIND -> over 45 kts													
15	BS5	CTD	18:42	w/c	49	56 15.05	168 43.46		174							
15	BS3	CTD	01:57	w/c	50	55 16.35	167 43.13		191	186						
16	BS2	CTD	06:29	w/c	51	54 52.92	166 49.10		204	195						
16	BS1	CTD	11:22	w/c	52	54 40.50	165 39.97		325							

CAST TYPE -

BOT -

bottle cast

ROS -

rosette

USW -

sea water loop

TIME CODE -

BE -

beginning time of cast

DE -

deployment time

POSITION CODE -

RAD -

RADAR

CTD -

ctd

NET -

net haul

BO -

bottom time of cast

MR -

messenger release

GPS -

GLOBAL

MOR -

mooring

DRF -

drifter

EN -

end of cast

RE -

recover mooring

LOR -

LORAN

DAILY LOG

OCEAN PHYSICS

INSTITUTE OF OCEAN SCIENCES

YEAR		MONTH		SHIP		CRUISE		PAGE		OF				
1999		OCTOBER		LAURIER		9925								
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
16	UN08	CTD	17:18	w/c	53	54 16.59	164 40.08		96m	90m				
16	UN18	CTD	18:18	w/c	54	54 12.11	164 32.74		116	110m				
16	UN28	CTD	19:11	w/c	55	54 08.00	164 25.28		83m	78m				
16	UN38	CTD	20:05	w/c	56	54 03.87	164 17.70		95m	89m				
16	UN48	CTD	20:54	w/c	57	53 59.58	164 10.60		80m	75m				
16	UN58	CTD	21:41	w/c	58	53 55.37	164 03.28		71m	68m				
16	UN68	CTD	22:30	w/c	59	53 51.50	163 55.8W		84m	77m				
16	UN78	CTD	23:22	w/c	60	53 47.20	163 48.61W		430m	420				
21	GI9	CTD	06:52	w/c	61	54 12.49	133 32.92		367m	357				Rainy! Strong winds
21	GI8	CTD	07:41	w/c	62	54 11.66	133 26.95		405m	397				
21	GI7	CTD	08:30	w/c	63	54 10.62	133 19.47		253m	246m				
21	GI6	CTD	09:13	w/c	64	54 09.71	133 12.73		77	70m				
21	GI5	CTD	09:39	w/c	65	54 09.24	133 09.53		56	49m				
21	GI4	CTD	09:57	w/c	66	54 09.11	133 08.65		53	47				
21	GI3	CTD	10:12	w/c	67	54 08.99	133 07.85		43	37				
21	GI2	CTD	10:26	w/c	68	54 08.83N	133 07.12W		43	37				Had To stop, wind over 52 kts
														Too much Wind to do
														GI1

CAST TYPE -

BOT -
CTD -
MOR -bottle cast
cid
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