

# DAILY SCIENCE LOG BOOK

MISSION  
NUMBER

2012-49  
(SOG #2012-03)

DATE:

From: June 21 / 2012

to: July 16 / 2012

VESSEL:

WE RICKER

PROJECT(S):

SOG Juvenile Salmon Survey  
-Neville

Water Properties Group  
Fisheries and Oceans Canada  
Institute of Ocean Sciences  
Ocean Sciences Division  
North Saanich, BC, Canada

also 2012-30

[WaterProperties.ca](http://WaterProperties.ca)

# DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 1 of 1

| Month <u>JUNE</u> |                  |            | Year <u>2012</u> |           |               | Ship <u>W.E. RICKER</u> |                        |             | Cruise ID <u>2012-03</u> |           |                                 |              |               |                |                                |
|-------------------|------------------|------------|------------------|-----------|---------------|-------------------------|------------------------|-------------|--------------------------|-----------|---------------------------------|--------------|---------------|----------------|--------------------------------|
| Day               | Station Name     | Time (UTC) | Time Code        | Cast Type | Firing Method | Event Number            | Positional Information |             | Bottom Depth             | Max Depth | Sample Numbers                  | # of Bottles | Watch Keepers | Trans. Cleaned | Comments                       |
|                   |                  |            |                  |           |               |                         | Latitude               | Longitude   |                          |           |                                 |              |               |                |                                |
| 21                | 8                |            |                  | CTD       |               | 002                     | 48°43.7165             | 123°33.1361 | 55m                      | 35m       |                                 | 0            | T.C.          |                |                                |
| 21                | 10               |            |                  | CTD       |               | 003                     | 48°50.6838             | 123°19.5240 | 57                       | 35m       |                                 | 0            | T.C.          |                | * Pump turned on but read 110' |
| 21                | 14 <sup>15</sup> |            |                  | CTD       |               | 004                     | 48°45.102              | 123°17.789  | 116                      | 95m       |                                 | 0            | T.C.          |                | * All systems appear to work.  |
| 22                | 16               |            |                  | CTD       |               | 005                     | 48°42.5524             | 123°29.7967 | 76                       | 60m       |                                 | 0            | T.C.          |                | ✓                              |
| 22                | 19               | 18:37      |                  | CTD       |               | 006                     | 48°45.384              | 123°9.190   | 95                       | 85        |                                 | 0            | T.C.          |                | ✓                              |
| 22                | 24               | 18:10      |                  | CTD       |               | 007                     | 48°54.372              | 123°11.078  | 128                      | 105       |                                 | 0            | T.C.          |                | ✓                              |
| 23                | 25               | 0609       |                  | CTD       |               | 008                     | 48°56.8767             | 123°25.8214 | 108                      | 90        |                                 | 0            | T.C.          |                | ✓                              |
| 23                |                  | 18:41      |                  | CTD       |               | 009                     | 49°16.223              | 123°29.518  | 265                      | 250       |                                 | 0            | T.C.          |                | BE=18:35 EN=18:42<br>BO=18:34  |
| 23                | 33               | 01:24      |                  | CTD       |               | 010                     | 49°21.9100             | 123°33.2283 | 170                      | 150       |                                 | 0            | T.C.          |                | BE=01:25 EN=<br>BO=            |
| 24                | 38               | 18:22      |                  | CTD       |               | 011                     | 49°10.7343             | 123°34.0483 | 270                      | 250       |                                 | 0            | T.C.          |                | BE=18:24 EN=18:40<br>BO=18:23  |
| 24                | 42               | 00:52      |                  | CTD       |               | 012                     | 49°15.073              | 123°53.821  | 270                      | 250       |                                 | 0            | T.C.          |                | BE=00:52 EN=<br>BO=00:51       |
| 25                | 46               | 14:26      |                  | CTD       |               | 013                     | 49°32.916              | 124°08.327  | 358                      | 330       |                                 | 0            | T.C.          |                | BE=14:26 EN=14:40<br>BO=14:23  |
| 25                | 49               | 18:01      |                  | CTD       |               | 014                     | 49°35.990              | 124°13.528  | 237                      | 210       |                                 | 0            | T.C.          |                | BE=18:01 EN=18:09<br>BO=18:05  |
| 25                | 55               | 01:00      |                  | CTD+BOT   |               | 015                     | 49°49.144              | 124°36.502  | 267                      | 250       | 1 = ~250m<br>1 = ~10m           | 2            | T.C.          |                | BE=00:59 EN=1:08<br>BO=1:06    |
| 26                | 56               | 14:21      |                  | CTD       |               | 016                     | 49°48.656              | 124°48.232  | 284                      | 260       |                                 | 0            | T.C.          |                | BE=14:24:16 EN=<br>BO=14:29:16 |
| 26                | 59               | 17:46      |                  | CTD       |               | 017                     | 49°52.225              | 125°01.20   | 248                      | 225       |                                 | 0            | T.C.          |                | BE=17:46:33 EN=<br>BO=17:53:03 |
| 26                | 65               | 00:05      |                  | CTD+BOT   |               | 018                     | 49°53.550              | 125°4.344   | 120                      | 110       | 1 = 110m (-3m)<br>1 = 10m (-3m) | 2            | T.C.          |                | BE=00:07 EN=00:12<br>BO=00:09  |
| 27                | 66               | 13:55      |                  | CTD       |               | 019                     | 50°3.856               | 125°8.794   | 165                      | 149       |                                 | 0            | T.C.          |                | BE=13:54:42 EN=<br>BO=13:57:54 |
| 27                | 70               | 13:20      |                  | CTD       |               | 020                     | 50°10.247              | 125°8.608   | 142                      | 125       |                                 | 0            | T.C.          |                | BE=13:21:52 EN=<br>BO=13:24:01 |

