

CRN

9116

DAILY LOG

INSTITUTE OF OCEAN SCIENCES
OCEAN PHYSICS

DATE

Oct 23, 1991 —

VESSEL

R. B. Young

PROJECT

PORT ALBERNI OXYGENS

First Officer : _____
Third Officer : _____

Scientific Personnel: Party Chief: Dario Stucchi

[illegible][illegible][illegible]

DATA LOGGING SYSTEM: Unit number: Vectra #2 program ver. 1.17
 CTD deck unit make: Guldhia ~~8777~~ model: 87107 serial no.: 57,160
 Computer make: Vectra model: Q5/20 serial no.: #2
 monitor make: NEC model: Multisync 2A serial no.:
 printer make: star model: Roller 10 serial no.:

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1st CTD make: Quidline model: 8705 serial no.: 58,482
    temperature sensor model: _____ serial no.: _____
    coefficients: slope: _____ offset: _____
    conductivity sensor model: _____ serial no.: _____
    coefficients: slope: _____ offset: _____
    pressure sensor range: 3000 db psi serial no.: _____
    coefficients: FSP: _____ dB offset: _____
    transmissometer model: _____ serial no.: _____
    coefficients: slope: _____ offset: _____

```

Comments: Fluorometer + rosalia system

We are using 10 bottle (GOFLOWS) with General Oceanics rosette + transmittance + fluorometer

2nd CTD make: _____ model: _____ serial no.: _____
temperature sensor model: _____ serial no.: _____
coefficients: slope: _____ offset: _____
conductivity sensor model: _____ serial no.: _____
coefficients: slope: _____ offset: _____
pressure sensor range: _____ psi serial no.: _____
coefficients: FSP: _____ dB offset: _____
transmissometer model: _____ serial no.: _____
coefficients: slope: _____ offset: _____
Comments: _____

WINCHES:

CTD	make: <u>Ocean R 329</u>	model: <u>Ocean Biology</u>	serial no.: _____
counter	make: <u>Roules</u>	model: <u>8750</u>	serial no.: <u>009296</u>
HYDRO	make: _____	model: _____	serial no.: _____
counter	make: _____	model: _____	serial no.: _____
Spooling	make: _____	model: _____	serial no.: _____
Drag	make: _____	model: _____	serial no.: _____
other	make: _____	model: _____	serial no.: _____

Salinometer make: _____ model: _____ serial no.: _____

SAIL System:

program version: _____ time zone: _____
sampling interval: _____ sec.
CTF module no.: _____ serial no.: _____
remote temperature model: _____ serial no.: _____
flow sensor model: _____ serial no.: _____
Other sensors: (special for this cruise)
name: _____ module I.D.: _____ serial no.: _____
name: _____ module I.D.: _____ serial no.: _____
Comments: _____

ADCP Setup:

Program version: _____ number of depth bins: _____
time zone: _____ bin length (2^x): _____
sampling interval: _____ sec. pulse length: _____
blank beyond transmit: _____ pings per ensemble: _____
pulse cycle time: _____
percent pings good threshold: _____
Comments: _____

Wednesday, Oct 23rd.

~1200 to 1230: Left IOS bound for Alberni Inlet

- cleaned out directories on HP VECTRA
- emptied D: + E drives
