

DAILY LOG BOOK

MISSION
NUMBER

+
+

Cruise 2004-29
Cruise 2004-35
Cruise 2004-38

DATE:

From:

Sep. 13

to:

Sep. 23, 2004

VESSEL:

CCGS J.P. Tully

PROJECT:

La Perouse, GVRD, Georgia Str., ECOHAB, BIO MOOR,
Juan de Fuca, Deep Water Return, ETC.

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

2004-35 Vector Oct. 23-24
2004-38 Vector Nov. 16-17

Captain: _____
First Officer: _____
Second Officer: _____
Third Officer: _____

Mission Participants / Agencies:

[illegible]

Second leg of Mission:	Party Chief:					
Name		Watch	Cabin		Name	

Data logging computer: FS02 Shuttle Case

Data acquisition program: Seaspave Win 32 Ver 5.27c

CTD deck unit make: Seabird model: 11plus serial number: 0508

Primary CTD

Make: Seabird model: 911 plus serial number: 0550

Primary temperature serial number: 2968 22-Apr-03

Primary conductivity serial number: 1729 24-Apr-03

Secondary temperature serial number: 2038 19-Aug-04

Secondary conductivity serial number: 2173 19-Aug-04

Transmissometer: Wetlabs Model: CSTAR s/n: 498 DA

Fluorometer: Model Seapoint Cable gain: 10x s/n: 2356 P, S or NO pump?

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

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

Other sensors: Benthos Altimeter s/n: 1024 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: _____

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?**

CTD calibration bottle location (height above CTD in metres): 0.5

Cruise 2004-29 J. P. Tully Sep. 13-23, 2004

Date	Time PDT	
Sep. 13	1300-1900	- load ship.
Sep. 13	2400	- scheduled departure for recovery @ GVRD1
Sep. 14	0730	- on station GVRD1-B for recovery - crew still setting up winch and moving Rosette, installing stopper.
	0821	- set on deck and moving over mooring site
	0827	- sent enable. CA11 rec'd exec'd. 231 m 237 - sending D000 rec'd 234, 231 as we maneuver around. - 286 as we move to south position for release. - 226 coming to stop, 137, 140 - maneuvering for traffic
	0835	- stopped 157 m - sent CA15, "rec'd" "exec'd" - positive response to release - sending enable + release - ranges 130-140 we are 120 m away - but mooring not rising. - also other noises stopping range → gen. mode disengaged

DAILY LOG

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Month <i>Sept</i>				Year <i>2004</i>			Ship <i>Tully</i>				Cruise ID <i>2004-29</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							
14															Started Thermal
15	LOOP1	0200		USW			49 04.71	123 21.42	196						@ 17:42 UTC Brushed Fluorometer
15	VI05	0355	BE	CTD		001	49 10 96	123 18.78	124						Main Computer problem
		0358	BO				49 10 96	123 18.81		113					
		0400	EN				49 10 95	123 18.83							
	VI04	0433	BE			002	49 08.56	123 23.40	185						Pumps not on
		0437	BO				49 08.47	123 23.42		198					
		0440	EN				49 08.45	123 23.45							
	VI03	0518	BE			003	49 05.9	123 29.04	339						
		0522	BO				49 05.84	123 29.06		330					
		0529	EN				49 05.73	123 29.96							
	VI02	0600	BE			004	49 04.44	123 31.81	284						
		0603	BO				49 04.43	123 31.82		274					
		0606	EN				49 04.38	123 31.43							x
15	VI01	0640	BE			005	49 03 42	123 34.58	2053						
		0645	BO				49 03.51	123 34.53		192			DA		
		0648	EN				49 03 52	123 34.55							

Cast type:

BOT = bottle cast, no CTD
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MOR = mooring
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 DRF = drifter

bottle firing method:

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28 May 2003

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Date Time PDT

Sep. 14 0850

- GURDI - recovery continues
- sending CA11 ranges 380-390 ranges
- still no on surface.

0910

- turned on Argos receiver just in case.
- listened with pinger receiver - no signal (on station)

0945

- stopped right on station
 - no pinger signals.
 - no consistent ranges.

0950

- send CA11 rec'd + executed } toggled - enable + disable
CA12 " " } several times - each
with correct responses
- sent CA15 release 5-6 times - no consistent ranges but rec'd correct responses.

