

DAILY LOG BOOK

MISSION
NUMBER

2007-02
- 28
- 03

DATE:

VESSEL:

PROJECT:

From: VICTORIA 2 JULY to: BARROW ALASKA 22 JULY
CCGS "SIR WILFRID LAURIER"
C30 / IPY
LEG 1 , LEG 2 , LEG 3

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

Captain: N Thomas First Officer: _____
Second Officer: _____ Third Officer: _____

Mission Participants / Agencies:

Scientific Personnel: Bill Williams / Jackie Grebner
Name Name
Watch Cabin Watch Cabin

[illegible]

Data logging computer: _____

Data acquisition program: _____

CTD deck unit make: _____ model: _____ serial number: _____

Primary 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?

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?

Secondary CTD

Make: _____ model: _____ serial number: _____ s/n: _____ P, S or NO pump?

Primary temperature serial number: _____ P, S or NO pump?

Primary conductivity serial number: _____ P, S or NO pump?

Secondary temperature serial number: _____ P, S or NO pump?

Secondary conductivity serial number: _____ P, S or NO pump?

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

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: _____ P, S or NO pump?

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

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

DAILY LOG

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Month <u>September</u>				Year <u>2007</u>				Ship <u>CCGS Sir Wilfrid Laurier</u>				Cruise ID <u>2007-03</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
25	DVH072	1730	DE	CTD		1	70° 59.1885	133° 45.6529	119.5		None	0	lm		FAR no good Cap left on.
25	KC0500	1911	DE	Pumping No CTD		2	71° 05.123	134° 22.506	517.5			6			Submersible pumps 1 cast w/ 6 levels
25	KC0500			TM Ros		3	Near KC0500				1 -				Test Cast.
26	IHC05-1	0840	DE	CTD		4	70° 19.964'	134° 45.001	56.5		None	0	lm		
28	DVH07-1	0324	DE	CTD		5	70° 20.007'	134° 44.688	56		None		lm		
29	KC2700	0415 0730	DE	ROS	UN	6	72° 27.651	136° 56.141	2586	2350	2x 6 levels 1-12	12	lm		Geochem (boatdeck)
29	KC2700	0615	DE	ROS	UN	7	72° 27.672	136° 56.223	2587	1100	12 levels 13-24	12	JC		T/M rosette
29	KC2700	0950 1044	DE	ROS	UN	8	72° 27.664	136° 56.169	2587	1200	2x 6 levels 25-36	12	lm		Geochem
29	KC2700	1100	DE	Pumps		9	72° 27.675	136° 56.105	2587	2350	6 levels	6	RF		Pumping through filters 2 nd @ 3 deep levels

Cast type:

BOT = bottle cast, no CTD
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NET = net haul
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bottle firing method:

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Additional comments

SBE 25 s/n 334

T-sensor s/n 2668

C-sensor s/n 2754

p-sensor s/n 290554 (1000 db macc)

Altimeter s/n 40853 Telelynx PSA-916

No data. Line jumped the block in seas. Cast aborted.

Two drops. Salinity trace of first looks poor

No PAR sensor installed - trace is gibberish.

Change p-sensor to s/n 290436 (6800 db macc)

$A_0 = 5286.501$; $A1 = -2.758697$; $A3 = -1.298335 \text{e-}006$

Problems with spiking on pressure signal. Suspect w/w connectors

Offset adjusted to 3.3 in air

Cal Date 11-Feb-2002

Spiking in pressure much reduced by clearing & drying w/w connectors & reversing it end to end.

Pumps started early - down-cast speed mis-judged. Samples smeared over depth.