## Cast Type:

BOT = Bottle cast, no CTD  
CTD = CTD without Rosette  
ROS = Rosette plus CTD  
SET = Fish Set

USW = Sea Water Loop

MOR = Mooring  
NET = Plankton 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 Time of Cast  
DE = Deployment Time  
MR = Messenger Release Time  
RE = Recover Mooring Time

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

Notes:

Produced by the Water Properties Group, IOS

WaterProperties.ca  
Version: 16 April 2010



## DAILY SCIENCE LOG

## Ocean Sciences Division, Institute of Ocean Sciences

Page 2 of       

| Month <u>JUNE</u> |              |            |           | Year <u>2012</u> |               |                       | Ship <u>W.E. RICKER</u>            |            |              |           | Cruise ID <u>2012-03</u> |              |               |                |                                              |
|-------------------|--------------|------------|-----------|------------------|---------------|-----------------------|------------------------------------|------------|--------------|-----------|--------------------------|--------------|---------------|----------------|----------------------------------------------|
| Day               | Station Name | Time (UTC) | Time Code | Cast Type        | Firing Method | Event Number          | Positional Information             |            | Bottom Depth | Max Depth | Sample Numbers           | # of Bottles | Watch Keepers | Trans. Cleaned | Comments                                     |
|                   |              |            |           |                  |               |                       | Latitude                           | Longitude  |              |           |                          |              |               |                |                                              |
| 27                | 74           | 23:06      |           | CTD + Bot        |               | <del>002</del><br>021 | 50°21.047<br><del>125°67.833</del> | 125°67.733 | 605          | 590.87    | 2, 3 = 340m<br>1 = 10m   | 2            | T.C.          |                | BE = 14:00:48 EN =                           |
| 28                | 75           | 13:50      |           | CTD              |               | 022                   | 50°18.280                          | 124°56.755 | 508          | 475       |                          | 0            | T.C.          |                | BE = 14:00:48 EN =<br>Bo = 14:09:55          |
| 28                |              | 18:14      |           | CTD              |               | 023                   | 50°10.127                          | 124°40.610 | 706          | 695       |                          | 0            | T.C.          |                | BE = 18:15:01                                |
| 28                |              |            |           | CTD              |               | 024                   | 50°10.127                          | 124°40.610 | 706          | 680       |                          | 0            | T.C.          |                |                                              |
| 28                | 84           | 00:02      |           | CTD              |               | 025                   | 50°49°54.16                        | 124°40.822 | 151          | 140       |                          | 0            | T.C.          |                |                                              |
| 29                | 85           | 14:06      |           | CTD              |               | 026                   | 49°46.972                          | 124°41.872 | 202          | 190       |                          | 0            | T.C.          |                | BE = 14:00:01<br>Bo = 14:17:02 EN = 14:16:21 |
| 29                |              | 17:57      |           | CTD              |               | 027                   | 49°35.680                          | 124°41.921 | 125          | 105       |                          | 0            | T.C.          |                | BE = 17:58<br>Bot                            |
| 29                | 93           | 00:14      |           | CTD              |               | 028                   | 49°29.768                          | 124°31.976 | 175          | 160       |                          | 2            | T.C.          |                |                                              |
