

DAILY LOG BOOK

MISSION
NUMBER

2003-26

DATE:

From: July 23, 2003 to: August 4, 2003

VESSEL:

John P. Tully

PROJECT:

Sea breeze / SSF

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

July 23/03

1115 Repair IOS for JAF 20 ADCP
mooring. Sunny/warm

1300 Boat + Fire drill.

1802 on station JFRC-CV-C for recovery

- sent CDF - received response

- ranges = 600 - 200

- stopped over mooring range 197

- moved off to release position

- range = 274 m

1808 - sent BEFG

- received positive response.

1814 - sent BEFG again received positive response

1817 - mooring not up yet

- sent BEFG again received positive response.

- sent CDFG + CDF + BEFG

received positive response

1822 - sighted off port bow app. 4 pk on

- ranges read 400-440.

- mooring recovered without incident.

- VHF 68 not received.

Argos Light + Pinger working.

- lightly fouled - no growth mostly slime.

- stainless body band holding ADCP suffered

crevice corrosion, will have to be replaced

- Release #002 released on clock - gave

positive response but motor shaft not
turning.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>July</i>		Year <i>2003</i>		Ship <i>Tim</i>		Cruise ID <i>2003-26</i>								
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
24	ERO3G1	1522	<i>net</i>		MOOR	47 56.505	129 05.510	2135						<i>Many red feeling well on way out</i>
24	ERO3N3	1648	<i>net</i>			47 57.462	129 05.335	2122(2)						<i>North line, East side</i>
<i>CTD STATIONS - GMT, Moorings PLOT (+7)</i>														
25	ERO1	0246	CTD	BE	1	47 56.74	129 05.68	2128		1-2	2	DA		
		0328		BO		47 56.82	129 05.74	2170						
				EN		47 56.78	129 05.86							
25	ERO2	0425	CTD	BE	2	47 56.43	129 05.08	2124						<i>LOOP 1 TAKEN 0427</i>
		0505		BO		47 56.45	129 05.11	2100		-	-	DA		<i>Plume @ 1860 m</i>
		0538		E2		47 56.47	129 05.10							
25	ERO3	0611	CTD	BE	3	47 54.92	129 06.75	2227		-	-	DA		<i>Top of plume at 1904 m</i>
		0653		BO		47 54.97	129 06.79	2220		-	-	DA		
		0723		EN		47 54.95	12 06.80							
25	ERO3N1	1630	MOORING			47 57.705	129 05.741		2080					
25	ERO3S2	1830	MOORING			47 56.088	129 06.268		2176					
25	ERO3S4	2058	MOORING			47 56.002	129 05.910		2124					
25	ERO3S3	2316	MOORING			47 56.039	129 06.075		2154					
26	ERO3S1	0008	MOORING			47 56.147	129 06.513		2096					
26	ERO3N2	0215	MOORING			47 57.521	129 05.579		2157					

Cast type: BOT = bottle cast, no CTD
CTD = CTD without Rosette
ROS = Rosette plus CTD

USW = sea water loop
MOR = mooring
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DRF = drifter

bottle firing method:
• US = up / stop
• UN = up / no stop
• DN = down / no stop

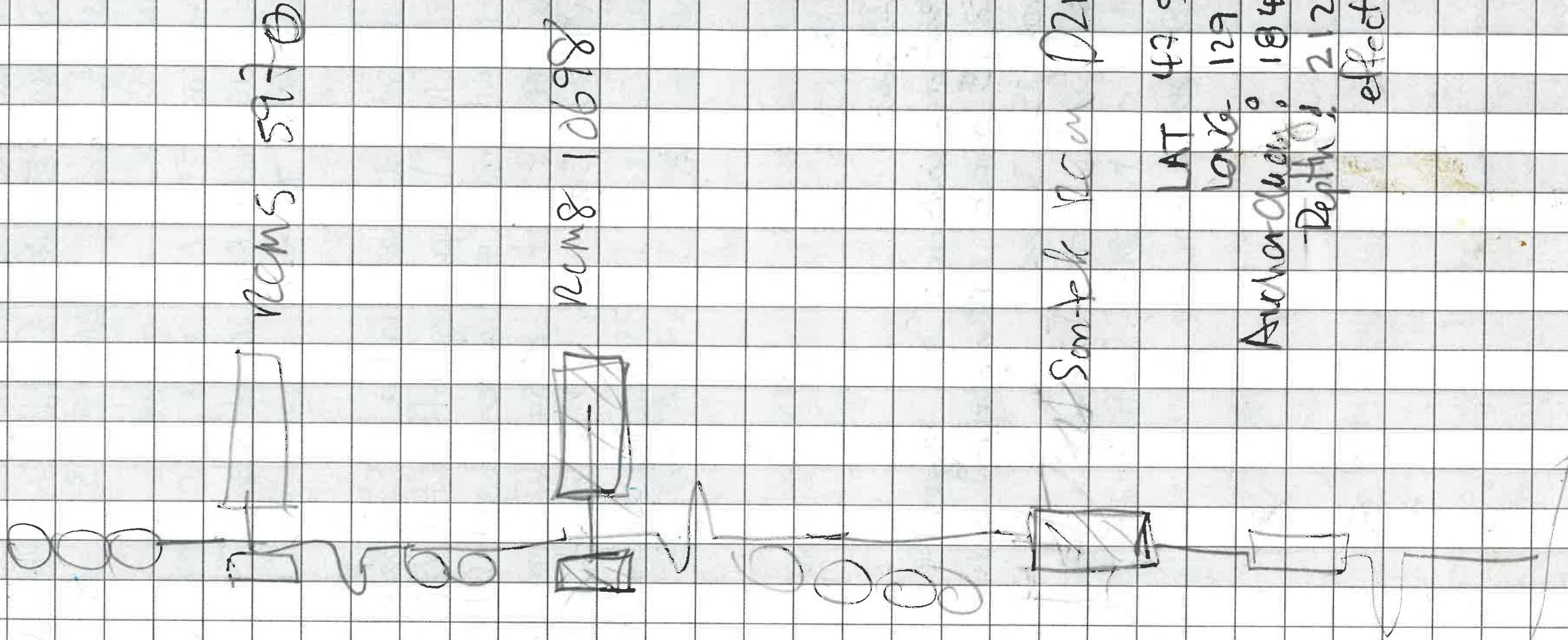
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Transmissometer to be cleaned for each cast, do not use Ammonia products