- loaded software onto E drive
- tied down and stowed equipment

~1700

Thursday, Oct 24th

0730 - 1700 CTD/Rosette survey from PA32 to PA01

1900 - tied up to fisherman's wharf.

2000 2100 - Divers, (Neil, Dennis, Ernie) arrived and loaded their belongings aboard

- Tom arrived and deckhand helped him load bathy chambers aboard

Friday, Oct 25

0800

- started DO probe
- met with diver to explain sampling procedure
- divers deployed chamber #3
- recovered chamber

1700

- tied up

1900-2300:

- processed data
- prepared 2'118's
- planned next days work.

Saturday

pump flow test at dockside (2.8/min)

0800

- CTD/Rosette at 213

- set up chambers and made modification so that 400m tube is flushed by pump

1200

- deployed #1 + #3 chambers

1600

- recovered chambers

1700

- tied up

1800-2100

- dumped data from chambers + put them up for next deployment.

Sunday, Oct 27

0800 - left dock for Mahimud Bay.

- prepared chambers #1 + #2 for deployment
- sounded Mahimud Bay for deployment site
- deployed chambers
- did CTD/rosette cast in bay at station NABA
- recovered chambers + removed batteries + 1184's

* - did CTD/rosette cast station L13 (Hohn Is)

1800 - tied up to dock

- 1900-2100 - extracted data from 1184's + showed Darren how to process it.
- prepared 1007 + 1006 for deployment.
 - discussed plan for work the next day.

Monday, Oct 28.

0800-1200 - Darren + Divers did CTD/rosette survey, PA01 →

- I processed bathy chamber data, cleanup files etc

1230-1530 - Darren did oxygen while I continued with CTD/rosette cast out to station PA22.

1700 - Tied up

1800 - Prepared ENDECO's for deployment in AM.

Tuesday, Oct 29

0800: - deployed all 3 chambers

- did hydrocast using Niskin + rosette for comparison purposes
- phoned Doug Tedford + George about problems with CTD
- recovered all 3 chambers

1700 - tied up.

- 1800-2100: - Prepared 3 ENDECO's
- plotted data.

Wednesday, Oct 30

0800 - deployed 3 chambers at station F10, but after titrating samples discovered that no oxygen was present

- did CTD/rosette cast at F10
- Darren + I pulled out the 3 chambers

1400 - tied up.

- divers collapsed shack and stowed it away

Wed Oct 20

- processed EMDRO data and plotted some $\text{C}^{18}\text{O}/\text{O}_2$ data.
- 1800 - took Rick the cook out to dinner.

Thursday, Oct 21

0800 - 1200 Did 11 $\text{C}^{18}\text{O}/\text{O}_2$ in the harbour

- after lunch did P^{40}Ar & P^{39}Ar
- Darren did titration
- I packed up lab and tied down equipment & boxes

Thursday, Oct 21

Tag 0	30m	16:03:33	not recorded
Tag 1	25m	16:04:42	
Tag 2	20m	16:05:26	
Tag 3	15m	16:06:04	
Tag 4	10m	16:06:50	
Tag 5	8m	16:07:20	
Tag 6	6m	16:07:58	
Tag 7	4m	16:08:37	
Tag 8	2m	16:09:05	
Tag 9	0m	16:10:39	

Hydro cart 0002 PA32

Tag #	Depth	Time	Salinity #
1	200	16:50:43	on cons 0004 #1
2	150	16:51:59	cons 0005 #2
3	100	16:55:58	#3
4	75	16:57:18	#4
