

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2009-04

DATE:

From: 29 Jan 2009 to: 24 Feb 2009

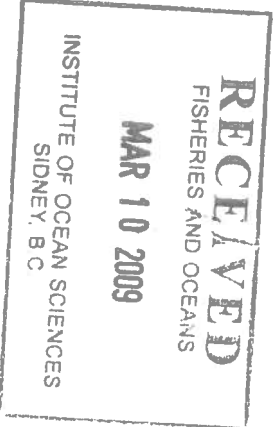
VESSEL:

W.E. RICKER

PROJECT(S):

Biological Hotspots in the Strait of Georgia
An S&S ERI project.

Water Properties Group
Fisheries and Oceans Canada
Institute of Ocean Sciences
Ocean Sciences Division
Sidney, BC, Canada



WaterProperties.ca

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month FEB			Year			Ship						Cruise ID			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
CR	CTD07	01:34	BE	CTD		6	49 34.464	124 24.151							
		01:44	BS				49 34.504	124 24.094	347	335			GAH		
		01:52	EN				49 34.544	124 24.068							
	CTD06	02:29	BE	CTD		7	49 30.538	124 27.911	186	180			TS		
		02:34	BO				49 36.557	124 27.887							
		02:37	EN				49 36.595	124 27.876	-						
	CTD05	03:07	BE	CTD		8	49 27.364	124 30.808	309	300			TS		
		03:15	BO				49 27.396	124 30.890							
		03:21	EN				49 27.461	12430.893							
	CTD04	04:08	BE	CTD		9	49 24.848	124.22.078	346	340					
		04:17	BO				49 24.851	124 22.085							
		04:24	EN				49 24.883	124 22.081							
	CTD03	04:48	BE	CTD		10	49 26.614	124 20.292	320	310					
		04:55	BO				49 26.678	124 20.322							
		05:02	EN				49 26.706	124 20.310							
	CTD01	06:10	BE	CTD		11	49 20.336	124 12.158	245	240					
		06:15	BO				49 20.381	124 12.140							
		06:21	EN				49 20.419	124 12.131							

Cast Type:
BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set

USW = Sea Water Loop
MOR = Mooring
NET = Plankton 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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Transmissometer to be cleaned before each cast, do not use Ammonia products

DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Notes:

Produced by the Water Properties Group, IOS

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Version: 06 March 2008

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month			Feb			Year			2009			Ship			W E Ricker			Cruise ID			2009-04		
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments								
							Latitude	Longitude															
02	CTD002	06:55	BE	CTD		12	24.159	124 9.811															
		07:02	BD				24.222	124 9.298	273	257													
							24.238	124 9.283															
		07:07	EN																				
03	CTD25	15:34	BE	CTD		13	27.720	124 7.420	294	290													
		15:41	BD				27.710	124 7.384	294	290													
		15:47	EN				27.721	124 7.388	295														
03	CTD24	16:24	BE			14	30.305	124 5.980	423														
		16:33	BD				30.312	124 5.941	422.7	418													
		16:42	EN				30.332	124 5.929	422.5														
03	CTD22	20:19	DE			15	40.208	124 16.282	349	340			TS										
		20:27	BD				40.222	124 16.295	350														
		20:35	EN				40.246	124 16.292	350														
03	CTD20	23:26	BE			16	47.214	124 32.336	308	300			TS										
		23:33	BD				47.197	124 32.290	307														
		23:40	EN				47.189	124 32.241	305														
03	CTD19	17:31	BE			17	12.46	52.933	282	275			TS		See in 030209								
		17:36	BD				12.259	52.962	290														
		17:42	EN				12.279	52.998	293														