22 March 2002
Daily_log_book.doc

ER03 N3



Additional comments

LAT 47 57.462

LONG 129 05.335

Anchor Chain: 1849 PDT

Depth: 2122 m (side wall effects?)

July 24/03 0900 PDT

MOORING DISCUSSION -

1. Deploy mooring FRO3G1 first. IO release
RCMS at 15 mab; RCMS at 30 mab

2. Deploy mooring FRO3N3 2nd. IOS release
SONTEK at 15 mab; RCMS/8 at 30 mab
RCMS/8 at 75 mab

1100 PDT: Russ and Rick had a discussion
with 19 mate (Mike) regarding differential GPS on
ship. Uses land-based station to correct GPS.
We presently have 8 out of 8 satellites and error
will be meters. Good idea to run soundings lines.
Bridge will offset DGPS to be under A-frame.
So ~~the~~ Trimble GPS will be to A-frame

July 25/03

Note on moorings:

- ① All conventional moorings are same. RCMS/8s
are 30 and 75 mab. GAP mooring has only
2 RCMS at 15 & 30 mab
- ② The bottom instrument (15 mab) is typically
non-REM *ee* North, Sontek and REM.
- ③ Timing set for 1 hour in conventional

Mooring ERO351 (The 'gap')

RCM 11 @ 15mab & RCM 8 @ 30mab
Proposed Site 47 56.512°N 129° 55.514'W 2145m water

5m poly

#33025
#44797
#44809

VF channel #68

swivel → 1m of 5/16" wire

RCMS
Vane 8-1

30mab

10.15m 1/4" wire

Deployment
July 24/03

LAT: 47 56.505
LONG: 129 05.510
Anchor Time: 1522 PHT

44746
44807
44758
44756
33003

Sounder depth: 2135m
1st cm into water 1516pdt

1m 5/16" wire

15mab RCM 11 #39

1m 5/16" wire

swivel

IO 524 10900 Rel Code: ABCD
RCM: CDFG-
Reply: 8 kHz

10m 1" poly

2m heavy chain

Flag 105 X

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month July					Year 2003			Ship Tully			Cruise ID 2003-26			
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						Latitude	Longitude							
26	LAB12	0704	ROS	DE	4	47 57.94	127 59.94	2614		3-4	2	DA		
		0722		BO		47 58.00	128 00.10		1500					
		0746		EN		47 57.95	128 00.09							
26	LAB11	1225	ROS	BE	5	47 59.00	127 00.01	2516		5-6				Sunfish Sighting!
		1247		BO		47 59.03	127 00.02				2	DA		
		1310		EN		47 59.01	127 00.01							
26	LAB10	2056	ROS	BE	6	47 59.92	125 58.16	1414				DS		Overcast Wind 5 kn
		2122		BO		47 59.98	125 58.20		1419	7-8	2	DA		little or no swell
		2139		EN		47 59.98	125 58.30							
26	LAB09	2248	ROS	BE	7	48 3.806	125 50.644	763		9-10	2	JV		Very calm
				BO					750		2			changed CTD →
		2317		EN								Sam		
27	LAB08	0017	ROS	BE	8	48° 7.842'	125° 43.140	318						WHITE-SIDED DOLPHIN
		0024		BO		48° 7.866	125° 43.141		300					FAST Sunny/warm
		00		EN		48 7.854	125 43.162							
27	LAB07	0134	CTD	BE	9	48 11.728	125 35.556	162						
		0138		BO		48 11.675	125 35.569		150					
		0140		EN		48 11.687	125 35.566							
27	LAB06	0238	ROS	BE	10	48 15.172	125 27.992							

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22 March 2002
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SOUNDING LINE MOORING LINE ERO3N July 24/03

				Additional comments			
TIME	LAT	LONG	DEPTH	TIME	LAT	LONG	DEPTH
START	47° 57' 860	129° 04' 962	2238	1647	47 57	594 129 05	840
	57 837	06.841	2087	1648		582	790
	814	770	2081			570	747
	808	724	2114			559	698
	805	670	2084			547	650
	799	602	2097			535	600
	788	549	2090	1650		522	548
	766	498	2082			509	499
	739	449	2078			496	448
	728	401	2074			470	346
	715	336	2062			456	286
	702	299	2066			436	212
	700	248	2063			416	134
	685	199	2066			403	078
	672	150	2065			390	031
	659	099	2059	1655		384	997
	647	049	2065			373	948
	635	000	2068			361	898
	624	05.942	2075			347	838
	606	885	2084			335	792
							2090

LAT	Long	Depth
47° 57'	129 04 740	2107
306	685	2110
294	642	2110
281	592	2116
267	542	2125
252	482?	2124
231	399	2207
219	350	2158
207	305	2162
195	249	2176
180	187	2192
166	137	2198
158	099	2222
143	040	2247
124	952	2265
113	902	2274

LAT	Long	Depth
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MOURING POSITION 8 ERO3 N3

Proposed site ~~47°~~ 57.462

129 05.340'

2178 m water

July 25/03

ERO3 NI A

#32988 + NORTEC

#43161

#36242

— 1 m 5 1/16"

75m
(main)



RCMS 6881

VANE SA3

41.75m 1/4"

#44900

#44822

1m 5 1/16"

30m



RCMS 8556 VANE 510

— 10.15 m 1/4"

44045

32954

32141

45182

44889

In water 0915 PDT

LAT: 47° 57' 70S

LONG: 129° 05' 74W

Depth Sounder: 2080

Time ANCHOR: 0930 PDT
1630 GMT

15m



NORTEC 1161 in cage

— 1m 5 1/16"

Swivel

IOAR

0898101

LOGGED

Rel: ADELH

ARW LOGG

8kHz

— 10m 1" poly

— 2m chain

1x

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>July</i>					Year <i>2003</i>			Ship <i>Willy</i>				Cruise ID <i>2003 26</i>		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
	LAB06	0243	ROS	BO	10	48°15.670	125°27.965	140						
		0253		EN		48°15.642	125°27.934		130	22-29	8	<i>Sm</i>		
27	LAB05	0347	CTD	BE	11	48°19.709	125°20.366	116						Sunset, clear
		0352		EN		48°19.718	125°20.378		108					Sea's calm
27	LAB04	0447	ROS	BE	12	48°23.674	125°12.773	186		30-38	8			
		0452		BO					175					
		0502		EN		48°25.580	125°12.788							Pressure Reads 0' ^{at surface}
27	LAB03	0557	CTD	BE	13	48°27.566	125°05.130	170						usually reads ~ 1.6m?
		0603		BO		572	131		161					
		0606		EN		48°27.562	125°05.112							
27	LAB02	0723	ROS	BE	14	48°31.558	124°57.700	65		39-44	6	JV		saw a spectacular cruise ship!
		0729		BO		48°31.536	124°57.731		55					
		0733		EN		48°31.517	124°57.776							
27	LAB01	0827	CTD	BE	15	48°35.566	124°52.940	68				JV		very foggy, & fish
		0830		BO		48°35.587	124°52.912		55					feeding frenzy.
		0833		EN		48°35.602	124°52.896							
27	LAB01	0944	CTD	BE	16	48°40.396	124°59.452	36				JV		still, very foggy
		0948		BO		48°40.402	124°59.430		25					
		0949		EN		48°40.406	124°59.423							

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July 25/03

FR03SZ-A

#7389+ Witness Buoy
NOVATEK Cham-08
#79

#44172

#44788

#44754

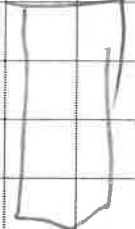
75m  1m 5/16" #
RCMS #6462
Vane 439

41175m 1/4"

#16458

#44709

1m 5/16"

30m  RCMS #8558
Vane 505

10.15m 1/4"

#44591

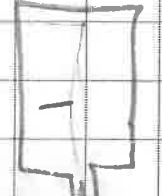
X76000

44798

44763

44761

44810

15m  1m 5/16" #
RCMS 8729
Vane 506

July 25/03

Time in water 1112 POT

LAT: 42°56.088

LONG: 129°06.268

Depth Sander: 2176

10m " poly Time Release: 1131 POT

2m chain

780lbs

1 wheel.

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <i>July</i>					Year <i>2003</i>			Ship <i>Tully</i>				Cruise ID <i>2003-26</i>		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
27	LBC1	11:18:13	CTD	BE	17	48°43.780 N	125°15.116 W	73				4P		0.4 foggy, warm, 4P
		11:21		BO		48°43.76 N	125°15.126 W		65					
		11:23		EN		48°43.76 N	125°15.154							
27	EFF01	1502	ROS	BE	18	49°5.462	125°11.518	40		45-49				Warm, 2-300 Ft
		1510		EN					35					cloud ceiling
27	EFF02	1610	ROS	BE	19	49°4.988	125°10.300	70		50-55				
		1618		EN		49°4.993	125°10.298		62					
27	EFF02A	1644	ROS	BE	20	49°4.499	125°9.749	103		56-62				Low oxygen at bottom
		1655		EN		49°4.495	125°9.736		95					H ₂ S in bottom 2 samples
27	EFF03	1709	ROS	BE	21	49°4.247	125°9.390	123		63-70				Low Oxygen ^{bottom} 3 bottles
		1721		EN		49°4.253	125°9.389		118					H ₂ S
27	EFF03A	1757	ROS	BE	22	49°3.793	125°9.085	90		71-77				Brilliant Sunshine
		1807				49°3.797	125°9.102		85					low O ₂ 2 bottles
27	EFF04	1828	ROS	BE	23	49°3.116	125°8.602	70		78-83				Touched Bottom
		1836		EN		49°3.120	125°8.590		65					
27	EFF04A	1910	ROS	BE	24	49°2.894	125°9.101	195		84-92	9	JV		clear, sunny
		1916		BO		49°2.897	125°9.136		180					
		1928		EN		49°2.935	125°9.148							
27	EFF05	1951	ROS	BE	25	49°2.554	125°9.134	207		93-102	10			

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22 March 2002

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July 25/03

PR0354

3733 + NAVAID WB

45185

44930

33141

RCMS/8 10699
Vane Sol

3304

45169

RCMS/8[#] 8730
Vane Sol

41191

43165

27145

48471

43163

MD54 2492
(3000 m)