5	50	16:58:33	
6	40	16:59:35	

Tag #	Depth	Time	Sal sample #
1	250	18:11:28	
2	200	18:13:50	6
3	150	18:15:53	7
4	100	18:17:57	8
5	75	18:20:01	
6	50	18:21:20	
7	40	18:22:15	

Hydro cart 0004

Tag #	Depth	Time
1	30	18:47
2	25	18:47:30
3	20	18:48:05
4	15	18:48:30
5	10	18:49:13
6	8	18:49:37
7	6	18:50:03
8	4	18:50:27
9	2	18:50:58
10	0	18:51:25

} These 2 bottles
tripped at
same depth
18:49:37
18:50:58
Must correct for pressure
offset

YEAR	1991	MONTH	Oct	TIME ZONE	UTC	SHIP	R. B. Young	CRUISE	9116	PAGE	1 OF		
DAY	STATION IDENTIFICATION	DEPTH SOUNDING (m)	SHIP STOP/START TIME	LATITUDE/ LONGITUDE	STD CONSEC #	STD TIME	HYDRO CONSEC #	MESSENGER TIME	HYDRO SALINITY #	OXYGEN #	SURFACE TEMPERATURE/ SALINITY	LOOP SALINITY #	NOTES
24	PA32	245m	15:30	48° 58.98 N 124° 54.78 W	0001	15:52	0001						Po = 1.6 m. Shallow Cast
		1			0002	16:00	0002 0001						Upcast
	PA32	240		48° 58.99 124° 54.76	0003	16:40							Deep Cast, Po = 1.5 - 1.8 Crashed, overflow, Press is very high
					0004	16:50	0002						Upcast starting at 200m System crashed, overflow in pressure
	PA32				0005	16:52	0002						Upcast Salinity samples #1 to #4
	PA22	280	17:30		0006	17:54							Deep Cast, Po = 1.7 Data error > 200m.
					0007	18:08.6	0003	18:10.17	0008 2015		Salt Sample #5 Miskin bottle		Upcast, Sal RT's at 250m. spikes in data, Data error 1/4 flickering
	PA22				0008	18:44							
					0009	18:46	0004				O2 from 2017-3123		Program crashed at end of cast Device 2/0 error in low O in CTI.
											RT's Digital: #4002 - 7.793 5957 11.4, 7.90 6059 11.6, 7.90	11.4 7.90 11.2 7.92	
											Salinity Sample #5 RT's		

Tag #	Depth x	Time
1	30 ✓	19:36
2	25 ✓	19:37
3	20 ✓	19:37
4	25 ✓	19:39
5	10 ✓	19:38
6	8 ✓	19:39
7	6 ✓	19:39
8	4 ✓	19:39
9	2 x ✓	19:40
10		

only 9 bottles
tripped.

⊗ actually
at surface

Pressure sensor reads 2.2 to 2.4 m.

this is the offset.

PA13 Hydro 0006

Tag	Depth	Time	Salinity
1	100	20:02	#9
2	75	20:04	
7	50	20:05	
4	40	20:06	

PA10

Hydro 0008

Tag #	Depth	Time	Sal. Temp
1	100	20:00	#10
2	75	20:01	
7	50	20:03	
4	40	20:03	

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[illegible]

PA07

Hydro: 0009

Tag#	Depth	Time
1	30	21:48
2	25	21:48
3	20	21:49
4	25	21:49
5	10	21:50
6	8	21:50
7	6	21:51
8	4	21:51
9	2	21:52
10	0	

PA05

Hydro: 0011

Tag#	Depth	Time
1	30	22:40
2	25	22:40
3	20	22:41
4	15	22:41
5	10	22:42
6	8	22:42
7	6	22:43
8	4	22:43
9	2	22:44
10	0	22:44

PA07

Hydro 0010

Tag#	Depth	Time
1	75	22:14
2	50	22:15
3	40	22:16
4	10	22:17

Hydro: 0012

Tag#	Depth	Time
1	50	23:01
2	40	23:02

[illegible]

PA04

Hydro: 0013

Tag #	Depth	Time
1	30	23:19
2	25	23:20
3	20	23:20
4	15	23:21
5	10	23:22
6	8	23:22
7	6	23:22
8	4	23:23
9	2	23:23
10	0	23:24

PA07

Hydro

Tag #	Depth	Time
1	30	0021
2	25	0022
3	20	0023
4	15	0023
5	10	0024
6	8	0024
7 7	6	0025
8	4	
8	2	0027
9	0	0029

missed a tag

PA04

Hydro 0014

Tag #	Depth	Time
f2	40	23:43
1	50	23:42

[illegible]

PA02

