

DAILY LOG BOOK

MISSION
NUMBER

2007-12

DATE:

From: 22 May 2007

to: 29 May 2007

VESSEL:

J. P. Tully

PROJECT:

La Pérouse, WCU1

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

Rosette Setup:

Number of bottles: 24
Manufacturer: _____
Volume of Bottles (litres): 20

Winches:

1. Make: HAWK BOLDT Model: SPR-5834213 Serial #: 17026 used for: CTD/ROS
2. Make: HARLISON ROBBIN Model: 589 Serial #: 515 used for: BOKLA NETS
3. Make: _____ Model: _____ Serial #: _____ used for: _____

Comments on performance during cruise: _____

Salinometer:

(NONE)

Make: _____ Model: _____ Serial #: _____

Comments on performance during cruise: _____

Oxygen Kit

2

Comments on performance of kit and chemicals: _____

No problems.

Thermosalinograph System:

Program: _____ Version: _____
Sampling interval (seconds): _____
Fluorometer sensor serial number: _____

Comments on performance during cruise: _____

ADCP Setup:

Computer time zone: _____ User Exits: Name: _____ Exit Points: _____
Sampling interval (seconds): _____ Name: _____ Exit Points: _____
Bin Length (2⁴x): _____ Name: _____ Exit Points: _____
Pulse Length: _____ Work File: _____
Buffer (bytes): _____
Gyro Offset: _____

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 ☐

If no, give reason: _____

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

FINE

CTD pressure reading on deck (db): 0.26

Should be 0.0 db $\pm$ 0.5)

Pumps working?

yes ☒ no ☐

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

Secondary Temp- Primary Temp: 0.001

Average from the Mixed Region)

Secondary Salinity- Primary Salinity: 0.002

Average from the Mixed Region)

Additional Comments: _____

DAILY LOG

Ocean Sciences and Productivity Division

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Month 05				Year 2007			Ship Tully				Cruise ID 2007-12 P1				
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							
23	Saccul	0317	BE	ROS		1	48 35.558	123 29.838	224	220	1-11	2A	SR		test cast
	ST03	0322	BO				48 35.558	123 29.900							fixed all bottles
		0335	EN				48 35.440	123 30.040							
23	LB01	1508	BE	ROS	US	2	48 40.42	124 59.47	34					✓	
		1517	BO				48 40.44	124 59.46			12-15	4	HM/MR		
		1520	EN				48 40.46	124 59.45							
23	LB02	1548	BE	ROS	US	3	48 39.01	125 02.49	56				HM/MR	✓	
		1551	BO				48 39.02	125 02.50		45	16-20	5			
		1557	EN				48 39.03	125 02.47							
23	LB03	1624	BE	ROS		4	48 37.33	125 05.67	93				HM/MR	✓	
		1628	BO				48 37.34	125 05.66		83	—	∅			
		1630	EN				48 37.34	125 05.66							
23	LB04	1710	BE	ROS	US	5	48 35.67	125 08.72	112				HM/MR	✓	
		1714	BO				48 35.67	125 08.74		100	21-27	7			
		1722	EN				48 35.65	125 08.78							
23	E1	1804	BE	ROS		6	48 31.72	125 03.81	116						
		1807	BO				48 31.72	125 03.82		105	—	∅			
		1810	EN				48 31.72	125 03.83							

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
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CAST 1: Wrong cruise number in header

CAST 2: Went down to ≈ 25 m. Back to 18 m for a long time, trying to
get the sounder to work. Then back down to 20 m to close 2 bottles

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INSTITUTE OF OCEAN SCIENCES

Month <i>MAY</i>				Year <i>2007</i>			Ship <i>J. P. TULLY</i>				Cruise ID <i>2007-12 p 2</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							
23	E1	1820	BE	NET		7	48° 31.72	125° 03.89	117				HM/HR		
		1823	BO				48° 31.72	125° 03.90		100					
		1825	EN				48° 31.72	125° 03.91							
	LB05	1921	BE	ROS		8	48° 33.88	125° 12.36	100						
		1923	BO				48° 33.85	125° 12.39		96	—	Ø	ST et	✓	
		1925	EN				48° 33.83	125° 12.41					al		
	LB06	1955	BE	ROS		9	48° 32.06	125° 15.53	115				↓		
		1957	BO				48° 32.02	125° 15.56		111	28-35	8			
		2006	EN				48° 32.93	125° 15.70							
23	C1	2122	BE	ROS		10	48° 28.88	125° 15.21	152						
		2125	BO				48° 28.90	125° 15.15		145					
		2128	EN				48° 28.90	125° 15.15							
	C1	2142	BO	NET		11	48° 28.94	125° 15.05	152	130					
	C2	2231	BE	ROS		12	48° 25.30	125° 07.89	124						
		2235	BO				48° 25.29	125° 07.85		118					
		2236	EN				48° 25.30	125° 07.84							
	C2	2245	BE	NET		13	48° 25.31	125° 07.89	131						
		2251	BO				48° 25.32	125° 07.93		110					
		2252	EN				48° 25.32	125° 07.98							