1015

- repeated above sequence 1.3 nm to south along contour with same result.
- there was a potential sighting we turned north again but it turned out to be crab buoys.

1040

- repeated sequence .8 nm to south along contour
- investigated another float, yellow, large, without luck - turned out to be a large yellow balloon.

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							Latitude	Longitude							
15	GI03	0745	BE	ROS	US	006	49 10.41	123 33.48	373						
		0752	BO				49 10.36	123 33.48		360	1-3	3	DA Scott	✓	
		0800	EN				49 10.32	123 33.46							
	GI04	0844	BE	ROS	US	007	49 12.63	123 40.45	386						
		0850	BO				49 12.65	123 40.39		370	4-6	3			
		0858	EN				49 12.68	123 40.38							
	NI01	0955	BE	CTD		008	49 13.36	123 51.52	112						
		0958	BO				49 13.36	123 51.42		100					Hit bottom
		1001	EN				49 13.36	123 51.40							
	NI02	1031	BE	CTD		009	49 14.74	123 48.69	357						
		1037	BO				49 14.70	123 48.73		345					
		1043	EN				49 14.66	123 48.78							
	NI03	1115	BE	ROS	US	010	49 16.03	123 45.88	417						
		1120	BO							399	7-9	3			
		1131	EN				49 16.04	123 45.95							
16	LOOP 2	0001	BE	USW			49 05.21	123 23 12				1			SAL ONLY
16	GI05	0308	BE	ROS		011	49 17 55		147						
		0312	BO								10-12	3			SAL ONLY
	↓	0313	EN												

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Date Time PDT

Sep 14 1100

- the hover craft "Penache" was exercising in area and joined recovery by completing a surface search.

1115

- listened at position 2 nm to south pinger + release without result - rather same result

1131

- listened at position 3 nm to south no success by pinger or release

1200

- the "Penache" reported in that it found nothing on the surface after a "expanding squares" search centered on the deployment position.

1246

- on station GURD2-B for recovery

- listened for pinger - no response.

listened with 2 pinger deck units

- completed fire + boat drill

- lan reported back that #7069 Argos is not on the surface GURD1-B not released, is one possibility

- no pinger response, however release giving consistant ranges 790-810 m away.

We move to south east and ranges do not consistantly increase or decrease - not consistancy.

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Month 09				Year 2004			Ship TULLY				Cruise ID 2004-29				
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							
16	GI06	0422	BE	CTD		012	49 12 03	123 23 67	275			2	SL WES		
		0424	BO				49 11 98	123 23 64		265					
		0429	EN				49 11 95	123 23 65							
16	GI02	0535	BE			013	49 2.67	123 23 32							
		0539	BO	CTD	U/S		49 2.66	123 23 32	268	255	12 13	2	SL WES		
		0544	EN				49 2 65	123 23 31							
16	GI01	0629	BE				48 58 60	123 16 46							
		0632	BO	CTD		014	48 58 62	123 16 44	167.9	160			SL WES		
		0634	EN				48 58 63	123 16 42							
16	MI01	0739	BE	CTD		015	48 52.41	123 14.51	152						
		0743	BO				48 52.45	123 14.50		145	0	0	DA WES SR	/	
		0746	EN				48 52.53	123 14.46							
16	MI02	0809	BE	CTD		016	48 53.83	123 12.44	140						
		0812	BO				48 53.84	123 12.46		130	0	0	DA WES SR		
		0815	EN				48 53.87	123 12.47							
16	MI03	0834	BE	CTD		017	48 55.23	123 10.65	126		0	0	DA WES SR	✓	
		0837	BO				48 55.22	123 10.61		115					
		0840	EN				48 55.21	123 10.58							

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Date Time PDT

Sep. 14 1352

- set up release #246 to lower on wire and test our deck equipment.

- lower release ranging as we go down.

- ranges consistently increasing

- stopped at 100m counter we have 105 acoustic

- stopped at 200m counter we have 201 acoustic

- ranges consistently decreasing as we raise it

conclusion: our deck equipment through to hull transducer is good.

- we are presently $\frac{1}{2}$ nm north

- no success with release - no pinger

- move 1 mile due west - no pinger response

- no consistent ranges from release.

