

DAILY SCIENCE LOG BOOK

MISSION
NUMBER

2015-22
Book 3

DATE:

From: 6 July 2015

to:

VESSEL:

Salacia

PROJECT(S):

Strait of Georgia

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

WaterProperties.ca

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 7 of

Cruise ID 2015-22

| DAILY SCIENCE LOG | | | | | | | Cruise ID | | 2015-22 | | | | | | | |
|--|--------------|------------|-----------|-----------|---------------|--------------|------------------------|------------|--------------|-----------|----------------|--|--------------|---------------|----------------|----------------------|
| Month | | | | Year | | | Ship | | Salacia | | Sample Numbers | | # of Bottles | Watch Keepers | Trans. Cleaned | Comments |
| Day | Station Name | Time (UTC) | Time Code | Cast Type | Firing Method | Event Number | Positional Information | | Bottom Depth | Max Depth | | | | | | |
| | | | | | | | Latitude | Longitude | | | | | | | | |
| 9 | SC-04 | 13:06 | B0 | CTD | | 204 | 48 43.511 | 123 25.000 | 76 | | | | | | | 2015-22 204.1m |
| | | 13:09 | B0 | | | | 48 43.527 | 123 24.956 | | 86 | | | | | | |
| | | 13:11 | B0 | | | | 48 43.527 | 123 24.956 | | | | | | | | surface lugols. |
| | | 13:06 | B0 | Bucket | | 205 | 48 43.512 | 123 24.985 | | 0 | 66 | | | | | |
| | SC-04 | 13:12 | B0 | NET | | 206 | 48 43.527 | 123 24.956 | 94 | | | | | | | |
| | | 13:15 | | | | | 48 43.560 | 123 24.926 | | 86 | | | | | | |
| | | 13:17 | | | | | 560 | 925 | | | | | | | | |
| END! | | | | | | | | | | | | | | | | |
| 3 | 59 | 09:00 | B0 | | - | 257 | 42 58 | 123 25.52 | 230 | | | | | MO | ✓ | TRIP #7 START |
| | | 09:09 | B0 | | | | 44 | 27 0 13 | | 200 | | | | | | Very strong current. |
| | | 09:13 | B0 | | | | 38 | 23 4 42 | | | | | | | | Pl. 2015-22 207.1m |
| | 59 | 09:22 | B0 | 150 | - | 258 | 42 58 | 27 0 13 | 233 | | | | | MS | | |
| | | 09:30 | B0 | | | | 63 | 23 12 59 | | 220 | | | | | | |
| | | 09:31 | B0 | | | | 59 | 23 14 56 | | | | | | | | |
| 3 | 50 | 11:49 | B0 | MO | - | 307 | 42 58 | 123 25.72 | 174 | | | | | MB | ✓ | 2015-22 209.6m |
| | | 11:53 | B0 | | | | 39 | 57 2 16 | | 167 | | | | | | |
| | | 11:56 | B0 | | | | 31 | 57 10 60 | | | | | | | | |
| Transmissometer & Fluorometer are to be cleaned before each cast | | | | | | | | | | | | | | | | |

Ave

Ave

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:

e 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 & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 7 July 2014