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INSTITUTE OF OCEAN SCIENCES

Month MAY				Year 2007			Ship JOHN P. TULLY				Cruise ID 2007-12 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							
24	C3	0002	BE	ROS		14	48 23.237	125 20.761	122	118		-	SK	✓	
		0005	BO				48 23.174	125 20.713							
		0007	EN				48 23.130	125 20.682							
24	C3	0017	BO	NET		15	48 23.045	125 20.494	122	112					
		0019	EN				48 23.0440	125 20.494							
24	LB07	0107	BE	ROS		16	48 28.672	125 22.065	158	153				✓	
		0112	BO				48 28.650	125 22.062			-	∅			
		0115	EN				48 28.633	125 22.043							
24	LB07	0126	BO	NET		17	48 28.597	125 21.965	157	150					
		0129	EN				48 28.610	125 21.814							
24	B8	0230	BE	ROS		18	48 34.492	125 30.170	137	132				✓	
		0234	BO				48 34.464	125 30.093			-	∅			
		0237	EN				48 34.462	125 30.025							
24	B8	0246	BO	NET		19	48 34.477	125 29.909	128						
		0250	EN				48 34.470	125 29.968		120					
24	B7	0329	BO	ROS		20	48 32.00	125 35.39	80				HM-HL-MR	✓	
		0331	BO				48 32.01	125 35.34		70	-	∅			
		0333	EN				48 32.01	125 35.30							

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							Latitude	Longitude								
24	B7	0340	BE	NET		21	48° 32.06	125° 35.14	80				HM, ML, MR			
		0342	Bo				48° 32.04	125° 35.14		70						
		0343	EN				48° 32.01	125° 35.12								
24	LB08	0443	BE	NET		22	48° 24.85	125° 27.70	130				HM.			
		0446	Bo				48° 24.78	125° 27.62		120						
		0448	EN				48° 24.76	125° 27.58								
24	LB08	0458	BE	ROS	US	23	48° 24.53	125° 27.32	130					✓		
		0502	Bo				48° 24.47	125° 27.26		120	36-44	9				
		0510	EN				48° 24.28	125° 27.08								
24	LB09	0556	BE	ROS	US	24	48° 21.94	125° 34.75	151				HM, ML, MR			
		0601	Bo				48° 21.89	125° 34.67		140	45-52	8				
		0611	EN				48° 21.82	125° 34.54								
24	LB10	0701	BE	ROS		25	48° 18.53	125° 41.11	153				ST et al			
		0704	Bo				48° 18.52	125° 41.08		146	-	Ø	↓	✓		
		0707	EN				48° 18.52	125° 41.05								
24	LB11	0754	BE	ROS		26	48° 15.19	125° 47.70	205		53-64	11g		✓		
		0759	Bo				48° 15.15	125° 47.72								
		0816	EN				48° 15.13	125° 47.64								

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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
	LB11	0826	BE	NET		27	48°15.16	125°47.71	207				STet		
		0831	BO				48°15.16	125°47.67		180			al		
	LB12	0915	BE	RDS	US	28	48 12.91	125 51.82	508		64-79	16	↓		
		0923	BO				48 12.88	125.51.80							
		0945	EN				48 12.88	125.51.79							
	LB13	1027	BE	RDS		29	48 10.73	125.56.10	915						
		1037	BO				48.10.57	125 56.08							
		1048	EN				48 10.58	125 56.05							
24	LB13	1108	BO	NET		30	48 10.588	125 56.078	917				SL		Went to remove
		1111	EN				48 10.583	125 56.091		250					PAR sensor, but
24	LB14	1149	BE	RDS		31	48 8.462	125 59.944	1171					✓	It wasn't there!
		1210	BO				48 8.478	125 59.914		1161	80-98	19			
		1246	EN				48 8.476	125 59.929							
24	LB15	1342	BE	RDS		32	48 4.337	126 8.450	1489						
		1401	BO				48 4.402	126 8.202		1480					
		1421	EN				48 4.378	126 7.883							
24	LB16	1516	BE	RDS		33	48°00.55	126°16.99	1785				HM-MR	✓	
		1547	BO				48°00.59	126°16.97		1807	—	Ø			
		1614	EN				48°00.59	126°16.97							