TIME IN WATER 1335 PDT

LAT: 47°56'00" N

LONG: 129°05'09" W

Depth Sounder 2124 m

Time Anchor 1058 GMT

Additional comments

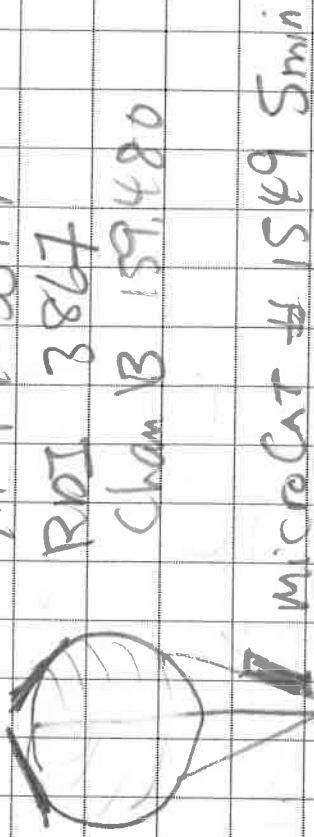
July 25/03

EROS3

XP F1-30#F

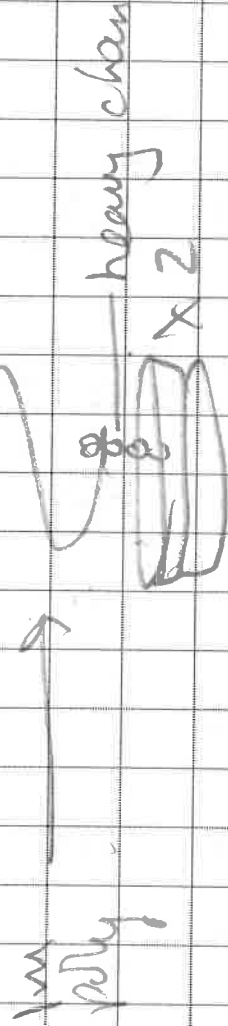
RDI 3867

Cham B 159,480



microCat #1549 Smin

MORS 661 AR152



Time in water (UTC): 2316 UTC

LAT 47°56.039

LONG 129°06.075

Depth: 21.54 m

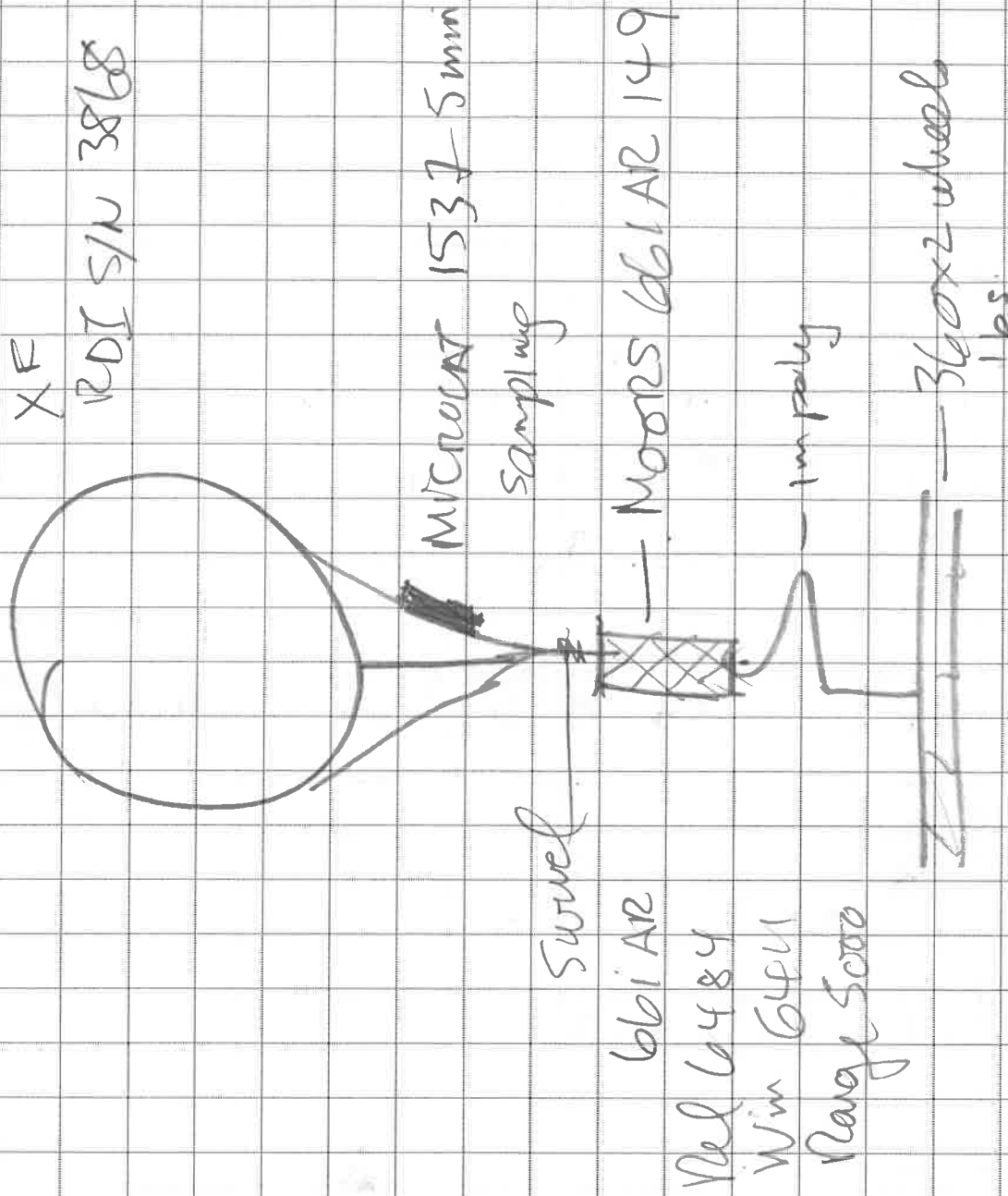
Slightly to east of specified site (1/4 ship length off station).