| 30                | 94           | 14:01      |           | CTD              |               | 029                   | 49°28.310                          | 124°30.764 | 165          | 140       |                          | 0            | T.C.          |                | BE<br>Bo EN                                  |
| 30                | 97           | 18:23      |           | CTD              |               | 030                   | 49°25.566                          | 124°18.254 | 321          | 305       |                          | 0            | T.C.          |                | BE = 18:23<br>Bo = 18:31:36 EN = 18:37:06    |
| 30                | 103          | 00:56      |           | CTD + Bot        |               | 031                   | 49°23.375                          | 124°9.060  | 293          | 271       |                          | 0            | T.C.          |                | BE = 00:56:35<br>Bo = 01:04:02 EN = 1:09:24  |
| 1                 | 104          | 14:07      |           | CTD              |               | 032                   | 49°2.592                           | 123°17.902 | 121          | 110       |                          | 0            | T.C.          |                | BE = 14:07:32<br>Bo = 14:10:16 EN = 14:12:38 |
| 1                 | 108          | 18:04      |           | CTD              |               | 033                   | 49°13.696                          | 123°18.176 | 115          | 92        |                          | 0            | T.C.          |                | BE = 18:05:33<br>Bo = 18:07:16 EN = 18:09:11 |
| 1                 | 114          | 00:02      |           | CTD + Bot        |               | 034                   | 48°56.664                          | 123°24.673 | 150          | 140       |                          | 2            | T.C.          |                | BE = 00:04:11<br>Bo = 06:49 EN = 00:10:21    |
| 2                 | 115          | 14:09      |           | CTD              |               | 035                   | 49°27.094                          | 124°4.339  | 392          | 380       |                          | 0            | T.C.          |                | BE = 14:12:36<br>Bo = 14:19:54 EN = 14:23:36 |
| 2                 | 118          | 17:50      |           | CTD              |               | 036                   | 49°24.484                          | 123°46.352 | 119          | 105       |                          | 0            | T.C.          |                | BE = 17:51:50<br>Bo = 17:53:46 EN = 17:56:08 |
| 2                 | 123          | 23:17      |           | CTD + Bot        |               | 037                   | 49°15.534                          | 123°52.919 | 275          | 240       |                          | 2            | T.C.          |                | BE = 23:19:21<br>Bo = EN = 23:32:16          |
| 3                 | Before 124   | 17:50      |           | CTD              |               | 038                   | 48°49.360                          | 123°20.589 | 105          | 95        |                          | 0            | T.C.          |                | BE = EN = 17:56:09<br>Bo =                   |
| 3                 | 128          | 23:04      |           | CTD + Bot        |               | 039                   | 48°45.290                          | 123°8.588  | 45           | 80        |                          | 2            | T.C.          |                | BE = 23:04:22<br>Bo = 23:08:01 EN = 23:09:56 |

## Cast Type:

BOT = Bottle cast, no CTD  
CTD = CTD without Rosette  
ROS = Rosette plus CTD  
SET = Fish Set

## USW = Sea Water Loop

MOR = Mooring  
NET = Plankton Net Haul  
DRF = Drifter

## Bottle Firing Method:

US = Up / Stop  
UN = Up / No stop  
DN = Down / No stop

## Notes:

## Time Code:

BE = Beginning Time of Cast  
BO = Bottom Time of Cast  
EN = End Time of Cast  
DE = Deployment Time  
MR = Messenger Release Time  
RE = Recover Mooring Time

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

Produced by the Water Properties Group, IOS

WaterProperties.ca  
Version: 16 April 2010

\* PH capsule left on. R CTD cancelled; returned to surface @ ~180m  
\* PH seems to work fine

July 1st, 2012

\*  $O_2$  fixture may be incorrect. Ship had to reposition.  $\rightarrow$  winch stopped. Pump off on trip down, on position for trip up.

# DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 3 of     

| Month <u>July</u> |                    |            |           | Year <u>2012</u> |               |              |                        | Ship <u>W.E. Ricker</u> |              |                   |                | Cruise ID <u>2012-03</u> |               |                |                             |
|-------------------|--------------------|------------|-----------|------------------|---------------|--------------|------------------------|-------------------------|--------------|-------------------|----------------|--------------------------|---------------|----------------|-----------------------------|
| Day               | Station Name       | Time (UTC) | Time Code | Cast Type        | Firing Method | Event Number | Positional Information |                         | Bottom Depth | Max Depth         | Sample Numbers | # of Bottles             | Watch Keepers | Trans. Cleaned | Comments                    |
|                   |                    |            |           |                  |               |              | Latitude               | Longitude               |              |                   |                |                          |               |                |                             |
| 4                 | <del>130</del> 130 | 14:02      |           | CTD              |               | 40           | 48°43.618              | 123°32.909              | 63           | 50                | 0              | 0                        | T.C           | ✓              | STN = 130                   |
| 4                 | 134                | 18:00      |           | CTD              |               | 41           | 48°42.356              | 123°28.741              | 78           | 65                | 0              | 0                        | T.C           |                |                             |
| 4                 | 137                | 23:15      |           | CTD              |               | 42           | 48°42.355              | 123°28.728              | 182          | 170               | 2              | 2                        | T.C           |                | BE = 23:19:48 EN = 23:31:12 |
| 5                 | 138                | 14:04      |           | CTD              |               | 43           | 48°22.811              | 123°5.333               | 137          | 125               | 0              | 0                        | T.C           |                | BE = 14:07:31               |
| 5                 | 144                | 18:07      |           | CTD              |               | 44           | 48°22.372              | 122°43.449              | 96           | 80                | 0              | 0                        | T.C           |                | BE = 18:09:29               |
| 5                 | 149                | 23:34      |           | CTD<br>+ BOT     |               | 45           | 48°18.334              | 123°17.413              | 96           | <del>85</del> 78  | 2              | 2                        | T.C           | ✓              | BE = 18:10:59 EN =          |
| 6                 | 150                | 13:59      |           | CTD              |               | 46           | 48°22.950              | 124°33.343              | 62           | 50                | 0              | 0                        | T.C           |                | BE =                        |
| 6                 | 155                | 19:56      |           | CTD<br>+ BOT     |               | 47           | 48°11.950              | 123°56.114              | 49           | 39                | 2              | 2                        | T.C           | ✓              | BE =                        |
| 7                 |                    | 14:31      |           | CTD              |               | 48           | 47°37.028              | 122°25.470              | 184          | 170               | 0              | 0                        | T.C           | ✓              | BE = 14:32:55 EN =          |
| 7                 | 160 Entry          | 18:43      |           | CTD              |               | 49           | 47°21.684              | 122°20.458              | 164          | <del>139</del>    | 0              | 0                        | T.C           |                | BE =                        |
| 8                 | 164                | 18:50      |           | CTD              |               | 50           | 48°14.500              | 122°34.577              | 43           | 30                | 0              | 0                        | T.C           | ✓              |                             |
| 8                 | 171                | 18:39      |           | CTD              |               | 51           | 48°9.941               | 122°26.148              | 56           |                   | 0              | 0                        | T.C           |                |                             |
| 8                 | 175                | 23:25      |           | CTD<br>+ BOT     |               | 52           | 47°55.050              | 122°21.222              | 175          | 160               | 2              | 0                        | T.C           | ✓              |                             |
| 9                 | 176                | 13:49      |           | CTD              |               | 53           | 47°51.749              | 122°30.132              | 50           | 35                | 0              | 0                        | T.C           |                |                             |
| 10                | 181                | 14:13      |           | CTD              |               | 54           | 49°22.633              | 123°18.536              | 244          | 230               | 0              | 0                        | T.C           |                |                             |
| 10                | 184                | 17:31      |           | CTD              |               | 55           | 49°32.440              | 123°16.262              | 175          | <del>160</del> 58 | 0              | 0                        | T.C           |                |                             |
| <del>10</del> 11  |                    | 12:55      |           | CTD              |               | 56           | 50°54.340              | 124°49.722              | 190          | 180               | 0              | 0                        | T.C           |                | Butte Init.                 |
| 11                |                    | 17:50      |           | CTD              |               | 57           | 50°26.474              | 125°4.789               | 656          | <del>600</del>    | 0              | 0                        | T.C           |                |                             |