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INSTITUTE OF OCEAN SCIENCES

Month MAY				Year 2007				Ship TULLY				Cruise ID 2007-12 p6			
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
24	LC12 / A4	1832	BE	ROS		34	48° 14.99	126° 39.92	2085				HM ML MR	✓	
		18	BO				48° 15.01	126° 39.87		2005	-	Ø	ST		
		1920	EN				48° 15.00	126° 39.52							
		1939	BO	NET		35	48° 14.97	126° 39.24		250					
		2010	BE	MN		36	48° 14.90	126° 39.		1000	99-118	20			
	LC11	2233	BE	ROS	US	37	48° 18.76	126° 26.43	1512						
		2234	BO				48° 18.79	126° 26.64		1450					glitch with the
		2329	EN				48° 18.909	126° 26.515							power to the CTD +
25	LC10	0014	BE	ROS		38	48° 22.322	126° 20.135	1245						then getting the
		0034	BO				48° 22.396	126° 20.156		1240					pump started.
		0050	EN				48° 22.363	126° 20.132							
	LC9	0135	BE	ROS		39	48° 25.973	126° 13.652	611	577	115-135			YES!	oxy channels are
		0149	BO				48° 25.855	126° 13.600		600					delivering bubbles
		0214	EN				48° 25.954	126° 13.542							to sample - needs
	LC9	0230	BO	NET		40	48° 25.953	126° 13.617	600						to be checked
		0235	EN				48° 25.953	126° 13.617		250					
25	LC8 / A1	0317	BE	ROS	US	41	48° 29.45	126° 07.11	202		136-146	11	HM ML MR	✓	
		0322	BO				48° 29.41	126° 07.10		190					
		0335	EN				48° 29.45	126° 07.98							

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Month MAY				Year 2007			Ship TULLY				Cruise ID 2007-12 p7				
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							
25	LC08/A1	0344	BE	NET		42	48° 29.41	126° 07.06	202				HM. ML. MR		Wire out 200
		0349	BO				48° 29.44	126° 07.06		190					
		0352	EN				48° 29.41	126° 07.10							
25	LC7	0437	BE	ROS		43	48° 32.76	126° 00.59	130				HM. ML. MR	✓	
		0441	BO				48° 32.74	126° 00.59		120	—	Ø			
		0443	EN				48° 32.73	126° 00.60							
25	LC6/B6	0535	BE	ROS	US	44	48° 36.40	125° 53.92	93				HM. MR ML	✓	
		0539	BO				48° 36.31	125° 53.95		86	147-153	7			
		0547	EN				48° 36.43	125° 53.98							
25	LC6/B6	0556	BE	NET		45	48° 36.40	125° 53.93	93				HM. MR ML		
		0559	BO				48° 36.38	125° 53.94		90					
		0602	EN				48° 36.44	125° 53.93							
25	LC6/B6	0618	MR	BOT		46	48° 36.55	125° 53.68	93	10		(1)	HM. MR ML		Go-Flu @ 10m
	LC05	0708	BE	ROS		47	48° 39.91	125° 47.37	66				ST/AS/ML		
		0710	BO				48° 39.90	125° 47.35		60					
		0712	EN				48° 39.91	125° 47.35							
25	LC05	0726	BE	NET		48	48° 39.91	125° 47.40	64						
		0727	BO				48° 39.91	125° 47.41		45					
		0728	EN				39.90	47.41							