JULY 26/03

ERO3 S1

75 kftz

Long Ranger



TIME IN WATER 0008 JULY 26/03 GMT

LAT: 47° 56.147

LONG: 129° 06.513

DEPTH Sounder: 2096

DAILY LOG

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27	EFF05 CONT'D	1958		BO	25	49° 2.568	125° 9.128		200	93-102	10			
		2007		EN		49° 2.585	125° 9.134			sample no 98				non-existent
27	EFF06	2032	ROS	BE	26	49° 1.780	125° 9.184	152		103-110	8			
		2041		BO		49° 1.770	125° 9.193		145					
		2051		EN		49° 1.766	125° 9.200							
27	EFF07	2109	ROS	BE	27	49° 1.259	125° 9.385	125		111-117	7			
		2114		BO		49° 1.271	125° 9.374		110					
		2125		EN		49° 1.271	125° 9.360							
27	EFF08	2150	ROS	BE	28	49° 0.679	125° 10.190	89		118-123	6			
		2154		BO		49° 0.676	125° 10.216		75					
		2200		EN		49° 0.674	125° 10.212							
27	EFF09	2222	ROS	BE	29	49° 0.103	125° 10.836	64		124-128	5			Still nice and sunny
		2226		BO		49° 0.100	125° 10.846		50					
		2232		EN		49° 0.107	125° 10.820							
27	EFF10	2247	ROS	BE	30	48° 59.836	125° 11.232	102		129-135	7			
		2252		BO		48° 59.836	125° 11.240		90					
		2302		EN		48° 59.851	125° 11.239							
27	EFF11		ROS	BE	31			87		136-142	7			
				BO										

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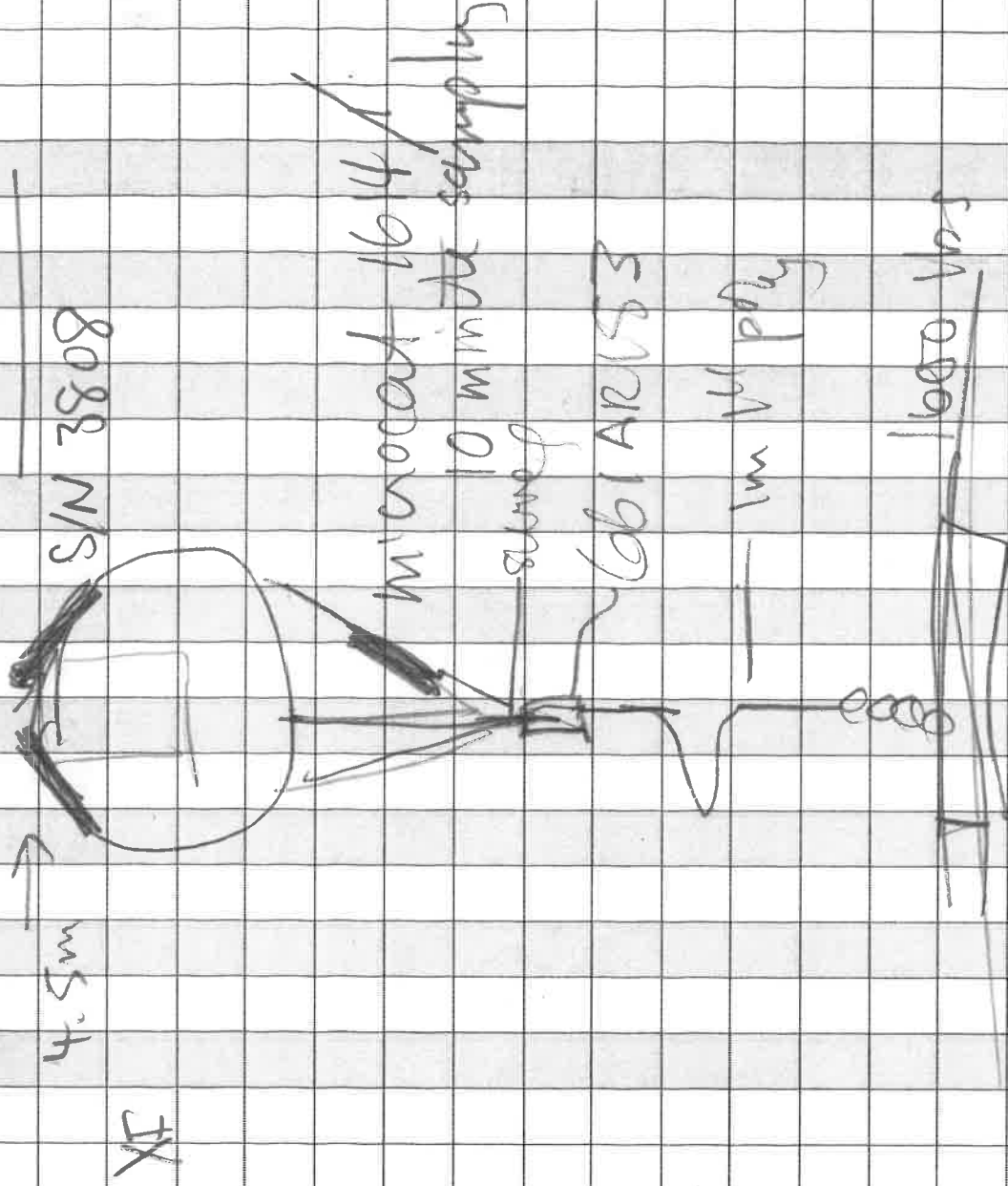
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22 March 2002
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July 26/03 UTC

ER03NZ



Time in water: 0215 UTC July 26/03

LAT 47° 57.521

LONG 129° 05.579

Depth 2157

* Changed CTD from 0443 to 0550 (T.C.)

