

DAILY LOG BOOK

MISSION
NUMBER

2003-02

DATE:

From: FEB 24 to: FEB 28 / 03

VESSEL:

J. P. TULLY

PROJECT:

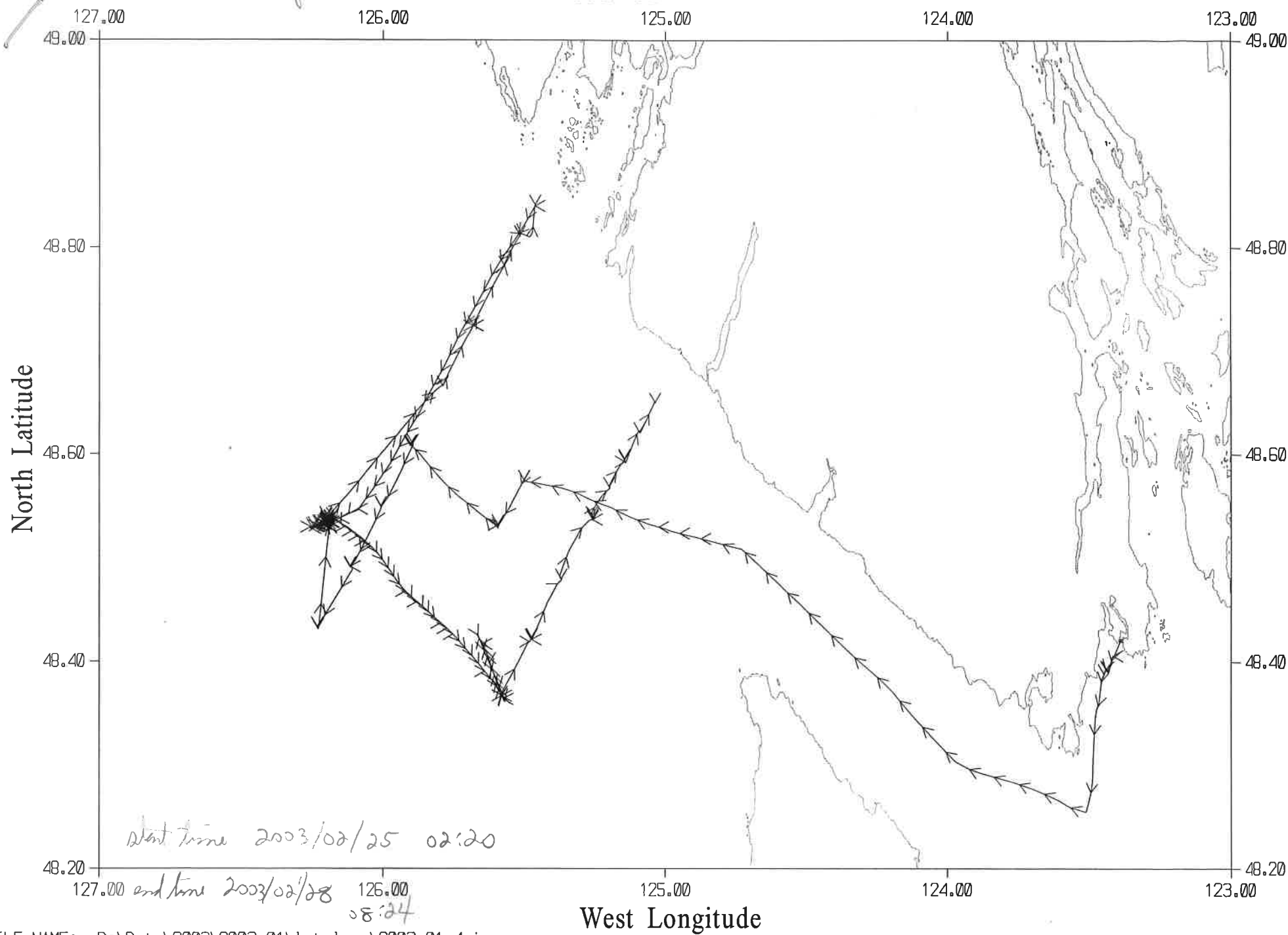
PHYTOPLANKTON / MOORINGS

INSTITUTE OF OCEAN SCIENCES
OCEAN SCIENCES AND PRODUCTIVITY DIVISION
SIDNEY, BC, CANADA

Tully