## Cast Type:

BOT = Bottle cast, no CTD  
CTD = CTD without Rosette  
ROS = Rosette plus CTD  
SET = Fish Set

USW = Sea Water Loop  
MOR = Mooring  
NET = Plankton 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 Time of Cast  
DE = Deployment Time  
MR = Messenger Release Time  
RE = Recover Mooring Time

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

Produced by the Water Properties Group, IOS

WaterProperties.ca  
Version: 16 April 2010

Notes:

*This page is for any notes or observations*

\* PH not recorded As 'High Seas' connected own CTD without.

## DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 1 of     

| Month <u>August</u> |              | Year <u>2012</u> |           | Ship <u>R/V Fisher</u> |               | Cruise ID <u>201230</u> |                        |            |              |           |                |              |               |                |           |
|---------------------|--------------|------------------|-----------|------------------------|---------------|-------------------------|------------------------|------------|--------------|-----------|----------------|--------------|---------------|----------------|-----------|
| Day                 | Station Name | Time (UTC)       | Time Code | Cast Type              | Firing Method | Event Number            | Positional Information |            | Bottom Depth | Max Depth | Sample Numbers | # of Bottles | Watch Keepers | Trans. Cleaned | Comments  |
|                     |              |                  |           |                        |               |                         | Latitude               | Longitude  |              |           |                |              |               |                |           |
| 23                  | CS3B         | 0629             | BE        | CTD                    |               | 1                       | 50 59.819              | 129 27.059 | 211          | 200       | —              | —            | SR            | —              | 1 hex     |
|                     |              | 0633             | BO        |                        |               |                         | 50 59.804              | 129 27.056 |              |           |                |              |               |                |           |
|                     |              | 0636             | EN        |                        |               |                         | 50 59.794              | 129 27.050 |              |           |                |              |               |                |           |
| 23                  | CS3B         | 0650             | BO        | NET                    |               | 2                       | 50 59.794              | 129 27.050 | 215          | 200       |                |              |               |                | Bongo UNH |
| 23                  | CSΦ3         | 0856             | BE        | CTD                    |               | 3                       | 50 45.554              | 129 20.014 | 225          | 236       |                |              | SR            | —              | 2 hex     |
|                     |              | 0903             | BO        |                        |               |                         | 50 45.536              | 129 20.048 |              |           |                |              |               |                |           |
|                     |              | 0907             | EN        |                        |               |                         | 50 45.545              | 129 20.072 |              |           |                |              |               |                |           |
| 23                  | CSΦ3         | 0920             | BO        | NET                    |               | 4                       | 50 45.545              | 129 20.072 | 140          | 125       |                |              |               |                |           |
| 24                  | GIΦ2         | 0545             | BE        | CTD                    |               | 5                       | 51 30.362              | 129 37.709 | 140          | 125       |                |              | SR            | —              | 3 hex     |
|                     |              | 0550             | BO        |                        |               |                         | 51 30.421              | 129 37.832 |              |           |                |              |               |                |           |
|                     |              | 0553             | EN        |                        |               |                         | 51 30.452              | 129 37.902 |              |           |                |              |               |                |           |
| 24                  | GIΦ2         | 0605             | BO        | NET                    |               | 6                       | 51 30.452              | 129 37.902 |              |           |                |              |               |                |           |

## Cast Type:

BOT = Bottle cast, no CTD  
 CTD = CTD without Rosette  
 ROS = Rosette plus CTD  
 SET = Fish Set

USW = Sea Water Loop  
 MOR = Mooring  
 NET = Plankton Net Haul  
 DRF = Drifter