Used sensors from 0443, moved OXT over to 0550

Additional comments

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						Latitude	Longitude							
27	EFF11	2328	ROS	EN	31	48 59.117	125 10.998	.	75	7 136-142				
27	EFF12	2355	ROS	BE	32	48 57.996	125 10.508		95	7	7	MK		
28		0000		BO		48 57.986	125 10.500			143-149				
28		0006		EN		48 57.995	125 10.489							
28	EFF13	0032	ROS	BE	33	48 56.515	125 10.660		105	150-156 7	7	MK		
28				BO		48 56.527	125 10.634	100				R.T.		
28		0046		EN		48 56.558	125 10.585							
28	LC01	0251	CTD	BE	34	48 50.243	125 27.703	97	90			MK		
28		0255		BO		48 50.403	125 27.685							
28		0256		EN		48 50.430	125 27.707							
28	LC02	0331	CTD	BE	35	48 48.666	125 30.953	111						
		0334		BO		48 48.661	125 30.944		100					
		0336		EN		48 48.658	125 30.938							
28	LC03	0410	CTD	BE	36	48 46.955	125 34.244	136						
		0414		BO		48 46.949	125 34.266'		130					
		0416		EN		48 46.940'	125 34.262'							
28	LC04	0506	CTD	BE	37	48 43.404'	125 40.786'	169						
		0511		BO		48 43.418'	125 40.783'		160					
		0514		EN		48 43.412	125 40.790'							

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 of cast time

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

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

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>July</u>					Year <u>2003</u>			Ship <u>R/V</u>				Cruise ID <u>2003 26</u>			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
28	LC05	0607	CTD	BE	38	48° 39.932'	125° 47.364'	67						Wind 13kt NW	
		0610		BO		48° 39.926'	125° 47.358'		60						
		0612		EN		48° 39.920'	125° 47.345'								
28	LC06	0733	CTD	BE	39	48° 36.455'	125° 54.032'	95				IN		Clear	
		0738		BO		48° 36.457'	125° 54.028'		85						
		0740		EN		48° 36.460'	125° 54.028'								
28	LC07	0831	CTD	BE	40	48° 32.951'	126° 0.521'	130							
		0836		BO		48° 32.953'	126° 0.520'		120						
		0839		EN		48° 32.950'	126° 0.523'								
28	LC08	0933	CTD	BE	41	48° 29.428'	126° 7.123'	201							
		0939		BO		48° 29.432'	126° 7.112'		190						
		0943		EN		48° 29.419'	126° 7.133'								
28	LC10	1120	CTD	BE	42	48 22.416	126 20.150	1240				MK		skipped LC09 and	
		1139		BO		48 22.414	126 20.150		1239					went to LC10	
		1156		EN		48 22.414	126 20.143								
28	LC09	1245	CTD	BE	43	48 25.952	126 13.643	600				MK			
		1256		BO		48 25.943	126 13.636		600						
		1304		EN		48 25.985	126 13.577								

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bottle firing method:
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July 28 2003

PAT 0745

- 19U

Rel B540

Rearm B540

Range B539

no ON/OFF option or any other option

- responds on FR1 *

43172

47304

9809

9808

9077 18.7 volts Pinger.

swivel

19U Release B540

Range B539
2m 3/4" poly no other functions

drop link
no zinc

1m scrap chain

1 wheel @ 650 lbs.

19U

0813 - deployed ~~down~~ Moor. @

48° 32.435' 126° 11.905'
in 489 m water.

- on station range 547, 555, 564, 569

- as we drift off NB. using hull *

- moved directly over station

- 498, 502, 504

- turned gen. mode back on

- 524, 528 as we drift off

- gen. mode off
- receiving while steaming

Date Time PDT

July 28 - 0831 - moving off @ 5 knots gen mode on
- intention is to test release at speed
4 at distance in $\frac{1}{2}$ mile increments
- 816, 838, 865 - steaming/gen. on
- 906, 976, 1005

set on auto - became inconsistent. X

0838

- stopped $\frac{1}{2}$ mile away 1184 m
1132 m

NB:

- testing only hull transducer
- assume clunking trans better.
- testing both gen. on/off
- testing both. moving/stopped

- 1150, 1114, 1132 gen. mode off.
1157 stopped

- at this point while moving and
gen. mode on - signals became
erratic

- when we stopped gen mode on

- signals were good

- gen mode off signals stable.

- NB we are moving into shallower water

0845

- continuing to 1 mile distance
1240, 1232 as we turn to leave

moving

1258, 1420, 1440, 1472, 1515

1582 - becoming inconsistent + incorrect.

1597

1663?