~~2003-01~~ noveltec

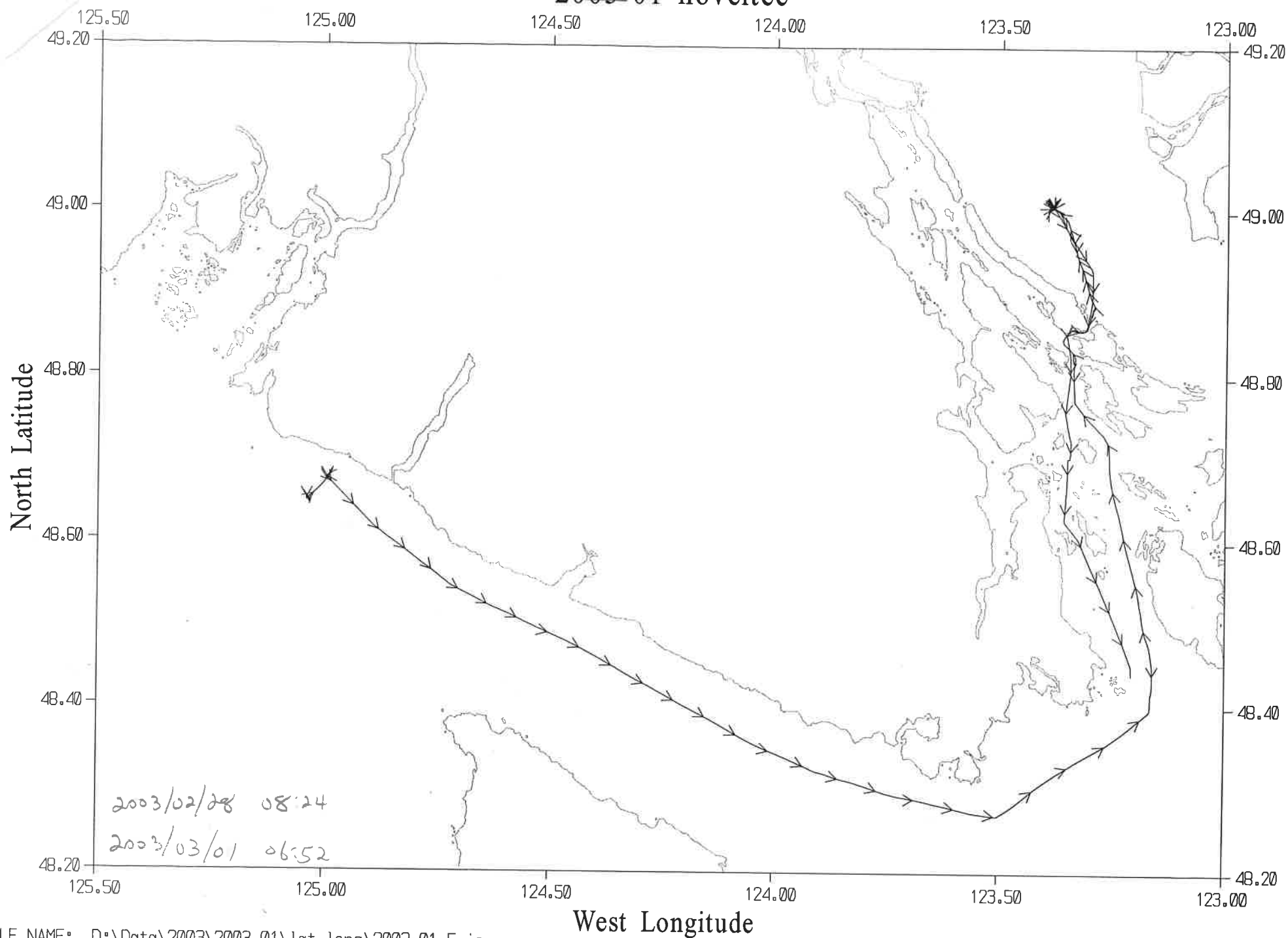
2003-02



4:44:24

2003-01 noveltec

2003-02



FILE NAME: D:\Data\2003\2003-01\lat_long\2003-01-5.ios

START TIME: 0

END TIME: 0

Captain: JOHN ANDERSON First Officer: Doug
Second Officer: MIKE Third Officer: MARK