## Bottle Firing Method:

US = Up / Stop  
 UN = Up / No stop  
 DN = Down / No stop

Notes: \_\_\_\_\_

## Time Code:

BE = Beginning Time of Cast  
 BO = Bottom Time of Cast  
 EN = End Time of Cast

DE = Deployment Time  
 MR = Messenger Release Time  
 RE = Recover Mooring Time

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

Produced by the Water Properties Group, IOS

WaterProperties.ca  
 Version: 16 April 2010

# DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 2 of     

| Month <u>August</u> |              |            |           | Year <u>2012</u> |               |              | Ship <u>R/V</u>        |            |              | Cruise ID <u>2012-30</u> |                |              |               |                |                      | Page <u>2</u> of <u>    </u> |  |
|---------------------|--------------|------------|-----------|------------------|---------------|--------------|------------------------|------------|--------------|--------------------------|----------------|--------------|---------------|----------------|----------------------|------------------------------|--|
| Day                 | Station Name | Time (UTC) | Time Code | Cast Type        | Firing Method | Event Number | Positional Information |            | Bottom Depth | Max Depth                | Sample Numbers | # of Bottles | Watch Keepers | Trans. Cleaned | Comments             |                              |  |
|                     |              |            |           |                  |               |              | Latitude               | Longitude  |              |                          |                |              |               |                |                      |                              |  |
| 24                  | QCS7         | 2145       | BE        | CTD              |               | 7            | 51 37.336              | 130 46.339 | 1040         | 500                      |                |              | SR            | -              |                      |                              |  |
|                     |              | 2157       | BO        |                  |               |              | 51 37.354              | 130 46.272 |              |                          |                |              |               |                |                      |                              |  |
|                     |              | 2206       | EN        |                  |               |              | 51 37.432              | 130 46.225 |              |                          |                |              |               |                |                      |                              |  |
|                     |              |            |           |                  |               |              |                        |            |              |                          |                |              |               |                |                      |                              |  |
| 24                  | QCS6         | 2300       | BE        | CTD              |               | 8            | 51 42.575              | 130 37.799 | 700          | 500                      |                |              | SR            | -              | very low DO2 at 500m |                              |  |
|                     |              | 2311       | BO        |                  |               |              | 51 42.625              | 130 37.735 |              |                          |                |              |               |                |                      |                              |  |
|                     |              | 2320       | EN        |                  |               |              | 51 42.628              | 130 37.705 |              |                          |                |              |               |                |                      |                              |  |
|                     |              |            |           |                  |               |              |                        |            |              |                          |                |              |               |                |                      |                              |  |
| 25                  | QCS5         | 0434       | BE        | CTD              |               | 9            | 51 49.777              | 130 13.904 | 187          | 190                      |                |              | SR            | -              | 6.hep                |                              |  |
|                     |              | 0444       | BO        |                  |               |              | 51 49.703              | 130 13.868 |              |                          |                |              |               |                |                      |                              |  |
|                     |              | 0449       | EN        |                  |               |              | 51 49.703              | 130 13.866 |              |                          |                |              |               |                |                      |                              |  |
|                     |              |            |           |                  |               |              |                        |            |              |                          |                |              |               |                |                      |                              |  |
| 25                  | QCS4         | 0613       | BE        | CTD              |               | 10           | 51 55.100              | 129 58.409 | 137          | 130                      |                |              | SR            | -              | 7.hep                |                              |  |
|                     |              | 0617       | BO        |                  |               |              | 51 55.049              | 129 58.495 |              |                          |                |              |               |                |                      |                              |  |
|                     |              | 0620       | EN        |                  |               |              | 51 55.036              | 129 58.553 |              |                          |                |              |               |                |                      |                              |  |
|                     |              |            |           |                  |               |              |                        |            |              |                          |                |              |               |                |                      |                              |  |
| 25                  | QCS3         | 0740       | BE        | CTD              |               | 11           | 52 3.014               | 129 43.765 | 106          | 100                      |                |              |               |                |                      |                              |  |
|                     |              | 0752       | BO        |                  |               |              | 52 3.000               | 129 43.753 |              |                          |                |              |               |                |                      |                              |  |
|                     |              | 0754       | EN        |                  |               |              | 52 2.995               | 129 43.813 |              |                          |                |              |               |                |                      |                              |  |