0852

- stopped $\frac{1}{2}$ mile distance gen off

- 1365, 1289, 0933, 1343, 1307

1369, 1329, 1255, 1365

- signal erratic - ended experiment

- head for LCB06

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month JULY					Year 2003			Ship TULLY				Cruise ID 2003-26			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
28	LBC06	1747	CTD		44	48°24.817'	125°52.775'	155	150					Sunny Wind Skt at 333°	
		1753				48°24.840'	125°52.734'								
		1755				48°24.842'	125°52.711'								
28	LOOP2	1830	LOOP			48°25.05'	125°45.87'							LOOP TAKEN UNDERWAY	
28	LBO8	1952	ROS	BE	45	48°25.201'	125°28.585'	136			11	JV		Sunny & warm	
		1956		BO		48°25.172'	125°28.603'		120	157				Sample Depth: 120m	
		1958		EN		48°25.151'	125°28.603'							Transmissometer noisy - redo connection - done ✓	
28	LAB03	2147	ROS	BE	46	48°27.545'	125°5.054'	170						Sample Depth: 155m	
		2152		BO		48°27.518'	125°5.096'		155	158	1				
		2155		EN		48°27.556'	125°5.052'								
28	LA01	2332	CTD	BE	47	48°29.214'	124°43.660'	265				MX		No bottles fired	
		2338		BO		48°29.196'	124°43.710'		260	157	1				
		2345		EN		48°29.174'	124°43.679'								
29	JFE7	0227	CTD	BE	48	48°16.486'	124°15.014'	110				UR		U.S. coast is close	
		0229		BO		48°16.487'	124°15.018'		100						
		0231		EN		48°16.490'	124°15.019'								
29	JFE6	0252	CTD	BE	49	48°17.606'	124°14.989'	173				MX			
		0256		BO		48°17.630'	124°15.030'		160						
		0259		EN		48°17.641'	124°15.055'								

Cast type:

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July 29/03

MOORING JZC - CV-D

HOT/sunny

6:35 AM

NOVA JZC-A RF

Light

Whistles

Transducer # 2664

RDI S/N: 1588 Chassis

WHE S/N 1506A2

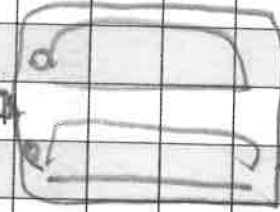
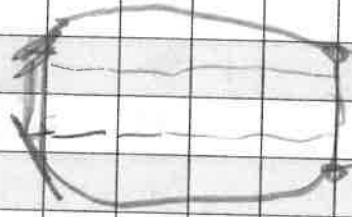
Stroke T07-0311

Angle # 7068

Finger 20kHz; 1200Hz

1000 m depth rating

20° angle beam; 4 beams -



Double AR:

1090 # 460

1090 # 465

1 m 1" poly

— 2 m Heavy Chain



Anchor 2X

TIME: July 29, 2003 19:48

LAT: 48° 21.500

LONG: 124° 12.843

Depth Sounder: 186 m
analog

Had problem with line furling

Additional comments

July 29/03

JFZB—

Witness Bay # 2928

SS-37 # 2458

Pinger # 7423

Vol. 21.3

175 m

Workhorse ADCP 2281

#

23.22 m 5/16" wire

InterOcean 34 # 5903

swivel

Pinger # 506

1 m 5/16" wire



RCM4 S/B 8305 / wave 435

1 m 5/16" wire

1090 # 10-479

Rel: BESTA

Ream: CDEG

Reply: 8k Hz

9.28 m poly

2 m chain

164 m →

77711 → 3280 bs (exchanged)

TIME: July 29/03 @ 2238 UTC

LAT: 48° 22.923

LONG: 124° 11.044

Depth/Gambel 165 m

WATCHES

Tom / Dave
Lucas / Steve
Doug / Rick
Max

0800 - 1200
1200 - 1800
1800 - 2000

Max
Andrew
Salma
Jacklyn
Tessa

Tom / Dave / Tessa / Andrew
Lucas / Steve / Jacklyn /
Doug / Rick / Max

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>July</u>					Year <u>2003</u>			Ship <u>Tully</u>				Cruise ID <u>2003-26</u>		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
29	JFE5	0324	ROS		50	48°19.270	124°15.064	213				DS		Transmissometer noisy
		0330	CTD			48°19.302	124°15.125		201					
		0333				48°19.322	124°15.161							
29	JFE4	410	CTD		51	48°21.295	124°15.066	225						Transmissometer Flatlined
		0416				48°21.323	124°15.132'		220					Switch to 498DR
		0419				48°21.346	124°15.163'							Transmissometer For test
29	JFE3	0454	CTD		52	48°23.195	124°15.107	184m						Con File not changed
		0459				48°23.177	124°15.199		176					Old Tx dummi ed off but left on
		0502				48°23.171	124°15.217							Transmissometer trace clean
29	JFE2	0541	CTD	BE	53	48°25.211'	124°14.986'	138						
		0545		BO		48°25.194'	124°14.986'		130					
		0547		EN		48°25.198'	124°14.986'							
29	JFE1	0645	CTD	BE	54	48°27.241'	124°15.097	31						Old Tx removed, .CON
						48°27.254	124°15.121'		25					File still not changed.
		0649		EN		48°27.256	124°15.125'							Two casts. One with pump on.
29	JFE2	0724	ROS	BE	55	48°25.225'	124°15.020'	138				JV		Oops.
		0730		BO		48°25.225'	124°15.010'		128	159	1			0550td.com Con file changed
		0733		EN		48°25.224'	124°15.020'							depth of sample: 128 m

Cast type: USW = sea water loop • bottle firing method: • Time Code
 BOT = bottle cast, no CTD MOR = mooring • US = up / stop • BE = beginning time of cast DE = deployment time
 CTD = CTD without Rosette NET = net haul • UN = up / no stop • BO = bottom time of cast MR = messenger release time
 ROS = Rosette plus CTD DRF = drifter • DN = down / no stop • EN = end of cast time RE = recover mooring time