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 8 of

| Month <u>August 2015</u> | | | | Year <u>2015</u> | | | Ship <u>SALADA</u> | | | | Cruise ID <u>2015-22</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 | | | | | | | |
| 3 | 40 | 1157 | R | CTD | - | 210 | 48 5 23 | 123 10 57 | 179 | | - | - | MR | - | |
| | | 1208 | R | | | | 48 5 24 | 123 10 47 | | 167 | | | | | |
| | | 1208 | S | | | | 48 5 22 | 123 10 40 | | | | | | | |
| 3 | 41 | 1359 | R | CTD | MR | 211 | 49 3 30 | 123 20 40 | 241 | | 67 | 1 | MR | ✓ | Shallow water A+B attached 1m above |
| | | 1402 | R | | | | 49 3 34 | 123 20 42 | | 239 | | | | | 2015-22-21 (CTD) |
| | | 1410 | R | | | | 49 3 30 | 123 20 45 | | | | | | | 60m |
| 3 | 42 | 1411 | R | BOT | MR | 212 | 49 3 30 | 123 20 47 | 241 | 5 | 68-69 | 2 | MR | | 68-5m Chl A+B 69-0m Chl A+B-Phyl. |
| 3 | 43 | 1422 | R | CTD | - | 213 | 49 3 34 | 123 22 63 | 241 | | - | - | MR | | |
| | | 1430 | R | | | | 49 3 37 | 123 22 53 | | 234 | | | | | |
| | | 1435 | R | | | | 49 3 21 | 123 22 65 | | | | | | | |
| 3 | 38 | 1546 | R | CTD | MR | 214 | 49 2 02 | 122 30 43 | 300 | | 70 | 1 | MR | ✓ | Shallow water A+B 1m above CTD |
| | | 1552 | R | | | | 49 12 01 | 123 30 31 | | 290 | | | | | Ph 2015-22-21 (CTD) |
| | | 1559 | R | | | | 49 11 44 | 123 30 19 | | | | | | | |
| 3 | 39 | 1602 | R | NET | - | 215 | 49 10 00 | 123 30 17 | 300 | | - | - | MR | - | |
| | | 1611 | R | | | | 49 11 22 | 123 30 07 | | 290 | | | | | |
| | | 1618 | R | | | | 49 11 46 | 123 30 05 | | | | | | | |
| 3 | 44 | 1721 | R | CTD | - | 216 | 49 8 64 | 123 36 91 | 134 | | - | - | MR | ✓ | Ph 2015-22-21 (CTD) |
| | | 1721 | R | | | | 49 8 65 | 123 36 92 | | 123 | | | | | |
| | | 1726 | R | | | | 49 8 71 | 123 36 92 | | | | | | | |

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 & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 7 July 2014

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 9 of

| Month <u>August 2015</u> | | | Year <u>2015</u> | | | Ship <u>SLAGTA</u> | | | Cruise ID <u>2015-22</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 | | | | | | | |
| 3 | 40 | 1727 | BC | NET | - | 217 | 49 8 74 | 123 36 90 | 134 | | - | - | MB | - | |
| | | 1731 | BO | | | | 49 8 78 | 123 36 95 | | 123 | | | | | |
| | | 1733 | EN | | | | 49 8 81 | 123 36 95 | | | | | | | |
| 4 | G601 | 1336 | BE | CTD | MSG | 218 | 49 14 98 | 123 44 87 | 420 | | 71 | 1 | MB | ✓ | Salinity 44.8 10m - 1m 34.0m CTD |
| | | 1340 | BO | | | | 49 14 98 | 123 44 77 | | 390 | | | | | 72.5m - 73.0m + Phos |
| | | 1355 | EN | | | | 49 14 95 | 123 44 66 | | | | | | | FL 2015-22 - 218.10m |
| 4 | G601 | 1401 | BE | BOT | MSG | 219 | 49 15 01 | 123 44 95 | 420 | 5 | 72-73 | 1 | MB | - | Salinity 44.8 10m - 1m 34.0m CTD |
| 4 | G601 | 1405 | BE | NET | - | 220 | 49 14 98 | 123 44 86 | 420 | | | - | MB | - | 72.5m, 73.0m + Phos |
| | | 1415 | BO | | | | 49 14 90 | 123 44 73 | | 390 | | | | | |
| | | 1424 | EN | | | | 49 14 85 | 123 44 67 | | | | | | | |
| 4 | HALIBUT | 1513 | BE | BOT | MSG | 221 | 49 20 40 | 123 45 26 | | 0 | 74 | 1 | MB | - | Salinity 44.8 10m - 1m 34.0m CTD |
| 4 | 78 | 1544 | BE | CTD | - | 222 | 49 24 14 | 123 45 28 | 134 | | - | - | MB | ✓ | FL 2015-22 - 222.10m |
| | | 1547 | BO | | | | 49 24 14 | 123 45 30 | | 39 | | | | | |
| | | 1549 | EN | | | | 49 24 15 | 123 45 31 | | | | | | | |
| 4 | 78 | 1550 | BE | NET | - | 223 | 49 24 15 | 123 45 32 | 133 | | | | | | |
| | | 1554 | BO | | | | 49 24 16 | 123 45 35 | | 124 | | | | | |
| | | 1556 | EN | | | | 49 24 16 | 123 45 35 | | | | | | | |