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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							
25	LC04	8:25	DE	ROS	US	49	48 43.35	125 40.70	165				ST/AS/AM		
		8:29	BO				48 43.34	125 40.67			154-162	9			
		8:45	EN				48 43.338	125 40.42							
	LC03	9:36	BE	ROS		50	48.46.91	125.34.29	136						
		9:40	BO				48 46 93	125 34.25							
		9:43	EN				48.46.94	125 34.22							
	LC02	10:15	BE	ROS	US	51	48 48.67	125 30.96	109		163-169	7			
		10:17	BO	R			48 46 65	125 30.95							
		10:31	EN				48 48 69	125 30.87							
25	LC01	11:01	BE	ROS	US	52	48 50.442	125 27.720	95		170-176	7	SP	YES!	
		11:04	BO				48 50.420	125 27.733		85					
		11:11	EN				48 50.388	125 27.767							
25	Loop 1	15:04	BE	USW	-	-	49 10.34	126 17.17	64						CHL, SAL
25	LG01	16:43	BE	ROS	US	53	49 20.53	126 34.99	51				HM, ML, MR		
		16:46	BO				49 20.56	126 34.98		40	177-181	5			
		16:51	EN				49 20.54	126 34.96							
25	LG02	17:19	BE	ROS	US	54	49 18.71	126 38.20	100				HM, ML, MR		
		17:22	BO				49 18.71	126 38.19		91	182-188	7			
		17:29	EN				49 18.70	126 38.15							

Cast type: USW = sea water loop

bottle firing method:

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25	LG02	1739	BE	NET		55	48° 18.70	126 38.07	101				HM, ML, MR		Bongo
		1741	BO				48° 18.70	126 38.05		90					
		1744	EN				48° 18.70	126 38.01							
25	LG03	1830	BE	ROS		56	49° 14.99	126 43.70	124				HM, MR	✓	
		1834	BO				49° 15.03	126 43.67		117	—	φ			
		1836	EN				49° 15.04	126 43.65							
25	LG04	1925	BE	BOT		57	49° 11.23	126° 49.27	144	10m	—	1			GO. Flo
		1936	BE	ROS		58	49° 11.20	126 49.42	146		189-197		ST/AS/HM		
		19.40	BO				49 11.19	126 49.42	140				✓		
		19.55	EN	NET		58	49 11.21	126 49.19							
		2006	BE	NET		59	49° 11.25	126 49.35	145						
		2009	BO				49 11.21	126 49.32		135					
	LG05	20.55	BE	ROS		60	49 7.35	126 55.19		273					
		21.00	BO				49 7.38	126 55.13							
		21.04	EN				49 7.42	126 55.10							
	LG06	21.52	BE	ROS		61	49 3.42	127 1.13	953						
		22.09	BO				49 03 396	127 0.95			198-215				
		22.46	EN				49 3.246	127 0.57							

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DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month MAY				Year 2007				Ship J. P. TULLY				Cruise ID 2007-12 p. 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							
25	LG07	2331	BE	ROS		62	48 59.419	127 7.171	1303	1295			SR	YES!	
		2354	BO				48 59.338	127 7.222							
		0014	EN				48 59.455	127 7.168							
26	LG07	0026	BO	NET		63	48 59.338	127 7.092	1305						
		0031	EN				48 59.383	127 7.054		250					
26	LG07	0039	BO	NET		64	48 59.402	127 7.131	1305						
		0041	EN				48 59.402	127 7.131		50					Akash's sample
26	LG08	0132	DE	ROS		65	48 54.966	127 13.240	2064					YES!	
		0158	BO				48 55.082	127 13.199		2005					
		0223	EN				48 55.216	127 12.952							
26	LG09	0312	BE	ROS	US	66	48 51.19	127 19.23	2055		216-236	21	ML-HM MR	✓	Large T ₂ -T ₁ @ surface
		0345	BO				48 51.25	127 19.26		2005					
		0430	EN				48 51.22	127 19.32							
26	LG09	0440	BE	NET		67	48 51.26	127 19.26	2055						
		0445	BO				48 51.28	127 19.22		250					
		0450	EN				30	19							
26	LG09	0505	BE	NET		68	48 51.37	127 19.07	2053						
		0521	BO							1000					NARB sounder time in file is 1 hour ahead
		0541	EN												