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Month		Feb		Year		2009		Ship		W.E. Ricker		Cruise ID		2009-04	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude N	Longitude W							
3	CTD 15	01:34	B6	CTD		18	49 51.620	125 1.565	124	120			TS		
		01:37	B0				49 51.619	125 1.570	124						
		01:40	EN				49 51.622	125 1.571	124						
	CTD 14	01:57	B6			15	49 53.020	124 59.514	309	300			TS		
		02:04	B0				49 53.042	124 59.512	309						
		02:11	EN				49 53.046	124 59.546	309						
	CTD 13	02:39	B6			20	49 55.314	124 55.267	230	225			TS		
		02:45	B0				49 55.321	124 55.158	237						
		02:49	EN				49 55.289	124 55.109	236						
	CTD 18	03:25	B6			21	49 59.149	124 58.865	142	135			TS		
		03:28	B0				49 59.154	124 58.800	142						
		03:31	EN				49 59.150	124 58.930	142						
	CTD 17	03:57	B6			22	49 58.818	125 4.308	258	256					
		04:03	B0				49 58.842	125 4.343	259						
		04:09	EN				49 58.841	125 4.378	260						
	CTD 16	04:41	B6			23	49 57.676	125 8.669	152	152					
		04:44	B0				49 57.558	125 8.371		132					bad tidal current
		04:49	EN				49 57.436	125 8.298	160						

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Month			Feb		Year			2009		Ship			W E Ricker		Cruise ID				2009-04	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments					
							Latitude N	Longitude W												
4	CTD009	1:29	BE	CTD		24	49 35.479	124 38.208	163	155			TS							
		1:32	BO				49 35.483	124 38.233	163											
		1:36	EN				49 35.490	124 38.245	163											
	CTD008	2:11	BE	CTD		25	49 39.305	124 32.995	332	325										
		2:18	BO				49 39.284	124 32.948	331											
		2:26	EN				49 39.289	124 32.941												
	CTD12	3:12	BE			26	49 43.528	124 40.798	349	340										
		3:19	BO				49 43.518	124 40.818	349											
		3:25	EN				49 43.494	124 40.816	349											
	CTD11	3:44	BE			27	49 42.416	124 43.318	296	285										
		3:50	BO				49 42.420	124 43.356	296											
		3:55	EN				49 42.437	124 43.382	297											
	CTD10	4:20	BE			28	49 40.764	124 47.303	95	85										
		4:23	BO				49 40.772	124 47.306	96											
		4:25	EN				49 40.782	124 47.300	95				TS							
5	CTD46	2:35	BE			25	48 51 319	123 10.852	183	170										
		2:40	BO				48 51.307	123 10.871	184											
		2:43	EN				48 51.295	123 10.856	185											

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Month			Year			Ship			Cruise ID						
Feb			2009			W E Ricker			7009-04						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude N	Longitude W							
5	CTD 45	03:10	BE	CTD		30	48 53.861	123 8.383	124	110					
		03:13	BO				48 53.851	123 8.379	124						
		03:16	EN				48 53.840	123 8.366	124						
	CTD 44	03:43	BE			31	48 56.756	123 5.993	114	107					
		03:46	BO				48 56.758	123 5.978	115						
		03:49	EN				48 56.754	123 5.962	115						
	CTD 50	04:32	BE			32	48 57.661	122 56.249	21	17					
		04:33	BO				48 57.661	122 56.249	21						
		04:37	EN				48 57.662	122 56.246	21						
	CTD 49	05:05	BE			33	48 55.055	122 59.551	126	120					
		05:08	BO				48 55.048	122 59.568	126						
		05:11	EN				48 55.037	122 59.560	126						
	CTD 48	05:40	BE			34	48 51.762	123 3.242	225	215					
		05:46	BO				48 51.704	123 3.253	224						
		05:50	EN				48 51.739	123 3.290	216						
	CTD 47	06:15	BE			35	48 49.306	123 6.240	180	170					
		06:19	BO				48 49.381	123 6.278	182						
		06:23	EN				48 49.354	123 6.313							