Cast Type:

USW = Sea Water Loop

Bottle Firing Method:

Time Code:

## Cast Type:

BOT = Bottle cast, no CTD  
CTD = CTD without Rosette  
ROS = Rosette plus CTD  
SET = Fish Set

USW = Sea Water Loop  
MOR = Mooring  
NET = Plankton Net Haul  
DRF = Drifter

## Bottle Firing Method:

US = Up / Stop  
UN = Up / No stop  
DN = Down / No stop

## Notes:

## Time Code:

BE = Beginning Time of Cast  
BO = Bottom Time of Cast  
EN = End Time of Cast  
DE = Deployment Time  
MR = Messenger Release Time  
RE = Recover Mooring Time

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

Produced by the Water Properties Group, IOS

WaterProperties.ca  
Version: 16 April 2010

# DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Month August Year 2012 Ship R/Vs Cruise ID 2012-30 Page 3 of     

| Day | Station Name | Time (UTC) | Time Code | Cast Type | Firing Method | Event Number | Positional Information |            | Bottom Depth | Max Depth | Sample Numbers | # of Bottles | Watch Keepers | Trans. Cleaned | Comments |
|-----|--------------|------------|-----------|-----------|---------------|--------------|------------------------|------------|--------------|-----------|----------------|--------------|---------------|----------------|----------|
|     |              |            |           |           |               |              | Latitude               | Longitude  |              |           |                |              |               |                |          |
| 26  | QCS1         | 0443       | BE        | CTD       |               | 12           | 52 14.983              | 129 2.932  | 166          | 160       |                |              | SN            | —              | 9. hex   |
|     |              | 0447       | Bo        |           |               |              | 52 14.966              | 129 2.950  |              |           |                |              |               |                |          |
|     |              | 0450       | EN        |           |               |              | 52 14.939              | 129 3.013  |              |           |                |              |               |                |          |
| 26  | QCS2         | 0642       | BE        | CTD       |               | 13           | 52 8.914               | 129 29.898 | 202          | 195       |                |              | SN            | —              | 10. hex  |
|     |              | 0647       | Bo        |           |               |              | 52 8.767               | 129 30.001 |              |           |                |              |               |                |          |
|     |              | 0651       | EN        |           |               |              | 52 8.672               | 129 30.001 |              |           |                |              |               |                |          |
| 26  | QCS3         | 0759       | BE        | CTD       |               | 14           | 52 2.983               | 129 43.879 | 109          | 100       |                |              | SN            | —              | 11. hex  |
|     |              | 0801       | Bo        |           |               |              | 52 2.935               | 129 43.913 |              |           |                |              |               |                |          |
|     |              | 0804       | EN        |           |               |              | 52 2.857               | 129 43.901 |              |           |                |              |               |                |          |
| 27  | M008         | 2120       | BE        | CTD       |               | 15           | 52 28.417              | 130 28.930 | 171          | 165       |                |              | SN            | —              | 12. hex  |
|     |              | 2124       | Bo        |           |               |              | 52 28.418              | 130 28.996 |              |           |                |              |               |                |          |
|     |              | 2127       | EN        |           |               |              | 52 28.440              | 130 28.961 |              |           |                |              |               |                |          |
| 27  | M008         | 2137       | Bo        | NET       |               | 16           | 52 28.440              | 130 28.961 | 172          | 165       |                |              | SN            |                | Bongo    |

## Cast Type:

BOT = Bottle cast, no CTD  
CTD = CTD without Rosette  
ROS = Rosette plus CTD  
SET = Fish Set

USW = Sea Water Loop  
MOR = Mooring  
NET = Plankton Net Haul  
DRF = Drifter

## Bottle Firing Method:

US = Up / Stop  
UN = Up / No stop  
DN = Down / No stop

## Notes:

## Time Code:

BE = Beginning Time of Cast  
BO = Bottom Time of Cast  
EN = End Time of Cast  
DE = Deployment Time  
MR = Messenger Release Time  
RE = Recover Mooring Time

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

Produced by the Water Properties Group, IOS

WaterProperties.ca  
Version: 16 April 2010