Hydro 0016

Tag	Depth	Time
1	20	0043
2	15	0044
3	10	0044
4	8	0045
5	8	0045
6	4	0046
7	2	0046
8	0	0047

2013

Hydro 0018

Tag	Depth	Time
1	15 15	16:11
2	10 12	16:11
3	10	16:12
4	8	16:12
5	6	16:13
6	4	16:13
7	2	16:14
8	0	16:14
9		
10		

PA01

Hydro 0017

Tag	Depth	Time
1	14	0103
2	10	0104
3	8	0104
4	6	0105
5	4	0105
6	2	0106
7	0	0107

NABA

Hydro #

Tag	Depth	Time
1	30	20:48
2	25	20:48
3	20	20:49
4	15	20:49
5	10	20:50
6	8	20:50
7	6	20:51
8	4	20:51
9	2	20:51
10	0	20:52

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[illegible]

Oxygens
Rosette

Saturday
LO13

Oct 26/21
Consec. # 0018

L13 Hydro# 020

Tag	Depth	Time
1	15	0150
2	12	0150
3	10	0150
4	8	0151
5	6	0151
6	4	0152
7	2	0152
8	0	0153

Tag	Depth	Time
1	54	1737
2	50	1738
3	40	1739
4	30	1740
5	25	1740
6	20	1741
7	15	1741
8	10	1742
9	8	1743
10	6	1743
1	4	1803
2	2	1804
3	0	1804

Oct 28 / 91

Monday

PA01				PA02				PA03			
Tag	Depth	Time		Tag	Depth	Time		Tag	Depth	Time	
0 TAG 5	16:18			1	22	16:40	missed	1	30	1710	
2 TAG 5	16:17			2	20	16:40	missed	2	25	1711	
4 TAG 4	16:17			1	15	16:41		3	20	1712	
6 TAG 3	16:16			2	12	16:41		4	15	1712	
8 TAG 2	16:16			3	10	16:42		5	10	1713	
10 Tag 1	16:16			4	8	16:42		6	8	1714	
12 missed Tag				5	6	16:43		7	6	1714	
14				6	4	16:43		8	4	1715	
				7	2	16:44		9	2	1715	
				8	0	16:45		10	0	1716	

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28	L13	18			0042	0148							R = 1.7
					0043	0149	020						Upcast for routine
28	PA01		1609		44	1610	/	/	/	/	/	/	Down cast snow
28	PA01		16:20		45	1614	21	/	/	1085	/		Up. Cast mixed 14m Tag 16:18 T ₆ 16:17 T ₅ 16:15 T ₁ 16:16 T ₂ + T ₃ 16:17 T ₄
			16:34						1095				
28	PA02				46	16:36							Down cast snow
28	PA02		1648		47	1639	22			1095			Up cast Rosette
			1700						2007				
28	PA03				48	1707							Down cast
													AQ. CRASHED!
28	PA03		1720		49	1710	23			2008			Up cast Rosette
			1730						2019				
28	PA04				50	1734							Down cast snow
	PA04				51	1737	24			2063			up cast
									2070				
	PA04				52	1802							Down cast
	PA04				53	1803	25			2064			UP CAST (LOG says 2nd Down)
									2066				

1	#26	65	1824
2		50	1826
3		40	1827
4		30	1827
5		25	1828
6		20	1828
7		15	1829
8		10	1829
9		8	1830
10		6	1830

1
2
3

#27

4
2
0

1849
1850
1850

CTD Cast 60			
TAG	PA07 #28	Depth	Time
1		100	1920
2		75	1922
3		50	1923
4		40	1924
5		30	1924
6		25	1925
7		20	1925
8		15	1926
9		10	1926
10		8	1927

CTD Cast 61			
TAG	PA07 #29	Depth	Time
1		6	1944
2		4	1944
3		2	1944
4		0	1945

PA10			
Tag#	Depth	Time	
1	100	20:31	not hit on dead unit, counter moved.
2	100	20:32	
3	75	20:34	
4	50	20:35	
5	40	20:36	
6	30	20:37	
7	25	20:37	
8	20	20:38	
9	15	20:38	
10	10	20:39	
11	8	20:40	

Tag	Depth	Time
1	6	21:03
2	4	21:03
3	2	21:04
4	0	21:04

[illegible]

PA12	Hydro # 32	
Tag	Depth	Time
1	100	2127
2	75	2129
3	50	2130
4	40	2130
5	30	2131
6	25	2132
7	20	2132
8	15	2132
9	10	2133
10	8	2133

PA24	Hydro # 34	
Tag	Depth	Time
1	250	2241
2	200	2243
3	150	2244
4	100	2246
5	75	2247
6	50	2249
7	40	2249
8	30	2250
9	25	2250
10	20	2251

PA13	Hydro # 33	
Tag	Depth	Time
1	6	2150
2	4	2150
3	2	2151
4	0	2151

PA22	Hydro # 35	
Tag	(P) Depth	Time
1	15	2316
2	12	2320
3	10	2320
4	8	2321
5	7.5	6
6	5.5	4
7	3.5	2
8	0	2224

Tag frozen
at 5 on
Screen
Alt T doesn't work

CTD # 72

[illegible]

CTD PROGRAM Problems

- 1) Day board frozen, you can move between fields but you cannot change settings (eg. Station name)
(Got out of INSERT MODE)
- 2) Tag key stroke frozen (ALT-T) for no apparent reason during cast #72
- 3) Lost a cast (cns#68), i.e. the cns# did not increment so the cast was overwritten
- 4) Several unexpected returns to DOS prompt without ALT-Q key strokes.
- 5) While in SHOWPLAC.EXE keyboard input frozen, Reboot and it was corrected
(Can't be in INSERT MODE)
- 6) CTD.EXE, ALT-(ALT+S) logging for awhile but screen cleared and reappeared with filename gone — it was no longer logging. CTD Lockout error lite flickered briefly after screen cleared. Small CTD file in D: drive and one in C:\NEWCTD as usual, but this later file is empty.

ANS C: DRIVE is full

F10

Hydro # 38

Tag	Depth	Time
1	7.0 m.	2035
2	6.0	2036
3	4.0	2037
4	2.0	2038
5	0	2039
6		
7		
8		
9		
10		

O10

Hydro # 41

Tag	Depth	Time
1	14	1648
2 ← ^{12/10/00} _{missed}	10	1648
1	8	1651
2	6	1651
3	4	1652
4	2	1652
5	0	1653

program bombad missed this tag

CTD Cons # 82

F10

Hydro # 39

Tag	Depth	Time
1	6	1620
2	4	1620
3	2	1621
4	0	1621

F13

Hydro # 42

Tag	Depth	Time
1	10	17:11
2	8	17:11
3	6	17:12
4	4	17:12
5	2	17:13
6	0	17:13

K10

Hydro # 40

Tag	Depth	Time
1	10	16:33
2	8	16:33
3	6	16:34
4	4	16:34
5	2	16:34
6	0	16:35

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[illegible]

K13

Hydro # 43

FIG

Hydro # 45

O16

Hydro #

Tag	Depth	Time	Tag	Depth	Time	Tag	Depth	Time
1	15	17:25	1	15	18:11	1	20	1845
2	10	17:30	2	10	18:12	2	15	1845
3	8	17:31	3	8	18:13	3	10	1846
4	6	17:31	4	6	18:13	4	8	1846
5	4	17:31	5	4	18:14	5	6	1847
6	2	17:32	6	2	18:14	6	4	1847
7	0	17:32	7	0	18:15	7	2	1848
						8	0	1848

O13

Hydro # 44

K16

Hydro #

Tag	Depth	Time	Tag	Depth	Time
1	15	1746	1	15	1827
2	10	1747	2	10	1828
3	8	1748	3	8	1829
4	6	1748	4	6	1829
5	4	1748	5	4	1830
6	2	1749	6	2	1831
7	0	1749	7	0	

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[illegible]

H19

Hydro # 48

Tag	Depth	Time	
1	20	1904	possibly 2 bottles trapped.
2	15	1905	
3	10	1905	
4	8	1905	
5	9	1906	
6	4	1906	
7	2	1907	
8	0	1907	

PA03

Hydro # 50

Tag	Depth	Time
1	30	2047
2	25	2048
3	20	2049
4	15	2050
5	10	2050
6	8	2051
7	6	2051
8	4	2052
9	2	2052
10	0	

N19

Hydro # 49

Tag	Depth	Time
1	25	1922
2	20	1923
3	25	1924
4	20	1924
5	8	1925
6	6	1925
7	4	1926
8	2	1926
9	0	1926

PA05

Hydro # 51

Tag	Depth	Time
1	30	2115
2	25	2116
3	20	2117
4	15	2117
5	10	2118
6	8	2118
7	6	2119
8	4	2119
9	2	2120
10	0	2120

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