DAILY SCIENCE LOG

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Month		Feb		Year		2004		Ship				WCG Ricker		Cruise ID				2004-04	
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments				
							Latitude N	Longitude W											
06	CTD 37	02:22	BE	CTD		36	49 13.600	123. 20.726	211	200			TS						
		02:27	BO				49 13.576	123 20.704	208										
		02:32	EN				49 13.535	123 20.706	208										
	CTD 38	03:02	BE			22	49 12.041	123 26.302	303	290									
		03:09	BO				49 12.041	123 26.317	303										
		03:15	EN				49 12.025	123 26.320	303										
	CTD 39	03:50	BE			38	49 9.816	123 32.834	369	360									
		03:58	BO				49 9.736	123 32.873	371										
		04:04	EN				49 9.712	123 32.918	372										
	CTD 40	04:30	BE			35	49 8.605	123 36.818	145	140									
		04:34	BO				49 8.586	123 36.844	145										
		04:37	EN				49 8.582	123 36.814	147										
	CTD 43	05:38	BE			40	49 0.221	123 30.036	200	190									
		05:42	BO				49 0.214	123 29.996	205										
		05:46	EN				49 0.216	123 29.978	204										
	CTD 42	06:10	BE			41	49 1.834	123 26.267	315	305					Near Venus 300 m				
		06:15	BO				49 1.855	123 26.234	314										
		06:21	EN				49 1.873	123 26.222	314										

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Month			Feb			Year			2009			Ship			WCG Richer			Cruise ID			2009-04		
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments								
							Latitude N	Longitude W															
06	CTD 41	06:46	BE	CTD		42	49 3.292	123 22.394	242	230			TS		Speed problems								
		06:52	BO				49 3.320	123 22.363	240														
		06:57	EN				49 3.340	123 22.350							Speed good								
08	M507	04:06	BE	CTD		43	49 36.247	124 13.543															
		04:11	BO				49 36.234	124 13.532	230	225													
		04:15					49 36.222	124 13.514															
08	M506	04:32	BE	CTD		44	49 37.390	124 11.917															
		04:40					49 37.392	124 11.850	355	348													
		04:46	EN				49 37.387	124 11.797															
08	M505	05		CTD		45	49 38.476	124 10.168															
		05:08	BO				49 38.484	124 10.157	221	215													
		05					49 38.484	124 10.102															
08	M504	06:11	BE	CTD		46	49 44.544	124 19.032															
		06:14					49 44.605	124 19.008	122														
		06:17	EN				49 44.646	124 18.983															
08		06	BE	CTD		47	49 43.327	124 21.055															
		06:47	BO				49 43.302	124 21.079	357														
		06:5					49 43.296	124 21.091															

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Month				Year				Ship				Cruise ID			
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude N	Longitude W							
08	M502	07:53	BE	CTD		48	49° 46.351	124° 33.013							cloudy
		07:59	BO					33 85268							
		08:03	EAU				49° 46.321	124° 33.162							
08		08:23	BE	CTD			49° 47.425								
		08:27	BO				49° 47.406	124° 32.416	255	250					
		08:31	EAU				39	482							
10	M507	09:36	BE	CTD		50	49° 36.289	124° 13.464							
			BO				49° 36.305	124° 13 9	246	240					
		09:49	EAU				49° 36.316	124° 13.496							
		06:18	BE	CTD		51	49° 38.498	124° 10.207							
		06:18	BO				49° 38.503	124° 10.220	285	225					
		06:22	EAU				49° 38.506	24° 10.219							
10	M506	06:38	BE	CTD		52	49° 37.502	124° 11.843							
		06:45	BO				49° 37.487	124° 11.856	357	350					
		06:51	EAU				49° 37.489	124° 11.846							
11	WTD1	21:12	BE	CTD		5	49° 36.086								
		21:15	BO				49° 36.038	124° 33.512	143	135					
		21:18	EAU				49° 36.030	124° 33.510							

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Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments								
							Latitude N	Longitude W															
11	WT-02	22:50	BE	CTD		59	49° 37.428	124° 31.392	238														
		22:54	BO				49° 37.426	124° 31.398	239	230													
		22:58	EO				49° 37.422	124° 31.396															
11	WT-03	23:18	BE	CTD		55	49° 38.791	124° 29.474	210.														
		23:23	BO				49° 38.800	124° 29.485	207	200													
		23:24	BN				49° 38.797	124° 29.459															
12	WT-03	20:25	BE	CTD		56	49° 38.881	124° 29.542															
		20:29	BO				49° 38.888	124° 29.312	178	170													
		20:32	BN				49° 38.894	124° 29.306															
12	WT-02	21:01	BE	CTD		57	49° 37.506	124° 31.495															
		21:07	BO				49° 37.510	124° 31.486	237	230													
		21:11	BN				49° 37.516	124° 31.478															
12	WT-01	21:46	BE	CTD		58	49° 36.083	124° 33.499															
		21:49	BO				49° 36.012	124° 33.480	142	135													
		21:52	BN				49° 36.079	124° 33.470															
13	JCTD 1	20:20	BE	CTD		59	49° 44.765	124° 14.478	307														
		20:27	BO				49° 44.760	124° 14.446	307	300													
		20:32	BN				49° 44.752	124° 14.419															

