

DAILY LOG BOOK

MISSION
NUMBER

2008-10

DATE:

From: 31 AUG/08 to: 8 SEPT/08

VESSEL:

J. P. TULLY

PROJECT:

LA PEROUSE / WCVI / SCOTT IS.

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

Captain: MURRAY Mc GREGOR First Officer: DUNCAN McCULLUM
Second Officer: DOUG MURDOCK Third Officer: ELINA E. IETEA

Mission Participants / Agencies: DFO

Scientific Personnel: Doug VSELAND
Party Chief:

[illegible][illegible]

Data logging computer: HP COMPAD

Data acquisition program: SENSE 7.16

Primary CTD
 make and model: EEC serial number: 0424

Make: <u>SEABIRD</u>	model: <u>911</u>	serial number: <u>0443</u>
Primary temperature	serial number: <u>4054</u>	
Primary conductivity	serial number: <u>1766</u>	
Secondary temperature	serial number: <u>34700</u>	
Secondary conductivity	serial number: <u>2173</u>	
Transmissometer:	Model: <u>CHL55A</u>	s/n: <u>1005DR</u>
Fluorometer:	Model <u>SEAPOINT</u>	Cable gain: <u>10X 0.75</u>
Oxygen sensor:	Model: <u>SEABOARD</u>	s/n: <u>2228</u>
PAR sensor:	Model: <u>IRADIANCE</u>	s/n: <u>1176</u>
Other sensors:	Model: <u>PRESSURE DIQUARTZ</u>	s/n: <u>4656</u>
Other sensors:	Model: <u>ALTIMETER</u>	s/n: <u>63507</u>
Other sensors:		s/n: <u>1152</u>
Other sensors:		s/n: <u></u>
Other sensors:		s/n: <u></u>
Other sensors:		s/n: <u></u>

Secondary CTD

Make: _____ model: _____ serial number: _____

Primary temperature serial number: _____

Primary conductivity serial number: _____

Secondary temperature serial number: _____

Secondary conductivity serial number: _____

Transmissometer: _____ Model: _____ s/n: _____

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

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

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

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

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

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

Rosette Setup:

Number of bottles: 24
Manufacturer: GO.
Volume of Bottles (litres): 10 LITRES

Winches:

1. Make: <u>HAWBOLT</u>	Model: _____	Serial #: <u>17029</u>	used for: <u>ROSETTE</u>
2. Make: <u>HARRISON</u>	Model: <u>589</u>	Serial #: <u>575</u>	used for: _____
3. Make: _____	Model: _____	Serial #: _____	used for: _____

Comments on performance during cruise: _____

Salinometer:

Make: PORTASAL Model: 8410A Serial #: 68627

Comments on performance during cruise: _____

DON'T USE

Oxygen Kit # 4

BRINKMAN COLORIMETER + BR. DOSIMAT

Comments on performance of kit and chemicals: _____

INITIAL PROBLEMS WITH CHEMICALS - CLEANED / RE-ASSEMBLED DOSIMAT - THEN SYSTEM WORKED FINESSLY (H.M.)

Thermosalinograph System:

Program: SEASAVE Version: 5137M
Sampling interval (seconds): 60 30
Fluorometer sensor serial number: W535-713F

Comments on performance during cruise: _____

ADCP Setup:

Computer time zone: _____ User Exits: Name: _____ Exit Points: _____
Sampling interval (seconds): _____ Name: _____ Exit Points: _____
Bin Length (2°x): _____ Name: _____ Exit Points: _____
Pulse Length: _____ Work File: _____
Buffer (bytes): _____
Gyro Offset: _____

NOT WORKING.

Comments: _____

CTD Test Cast Information

Test Cast at IOS Jetty? (optional) yes ☐ no ☒

Comments: (i.e. how did everything work??) _____

Test cast in Saanich Inlet? (recommended) yes ☒ no ☐

no, give reason: _____

Comments: (i.e. how did everything work??) _____

CTD pressure reading on deck (db): See 2008-24 (a35)
Should be 0.0 db $\pm$ 0.5)

Pumps working? yes ☒ no ☐

e.. Was the red LED display on the deck unit 0011 and not still 0010?)

Secondary Temp- Primary Temp: _____

Average from the Mixed Region)

Secondary Salinity- Primary Salinity: _____

Average from the Mixed Region)

Additional Comments: _____

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year				Ship				Cruise ID			
SEPTEMBER				2008				J. P. TULLY				2008-10			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
1	SIO3	0222	BE	ROS	US	1	48° 35.49	123° 30.06	227				DMR	✓	
		0225	BO				48° 35.51	123° 30.06		215	1-11	11			
		0239	EN				48° 35.48	123° 30.06							
1	UWL	0700		USW			48 21.344	123 25.554	80.4		Loop 1				Loop CHL 9 hours in Ridge
1	LB01	1438	BE	ROS	US	2	48° 40.49	124° 59.53	32					✓	PAR ON
		1441	BO				48° 40.51	124° 59.55		25	12-15	4			
		1447	EN				48° 40.57	124° 59.60							
1	LB02	1520	BE	ROS	US	3	48° 39.05	125° 02.55	55				DLAM	✓	
		1521	BO				48° 39.06	125° 02.56		45	16-20	5			
		1526	EN				48° 39.08	125° 02.65							
1	LB03	1556	BE	ROS	US	4	48° 37.31	125° 05.64	93				DLAM	✓	
		1558	BO				48° 37.31	125° 05.64		85	21	1			
		1559	EN				48° 37.32	125° 05.65							
1	LB04	1629	BE	ROS	US	5	48° 35.68	125° 08.79	111				DLAM	✓	Huge # TS PRIM SIZ
		1631	BO				48° 35.69	125° 08.81		102	22-28	7			
		1638	EN				48° 35.69	125° 08.91							

Cast type:

BOT = bottle cast, no CTD
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DRF = drifter

bottle firing method:

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DAILY LOG

Ocean Sciences and Productivity Division

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Month <u>SEPTEMBER</u>				Year <u>2008</u>			Ship <u>J.P. TULLY</u>				Cruise ID <u>2008-10</u> <u>P2</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
1	E1	1734	BE	ROS		6	48° 31.76	125° 03.87	117						
		1736	BO				48° 31.77	125° 03.90		106	29	1	DLAM	✓	+ Loop
		1739	EN				48° 31.79	125° 03.94							
1	E1	1751	BE	NET		7	48° 31.72	125° 03.82	117						
		1755	BO				48° 31.71	125° 03.85		117					Bongo
		1759	EN				48° 31.71	125° 03.84							
1	LB05	1855	BE	ROS		8	48° 34.076	125° 12.020	105						
		1859	BO				48° 34.099	125° 12.030		98	30	1			
		1902	EN				48° 34.122	125° 12.034							not taken from Loop
1	LB06	1939	BE	ROS		9	48° 32.240	125° 15.604	116					✓	
		1942	BO				48° 32.245	125° 15.631		106	31-37	7			No Trip #7
		1952	EN				48° 32.31	125° 15.69							
1	C1	2032	BE	ROS		10	48° 28.933	125° 15.275	154						
		2034	BO				48° 28.985	125° 15.283		145	38	1		✓	bottle @ 5m
		2038	EN				48° 28.999	125° 15.265							tripped 7 bottles
	C1	2050	BE	NET		11	48° 28.919	125° 15.311							#7 no Fire
		2055	EN				48° 28.917	125° 15.312	154						Bongo
									150						

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C1 - Rosette bottle @ 5m. Tripped 7 bottles after cleaning Pylon w/hot water. Bottle #7 still no trip. - Try again C2

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Month September				Year 2008			Ship JP TULLY				Cruise ID 2008-10 P3				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
1	C2	2150	BO	NET		12	48 25.436	125 07.727	137						Bongo
		2153	EN	1			48 25.443	125 07.719		130					
1	C2	2203	BE	ROS		13	48 25.422	125 07.772							
		2206	BO	1			48 25.433	125 07.735	140		39	1			bottle @ 5m
		2209	EN	1			48 25.445	125 07.715		127					tripped 8 bottles
1	C3	2325	BE	ROS	U.S.	14	48 23.41	125 20.79	123		40	1		✓	BOT @ 5m
		2327	BO				48 23.52	125 20.79		113					called 0011
		2330	EN				48 23.57	125 20.80							
	C3	2338	BE	NET		15	48 23.56	125 20.80		118					BONGO
1		2344	EN				48 23.52	125 20.73							
2	LB07	0037	BE	NET		16	48 28.70	125 22.02	157						BONGO
		0041	BO				48 28.70	125 22.02		150					
2	LB07	0055	BE	ROS	U.S.	17	48 28.70	125 22			41	1		✓	BOT @ 5m
			BO				48 28.70								
		0101	EN				48 28.70	125° 22 06							
2	B8	0205	BE	ROS	U.S.	18	48° 34.50	125° 29 46	119		42	1		✓	BOT @ 5m
		0210	BO				48° 34 47	125° 29 43		109					
		0215	EN				48° 34 44	125° 29 49							

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C2 - Washed pylon, twisted lanyard on bottle 7 to shorten & alter angle
to lanyard hook. Tripped 8 bottles, only 7 tripped, no bottle #7
pulled latch mech. off and soaked hot water. Scrubbed pylon solenoids - rusty
#7. #7 SOLINOID NO GOOD

C3 #7 STILL NOT FIRING - SOLINOID NO GOOD - CAN'T FIND SPARE PYLON

BUBBLE NET? GHT 0130 ON ALL KHZ BETWEEN 1307 → 1318

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Month <i>SEPT</i>				Year <i>2008</i>			Ship <i>J.P. TULLY</i>				Cruise ID <i>2008-10 P4</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
2	B8	0224	BC	NET		19	48° 34.43	125° 29.97	135						BONGO
		0227	50				48° 34.45	125° 29.97		130					
2	B7		BC	NET		20									
		0312	BO				48° 32.04	125° 35.40	78	72					→ already on way up not @ bottom
		0313	EN				48° 32.02	125° 35.41							BOT @ 5M
2	B7	0328	BE	ROS		21	48° 32.01	125° 35.45	78				DLAM	✓	
		0329	BO				48° 32.03	125° 35.44		68	43	1			
		0332	EN				48° 32.06	125° 35.43							
2	LB08	0507	BE	ROS		22	48° 25.27	125° 28.63	140				DLAM	✓	
		0510	BO				48° 25.29	125° 28.62		130	44-53	10			
		0520	EN				48° 25.28	125° 28.61							
2	LB08	0534	BE	NET		23	48° 25.28	125° 28.62	140						
		0538	BO				48° 25.28	125° 28.64		130					
		0540	EN				48° 25.30	125° 28.63							
				TRIP		TD		BAM FIELD							
2	LC01	1637	BE	ROS		24	48° 50.46	125° 27.86	96					✓	
		1639	BO				48° 50.47	125° 27.89		86	54-61	8	DLAM		
		1648	EN				48° 50.51	125° 28.01							

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Sept 1 local

1300 - $\approx$ 2300 break off Science, run to Bamfield for medical emergency

Sept 2 - Bamfield - 733 away

0200 - Head to Helby Ig

0300 - Anchor MacKenzie Anchorage

- 733 aboard

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>SEPT.</i>				Year <i>2008</i>			Ship <i>J.P. TULLY</i>				Cruise ID <i>2008-10 P5</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
2	LC02	1721	BE	ROS	US	25	48 48.69	125 30.99	110						
		1723	Bo				48 48.69	125 31.02		100	62-69	8	DLAM	✓	
		1730	EN				48 48.71	125 31.12							
2	LC03	1759	BE	ROS	US	26	48 46.96	125 34.33	135					✓	
		1801	Bo				48 48.96	125 34.37			70	1	DLAM		+ LOOP
		1804	EN				48 46.96	125 34.43							
2	LC04	1852	BE	ROS	US	27	48 43.472	125 40.954	167						
		1856	Bo				48 43.469	125 40.986		160	71-80	10			
		1911	EN				48 43.459	125 40.925							
2	LC05	2016	BE	ROS		28	48 39.96	125 47.676	66						
		2019	Bo				48 39.965	125 47.68		56	81	1			bottle @ 5m
		2022	EN				48 39.954	125 47.678							
2	LC05	2036	Bo	Net		29	48 39.910	125 47.657	66						1336 local time
		2040	EN				48 39.917	125 47.679		63					Bongo
	LC06	2126	Bo	Net		30	48 36.518	125 54.037		94					Bongo
		2133	EN				48 36.525	125 54.010							
	LC06	2151	BE	ROS		31	48 36.533	125 54.970	94						
		2153	Bo				48 36.550	125 54.011			82-88				no communication @
		2202	EN				48 36.500	125 54.064							bottom - re cast

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>SEPT</u>				Year <u>2008</u>				Ship <u>J.P. TULLY</u>				Cruise ID <u>2008-10</u> <u>p6</u>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments	
2	LC07	2248	BE	ROS	US	33	48 33.053	126 00.372	130		89	1				
		2251	BO				48 33.06	126 00.32		120						
		2254	EN				48 33.06	126 00.35								bottle @ 5m
3	LC08	0042	BE	ROS	US	35	48 29.41	126 07.00	199	189	90-101	12				
		0049	BO				48 29.37	126 07.07								
		0105	EN				48 29.39	126 07.13								
3	LC08	0115	BO	NET		36	48 29.39	126 07.01	200	190						
		0123	EN				48 29.32	126 07.12								Bongo
3	A2	0215	BO	NET		37	48 22.65	126 03.75	353							Bongo
		0229	EN				48 22.69	126 03.77		250						
3	A2	0245	BE	ROS	US	38	48 22.67	126 03.75	355	345	102	1				Bore 5m
		0250	BO				48 22.71	126 03.75								
		0258	EN				48 22.69	126 03.79								
3	LC09	0403	BE	ROS	US	39	48 25.94	126 13.65	601		103-119	17		✓	PAR OFF	
		0412	BO				48 25.91	126 13.67		592						
		0434	EN				48 25.95	126 13.65								
3	LC09	0450	BO	NET		40	48 25.92	126 13.6								
		0456	EN				48 25.87	126 13.67		250						

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→ Started archiving @ surface, below 10 L_g

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Month SEPT				Year 2008			Ship J.P. TULLY				Cruise ID 2008-10 P 7				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
3	LC10	0547	BE	ROS		41	48° 22.34	126° 20.21	1250					✓	
		0607	BO				48° 22.42	126° 20.16		1240	120	1	DLAM		
		0626	EN				48° 22.37	126° 20.17							
3	LC11	0720	BE	ROS		42	48° 18.876	126° 26.639	1458					✓	
		0741	BO				48° 18.900	126° 26.528		1485	121-140	20			Smoke Stack fumes
		0815	EN				48° 18.890	126° 26.658							
3	LC11	0835	BO	Net		43	48° 18.944	126° 26.677							Bongo
		0840	EN				48° 18.942	126° 26.669		250					
3	LC12	1005	BO	Net		44	48° 15.000	126° 39.980	2010						Bongo
		1015	EN				48° 15.006	126° 39.947		250					
3	LC12	1030	BE	ROS		45	48° 15.004	126° 39.960	2522					✓	
		1102	BO				48° 14.992	126° 39.977			141	1			
		1126	EN				48° 14.988	126° 39.866							
3	LC12	1228	BE	Net		46	48° 15.0	126° 39.9							
		1253	BO				48° 15.0	126° 39.9							Multi Net
		1309	EN				48° 14.94	126° 40.03							

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Sept 3 2008

0000 - TSG com port unable to establish - Dug took it!!

LCU - Smoke on deck from stack during sampling.

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Month <i>SEPT</i>				Year <i>2008</i>			Ship <i>TULLY</i>				Cruise ID <i>2008-10 p8</i>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments	
							Latitude	Longitude								
3	LD04	1908	BE	ROS	US	47	48 53 219	125 56 945	63						PAR ON	
		1911	BO				48 53 200	125 56 940		55	142-146	5		✓		
		1917	EN				48 53 165	125 56 944								
	LD04	1928	BO	Net		48	48 53 147	125 56 998	63						Bongo	
		1931	EN				48 53 161	125 56 990								
	LD04	2001	BE	Net		49	48 53 201	125 57 242	65							
		2006	BO				48 53 278	125 57 388		60m wire out + tow					Tucker - 60m wire out	
		2020	EN				48 53 495	125 57 993								
	LD02		BO	Net		50	48 58 389	125 47 111	46						Bongo	
		2135	EN				48 58 423	125 47 045								
	LD02	2145	BE	ROS		51	48 58 450	125 47 028	44					✓		
		2147	BO				48 58 480	125 47 034			147-151					
		2153	EN				48 58 508	125 47 051		36						
4	LG01	0520	BE	ROS		52	48 20 49	126 34 94	53		152-156	5	DLAM	✓	ROS	
		0526	BO				48 20 48	126 34 94		43						
		0531	EN				48 20 46	126 34 96								
4	LG02	0607	BE	ROS		53	48 18 64	126 38 11	100				DLAM	✓		
		0609	BO				48 18 67	126 38 06		86	157-164	8				
		0617	EN				48 18 80	126 38 01								