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 & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 7 July 2014

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 10 of 10

| Month | | | | Year | | | | Ship | | | | Cruise ID | | | |
|-------|--------------|------------|-----------|-----------|---------------|--------------|------------------------|-----------|--------------|-----------|----------------|--------------|---------------|----------------|--|
| 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 | 24 | 17:42 | B | BOT | - | 224 | 49 30 31 | 124 5 96 | 405 | | | | MB | ✓ | 224 net |
| | | 17:51 | B | | | | 49 30 36 | 124 5 91 | 405 | | | | | | |
| | | 17:59 | B | | | | 49 30 44 | 124 5 86 | | | | | | | |
| 1 | 24 | 18:03 | B | NET | - | 225 | 49 30 33 | 124 5 00 | 425 | | | | MB | | NET Scaprod 225 |
| | | 18:16 | B | | | | 49 30 44 | 124 5 95 | 415 | | | | | | |
| | | 18:25 | B | | | | 49 30 48 | 124 5 95 | | | | | | | |
| 5 | 24 | 07:27 | B | BOT | 18G | 226 | 49 40 11 | 124 5 43 | 353 | | 75 | 1 | MB | ✓ | 50m + 18G 30m 18G 20m 18G CAST 50m 20m 22m 22m 22m |
| | | 07:35 | B | | | | 49 40 15 | 124 5 48 | 303 | | | | | | |
| | | 07:41 | B | | | | 49 40 15 | 124 5 50 | | | | | | | |
| 5 | 22 | 17:40 | B | NET | - | 227 | 49 40 15 | 124 5 51 | 353 | | | | MB | | |
| | | 17:50 | B | | | | 49 40 15 | 124 5 55 | 307 | | | | | | |
| | | 18:03 | B | | | | 49 40 12 | 124 5 60 | | | | | | | |
| | | 18:18 | B | | | 228 | 49 40 53 | 124 5 41 | 405 | | | | MB | ✓ | 50m 20m 22m |
| | | 18:50 | B | | | | 49 40 50 | 124 5 30 | 300 | | | | | | |
| | | 19:00 | B | | | | 49 40 50 | 124 5 30 | | | | | | | |
| 5 | | 19:50 | B | BOT | 18G | 229 | 49 42 40 | 124 5 24 | 305 | 5 | 76-77 | 2 | MB | | 50m + B 120m 18G 76-5m 77-0m 18G |
| 9 | 1 | 11:00 | B | | | 5 | 49 40 40 | 124 5 33 | 300 | | | | MB | | |
| | | 11:12 | B | | | | 49 40 40 | 124 5 29 | 350 | | | | | | |
| | | 11:17 | B | | | | 49 40 40 | 124 5 25 | | | | | | | |