Cast Type: ☒ USW = Sea Water Loop ☒ MOR = Mooring ☒ NET = Plankton Net Haul ☒ ROS = Rosette plus CTD ☒ SET = Fish Set

Bottle Firing Method: ☒ US = Up / Stop ☒ UN = Up / No stop ☒ DN = Down / No stop

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Feb			2004			W E. LICKER			2004-04						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
13	XTD 2	21:51	BE	CTD		60	49°46.270	124°10.741							
		22:01	EO				49°46.255	124°10.734	574	500					
		22:10	EN				49°46.247	124°10.722							
17	CTD 26	03:02	BE	CTD		61	49°14.335	124°50.717							
		03:06	EO				49°14.330	124°50.726	257	250					
		03:12	EN				49°14.316	124°50.732							
17	CPF 1	04:30	BE	CTD		62	49°21.535	124°04.680							
		04:35	EO				49°21.541	124°04.443	236	230					
		04:38	EN				49°21.544	124°04.404							
17	CTD 11	05:13	BE	CTD		63	49°20.214	124°12.169							
		05:18	EO				49°20.284	124°12.184	240	135					
		05:32	EN				49°20.291	124°12.176							
17	5061	08:50	BE	NET		64	49°32.9	124°05.00	276						BIONESS
		09:13	EN				49°33.4	124°05.60							
17	5062	10:48	BE	NET		65	49°39.66	124°14.00	330						BIONESS
		11:23	EN				49°38.50	124°12.65							
17	5063	15:28	BE	NET		66	49°45.26	124°16.0	320						
		16:09	EN				49°45.88	124°18.0							

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February			2009			W. E. Russell			2009-04						
Day	Station Name	Time (UTC)	Time Code	Cast Type	Firing Method	Event Number	Positional Information		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch Keepers	Trans. Cleaned	Comments
							Latitude	Longitude							
18	WTO3	20:08	BE	CTD		67	49° 38.840	124° 29.473	205						
		20:13	BO				49° 38.836	124° 29.467	265	200					
		20:16	EN				49° 38.837	124° 29.467							
18	WTO2	20:44	BE	CTD		68	49° 31.486	124° 31.361	243	235					
		20:38	BO				49° 31.476	124° 31.365							
		20:42	EN				49° 31.471	124° 31.367							
18	WTO1	21:29	BE	CTD		69	49° 30.152	124° 33.440	145	140					
		21:33	BO				49° 30.145	124° 33.432							
		21:39	EN				49° 30.144	124° 33.432							
18	SO64	21:56	BE	NET		70	49° 36.0	124° 32.4							BIONESS
		22:3	EN				49° 35.4	124° 30.5							
19	SO65	16:00	BE	NET		71	48° 51.376	123° 04.512							BIONESS
		16:28	EN				48° 50.741	123° 03.753							
19	SO66	18:19	BE	NET		72	48° 50.77	123° 08.7							BIONESS
		18:46	EN				48° 50.97	123° 10.28							
21	SO67	21:24	BE	CTD		73	48° 11.48	123° 54.30	479	478					EXCAR
		21:30	BO				48° 11.48	123° 54.30							
		21:31	EN				48° 11.48	123° 54.30							

Cast Type:
BOT = Bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD
SET = Fish Set

USW = Sea Water Loop
MOR = Mooring
NET = Plankton 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

Transmissometer to be cleaned before each cast, do not use Ammonia products
DE = Deployment Time
MR = Messenger Release Time
RE = Recover Mooring Time

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca
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