- move 1 mile due south - no pinger response

- no consistent ranges from release.

- move 1 mile due east. - same - no luck.

- move 1 mile due north - same - no luck.

- established a point in the basin on route to B102 for recovery for our listening station. Rick in office advised that turbidity currents could carry moorings into the deep basin.

- no luck at this sight - ranging as we go.

- head for B102

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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							
16	MIO4	0902	BE	CTD		18	48 56 18	123 09 41	118		—	—	DA SR WC		
		0905	BO				48 56 20	123 09 41		110					
		0907	EN				48 56 21	123 09 41							
16	LOOP3	0917	BE	USW			48 56 87	123 08 60				1			SAL ONLY
16	MIO5	0922	BE	CTD		19	48 57.04	123 08.24	112		—		DA SR WC		
		0925	BO				48 57.05	123 08.23		102					
		0927	EN				48 57.04	123 08 23							
16	MIO6	0943	BE	CTD		20	48 58.02	123 07 02	126						
		0946	BO				48 58.02	123 07 02		115	—	—	DA SR WC		
		0948	EN				48 58 02	123 07 04							
16	MIO7	1004	BE			21	48 58 82	123 05.84	46						
		1006	BO				48 58 83	123 05 86		34	—	—	DA SR WC		
		1007	EN				48 58 83	123 05 86							
16	SIO8	1053	BE			22	48 56.40	123 58.80	45						
		1054	BO				48 56 40	123 58 80		40	—	—	DA SR WC		
		1055	EN				48 56 41	123 58 80							
17	LOOP4	2309		USW			48 15 183	123 38 28					DA	1	SAL ONLY

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Date Time PDT

Sep. 14 1740 - on station B102-F for recovery

- ranges 280 - 282

- sent ACDE received positive response + sighted on surface

1750 - entire mooring up

⇒ CTO Main Computer Problem, Switch to Back-Up

Sep. 15 0730
→ 0830

- standing off Ragged Island

- recovered the top float of GURD2-B

- head for SG02 for recovery

DAILY LOG

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Month 09				Year 2004				Ship TULLY				Cruise ID 2004-29			
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							
18	JFD7	0347	BE			023									
		0349	Bo	CTD			48 11 92	124 0 18	57	51					
		0351	EN												
18	JFD6	0413	BE			024	48 13 83	124 0 25							
			Bo	CTD			48 13 82	124 0 27	124	120					
		0417	EN				48 13 83	124 0 31							
18	JFD5	0450	BE			025	48 15 81	124 0 17	183	182					
		0455	Bo	CTD			48 15 80	124 0 18							
		0457	EN				48 15 81	124 0 20							
		0533	BE				48 17 63	124 0 20							Wait for 20 min for Traffic
18	JFD4	0536	Bo	CTD		026	48 17 63	124 0 27	190	180					
		0539	EN				48 17 63	124 0 38							
		0607	BE				48 19 79	124 0 30							
18	JFD3	0609	Bo	CTD		027	48 19 82	124 0 40	168						
		0611	EN				48 19 86	124 0 48							
		0635	BE				48 21 83	124 0 14							
18	JFD2	0637	Bo	CTD		028	48 21 84	124 0 14	123	115					
		0640	EN				48 21 86	124 0 16							

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Date Time PDT

Sep. 15

1020

- on station SG02-CV-F for recovery
- checked pingers + rec'd strong signal.
- ranges 282-293 as we drift off

1031

- range 308-315
- sent BLEH - rec'd positive response

- recovered without incident - no rotors fouled to the point that speed would be effected

1405

- deploy SG02-G in 269m @ $49^{\circ}01.513'$
 $123^{\circ}23.891'$
tide @ $+1.8$ m

- head for continued recovery attempts @ GVRD2 mooring.

1445

on station GVRD2-B for recovery

- no pinger signals available directly over mooring.
- conditions are much quieter today. - perhaps yesterday we had interference from noise.
- there were no conclusive signals from a release - things were very quiet.
- we had search a diamond pattern 1 nm distance from site in each cardinal direction.

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							Latitude	Longitude							
18		0701	BE				48 23.06	124 00.13	59						
	JFD1	0702	BO	CTD		029	48 23.06	124 00.13		50	-	-	DA WIS SR	✓	
		0704	EN				48 23.07	124 00.13				4			SAL ONLY
18	LOOP5	1710		USW			48 23.18	124 00.32				1			
18	JFE1		BE	CTD		30	48 27.14	124 15.09	26						
		0817	BO				48 27.13	124 15.06		20					
		0817	EN				48 27.13	124 15.09							
	JFE2	0842	BE	CTD		31	48 25.28	124 15.01	136						
		0844	BO				48 25.28	124 14.99		125					
		0847	EN				48 25.27	124 14.99							
	JFE3	0910	BE	CTD		32	48 23.20	124 15.11	184						
		0914	BO				48 23.20	124 15.15		174					
		0918	EN				48 23.22	124 15.16							
	JFE4	0939	BE	CTD		33	48 21.25	124 15.01	227						
		0943	BO				48 21.24	124 15.02		215					
		0948	EN				48 21.24	124 15.03							
	JFE5	1015	BE	CTD		34	48 19.25	124 14.96	214						
		1029	BO				48 19.23	124 14.95		204					
		1033	EN				48 19.21	124 14.89							

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- GURD2-B recovery continues by expanding search (previous to 2 nm distance in each cardinal direction into deeper water, i.e. North, West + South.

1540 - 2 nm due south.

- no pinger signals
- we are app 1 nm from SG02-G deployed earlier.
- we could prove our deck equipment is receiving 8kHz by transponding the 1090 on SG02-G simultaneously with both Oceano + Interocean deck units on separate transducers.
- could receive the 1090 on Interocean deck unit consistently
- could repeat this with the Oceano unit showing its transmitting + receiving

1621 - 2 nm due west.

- no results with pinger + release deck unit.

1651 - 2 nm due north.

- same no results
- head for GURD1

1809 - GURD1

- on station
- initially standing off app 4 cables to allow tug + barge to pass over mooring site.
- there are no pinger signals or release responses.

1830

- moved right over station.
- no pinger responses, no release responses

1855

- 1 nm to north of station - " " " " "
- 1 nm to west of station. " " " " "

- sent CA12 to disable unit if it hears it?

- head for CTD lines.

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Month 9				Year 2004				Ship Tully				Cruise ID 2004-29			
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							Latitude	Longitude							
18	JFE 6		BE			35	48 17.64	124 15.03	174						
		1100	BO				48 17.64	124 15.02		164					
		1104	EN				48 17.64	124 15.02							
	JFE 7	1129	BE			36	48 16.42	124 14.99	95						
		1132	BO				48 16.41	124 14.97		85					
		1134	EN				48 16.42	124 14.95							
18	LOOP 6	2030	BE	USW			48 24.49	124 22.55				1			SAL ONLY
19	LA 1	0134	BE	CTD		37	48 29.42	124 43.98	263				DA LP SR		
		0140	BO				48 29.36	124 44.02							
		0143	EN				48 29.36	124 44.09							
19	LA 2	0235	BE	ROS		38	48 26.30	124 51.63	301						
		0239	BO				48 26.33	124 51.79			14-26	13	DA LP SR		LOOP 7 SAL ONLY
		0255	EN				48 26.49	124 52.33							
19	LA 3	0340	BE				48 22.88	124 57.58							
		0342	BO			39	48 22.89	124 57.57	113						
		0344	EN				48 22.90	124 57.56							
19	LA 4		BE				48 19.41	125 4.13			27-37	11			
			BO	0445		40	48 19.43	125 4.14	191						
			EN	0453			48 19.44	125 4.12							

Cast type: USW = sea water loop
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Sep. 16

0730

- on station SGO1 for recovery
- recovery winch had broken down - assume it was leaking oil
- set up dragging winch for recovery

0800

- ready to proceed stopped above mooring - mooring seen on sonar
- range 310 m
- move off to release position range 364

0804

- send ABCH - received positive response

0805

- sighted on surface recovered without incident

1040

- tied up at I.O.S.

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							Latitude	Longitude									
		0540	BE														
19	L A 5	0542	BO	CTD		041	48 16 05	125 10 47	120	115							
		0543	EN				48 16 05	125 10 47									
			BE														
19	L A 6	0704	BO	CTD		042	48 12 . 67	125 17 . 26	112		—	—	DA, WT SR	—			
		0708	EN				48 12 . 67	125 17 . 27		100							
		0710					48 12 . 67	125 17 . 17									
19	L A 7	0755	BE	CTD		043	48 09 . 22	125 23 . 88	114								
		0758	BO				48 09 . 23	125 23 . 88		103	—	—	DA, WT SR	✓			
		0800	EN				48 09 . 24	125 23 . 88									
19	L A 8	0850	BE	RCS		044	48 05 . 75	125 30 . 49	142								
		0853	BO				48 05 . 73	125 30 . 48		131	37-45	9	DA WT SR	✓			
		0905	EN				48 05 . 68	125 30 . 58									
19	L A 9	0954	BE	RCS		045	48 02 . 40	125 36 97	362								
		1002	BO				48 02 . 37	125 36 . 99			46-58	13	DA WT SR	—			
		1026	EN				48 02 . 25	125 37 . 05									

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DRF = drifter

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28 May 2003
Daily_log_book.doc

Date Time PDT

- | Date | Time PDT | Notes |
|---------|----------|--|
| Sep. 17 | 0730 | <ul style="list-style-type: none"> - on station AS04 for recovery - sent 8221 enable #848 - pinger signal received strong - drifted off - ranges 546, 524, 502 as we approach mooring - manoeuvring into a position to release - very strong current. |
| | 0740 | <ul style="list-style-type: none"> - 171, 172, ranges on 8221 - sent 8225 got rec'd + "exec'd" - ranges 164, 158, 154 as mooring is rising |
| | 0742 | <ul style="list-style-type: none"> - sighted on surface - enabled #847 8211 - ranges 540-ish, sent disabled 8212 |
| | 0830 | <ul style="list-style-type: none"> - Steve + Patrick join ship + we land Luc to pick up tires for buoys and some nylon lashing line - the bungies that held the Vinyl floats had fatigued and elongated - we will be lashing the Vinyls in place this time - downloading, data check, prep. mooring |
| | 1330 | <ul style="list-style-type: none"> - landed Steve + Patrick, and pick up Luc with tires etc. - head for mooring site |
| | 1443 | <ul style="list-style-type: none"> - launched AS04-C @ $48^{\circ}17.969'$ $123^{\circ}22.523'$
in 118 m on sounder with +2.2 tide = 115.8 datum - head for JF2E |

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>Sept</u>				Year <u>2004</u>			Ship <u>Tully</u>				Cruise ID <u>2004-29</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							
20	LB7	0049	BE	CTD		46	48 28.66	125 22.07	158						Sal diff now 0.003
		0053	BO				48 28.65	125 22.09		147			DA SR WT		
		0055	EN				48 28.65	125 22.09							
20	LB8	0141	BE	ROS		47	48 25.29	125 28.49	138						
		0144	BO				48 25.34	125 28.49		130	59-67	9	DA SR WT		
		0154	EN				48 25.23	125 28.59							
20	LB9	0239	BE	CTD		48	48 22.07	125 34.63	150						
		0242	BO				48 22.08	125 34.60		140					
		0245	EN				48 22.08	125 34.60							
		0332	BE				48 18 53	125 41 20							
20	LB10	0335	BO	ROS	US	49	48 18 52	125 41 21	150	144	68-76				
		0341	EN				48 18 52	125 41 14							
		0426	BE				48 15 10	125 47 48							
20	LB11	0429	BO	CTD		50	48 15 04	125 47 51	210	200					
		0432	EN				48 15 01	125 47 53							
		0506	BE				48 12 94	125 51 76							
20	LB12		BO	ROS	US	51			514	498	77-91				
			EN				48 12 92	125 51 77							

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Date Time(PDT)

In water 2C {CDEH ABDEH} 2B
ABGH

JF2E-F = ACEH

Sep. 17. 1818

- on station JF2E for recovery
- drifting over ranges from 160 - 154 m
- ranges rising 157, 160, 164, 165 - 207 m

1823

- sent BCD F - rec'd positive response.

- recovered without incident
- clean up + set up.

1942

- deployed JF2E-F at $48^{\circ}15.209'$ $124^{\circ}09.768'$
in 152.8 m water with +2.8 m tide
datum = 150m

- head for CTD lines

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year			Ship				Cruise ID				
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							
		0610	BE				48 10 69	125 55 93	875	863					Pinger and Alt OK
20	LB13	0623	BO	CTD		52	48 10 67	125 55 91							00000000
		0633	EN				48 10 62	125 56 01							
			BE												
20	LB14	0707	BO	ROS	U/S	53	48 08 52	126 00 02	1186						
		0724	EN				48 08 59	126 00 01		1172	92-110	19	DA SR WT		LOOP 9 SAL ONLY
		0756					48 08 57	126 00 19							
20	LB15	0855		ROS		54	48 04 39	126 08 39	1490 ²						
		0916					48 04 35	126 08 47		1560	111-113	3	DA SR WT		
		0941					48 04 32	126 08 70							
20	LB16	1038		CTD		55	48 00 60	126 16 99	1798						
		1046					48 00 65	126 17 00		502					Only to 500 time constraints
		1055					48 00 77	126 16 95							
21	LOOP10	0100		USW			48 42 09	126 32 14				1			LOOP 10 SAL ONLY
21	LD11	0250	BE	ROS		56	48 28 84	126 42 84	1604						
		0310	BO				48 28 79	126 42 94			114-116	3			
		0330	EN				48 28 78	126 42 95							

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28 May 2003
 Daily_log_book.doc

Date Time PDT

- | <u>Date</u> | <u>Time</u> | <u>PDT</u> |
|-------------|-------------|---|
| Sep. 18 | 0730 | <ul style="list-style-type: none"> - on station JF2C for recovery - ranges 185, 188 we are on top - have to let a deep-sea vessel pass before releasing. |
| | 0750 | <ul style="list-style-type: none"> - moved off to release position - ranges 332, 329 - sent CDEH - no response sent again - no response - sent ABGH - rec'd positive response sent ABGH - rec'd positive response |
| | 0755 | <ul style="list-style-type: none"> - sighted on surface. |
| | 0842 | <ul style="list-style-type: none"> - recovered without incident + cleaned up. |
| | 0845 | <ul style="list-style-type: none"> - on station JF2B-E for recovery. - ranges 165, 167 we are on top. - 177, 180, 194, 198 → 200 |
| | 0850 | <ul style="list-style-type: none"> - sent ABDH rec'd positive response |
| | 0852 | <ul style="list-style-type: none"> - sighted on surface. |
| | 1240 | <ul style="list-style-type: none"> - deployed JF2C-F in 186m at +3.4m tide
@ 48° 21.519' 124° 12.812' |
| | 1315 | <ul style="list-style-type: none"> - held safety meeting discussing recovery of the ECOHAB moorings on route to EHI - Capt, Chief Exe Officer, Bosun, Sue + Anthony, Dave, Luc, and myself were present. |

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year				Ship				Cruise ID			
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							
21	LD10	0415	BE	CTD		57	48 32 21	126 36 62	1481		0117a 0118a 0119a				These numbers are not from LD8 Series but 3 call samples slotted into this cast
		0434	Bo		U/S		48 32 18	126 36 65							
		0452	EN				48 32 19	126 36 64							
		0538	BE				48 35 73	126 29 92							
21	LD9	0548	Bo	CTD		58	48 36 67	126 29 97	1057						
		0557	EN				48 35 70	126 30 02							
		0647	BE				48 39 19	126 23 39							
21	LD8	0658	Bo	ROS		59	48 39 16	126 23 31	779	764	117-133	17	DA SR WT	-	
		0728	EN				48 39 07	126 23 25		-					
21	LD7	0816	BE				48 42-66	126 16 68	453						
		0824	Bo	CTD		60	48 42-63	126 16 76		440			DA SR WT	-	
		0830	EN				48 42 66	126 16 81							
21	LD6	0916	BE	ROS		61	48 46 18	126 10 26	137						
		0920	Bo				48 46 18	126 10 27		127	134-142	9	SR DA WT	-	
		0929	EN				48 46 20	126 10 25							
21	LD5	1019	BE	CTD		62	48 49 64	126 03 61	90						
		1021	Bo				48 49 65	126 03 61		80					
		1022	EN				48 49 66	126 03 61							

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Date Time PDT.

Sep. 18

1449

- on station EHI for recovery
 - sent small boat to attach line
 - sent 5667 and 5A67 for range got rec'd + executed
 - sent 5668 and 5A68 for release got " "
- 1701
- cleaned up on deck except for old buoy and heading for CTD Lines. - LA Line

- things to do better.

- it is best if the boat attaches ^{port + starboard} guy-lines and passes them up to the ship
- the stopper on deck needs to be adjustable. i.e. when the crane picks up the load it is good to be able to release tension from back end.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year				Ship				Cruise ID				
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	
21	LD-1	1107	BE			63	48 53 16	125 57.08	63							
		1109	BO	ROS			48 53 17	125 57.15			143-148	6	DA 52	-		
		1116	EN				48 53.21	125 57.31								
21	LG01	2304	BE	CTD		64	48 20.49	126 35.00	55							
		2306	BO				48 20 50	126 34 96		48		-	"	-		
		2307	EN				48 20 49	126 34.94								
21	LG02	2345	BE	ROS		65	49 18.72	126 38.08	100							
		2347	BO				49 18.76	126 38.08			149-155	7	"	✓		
		2354	EN				49 18 67	126 38.15								
22	LG03	0058	BE	CTD		66	49 15 03	126 43.72	123							
		0102	BO				49 15 00	126 43 64				-	"	✓		
		0104	EN				49 15 00	126 43 59								
22 23	LG04	0149	BE	ROS		67	49 11 29	126 49 38	147							
		0153	BO				49 11 28	126 49 41		135	156-164	9	"			
		0204	EN				49 11 26	126 49 31								
23 23	LG05	0256	BE			68	49 07.29	126 55 09	274							
		0304	BO				49 07.25	126 55.89								
			EN				49 07	126 55.								

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Date Time PDT

- | | | |
|---------|------|--|
| Sep. 19 | 0730 | <ul style="list-style-type: none"> - on station EH2 for recovery - sent 040B on several occasions got "rec'd" + "executed" but inconsistent ranges. - sent 040B + 0456 got "rec'd" + "exec" and repeated the command with same results - the small boat at the buoy confirmed release. |
| | 0945 | <ul style="list-style-type: none"> - all on board + cleaning up - we steam for EH3 for recovery |
| | 1430 | <ul style="list-style-type: none"> - on station EH3 for recovery |
| | 1453 | <ul style="list-style-type: none"> - sent 6A92 x2 for release got "rec'd + exec" each time - small confirmed mooring is free - recovered without incident |
| | 1630 | <ul style="list-style-type: none"> - all cleaned up + heading for LB Line CTD's |

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month				Year			Ship				Cruise ID				
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 22	LG06	0352	BE				49 03 47	127 1 04	950	940	165 - 182				
		0401	Bo	ROS		6669	49 03 37	127 0 94							Bot 1 and 2 not
		0420	EN				49 03 12	127 0 68			Also no 100 m bottle				Tripped
23 22	LOOP 11	0530	BE	USW			48 59 14	126 46 76	No sounder			1			LOOP 11 SAL ONLY
23 ²²	EFF01	1530	BE	ROS		70	49 55 4	125 11 60			183-186				
23 22	EFF02	1551	BE	ROS		72	49 4 99	125 10 29			187-192				
23 22	EFF03	1605	BE	ROS		73	49 4 23	125 9 36			193-200				
23 22	EFF04	1628		ROS		74	49 3 11	125 8 58			201-205				
23 22	EFF05	1652		ROS		75	49 2 51	125 9 20			206-216				
23 22	EFF06	1711		ROS		76	49 1 65	125 9 26	150		217-225				
	EFF07	1732		ROS		77	49 01 25	125 09 38			226-234				
	EFF08	1755		ROS		78	49 00 64	125 10 27			235-241				

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Date Time (PDT)

* 1253 PDT deployed mooring A1-NN in 500m water
at position 48° 31.754 126° 12.123

Sep. 20 0735 - on station A1 for recovery.
- range 482, 481
- moved to release position 504 range
- send ABCD - got positive response - sighted on surface
- recovered without incident.