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

Transmissometer & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

WaterProperties.ca
Version: 7 July 2014

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 11 of

| Month <u>August</u> | | | | Year <u>2015</u> | | | Ship <u>Salvador</u> | | | | Cruise ID <u>2015-22</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 | | | | | | | |
| 5 | BS-11 | 1330 | BC | NET | - | 231 | 28 96 | 124 45 94 | 62 | | - | - | MR | ✓ | BS-11-22 |
| | | 1331 | BO | | | | 28 94 | 124 45 93 | | 52 | | | | | |
| | | 1332 | EN | | | | 28 95 | 124 45 92 | | | | | | | |
| 5 | BS-11 | 1338 | BC | NET | - | 232 | 28 92 | 124 45 91 | 62 | | - | - | MR | | |
| | | 1335 | BO | | | | 28 92 | 124 45 91 | | 52 | | | | | |
| | | 1336 | EN | | | | 28 92 | 124 45 91 | | | | | | | |
| 5 | CPEI | 1455 | BC | CTD | | 233 | 29 94 | 124 29 92 | 325 | | - | - | MR | ✓ | Delay in getting CTD |
| | | 1502 | BO | | | | 29 94 | 124 29 92 | | 315 | | | | | CTD data |
| | | 1505 | EN | | | | 29 94 | 124 29 92 | | | | | | | |
| 5 | BS-11 | 1507 | BC | NET | - | 234 | 29 98 | 124 29 91 | 325 | | - | - | MR | | |
| | | 1512 | BO | | | | 29 98 | 124 29 91 | | 315 | | | | | |
| | | 1524 | EN | | | | 29 98 | 124 29 91 | | | | | | | |
| 5 | CPEI | 1717 | BC | CTD | - | 235 | 49 02 | 124 4 97 | 245 | | - | - | MR | ✓ | CPEI-22 |
| | | 1725 | BO | | | | 49 02 | 124 4 95 | | 235 | | | | | (CPEI-22) |
| | | 1727 | EN | | | | 49 02 | 124 4 93 | | | | | | | |
| 5 | CPEI | 1731 | BC | NET | - | 236 | 49 02 | 124 4 93 | 245 | | - | - | MR | - | |
| | | 1738 | BO | | | | 49 02 | 124 4 93 | | 235 | | | | | |
| | | 1742 | EN | | | | 49 02 | 124 4 90 | | | | | | | |

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 & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 7 July 2014

DAILY SCIENCE LOG

Ocean Sciences Division, Institute of Ocean Sciences

Page 12 of

| Month <u> </u> | | | | Year <u> </u> | | | Ship <u> </u> | | Cruise ID <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 | | | | | | | |
| 10 | ST-01 | 1237 | B | 5 | | 237 | 18 15 84 | 20 52 | 16 | 56 | - | - | AK | ✓ | FL:205-72-237 h |
| | | 1244 | B | | | | 18 15 84 | 173 20 56 | | 56 | | | | | |
| | | 1235 | | | | | 18 15 84 | 173 20 56 | | | | | | | |
| 10 | GI-01 | 1237 | B | 115 | | 238 | 18 15 84 | 173 20 56 | 16 | 56 | - | - | AK | | |
| | | 1239 | B | | | | 18 15 84 | 173 20 56 | | 56 | | | | | |
| | | 1243 | B | | | | 18 15 84 | 173 20 56 | | | | | | | |
| 10 | SC-2 | 1318 | B | | | | 18 15 84 | 4 15 | 92 | | - | - | AK | ✓ | FL:205-72-239 h |
| | | 1320 | B | | | | 18 15 84 | 4 15 | 92 | 82 | | | | | |
| | | 1341 | B | | | | 18 15 84 | 4 15 | | | | | | | |
| 10 | SC-04 | 1322 | B | 5 | 108 | 240 | 41 43 48 | 24 92 | 92 | 5 | 78-19 | 2 | AK | | CH: A+B 60m/50 50m-78 30m-79 40m |
| 10 | SC-04 | 1323 | B | | | 241 | 41 43 48 | 4 87 | 85 | | | | AK | | |
| | | 1349 | B | | | | 41 43 48 | 24 83 | | 75 | | | | | |
| | | 1351 | B | | | | 41 43 48 | 4 84 | | | | | | | |
| | RETURN TO TOP @ 1500 | | | | | | | | | | | | | | |

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 & Fluorometer are to be cleaned before each cast

Produced by the Water Properties Group, IOS

WaterProperties.ca
 Version: 7 July 2014

Notes: