

CRN

91-18

DAILY LOG

INSTITUTE OF OCEAN SCIENCES
OCEAN PHYSICS

DATE

30 DEC 1991

VESSEL

PARIZEAU.

PROJECT

TIDES & CURRENTS

Captain: J. Anderson

First Officer: J. Carrier

Second Officer: M. Wheeler

Third Officer: — (lay days crew)

Cruise Participants/Agencies: Tides & Currents, Ocean Physics

Scientific Personnel: Party Chief: M. Woodward

Name

Watch Cabin

Name _____

Watch Cabin

B-12 A

8-12 C

12-4 E

12-4 E

4-8 G

4-8 F

Second leg of cruise: Party Chief:

Third leg of cruise: **Party Chief:**

Data logging system: Unit number:

Program version:

CTD deck unit make: GUILDLINE

model: 87107 serial no.: 58610

Computer make: HP VECTRA

model: QS20 serial no.: 2945A07.69

Monitor make: NEC

model: 2A serial no.:

Printer make: ROLAND

model: PR1212 serial no.:

1st CTD make: GUILDLINE model: 8755

serial no.: 58413

Temperature sensor model:

serial no.: 57 915

coefficients: slope: 1.000

offset: 0 0 0 0 0

Conductivity sensor model:

serial no.: 58 814

coefficients: slope: 1.000

offset: - 0.00016

Pressure sensor range: 4300.0 psi

serial no.:

coefficients: FSP: 3000 dB

offset: 0.00 2.5 in air 8°C

Transmissometer model: NOT USED

serial no.:

coefficients: slope:

offset:

Comments:

For sail loop check.

2-12-91
17:00 UTC

Bad Temperature on remote and very low salinity from TIC cell

20:30 UTC

Removed cell from engine room found a small piece of bark or rubber jammed in cell.

Removed checked the salinity, looks a bit low 29.5 should be ≈ 30.5 .

Remote temperature is bad -1°C

All coefficients look OK in Sail program do not have a spare sensor.

Mooring found

HP-11

Released 16:45

out of water at 1657 UTC 2/12/91

Re deploy HP-11 Wind 30kn +

Problems with A frame switch could not launch the anchor.

Mooring back on board in heavy weather at 1900 UTC Wind to 35kn

Going to tie in a quite anchorage.

9/12/4

16:13 UTC

leave anchorage at 0600 PST
arrive at mooring HP11 @ 08:15 to redeploy
mooring.

Sail sensor is still a problem, the remote
temperature giving erratic readings.
And the salinity is too low (21.5 should be 30.5)

1645 UTC CTD to 75 m

1744 UTC CTD to 22 m @ R000 Wollard/Woodward

:

1911 UTC Deploying ARGOS drifter @ STN R003

Mooring Site CP01 picked up mooring

at S4 23 14 130 39 71 9/12/5 20:57 UTC

CTD at mooring site NSTN Position

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[illegible]

5/12/91

Contact made with Les Spearing IOS
Positions of drift bouys passed on to
Bill Crawford.

ARGOS Drifters

8090/0005 @ 1913 Z 53 55 89 N
131 03 06 W

8092 @ 2140 Z 53 56 17 N
131 31 89 W

Asked Les to send Sail sensor for CTF
module.

He will send it to Prince Rupert down town
Airline Office for Pickup about the 12/12.

(5/12/91)

Correction made to Sail program as the
conductivity Ratio calculation was
not correct.

After Mod the ratio & temperature when
used in CONSAL program give the
correct Salinity results.

Salinity was always correct but the
display of ratio conductivity was not.

Mooring Site CPD2 @ 2200 UTC 5/12/91

Wind 38 KN sea rough but wave height
small $\approx$ 2m.

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5	R011	127	0024 54 16 38 0036 131 02 67	13	0027						13		
5	R012	108	0101 54 19 62 0107 131 05 66	14	0102						14		
5	R013	114	0131 54-23.41 0144 131-05.41	15	0135						15		Wind S 31 kt
5	R014												CTD's cancelled due to wind problems & winds > 35 kt.
5	NSTN	125	2103 54 22 89 2113 130 39 69	16	2105						/		Mooring site CP01-
5	NSTN	217	2226 54 18 86 130 45 23	17	2227						/		Mooring site CP02S
5	R027	163	2300 54 17.57 2310 130 44.22	18	2302						/		Depth more like 170
6	R032	320	0110 54 40 72 0130 130 45 38	19	0117						/		Depth varied from 292 to 307 m during cast.
6	R030	380	0209 54 38 86 0224 130 37 30	20	0211						16		Depth shoaled to 370 during cast.
6	R031	440	0313 54 41.70 0325 130 25.93	21	0314						17		Salinity 28.5 top 25 meters
6	R030	375	0411 54 38.87 0426 130 37.43	22	0413						/		
6	R029	100	54 30.55 130 37.13	23							/		

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6	R028	185	0627 54 23.60 130 36.52	24	0629						/		Wind from 135°T, 10-20kts.
6	R027	170	0724 54 17.85 0733 130 44.04	25	0726						/		
6	R026	85	0827 54 16.29 0833 130 32.34	26	0830						/		
6	R025	115	0916 54 10.03 0927 130 36.69	27	0924						18		Saf did not work until 15m. Until then 44
6	R023	160	1003 54 05.95 1010 130 30.40	28	1005						/		
6	R024	116	1046 54 09.98 1054 130 28.42	29	1052						19		
6	R022	76	1140 54 07.50 1145 130 18.67	30	1143						/		Wind speed in Comments should be 15 knots @ 165
6	R021	102	1216 54 05 00 1224 130 17 00	31	1218						20		Cest started at 121930
6	R020	130	1323 53 57 20 1329 130 11 68	32	1324						/		
6	R019	195	1410 53 51 80 1423 130 18 70	33	1414						21		
6	NSTW (CP02)	260	1800 54 18.43 130 44.17	34	1808						/		Mooring site CP02-
6	NSTW (DP05)	320	2132 54 40.34 130 50.23	35	2135						/		Mooring site DP05- DP06-

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6	NSTN (DPIS)	85	2335 54 36.60 2341 131 19.55	36	2337						/		Mooring site DPIS.
7	R012	107	0148 54 19.60 0156 131 05.49	37	0151						/		
7	R013	120	0219 54 23.43 0223 131 05.34	38	0220						22		Cold salty bottom layer.
7	R014	147	0248 54 26.82 0253 131 05.64	39	0249						/		
7	R015	155	0327 54 31.47 0335 131 02.50	40	0329						/		
7	R016	210	0411 54°36.27 0415 130°59.64	41	0411						23		
7	R017	353	0440 54°39.98 0454 130°58.31	42	0445						/		
7	Q129	425	0512 54'42.96 0529 130°56.15	43	0516						/		
7	R018	90	0545 54'46.09 0553 130°54.57	44	0549						/		
7	Q130	287	0618 54'42.99 0630 130°51.80	45	0621						/		
7	Q129	407	0647 54'43.04 0702 130°56.77	46	0649						24		
7	Q128	217	0729 54'43.00 0738 131°03.28	47	0731						/		

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DEC 07	Q127	287	0809 54 43.05 0821 131 10.27	48	0812	/	/				25		
07	Q126	212	0845 54 43.05 0853 131 16.29	49	0847						/		
07	Q125	167	0916 54 43.19 0925 131 21.26	50	0917						/		
07	Q124	219	0945 54 43.17 0953 131 27.84	51	0947						26		
07	Q123	253	1013 54 43.11 1024 131 34.19	52	1015						/		
07	Q122	440	1058 54 43.13 1113 131 40.73	53	1101						/		
07	Q121	380	1131 54 43.03 1141 131 46.41	54	1133						27		
07	Q120	388	1210 54 43.10 131 53 87	55	1211						/		
07	120A	377	1245 54 43.01 1258 131 56.27	56	1246						28		
07	120B	80	1313 54 43.07 1318 131 58.64	57	1313						/		Depth much less than expected but position is good.
07	Q56	190	1426 54 34.42 1437 132 07.09	58	1428						/		
07	Q55	135	1510 54 38.35 1516 132 06.98	59	1510						29		

Problem w/ generating del + lma + kxx files
for cost \$17

9/12/10

Drag for mooring

CPØ18

54 25 97

GPS

130 39 24

Position

First released on 5/12/01 release responded
and then stopped working and mooring
did not surface.

Returned to site 9/12/10 looked for pringer
found O/K

Mooring retrieved complete after 2nd drag.

Release 257 had hook cut through by drag
wire

Mooring

DPØ6

Start to deploy

16:46 PST 9/12/10

All meters entered into PIRIS Project

PERD91

Changed conductivity sensor

23:00 91-12-10

Coefficients not good very low Rctio
Post calibrals on return to IOS

9/12/11
Arrive at Mooring site 0705, 0900 PST

Wind 30kn sea rough. Response from the release ok. Sw swell about 4m

Release signal sent at 0934 confirmed release.

All equipment brought aboard ok

0129 CTD and Hydro bottle on CTD
wind Bottle trip at 454.

Water very stable Temp ≈ 5.519 Ratio .77380
Large wire angle and CTD Probe had to be raised
to stop it hitting the bottom.

Hydro #67 Calibration

THERMOMETER		DIGITAL	THERMOMETER	
5957		T451	6059	
11.0	5.58	5.568	11.0	5.63
19.6	5.75	5.568	19.1	5.77

Water depth 465 metre bottle trip would be

455 $\pm$ 5m obtained from sounder record.

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12	QL26	110	0256 54 26.57 0306 133 02.91	71	0258	/	/	/	/	/	32		Loop Snd 8.8257 0.6357 Ratio
12	QL25	55	0320 54 28.57 0326 133 02.74	72	0320	/	/	/	/	/	/		Loop Temp 8.810 0.6930
12	QL24	180	0342 54 30.03 0352 133 00.66	73	0343	/	/	/	/	/	/		Loop Temp 8.787 Loop Ratio .6932
12	QL23	370	0405 54 32.06 0419 132 58.61	74	0409	/	/	/	/	/	/		Loop temp - 8.784 Loop ratio - 0.6321
12	QL22	390	0441 54 34.70 0458 132 54.42	75	0447	/	/	/	/	/	33		Loop temp - 8.337 Loop ratio - 0.5934
12	QL21	310	0524 54 37.35 132 51.90	76	0529	Out of position - 10' to 40'					/		Loop temp - 8.042 Loop ratio - 0.5694
12	QL20	110	0558 54 39.72 0602 132 47.62	77	0559	/	/	/	/	/	/		Loop temp - 8.537 Loop ratio - 0.5923
12	Q52	100	0651 54 39.73 0656 132 38.46	78	0652	/	/	/	/	/	/		Loop temp - 7.892 Loop ratio - 0.5544
12	Q51	185	0725 54 38.14 0733 132 31.10	79	0727	/	/	/	/	/	/		Loop temp - 8.276 Loop ratio - 0.6037
12	Q46	195	0801 54 34.20 0809 132 31.58	80	0803	/	/	/	/	/	34		Loop temp - 8.598 Loop ratio - 0.6156
12	Q47	420	0857 54 28.57 0904 132 32.57	81	0858	/	/	/	/	/	/		Sounder 420 CTD Depth 380 Loop temp - 8.419 Loop salin - 0.6157
12	Q48	275	0934 54 23.91 0941 132 32.85	82	0835	/	/	/	/	/	/		Loop temp - Loop salin -

1237 UTC 12/12/91

Station OR4

Bridge canceled station as the wind was
NW 40K and station was in a very shallow
area on sand bar in McIntyre Bay and wind was
driving ship ashore.

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12	Q40	256	1018 54 17.60 132 33.75	83 1019							/		Loop Temp = 8.473 Cond Ratio = 0.6333
12	Q63	93	1114 54 10.51 1119 132 34.89	84 1115							35		
12	QR6	55	1137 54 08.20 1140 132 34.85	85 1138							/		Loop Temp = 8.525 Cond Ratio = 0.6151
12	QR5	95	1227 54 09 50 1236 132 20 63	86 1230									Loop Temp = 8.539 Ratio = 0.6346
12	QR4		5406 132 06										Did not do Statam Wind 40kn NW Station too near sand bank.
12	Q60	110	1327 54 10 26 1332 132 07 07	87 1328									
12	Q59	55	1354 54 13 20 1401 132 06 50	88 1355							36		Wind 30kn
12	Q58A	225	1445 54 17 88 1453 132 06 82	89 1445									Wind 20kn.
12	Q58	315	1534 54 23 27 1539 132 06 79	90 1535							/		
12	Q57	345	1610 54 27.30 1615 132 06.50	91 1612							/		Exactly a station by GPS.
12	Q56	190	1710 54 34.23 132 06.92	92 1714							37		Loop temp = 8.149 Loop Ratio = 0.6003
12	Q55	140	1753 54 38.31 1800 132 06.62	93 1755							/		Loop temp = 8.071 Loop Ratio = 0.5859

Messenger

Q126

CTD 10 meters off bottom

T 6.944

S 32.952

R 77.950

D 195.0.

Temp Glass

5957

17.8

7.25

DIGITA

7451

6.976

Temp glass

6059

17.2

7.35

Q129 Calibration bottle at 390 m
Very stable water bottom 150 m

03:04:46 messenger down.

Messenger + 2 min probe

03:06:48

Depth 385

Temp 6.635

Sal. 30.121

Ratio. 0.77870

Start up at 03:07:36

Temperature #1

5957

8.2

6.67

15.2

6.80

Digital

6.642

6.642

Temperature #3

6059

9.5

6.80

14.7

6.92

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13	R017	380	4:14 54 40.00 4:28 130 57.18	106 4:17									CR 0.5976 Temp 7.923
13	R016	220	4:48 54 36.27 5:03 130 59.59	107 4:53							40		Loop
13	R015	155	0527 54 31.44 0535 131 02.51	108 0529							/		Loop temperature - 8.332 Loop ratio - 0.6342
13	R014	145	0608 54 26.86 0617 131 05.70	109 0611							/		Loop temperature - 8.607 Loop ratio - 0.6397
13	R013	105	0645 54 22.94 0655 131 04.86	110 0649							41		Loop temperature - 8.455 Loop Ratio - 0.6333
13	R012	105	0718 54 19.33 0725 131 05.35	111 0720							/		Loop temperature 8.406 Loop Ratio 0.6351
13	Q143	135	0850 54 19.63 0855 131 18.86	112 0852							/		Loop temp - 8.335 Loop ratio - 0.6356
13	Q144	210	0930 54 24.13 0939 131 18.94	113 0933							42		Loop temp - 8.382 Loop ratio - 0.6232
13	Q145	145	1011 54 29.29 1016 131 18.91	114 1013							/		Loop temp - 8.439 Loop ratio - 0.6371
13	Q146	120	1046 54 34.57 1051 131 19.15	115 1048							/		Loop temp - 8.203 Loop ratio - 0.6133
13	Q148	125	1142 54 36.20 1148 131 33.22	116 1144							/		Loop temp - 8.339 Loop Con ratio - 0.6375
13	Q117	340	1237 54 34.50 1252 131 45.63	117 1240							43		

13/13/91

12:47 UTC Q 117 + Loop

Wind 13 KN

Sail 8.243 Temp
0.6230 Ratio

Q 116 1325 UTC

Wind 13 KN This is last CTD before
the mooring site at QF02 where dragging
operations will take place 21:00 UTC

[illegible]

0220 UTC 14/12/91

LORAN IS VERY POOR FOR POSITION INFORMATION

RDI DATA MAY BE AFFECTED

Made two attempts to drag for mooring without success

10:00 UTC 14/12/91

LORAN C now OK

0250 UTC 14/12/91

Wind 30-40 KN Southwest.

Arrive at 0120 but sea too rough to work. CTD tied down ship to head inside out of weather.

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14	QL 11	460	1118 54 20.07 1129 133 18.41	129	1121						/		
14	QL 10	309	1158 54 23.49 1207 133 23.82	130	1200						45		
14	QL 9B	300	1340 54 27 58.1 1351 133 51 37.6	131	1342	/	/	/	/	/	/	/	
14	QL 9A	220	1430 54 27 56.1 1438 133 40 48.5	132	1432	/	/	/	/	/	/	/	
14	QL 9	235	1515 54 27.38 1523 133 30.109	133	1517	/	/	/	/	/	/	/	Did not receive PINGER PINGER WAS TURNED ON CHECK ON NEXT CAST
14	QL 8	318	1558 54 31.03 1610 133 24.09	134	1600						—		Pinger ok
14	QL 7	335	1645 54 35.17 1659 133 18.09	135	1649						46		
14	QL 6	392	1730 54-38.62 1745 133-12.99	136	1733						—		
14	QL 5	180	1802 54 40.58 1814 133 10.28	137	1805						—		
14	QL 4	195	1840 54-43.53 1851 133-05.75	138	1842						—		
14	QL 3	120	1916 54-46.10 1926 133-01.58	139	1920						—		
14	QL 2	232	1939 54-47.09 1948 133-00.24	140	1941						*47		

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14	QL1	165	2000	54-47.72	141	2002					/		
				132-53.46									
14	QL50	95	2059	54-54.91	142	2102					/		
			2105	133-10.51									
14	QL51	185	2121	54-54.36	143	2123					/		
			2126	133-13.95									
14	QL52	205	2148	54 53.37	144	2150					48		
			2156	133 18.97									
14	QL53	175	2211	54 52.50	145	2214					/		
			2217	133 27.23									
14	QL54	150	2238	54 51.87	146	2240					/		
			2245	133 25.23									
14	QL55	120	2305	54 50.79	147	2306					/		
			2310	133 29.94									
14	QL20		0242		148	400							rough to work do not do Station
				0256									
16	Rp30	390	0102	54 38.939	148	0104	/	/	/	/	/	49	
			0114	130 37.303									
16	Rp29	100	0204	54 30.45	149	0207	/	/	/	/	/	/	
			0211	130 36.88									
16	NSTN	75	0240	54 25.53	150	0241	/	/	/	/	/	/	
			0245	130 39.00									
16	Rd28	180	0312	54 23.58	151	0314					50	Loop	
				130 36.61									

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