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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							
26	LBP8	1123	BE	ROS		69	49 48.613	128 16.783	2073	2005			SR/NHP	YES!	Lazy-As watch before vs forgot to reset the bottles!
		1203	BO				49 48.625	128 16.792					KY/SJR		
		1228	EN				49 48.652	128 16.778							
26	LBP7	1311	BE	ROS		70	49 52.375	128 11.141	2188	2005	237-257	21		YES!	We were searching for Gh. Better to leave bottles closed!
		1337	BO				49 52.422	128 11.214							
		1423	EN				49 52.703	128 11.317							
26	LBP7	1442	BO	NET		71	49 52.800	128 11.380	2204	250					
		1448	EN				49 52.821	128 11.325							
26	LBP6	1528	BE	ROS		72	49 56.20	128 05.46	780 ⁷				HM-MR	✓	SEE NOTES →
		1544	BO				49 56.20	128 05.39		840		Ø			
		1555	EN				49 56.23	128 05.38							
26	LBP5	1639	BE	ROS	US	73	49 59.96	127 59.98	1283				HM-HL MR	✓	
		1656	BO				49 59.93	127 59.92		1260	258-276	19			
		1727	EN				49 59.88	127 59.94							
26	LBP5	1739	BE	NET		74	49 59.95	128 0.01	1204						
		1747	BO				49 59.95	128 0.02		250					
		1752	EN				49 59.96	128 0.00							Bongo

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CAST 72, LBP6: Forgot to turn pump on. Go down to ~ 30m, then back to surface. Turn pump on, then down again.

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Month MAY				Year 2007				Ship TULLY				Cruise ID 2007-12 p 12			
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							
26	LBP4	1818	BE	ROS		75	50°01.39	127°58.17	1030				HM MR	✓	
		1834	BO				50°01.38	127°58.15		1080	—	∅			
		1847	EN				50°01.38	127°58.16					ST et al		
	LBP3	1918	BE	BOT		76	50°03.08	127°55.15					↓		
		1920	EN												
	LBP3	1927	BE	ROS		77	50°03.15	127°55.27	168					✓	
		1930	BO				50°03.15	127°55.28		160					
		1940	EN				50°03.16	127°55.30							
	LBP3	1951	BE	NET		78	50°03.20	127°55.42	170						
		1954	BO				50°03.17	127°55.43		160					Bongo 20°
			EN												
	LBP2	2013	BE	NET		79	50°03.99	127°54.20	98						
		2014	BO				50°03.98	127°54.19		90					
			EN				50°03	127°54							
26	LBP2	2027	BE	ROS		80	50°04.01	127°54.24	97						
		2029	BO				50°03.99	127°54.21		90					
		2030	EN				50°03.98	127°54.19							

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Month <u>MAY</u>				Year <u>2007</u>			Ship <u>TULLY</u>				Cruise ID <u>2007-12 P13</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							
	LBP1	2049	BE	ROS		81	50°04.82	127°52.66	46				ST	✓	
		2050	BO				50°04.80	127°52.64		40			✓		
		2051	EN				50°04.78	127°52.64							
26	LOOP2	2305	DE	USW		—	50°21.868	128°15.542	175		277				
27	CPE2	0126	BE	ROS		82	50°42.955	128°39.904	125						chl, sal, nt
		0132	BO				50°43.002	128°39.865		115					
		0134	EN				50°42.988	128°39.864							
27	CPE2	0144	BO	NET		83	50°42.994	128°39.841	125	115					
		0147	EN				50°42.988	128°39.829							
27	LQ03	0308	BE	NET		84	50°39.81	129°01.80	1160						
		0314	BO				50°39.83	129°01.74		250					
		0318	EN				50°39.82	129°01.71							
27	LQ03	0328	BE	ROS	✓	85	50°39.81	129°01.81	1182				HM MR	✓	
		0345	BO				50°39.85	129°01.57		1200	—	∅	MR		
		0400	EN				50°40.06	129°01.35							
27	CS01	0627	BE	ROS	—	86	50°34.94	129°41.40	2105				HM MR	✓	
		0646	BO				50°35.27	129°41.04		1005	—	∅			
		0659	EN				50°35.37	129°40.89					ST et al		

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Month MAY				Year 2007				Ship TULLY				Cruise ID 2007-12 P14			
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							
27	CS01	0712	BE	NET		87	50°35.45	129°40.86	2077				ST		
		0722	BO				50°35.46	129°40.84		250					
		0727	EN				50°35.44	129°40.84							
	CS02	0841	BE	ROS		88	50°41.29	129°27.99	1902m		278-295	18			
		0856	BO				50°41.28	129°27.99		1000					
		0913	EN				50°41.28	129°27.99							
	CS02	0945	BE	NET		89	50°41.29	129°28.03	1901						
		0952	BO				50°41.29	129°27.99							
			EN												
	CS03	1055	BE	ROS		90	50°45.59	129°19.99	225						
		1058	BO				50°45.59	129°19.97		220					
		1101	EN				50°46.61	129°19.97							
27	CS03	1116	BO	NET		91	50°45.59	129°19.965	228						
		1122	EN				50°45.579	129°19.953		220					
27	CS04	1231	BO	NET		92	50°49.241	129°13.021	91						GoFlow was done
		1233	EN				50°49.241	129°13.019		83					th, but event 94
27	CS04	1244	BE	ROS		93	50°49.256	129°13.009	93		296-304			YES!	not to screw up
		1247	BO				50°49.270	129°12.971		87					labels
		1253	EN				50°49.262	129°12.845							