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Additional comments

* Can file 0550end.com changed to reflect switch from CSTA2 transmissometer 333DR to 498DR

July 30/03

JEZ-D

~~giving 18272~~

~~11/11~~

SS07 # 924 1811 POT

Pinger 6942
20.8V

49.25 m 5/16" wire

125m

012607C

WORK HOURS 2272

ADCP #

TIME: July 30/03

LAT: 48° 15.158

LONG: 124° 09.746

Depth: 152

Sounder

10.81 m 5/16" wire

Intercor 34 # 5907

Swivel

Pinger # 7825
VOLT 20.3V

140m

RCM4 S/N 4224
6014 vane 422

1 m 5/16" wire

1090 # 334
Rel: ACFT

Rel: COT-C
Rel: 4224
5.28 m Poly

2 m Heavy Chain

DAILY LOG

Ocean Sciences and Productivity Division

INSTITUTE OF OCEAN SCIENCES

Month <u>JULY</u>					Year <u>2003</u>			Ship <u>TULLY</u>				Cruise ID <u>2003-26</u>		
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments
						Latitude	Longitude							
29	JFE3	0810	CTD	BE	56	48°23.243'	124°15.018'	184				JV		warm, clear
		0815		BO		48°23.234'	124°15.025'		173					
		0819		EN		48°23.230'	124°15.030'							
29	JFE4	0903	ROS	BE	57	48°21.306'	124°15.016'	224		160	1			sample depth: 214m
		0910		BO		48°21.307'	124°15.022'		214					
		0914		EN		48°21.304'	124°15.025'							
29	JFE5	0954	CTD	BE	58	48°19.236'	124°15.084'	212						
		1001		BO		48°19.224'	124°15.106'		199					
		1004		EN		48°19.226'	124°15.132'							
29	JFE6	1055	CTD	BE	59	48°17.651'	124°14.992'	173						
		1101		BO		48°17.659'	124°14.989'		160					
		1104		EN		48°17.659'	124°14.995'							
29	JFE7	1139	CTD	BE	60	48°16.346'	124°15.023'	84				MK		CRUISE SHIP
		1142		BO		48°16.346'	124°15.071'		80					
		1145		EN		48°16.371'	124°15.103'							
29	JFE6	1226	CTD	BE	61	48°17.680'	124°14.989'	173				MK		
		1229		BO		48°17.671'	124°14.996'		165					
		1233		EN		48°17.659'	124°14.995'							

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22 March 2002
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DAILY LOG

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Month <u>July</u>					Year <u>2003</u>			Ship <u>Tully</u>				Cruise ID <u>2003-26</u>			
Day	Station Name	Time (UTC)	Cast type	Firing Method	Event Number	Position		Bottom Depth	Max Depth	Sample Numbers	# of Bottles	Watch keeper	Trans. cleaned	Comments	
						Latitude	Longitude								
29	JFE5	13 09	CTD	BE	62	48° 19.232	124° 14.998	211				ML			
		13 13		BO		48° 19.241	124° 14.994		205						
		13 17		EN		48° 19.234	124° 14.983								
29	JFE4	1358	CTD	BE	63	48° 21.307	124° 15.011	224				ML			
		1403		BO		48° 21.282	124° 15.006		220						
		1407		EN		48° 21.276	124° 15.008								
29	JF2C-D	1948	Moor			48 21.500	124 12.843	186	1						150 kHz ADCP
29	JF2B-D	2238	Moor			48 22.923	124 11.044	165							300 kHz ADCP + RAS
30	JF2E-D	0126	Moor			48 15.158	124 09.746	152							300 kHz ADCP + RCMs
30	SG01	1500	Moor Recovery			48 46.24	123 2.897	186							

July 29

PDT

0808 - on station ✓ F2F-CV-C for recovery
- clearing deck for moorings
0826 - range 198, 202
- range 230
0827 - sent BDEF - received positive response
0828 - sighted on surface

0948 - on station ✓ F2B-CV-C for recovery
- range 170 - directly over mooring
- moving to release position
- range 179
0950 - sent CDFH received positive response
0952 - sighted on surface

July 30

Additional comments

July 29/03 STATION SGO1 DISCUSSION

~~Suggested position~~ 48° 43.1 , 123° 13.5 300m Dranes "SUGGESTED POSITION"
48° 43.134 123° 14.513 300 m ADCP @ 125m; RCMs @ 175, 275m
48° 46.252' 123 02.906 186 m Present Position (125 m 300 kHz; RCMs @ 25, 75, 175 m)

Concern for

- ① cable clearance
- ② Shoals to east / west
- ③ Flow separation at diverging channels

48 43.179 300m. } decided position
123 13.574 }

ADCP 100 m.
RCM₄ 150 m
RCM₄ 200 m
RCM₄ 290 m
300 m

July 30

- 0746 - approaching station SG01-CV-D for recovery
- 0749 - on station (near - ship drifting fast with current)
- ranges 203 → 195
- drifting off to release position
- range 216, 238, 245, 251
- 0753 - range 278, sent BEFF. received positive
- sighted on surface

July 31, 2003

PDI

-0830 - final loading of ship for mooring
SG01-CV-E

-0900 - Dave, Lucius + Tom depart with
ship - prepare mooring en route

-1131 - deployed SG01-CV-E at
48° 43.19' 123° 13.565'
in 301 m water with
a .9m + tide

-1137 - head back to 1.0.S. for off loading.

Additional comments