Mission Participants / Agencies: 105/DVIC

Scientific Personnel:

Party Chief: ANGELICA PEÑA

Name	Watch	Cabin	Name	Watch	Cabin
ANGELICA PEÑA	#2	A	SERGEI VOSTOKOV	#3	F
MELANIE QUENIVILLE	#1	H	PETERI SARRINEN	#2	G
SHEILA TOEWS	#2	E			
BEVERLY HALL	#3	H			
STEPHANIE KING	#1	C			
DARREN TUELE	#1	B			
STEVE MINALY	#2	elect.			
JIM GOWER	#1	D			
DOUG MOORE	#3	F			
DAVID RICHMOND	#3	G			

Second leg of Mission:

Party Chief:

[illegible]

Data logging computer:

Data acquisition program:

CTD deck unit make: SeaBird model: 11 serial number: 0508

Primary CTD

Make: Seabird model: all serial number: 6550

Primary temperature serial number:

Primary conductivity serial number: 2280

Secondary temperature serial number: 2710

Secondary conductivity serial number: 3278

Transmissometer:

s/n: 498 DR

Fluorometer: Model Serapoint Cable gain: by 0.5 s/n: 2356 P, S or NO pump? NO

Oxygen sensor: _____
 Model: 0047 s/n: 651604 P, S or NO pump? NO

PAR sensor: Photophysical Model: 1777 s/n: 4565

Other sensors: SPAR - Surface s/n: 16504 P S or NO pump?

Other sensors: _____ s/n: _____

Other sensors: _____

s/n: _____

P, S or NO pump? _____

Other sensors: _____ s/n: _____
P, S or NO pump? _____

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number:

Primary conductivity serial number:

Secondary temperature serial number:

Secondary conductivity serial number:

Transmissometer: _____
Model: _____

Fluorometer: Model _____ Cable gain: _____ s/n: _____
P, S or NO pump? _____

Oxygen sensor: _____ Model: _____ s/n: _____

PAR sensor: _____ Model: _____ s/n: _____

Other sensors: _____ s/n: _____ P, S or NO pump? _____

Other sensors: _____
 s/n: _____
 P, S or NO pump? _____

Other sensors: _____
 s/n: _____
 P, S or NO pump? _____

Other sensors: _____ s/n: _____ P, S or NO pump? _____

CTD calibration bottle location (height above CTD in metres):

Water	Temp	Time
	60	12:00
	70	12:00
	80	12:00
	90	12:00
	100	12:00
	110	12:00
	120	12:00
	130	12:00
	140	12:00
	150	12:00
	160	12:00
	170	12:00
	180	12:00
	190	12:00
	200	12:00
	210	12:00
	220	12:00
	230	12:00
	240	12:00
	250	12:00
	260	12:00
	270	12:00
	280	12:00
	290	12:00
	300	12:00
	310	12:00
	320	12:00
	330	12:00
	340	12:00
	350	12:00
	360	12:00
	370	12:00
	380	12:00
	390	12:00
	400	12:00
	410	12:00
	420	12:00
	430	12:00
	440	12:00
	450	12:00
	460	12:00
	470	12:00
	480	12:00
	490	12:00
	500	12:00
	510	12:00
	520	12:00
	530	12:00
	540	12:00
	550	12:00
	560	12:00
	570	12:00
	580	12:00
	590	12:00
	600	12:00
	610	12:00
	620	12:00
	630	12:00
	640	12:00
	650	12:00
	660	12:00
	670	12:00
	680	12:00
	690	12:00
	700	12:00
	710	12:00
	720	12:00
	730	12:00
	740	12:00
	750	12:00
	760	12:00
	770	12:00
	780	12:00
	790	12:00
	800	12:00
	810	12:00
	820	12:00
	830	12:00
	840	12:00
	850	12:00
	860	12:00
	870	12:00
	880	12:00
	890	12:00
	900	12:00
	910	12:00
	920	12:00
	930	12:00
	940	12:00
	950	12:00
	960	12:00
	970	12:00
	980	12:00
	990	12:00
	1000	12:00