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Month September				Year 2007				Ship CCGS Sir Wilfrid Laurier				Cruise ID 2007-03			
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							
29	KC2700	~1700	DE	PUMPS		10	72 27.7'	136° 56.2'	2587	2330	6 samples		MS/RF		2 ^{ea} @ 3 levels
30	KC2700	~0600	DE	PUMPS		11	72 27.7'	136 56.2'	2587	1800	7 samples		MS/RF		7 levels
30	KC2000	~1600	DE	PUMPS ROS	UN	12	71 43.925	135° 29.793	2002	1934	2 ^{ea} @ 6 levels 37-48	12	HM/KB		geochem (deep)
30	KC2000	1725	DE	ROS	US	13	71 43.935	135° 29.780	1998	1200	12 levels 49-60	12			TM
30	KC2000	1737	DE	ROS	US/UN	14	71° 44.036	135° 30.033	2000	700	2x6 levels 61-72	12	hm		geochem (shallow) → Koji's O ₂ sensor test
30	KC2000	1355		PUMPS		15	71 43.94	135 29.80	2000	1800			MS/RF		
30	KC2000	1930		PUMPS		16	71 43.94	135 29.76	2000				MS/RF		
01 OCT	KC1500	0702	DE	ROS	UN	17	71 28.14	135 01.760	1630	1000	12 levels 73-84	12	KB/JC		TM
01	KC1000	11:55	DE	ROS	UN	18	71 16.69	134 42.31	1064	1000	12 levels 85-96	12	KB/JC		TM
01	KC500	15:31	DE	ROS	UN/US	19	71 04.590	134 21.815	500	494	6 ^{ea} @ 2 levels 97-108	12	hm		geochem (deep)

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Additional comments

Pressure offset : indicates 6m depth when at 2m.

Sea cable termination for Haulbolt winch replaced. Visible damage was possible cause of spiking in sensor data at KC2700

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Month October				Year 2007			Ship <i>Sur Wilfrid Laurier</i>				Cruise ID 2007-03				
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	KC0500	1654	DE	ROS	UN	20	71 04.594	134 21.877	500	450	109-120	12	JC/KB		TM / foredeck
1	KC0500	1732	DE	ROS	US	21	71 04.599	134 21.872	500	350	3 rd @ 4 levels 121-132	12	HM		Boatdeck
1	KC0200	2042	DE	ROS	UN	22	70 58.144	134 12.189	213	200	133-144	12	KB/JC		TM / foredeck
2	1HC08-B	2134	DE	CTD		23	70 16.971	143 58.0 145° 41.651	30			0	hm		Boatdeck
3	1HC07-K	1916	DE	CTD		24	70 17.302	145° 19.681	30 ³³	29		0	hm		"
3	1HC07-A	2212	DE	CTD		25	70 21.952	146 00.201	32	29		0	hm		
4	1HC07-V	0105	DE	CTD		26	70 37.955	146 08.078	45	43		0	hm		
4	BCE-06	1715	DE	ROS	UN	27	71° 40.453	154 59.381	110	103	145-148	45	hm / KB		1805, separately recording
5	AIN-05 BCE-06	0215	DE	CTD ROS	UN	28	75 06.168	168 00.107	167	162		0	hm / KB		1805
6	HCW06	1726	DE	ROS	UN	29	73 03.645	163° 45.422	102	93.7	149-152	4	hm / KB		1805

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Additional comments

Close bottles after 1 min. stopped at Optode levels

Back to 1000 db f/s pressure.

Salinity on first drop was bogus. Second drop ok.

Salinity slow to stabilize

Salinity slow to stabilize. High values at times

ISUS plug in 1717:04 utc (synchronized w/CTD); Discard Bottle 4 - not submerged when closed

ISUS Pressure channel wacky. Depth information comes from winch speed control (1 m/s) & altimeter. [probably using con Rln]

~~Pressure connections serviced, but data~~

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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								
6	HCE06	21:55	DE	ROS	UN	30	73 09.70	162 20.99	204	190	153-156	4	HM/KB		15US	
									169.5							
7	BCW06	16:59	DE	ROS	UN	31	71°48.247	155°20.281	172	151	157-160	4	hm/kb		15US	
7	BCC06	21:01	DE	ROS	UN	32	71 44.22	155 10.80	309	291	161-164	4	HM/KB		15US	
8	BCED06	00:04	DE	CTD		33	71 40.43	154 59.51	111	98.4		0	KB		15US	
8	BCH06	22:04 21:52	DE	ROS	UN	34	71 06.57	159 20.68	87	76	165-168	4	KB		15US	

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Additional comments

- salinity taking a long time to stabilize (~150 to 180s), sent to 10m & started to stabilize
- altimeter spiking
- spiking from altimeter
- CTD & deck unit wouldn't communicate — had to re-set CTD (wake up & sleep in seaterm)