0841 - on site B101 for recovery.
- ranges 382, 383
- clearing deck from previous recovery

0855 - range 405 1.2 cables off.
- send ADEF - got positive response - sighted on surface
*

1440 - on station PATC 2 for recovery
- ranges 405, 407, 408, 413 directly over station
- the returns are very faint however
- pinger signal strong
- moved off 1.1 cables - release is so faint → no ranges
- sent ABEG - and again - faint response indicating release.
- no ranges
- sent CDFG + ABEG + CDFG + ABEG + CDFG + ABEG got faint release
responses repeatedly. - no mooring
1507 - no mooring on surface

DAILY LOG

Ocean Sciences and Productivity Division

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							Latitude	Longitude							
22	LOOP12	2205	BE	USW			48 33.72	124 44.76				1	DA		LOOP 12 SAL ONLY
23	JBF5	0417	BE				48 9 82	123 35 43							
		0417	Bo	CTD			48 9 82	123 35 43	60	53					
		0418	EN				48 9 81	123 35 42							
23	JFB4	0438	BE			80	48 11 73	123 35 37							
		0440	Bo	CTD			48 11 74	123 35 38	138	129					COMPUTER CRASH
		0442	EN				48 11 76	123 35 40							FILE 81 ZERO BYTES
		0504	BE				48 13 63	123 35 60							
23	JBF3	0506	Bo	CTD		82	48 13 64	123 35 60	150	Bot+5					
		0508	EN				48 13 64	123 35 60							
		0530	BE				48 16 56	123 35 40							
23	JBF2	0531	Bo	CTD		83	48 16 62	123 35 39	176	Bot+6					
		0533	EN				48 16 65	123 35 38							
		0545	BE				48 17 67	123 35 28							
23	JBF1	0547	Bo				48 17 66	123 35 26	163						
		0549	EN				48 17 65	123 35 26							
THE END															

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Date Time (PDT)

- Sep. 20 1509 - back over mooring getting ranges of 421, 415, very faint - still down there
- 1520 - setting up drag
- 1659 - start drag on 2 cable radius
- 1703 - drag recovered unsuccessful.
- 1703 - moved over station, ranges 428, 415 mooring still on bottom on position.
- this is confirmed by pinger signal
- sent CDFG + CDFG
- sent info to several fish boats visible in the area to look out for buoy.
- depart for CTD's on LD line.

- Sep. 21 0738 - on station E01 for recovery.
- 0740 - listened to pingers - got both pingers
- 0745 - sent 8231 → 'rec'd + exec'd', ranges 432, 434, → 464 as we drift
- 0745 - Sent 8235 → 'rec'd + executed' - sighted on surface

NB: this same release used on GURD mooring RT161 and we used the TT301 deck unit that returned from the Arctic and reported as faulty

- * - the top instrument and buoy have been damaged by large wire marks
- head for E03 ^(+value) recovery

Date Time PDT

- | Date | Time | PDT | |
|---------|------------|-----|--|
| Sep. 21 | 0952 | | - on station E03 for recovery |
| | | | - ranges 390, 391 |
| | | | - moved off cable range 466 467 |
| | 1001 | | - sent ABCF - rec'd positive response - sighted on surface. |
| | | | - recovered without incident serviced on site |
| | 1321 | | - deployed E03-NN in 402.6 m water (with +2.1 m tide)
at position $49^{\circ} 05.694'$
$126^{\circ} 56.074'$ |
| | 1530 | | - deployed E01-NN in 100 m water (with +2.8 m tide)
at position $49^{\circ} 17.524'$
$126^{\circ} 35.896'$ |
| | | | - head for CTD's on LG Line. |
| Sep. 22 | 0800 | | - CTD's in Effingham Inlet |
| | ± 1100 | | |

Effingham Station Notes:

0830 P.D.T.

Please note that bottles 1 & 2 fire intermittently so will not be used.

Bottle # 23 is missing and is in bottle # 11 slot.

At depth we fire 3 bottles taking the bottom sample from # 3

SL

Date Time PDT

Sep. 22 1817 - deployed JF2B-F in 166 m water with +4.1 m tide
@ position : $48^{\circ}22.922'$ $124^{\circ}11.045'$

- head for CTD's on JFB Line

1936 - Oxygen Standardization are is app. .08 lower than the expected .715-.724 range. Typical standard on this cruise has been .707