Time	Temp	Wind	Clouds	Pressure	Humidity	Visibility	Remarks
12:00	15.00	13.00	18.00				
13:00	15.00	13.00	18.00				
14:00	15.00	13.00	18.00				
15:00	15.00	13.00	18.00				
16:00	15.00	13.00	18.00				
17:00	15.00	13.00	18.00				
18:00	15.00	13.00	18.00				
19:00	15.00	13.00	18.00				
20:00	15.00	13.00	18.00				
21:00	15.00	13.00	18.00				
22:00	15.00	13.00	18.00				
23:00	15.00	13.00	18.00				
24:00	15.00	13.00	18.00				

[illegible]

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month Feb					Year 2003			Ship JP Tully				Cruise ID 2003-02		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
24	MC	1910	ROS		1	48 23.46	123 26.23	57						
		1913				48 23.44	123 26.30		50	1-11	11	DA	✓	-O2 sensor not added to config.
		1923				48 23.50	123 26.41							-watch values on 2nd cast to see if I did it right. (S.T)
														-NEVER MIND -
25	LCB3	0424	CTD	BE	2	48 34.98	125 30.10	127	115					NO O2 PROBE ON CTD!
				BO		48	125							
		0432		EN.		48 34.98	125 30.06							
25	LCB3	0457	NET.	BO	3	48 34.98	125 30.02	127	115					BO 40 TO 115
25	LCB4	0552	NET.	BO	4	48 34.82	125 35.60	79	70					BO 50 TO 70
25	LCB4	0610	CTD	BE	5	48 31.82	125 35.60	79	70					
				BO		48 31.8	125 35.6							
		0616		EN		48 31.8	125 35.6							

DAILY LOG

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Month					Year			Ship		Cruise ID				
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
25	LC06	0755	CTD/R	BE	006	48 36.48	125 54.05	93	83	12-24				
		0802		BO		48 36.50	125 54.0							
		0824		EN		48 36.50	125 54.21							
25	LC06	0842	NET	BO	007	48 36.50	125 53.57	92	83					BONGO TO 83 m
25	LC07	0950	CTD	BE	008	48 32.96	126 00.49	130	120					
		0953		BO		48 32.93	126 00.49							
		0956		EN		48 32.94	126 00.47							
25	LC08	1046	CTD/R	BE	009	48 29.49	126 07.11	199	190	25-38				
		1050		BO		48 29.50	126 07.11							
		1116		EN		48 29.47	126 07.02							
25	LC08	1142	NET	BO	010	48 29.45	126 06.55	199	190					BONGO TO 190 m
25	LC09	1250	NET	BO	011	48 25.919	126 13.766	606	250					BONGO TO 250

Cast type:

- BOT = bottle cast, no CTD
- CTD = CTD without Rosette
- ROS = Rosette plus CTD

USW = sea water loop

- MOR = mooring
- NET = net haul
- DRF = drifter

bottle firing method:

- US = up / stop
- UN = up / no stop
- DN = down / no stop

Time Code

- BE = beginning time of cast
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DE = deployment time

- MR = messenger release time
- RE = recover mooring time

Transmissometer to be cleaned for each cast, do not use Ammonia products

22 March 2002
Daily_log_book.doc

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEB					Year 2003			Ship TULLY				Cruise ID 2003-02		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
25	LC09	1312	CTD/R	BE	012	48 25.99	126 13.79	610	600	39-58				SEASAVE CRASHED AT
		1318		BO		48 26.00	126 13.77							END OF CAST (STOP XCR →
		1347		EN		48 25.95	126 13.73							BEFORE PUMP TURNED OFF)
25	BID1		CTD/R	BE	013	48 31.799	126 11.22	381		59-66				crash @ bottom
		16:16		BO	014	48 31.802	126 11.221							changed up cast file #14
		16:31		EN		48 31.817	126 11.233							
25	BID1	2252	RADIO	BE	15	48 32.274	126 11.928							
		2255		BO		48 32.285	126 11.928							
		2257		EN										
		2259		BE	16									
		2301		BO		48 32.318	126 11.978							
		2303		EN		48 32.330	126 11.997							
		2306		BE	17	48 32.337	126 12.00							
		2307		BO		48 32.34	126 12.01							
		2309		EN		48 32.35	126 12.03							
25	LAR	2330			18									- zero test, up, down +
														ref with caps on

Cast type:

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ROS = Rosette plus CTD

USW = sea water loop
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22 March 2002
Daily_log_book.doc

Additional comments

25/02/2003

0530UTC

SIMRAD 12 KHz SOUNDER HAVING SIGNIFICANT DIFFICULTIES TRACKING ROSETTE TRANSPONDER.
HAVEN'T SEEN A SINGLE USABLE TARGET. BOTTOM SOUND NONE TOO SWIFT NEITHER. TRANSPONDER
SEEMS TO BE WORKING OK, BUT AUDIO TEST SOMEWHAT SUSPECTIVE.

0545 UTC

WEATHER DEAD CALM, LIGHT FOG/MIST, VERY GENTLE SWELL FROM THE EAST.

Month					Year			Ship				Cruise ID		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
25	B101	2340	ROS	BE	19	48°32.16	126°11.81	456			22	ST	✓	
		2348		BO		48°32.14	126°11.77		452	67-88				
26		0012		EN		48°32.17	126°11.66							
26	LC05	0221	CTD	BE	20	48°39.96	125°47.39	62	52					
		0222		BO		48°39.96	125°47.42							
		0223		EN		48°39.97	125°47.42							
26	LC05	0238	NET	BO	21	48°39.98	125°47.43	62	50					BONGO to 50m.
26	LC04	0339	CTD/R	BE	22	48°43.45	125°40.79	168	155					
		0341		BO		48°43.45	125°40.79							
		0416		EN		48°43.49	125°40.70							
26	LC03	0512	CTD	BE	023	48°46.96	125°34.30	136	125					
		0516		BO		48°46.97	125°34.29							
				EN		48	125							

DAILY LOG

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Month FEB					Year 2003			Ship TULLY				Cruise ID 2003-02			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
26	LC02	558	CTD/R		024	48 48.70	125 30.99	110	100	-117				Gk. 1110 m depth in	
						48	125							harder file, should be	
		0609				48 48.71	125 31.01							110 m	
26	LC01		CTD/R		025	48 50.41	125 27.69	96	90	118-130					
		0705				48 50.41	125 27.69								
		0713				48 50.38	125 27.69								
26	B10 1	1550		BE	26	48 32.119	126 11.843	447		131-143	13		✓	Post cast	
		1604		BO		48 32.128	126 11.811		445						
26	B10	0847PS	Radio		26a	48 32.05	126 11.914							1 note original name B101F	
26	B10 1	1747		BE	27	48 31.848	126 11.216	372						wrong position	
26	B10 1	1800	CTD/ROS	BE	27	48 32.112	126 11.843	450		144-163				Deep Cast	
		1811		BO		48 32.138	126 11.839		446						
		1840		EN		48 32.129	126 11.811								
26	B10 1	2038	Radio		28	48 32.096	126 11.792	420	70					B101J	
		2047			29	48 32.036	126 11.834	420	20					B101K	
		2054			30	48 32.004	126 11.834							B101L	
		2112			31	48 32.032	126 11.753							Dark - short + caps on.	
26	B10 1	2132	hydro	BE	32	48 32.023	126 11.857	430	35	164-165	2			1 minute B101M	
		2143		BO										2 note	

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USW = sea water loop
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• bottle firing method:
• US = up / stop
• UN = up / no stop
• DN = down / no stop

• Time Code
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22 March 2002
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Additional comments

¹note: 0859 PST 26b Radio casts in triplicate same station as 26a original name: B101 G
0910 PST 26c original name: B101 H

Naming procedure in logging program (Satview) is to append an incrementing alphabetical character. i.e. B101A, B101B...

That naming standard will be in the header file

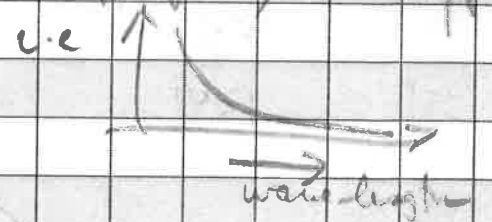
External file name will be B101-xxx xxx consecutive numbers

-  connector does not reconnect as "smoothly" as reg serial port, need to reconnect sometimes
- Satview will ask if dant is disconnected.

1133 PST - Light breeze with a small swell from the west. Patchy cloud, seems to be increasing, the morning was clearer.

1320 PST - Light breeze + small swell very low frequency - sea of okhotsk. Clearing, mostly sunny

²note: Reference sensor seems to be picking up noise on maybe, the cable resulting in broadband variability when shuttered down. As opposed to dant which displays stable readings with low frequency roll-off



DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>February</i>					Year <i>2003</i>			Ship <i>Tully</i>		Cruise ID <i>2003-02</i>				
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
26	BT01	2153	hydro	EN	32	48 32.137	126 11.807	435	70	BT01 N				} look for shading of surface ref!
26	BT01	2210	radio		33	48 32.145	126 11.790	435	75	BT01 O				
		2219			34	48 32.108	126 11.786		70	BT01 P				
		2231			35	48 32.061	126 11.776							
26	BT01	2322	CTD/R.	BE	36	48 32.10	126 11.76	442	430	166-185				
				BO										
				EN		48 32.09	126 11.78							
	1	1525	Radio		37	48 32.046	126 11.567		70	BT01 Q				Some shading of ref
		1535	Radio		38	32.007	11532		93	BT01 R				
		2	Radio		39	48 32.069	126 11.414		95	BT01 S				
27	BT01	0205	Radio		40	48 32.149	126 11.361	439	63	BT01 T				} SUNSET, A BEAUTY, BUT PROBABLY VAST DIFFERENCES IN THE TRIPLICATES HAD SOME TROUBLE GETTING DOWN CUZ OF SHIP DRIFT,
27	BT01	0210	Radio		41	48 32.165	126 11.265		35	BT01 U				
27	BT01	0216	Radio		42	48 32.197	126 11.125		76	BT01 V				
27	LB09	1542	BE		43	48 21.998	125 34.780	150		186-200				
		1545	BO			48 22.00	125 34.782							
			EN											
27	LB09		Radio		44	48 22.008	125 34.812		82					
		1632	Radio		45	48 21.976	125 34.767	150	100					

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22 March 2002
Daily_log_book.doc

Additional comments

1433 PST - Completely clear and sunny. Ship shaded the ref sensor, but was corrected before coast. Need longer cable for ref sensor.

Month					Year			Ship				Cruise ID			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
27	LBØ9	1640	Radio		46	48 21.982	125 34.764	150	83					LCØ9C	
27	LBØ8	1739	CTD/R	BE	047	48'25.33	125'28.63		0						
		1742		Bo		48'25.33	125'28.62	140		201-214		S.T.	✓		
		1755		EN		48'25.31	125'28.56		130						
27	LCØB	1811	Radio		48	48 25.36	125 28.374	137	84					LCØBA	
	↗	1818	Radio		49	48 25.363	125 28.322	136	80					LCØBB	
		1820	Radio		50	48 25.371	125 28.272	136	76					LCØBC ; possible	
error: actually the station is LBØB, thus error propagates to the next page and is presumably in the header															
files of the CTD data. It is in the radiometer files, but <u>not</u> on the water sample sheets															
27	LCØ7	1916	CTD	BE	51	48 28 829	125 22 049	152							
	LBØ7	1922		Bo		48 28 811	125 22 116		149						
				EN		48	125								
27	LCØ6	2014	Ros/CTD	BE	52	48 32 206	125 15 505	114		215-226				Light Dant Cast	
	LBØ6	2021		Bo		48 32 301	125 15 478		102						
	LBØ6	2032		EN		48 32 384	125 15 450								
27	LCØ6	2052			53	48 32.244	125 15.607	115	70					LCØ6A	
LBØ6	LCØ6				54			~115	~20					LCØ6B - stopped early	
LBØ6	LCØ6				55			~115	~20					because tilt - LCØ6C	

PST.

Additional comments

1035 27 FEB/03 WEATHER CONDITIONS : SUNNY, 1/2-m CHOP, 2-3 m SWELLS
PARTLY CLOUDY.
TEMP 5°C

1241 - SOME HIGH THIN CLOUDS, LIGHT WIND, 'WHAT HE SAID

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month FEBRUARY					Year 2003			Ship J.P. TULLY			Cruise ID 2003-02			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
27	LC6		Radio		56			115	70					LC66D
	LB6													
27	LC5	21	CTD	BE	57	48 34.084	125 11.993	103		127-238				
	LB5	2150		BO		48 34.09	125 11.49		100					
				EN		48	125							Computer crash
27	LB04	2225	CTD/R	BE	58	48 35 693	125 08 695	110						CTD rosette
		2232		BO		35.694	08.700							
		2242		EN		35 701	08 727							
27	LB04	2256	Radio		59	48 35.127	125 08.75	100	80					LB04A
		2300	Radio		60	48 35.629	125 08.779	111	76					LB04B
		2306	Radio		61	48 35.590	125 08.715	112	75					LB04C
27	LB03	23:43	CTD	BE	62	48 37.29	125 05.57	92	82.					
		23:45		BO		48 37.28	125 05.57							
		23:47		EN		48 37.28	125 05.57							
28	LB02	0012	Radio	BE	63	48 38.926	125 02.178	55	46					LB02A
		0031	Radio	BO	64	48 38.863	125 02.123	55	46					LB02B
		0034	Radio	EN	65	48 38.827	125 02.039	55	46					LB02C

PST.

Additional comments

1410

27 FEB/03

PARTLY CLOUDY

DAILY LOG

Ocean Sciences and Productivity Division

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Month FEBRUARY					Year 2003			Ship JP Tully			Cruise ID 2003-02			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
28	LB02	0057	CTD/R	BE	66	48 38.97	125 02.38	55	40	239-248				
		0059		BO		48 38.96	125 02.40							
		0105		EN		48 38.93	125 02.38							
28	LB01	0146	ROS	BE	67	48'46.44	124'59.59	29		249-253				
		0148		BO		48'40.75	124'59.61							
		0152		EN		48'40.47	124'59.64		21					
28	BIO 2	1549	CTD/ROS	BE	68	49 00 43.6	123 23 10.6	272		254-273	20			PvsI cast
				BO										
				EN										
28	BIO 2		Radio		69			270	60					BIO2A
		1645	Radio		70	49 0.301	123 23.521	270	82					BIO2B
		1649	Radio		71	49 0.286	123 23.587	270	70					BIO2C
28	BIO2-C	18:20	mooring		72	49 00.398	123 23.290	272						

Cast type:
BOT = bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD

USW = sea water loop
MOR = mooring
NET = net haul
DRF = drifter

• bottle firing method:
• US = up / stop
• UN = up / no stop
• DN = down / no stop

• Time Code
• BE = beginning time of cast
• BO = bottom time of cast
• EN = end of cast time

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

Transmissometer to be cleaned for each cast, do not use Ammonia products

22 March 2002
Daily_log_book.doc

PST.

Additional comments

1530

27 FEB /03

SEA STATE 2 m SWELLS, NO CHOP

DIFFUSE LIGHT - MOSTLY CLOUDY - STRATUS

TEMP ~ 8°C

WIND ~ 1 KTS