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INSTITUTE OF OCEAN SCIENCES

Month <u>MAY</u>				Year <u>2007</u>				Ship <u>TULLY</u>				Cruise ID <u>2007-12</u> <u>p15</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							
27	CS04	1222	Bo	BOT		94	50 49.282	129 12.962	92	22		2			Go flow for Uland
27	CS3B	1436	BE	ROS		95	50 59.978	129 27.058	221					✓	
		1441	SO				50 59.992	129 27.050		213	—	Ø			
		1444	EN				50 59.996	129 22.036							
27	CS3B	1500	Bo	NET		96	51 00.00	129 27.07	220						
		1506	EN				50 99.99	129 27.08		210					
27	CS05	1650	BE	NET		97	50 56.05	128 59.90	65				HM. MC MR		
		1652	Bo				50 56.06	128 59.87		55					
		1653	EN				50 56.05	128 59.85							
27	CS05	1703	BE	ROS	—	98	50 56.00	128 59.88	65					✓	
		1706	Bo				50 55.99	128 59.88		55	—	Ø			
		1708	EN				50 55.99	128 59.90							
27	CS06	1755	BE	ROS	US	99	50 59.96	128 49.99	67					✓	
		1758	Bo				50 59.96	128 50.01		55	305-310	6			
		1804	EN				50 59.97	128 50.01							
27	CS06	1812	BE	NET		100	50 59.99	128 50.05	66						
		1814	Bo				50 59.99	128 50.05		55					
		1816	EN				50 59.99	128 50.05							

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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
27	CS07	1859	BO	NET		101	51°04.47	128°43.98	65				ST/VW/AS		
		1902	EN				51°04.46	128°44.07		55			↓		
		1911	BE	ROS		102	51°04.45	128°44.09						✓	
		1913	BO				51°04.47	128°44.07	65	57					
		1914	EN				51°04.47	128°44.07						✓	
	CS08	1957	BE	ROS		103	51°08.48	128°35.88	144					✓	
		20.01	BOT				51°08.45	128°35.91		135					
		20.04	EN				51°08.45	128°35.94							
	CS08	2012	BE	NET		104	51°08.48	128°35.99	145						
		2016	BO				51°08.47	128°36.01		135					
		2019	EN				51°08.46	128°36.03							
27	CS09	2059	BE	NET		105	51°12.43	128°27.95	195						
		2104	BO				51°12.40	128°27.93		185					
		2107	EN				51°12.40	128°27.93							
		2117	BE	ROS	US	106	51°12.42	128°27.98	195		311-321	11		✓	
		2121	BO				51°12.41	128°27.99		185					
		2134	EN				51°12.45	128°28.13							

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							Latitude	Longitude							
27	CPE1	2357	BE	LOS		107	50 59.818	127 49.866	150				SAL/KYI STR	YES	
		0003	BO				50 59.818	127 49.840		145					
		0006	EN				50 59.836	127 49.867							
28	CPE1	0016	BO	NET		108	50 59.914	127 49.972	150						
		0019	EN				50 59.910	127 49.976		142					
28	LOOP3	2357		USW			50 23.33	125 52.26	174		322				CHL + SAL.
28	DF01	1758	BG	CTD		109	49 14.99	123 44.95	400						
		1804	BO				49 15.02	123 44.92		390			MR/ARI		
		1809	EN				49 15.02	123 44.91							
28	DF01	1817	BG	NET		110	49 15.02	123 44.90	400						
		1819	BO				49 15.01	123 44.89		100					
		1821	EN			111	49 15.01	123 44.89							
28	DF01	1827	BG	NET		111	49 14.99	123 44.89	400						
		1835	BO				49 14.94	123 44.81		390					
		1842	EN				49 14.89	123 44.67							

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