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

Daily_log_book.doc

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month SEPTEMBER				Year 2008			Ship J. P. TULLY				Cruise ID 2008-10 p 9				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
4	LG02	0626	BE	NET		54	49 18 65	126 38 15	100						
		0629	BO				49 18 68	126 38 06		90					
		0631	EN				49 18 70	126 37 99							
4	LG03	0819	BE	ROS		55	48 15 012	126 43 672	126		165			✓	
		0824	BO				48 15 055	126 43 549		111		1			bottle @ 5m
		0829	EN												
4	LG04	0934	BE	ROS		56	49 11 386	126 49 279	146		166-175	10		✓	school of fish @ stern - NH4?
		0938	BO				49 11 362	126 49 208							
		0949	EN				49 11 194	126 49 090							
4	LG04	1009	BO	Net		57	49 11 303	126 49 379	146						Bongo
		1013	EN				49 11 305	126 49 374		140					
4	LG05	1120	BE	ROS		58	49 07 327	126 55 354	278		176	1		✓	Bot @ 5m
			BO												
		1130	EN				49 07 377	126 55 491							
4	LG06	1217	BE	ROS		59	49 03 464	127 01 230			177-194	18		✓	
		1234	BO				49 03 49	127 01 21							
		1303	EN				49 03 46	127 01 03							

Cast type:

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Sept 4

LGO2 - Waiting for traffic Midnite - 0045 then on to LGO3

LGO4 - Lots of smoke on deck from stack during sampling.
Bow thruster issues

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>SEPTEMBER</i>				Year <i>2008</i>			Ship <i>J.P. TULLY</i>				Cruise ID <i>2008-10</i> <i>p10</i>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments	
							Latitude	Longitude								
4	LG07	1404	BE	ROS	US	60	48° 59.35	127° 07.15	1752		195	1			Bot @ 5m + Loop	
		1434	BO				48° 59.40	127° 07.18		1750					PAR OFF	
		1453	EN				48° 59.38	127° 07.30							sponder 1756 10m depth 1744	
4	LG07	1510	BE	NET		61	48° 59.39	127° 07.19	1751							
		1518	BO				48° 59.43	127° 07.32		250					260 wire out	
		1523	EN				48° 59.49	127° 07.41								
4	LG08	1645	BE	ROS	US	62	48° 55.29	127° 13.23	2064		196	1	DLAM	✓		
		1705	BO				48° 55.29	127° 13.23		2005						
		1725	EN				48° 55.30	127° 13.24								
4	LG09	1820	BE	ROS	US	63	48° 51.19	127° 19.38	2057				DLAM	✓		
		1851	BO				48° 51.296	127° 19.272		2005	197-217	21			Rosette: 1900m came up? then returned	
		1937	EN				48° 51.215	127° 19.306							2005m	
4	LG09	1954	BO	Net		64	48° 51.246	127° 19.405	2057						Bongo	
		1958	EN				48° 51.290	127° 19.382		250					Bongo	
5	L13P8	0304	BE	NET		65	48° 48.49	128° 16.57	2074							
		0311					48° 48.52	128° 16.64		250						
		0316					48° 48.56	128° 16.67								

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LG09 - Brought rosette up from 2005m, to 1900m then realised this STN was rosette not CTD
returned to 2005m

LG09 - 2000 UTC / 1300 local - Depart LG line for LBP8

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month SEPT				Year 2008			Ship TULLY				Cruise ID 2008-10 1011				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
5	LBP8 cont	0328	BE	ROS	US	66	48°48.61	128°16.68	2075				DLAM	✓	with cups on!
		0355	BO				48°48.63	128°16.76		2005	218	1			
		0422	EN				48°48.62	128°16.75							
5		0515	BE	NET		67	49°48.61	128°16.77	2072			5 NETS			Multinet
		0553	BO				49°48.63	128°16.84		1004					
		0617	EN												
5	LBP7	0711	BE	ROS		68	49°52.402	128°11.098	2179						
		0737	BO				49°52.398	128°11.088		2005	219-239	21		✓	
		0819	EN				49°52.412	128°10.957							
		0840	BO	net		69	49°52.436	128°11.256	2179						Bongo
		0846	EN				49°52.432	128°11.236		250					
5	LBP6	0941	BE	ROS		70	49°56.189	128°05.480	902						
		0954	BO				49°56.194	128°05.492		890	240	1			
		1009	EN				49°56.201	128°05.560							
5	LBP5	1104	BE	ROS		71	49°59.97	128°00.06	1280				HTSM		
		1114	BO				49°59.96	128°00.05		1270	241-259	19		✓	
		1142	EN				49°59.88	127°59.89							
5	LBP5	1148	BE	NET		72	49°59.88	127°59.89	1280	250					

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>September</i>				Year <i>2008</i>			Ship <i>J.P. TULLY</i>				Cruise ID <i>2008-10</i> <i>P 12</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
5	LBP 4	1247	BE	ROS		73	50 01.37	127 58 08	1053	1080?	260	1	HJM	✓	Bote 5m *
		1301	BO				50 01.38	127 58.07		1060					
		1312	EN				50 01.37	127 58.06							
5	LBP 3	1341	BE	ROS		74	50 03.15	127 55.20	169	161	261-271	11	"	✓	
		1346	BO				50 03.15	127 55.22							
		1403	EN				50 03.15	127 55.25							
5	LBP 3	1416	BE	NET		75	50 03.14	127 55.28	170						
			EN				50 03.14	127 55.28		165					
5	LBP 2	1450	BE	NET		76	50 03.98	127 54.21	98				DLAM		
		1453	BO				50 03.97	127 54.22		90					
		1455	EN				50 03.97	127 54.24							
5	LBP 2	1506	BE	ROS		77	50 03.96	127 54.17	98					✓	
		1508	BO				50 03.96	127 54.17		90	272	1			
		1510	EN				50 03.96	127 54.16							
5	LBP 1	1541	BE	ROS		78	50 04.77	127 52.79	54						
		1542	BO				50 04.77	127 52.79		44	273	1			+LOOP
		1544	EN				50 04.77	127 52.78							

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- LBP 4 - FILE CALLED H 72 - SHOULD BE H 73 (IN SCASAVE)

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>September</i>				Year <i>2008</i>			Ship <i>J.P. TULLY</i>				Cruise ID <i>2008-10 P 13</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
5	CPE2	2219	BE	ROS		79	50 42 948	128 40 026	124		274	1		✓	PAR is ON
		2222	BO				50 42 956	128 40 018		119					bottle @ 5m
		2224	EN			(15?)	50 42 984	128 40 010							
		2240	BO	Net		80	50 42 921	128 40 045	127						Bongo
5	CPE2	2243	EN				50 42 897	128 40 046		125					
6	LQ03	0054	BO	NET		81	50° 39.76	129° 01.78	1190	250			HTJM		BONGO
		0058	GN				50° 39.76	129° 01.81							
6	LQ03	0113	BO	ROS		82	50° 39.77	129° 01.86	1176					✓	Bot @ 5m
		0129	BO				50 39.77	129° 01.90		1150	275	1			
		0145	GN				50 39.80	129° 01.88	1518						
6	JI22	0320	BO	ROS		83	50° 39.77	129° 17.49	1423?					✓	
		0345	BO				50° 39.77	129° 17.59		1530	276	1	DLAM		Bot @ 5
		0406	EN				50° 39.75	129° 17.61							
6	JI22	0415	BE	NET		84	50° 39.74	129° 17.61	1518						
		0425	BO				50° 39.77	129° 17.58		250					
		0430	EN				50° 39.82	129° 17.56							

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Sept 5

2130 UTC - increased flow thru TSG remote temp.

CPEZ

2210 PAR sensor on

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month SEPTEMBER				Year 2008			Ship TULLY				Cruise ID 2008-10 p. 14				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
6	CS01	0703	BO	NET		85	50 34.842	129 41.446	2109	250					BONGO to 250m.
		0710	EN				50 34.802	129 41.454							
6	CS01	0729	BE	ROS		86	50 34.850	129 41.486	2109						
		0747	BO				50 34.891	129 41.604		1005	277	1			bottle @ 5m
		0758	EN				50 34.946	129 41.622							
6	CS02	09:39	BE	ROS		87	50 41.281	129 27.979	1900						
		09:54	BO				50 41.294	129 28.016		1005	278-295	18		✓	
		10:20	EN				50 41.357	129 27.146							
6	CS02	10:39	BO	Net		88	50 41.483	129 27.904	1901						
		1047	EN				50 41.510	129 27.956		260					Bongo
6	CS03	1152	BO	Net		89	50° 45.57	129 20.05	244	232			HTIM		Bongo
		1158	EN				50° 45.46	129° 19.92							
6	CS03	1215	BE	ROS		90	50° 45.57	129° 19.94	219		296	1		✓	Bote 5m
		1220	BO				50° 45.56	129° 19.93		220		1			
		1224	EN				50° 45.54	129° 20.00							
6	CS04	1317	BE	NET		91	50° 49.08	129° 13.11							TUCKER TRAWL
		1333	BO				50° 49.13	129° 13.07							
		1333	EN				50° 49.13	129 13.07							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>Septembre</i>				Year <i>2008</i>			Ship <i>J.P. TULLY</i>				Cruise ID <i>2008-10 P. 15</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
6	CS04	1346	BO	NET		92	50° 49. 16	129° 13. 07	98	88			HTIM		BONGO
		1352	EN				50° 49. 17	129° 13. 06							
6	CS04	1402	BE	ROS		93	50° 49. 16	129° 13. 05			297-304	8		✓	
		1404	BO				50° 49. 15	129° 13. 06							
		1410	EN				50° 49. 16	129° 13. 05							
6	CS3B	1603	BE	ROS		94	50° 59. 98	129° 27. 02	220				DLAM	✓	PAR ON
		1607	BO				50° 59. 97	129° 27. 06		210	305	1			Bot @ 5 + LOOP
		1611	EN				51° 00. 00	129° 27. 07							
6	CS3B	1620	BE	NET		95	51° 00. 00	129° 27. 23	221				MR, J.M.A, LG.		BONGO
		1626	BO				51° 00. 06	129° 27. 30		210					212 m wire out
		1631	EN				51° 00. 12	129° 27. 31							
6	CS05	1840	BE	NET		96	50° 55. 97	129° 00. 05	64						
		1843	BO				50° 56. 00	129° 00. 07		55					
		1844	EN				50° 56. 01	129° 00. 08							
6	CS05	1855	BE	ROS		97	50° 55. 993	129° 00. 040	64						
		1856	BO				50° 55. 984	129° 00. 050		56	306				bottle @ 5m
		1858	EN				50° 55. 976	129° 00. 055							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>September</i>				Year <i>2008</i>				Ship <i>TULLY</i>				Cruise ID <i>2008-10 p16</i>			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
6	CS06	2003	BE	ROS		98	51 00 072	128 51 766	64						
		2004	BO				51 00 067	128 51 780		55	307-312	6			
		2012	EN				51 00 052	128 52 019							
6	CS06	2024	BO	Net		99	51 00 123	128 52 000	64						Bongo
		2025	EN				51 00 097	128 52 000		60					
6	CS07	2120	BO	Net		100	51 04.482	128 44.026	66						Bongo
		2122	EN				51 04.482	128 44.033		60					
6	CS07	2133	BE	ROS		101	51 04.492	128 44 051	66					✓	bottle @ 5m
		2136	BO				51 04 489	128 44 054			313	1			
		2138	EN				51 04 499	128 44 045							
6	CS08	2235	BE	ROS		102	51 08 486	128 36 036	145						
		2237	BO				51 08 495	128 36 060		136	314	1		✓	bottle @ 5m
		2242	EN				51 08 496	128 36 072							
6	CS08	2254	BO	Net		103	51 08 505	128 36 030	145						Bongo
		2259	EN				51 08.52	128 36.03		140					
6	CS09	2352	BE	NET		104	51° 12.48	128° 27.95	195						BONGO
		2359	BO				51° 12.49	128° 27.94		190					
7		0003	EN				51° 12.48	128° 27.96							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>Sept.</i>				Year <i>2008</i>			Ship <i>TULLY</i>				Cruise ID <i>2008-10 p17</i>					
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments	
7	CS09	0013	BE	ROS	U.S.	105	51° 12.46	128° 27.94	196		315-326	12	HTJM	✓		
		0017	BO				51° 12.45	128° 27.95		185						
		0030	GN				51° 12.48	128° 27.96								
7	CS10	0129	BE	ROS		106	51° 16.51	128° 19.97	81							
		0131	BO				51° 16.51	128° 19.96		71	327	1		✓	BOT @ 5m	
		0133	EN				51° 16.51	128° 19.96								
7	CS10	0143	BO	NET		107	51° 16.52	128° 19.95	82	75						BONGO
		0145	EN				51° 16.54	128° 19.93								
7	LOOP2	0302	BE	USW	-	-	51° 08.14	128° 23.02	190							NUT, SAL, CHL
7	LOOP3	0650	BE	USW	-	-	50° 28.40	128° 22.40	182							NUT, SAL, CHL
7	LOOP4	1455	BE	USW	-	-	49° 14.42	127° 20.55	1410							
7	LD10	2200	BE	CTD		108	48° 32.180	126° 36.595	1465					✓	7m off bottom	
		2028	BO				48° 32.234	126° 36.584		1476					700m bottles for lower	
		2051	EN				48° 32.195	126° 36.685								
7	LD08	2212	BE	CTD		109	48° 39.07	126° 23.37	777					✓		
		2225	BO				48° 39.07	126° 23.36		770						
		2238	EN				48° 39.04	126° 23.42								
	LD08	2250	BO	Net		110	48° 39.06	126° 23.44	777							Bongo
		2303	EN				48° 39.08	126° 23.46		250						

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Daily_log_book.doc

Sept 7
LD10 1300 local TSG flow test. Compare flow @ meter vs. TSG #3 temp/sal
a) recommended .6 vs .9 (54 l/min)

TIGER MAG flow sensor under sink = 30.9 l/min.

Setting: .6

.9 after 3 minutes of flow adjust

14.396 TSG: pri T°C = 14.347
31.759 sec T°C = 14.019
Sal = 31.485

TSG: pri T°C = 14.383

sec T°C = 14.583

Sal = 31.397 - Loop taken

Start Cast CTD: @ 4.2m - ships draught (up cast) - Prop WASH?

Temp: 13.873 Temp: 13.870
Sal: 32.107 Sal: 32.094

Temp: 13.870
Sal: 32.094

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>SEPT</i>			Year <i>2008</i>				Ship <i>TULLY</i>				Cruise ID <i>2008-10</i>				
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	#of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
7	LD07	2359	Bo	NET		111	48°42.54	126°16.72	418	250			ATJN		BONGO
8		0004	GM	1			48°42.55	126°16.71							
8	LD07	0015	BE	CTD <i>ROS</i>		112	48°42.54	126°16.71	414		—	Ø			CTD ONLY in Rosette frame
		0021	BO	1			48°42.55	126°16.72		400					
		00	EN	1			48°42.62	126°16.72							
8	LD06	0115	BE	CTD <i>ROS</i>		113	48°46.13	126°10.04		138	—	Ø			
		0118	BO	1			48°46.13	126°10.05							
		0120	EN	1			48°46.13	126°10.05							
8	LD05	0207	BE	CTD <i>ROS</i>		114	48°49.61	126°03.46	90		—	Ø			
		0210	BO				48°49.61	126°03.46							
		0212	EN				48°49.61	126°03.47							
8	LD05	0220	BO	NET		115	48°49.62	126°03.50							BONGO
		0225	EN				48°49.63	126°03.50							
8	LD03	0345	BE	ROS		116	48°56.69	125°50.38	48		—	Ø	✓		
		0346	BO				48°56.69	125°50.38		38					
		0347	EN				48°56.69	125°50.38							
8	LD01	0436	BE	ROS		117	49°00.12	125°43.78	36						
		0437	BO				49°00.13	125°43.78		26	—	Ø			
		0438	EN				49°00.14	125°43.78							

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 time of cast

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

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

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