

Cruise ID: 2017-64 Station: S1 Event #: 1 Vessel: NECTOP UTC Date (dd|mmm|yyyy): 22 | Jul | 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |     |  |  |  |  |  |  |  |  | Comments |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|-----|--|--|--|--|--|--|--|--|----------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPLC | DIC |  |  |  |  |  |  |  |  |          |
| 1                 |          | 1        | 100               | ✓ 100              | X                                                                 | X   |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 2                 |          | 2        | 75                | ✓ 75               | I                                                                 | I   | X   |       |      |     |  |  |  |  |  |  |  |  |          |
| 3                 |          | 3        | 50                | ✓ 50               | I                                                                 | XX  |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 4                 |          | 4        | 40                | ✓ 40               | I                                                                 | I   |     |       |      | X   |  |  |  |  |  |  |  |  |          |
| 5                 |          | 5        | 30                | ✓ 30               | XX                                                                | I   |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 6                 |          | 6        | 20                | ✓ 20               | I                                                                 | I   |     | XX    |      |     |  |  |  |  |  |  |  |  |          |
| 7                 |          | 7        | 10                | ✓ 10               | I                                                                 | I   |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 8                 |          | 8        | 5                 | ✓ 5                |                                                                   |     |     | XX    |      |     |  |  |  |  |  |  |  |  |          |
| 9                 |          | 9        | SFC               | ✓ 0.6              | X                                                                 | X   |     | XX    | XX   |     |  |  |  |  |  |  |  |  |          |
| 10                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 11                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 12                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 13                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 14                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 15                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 16                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |          |

Profile type:  
Ros (default) | TrMetlRos | X-Niskin

Watchkeeper(s):  
RC SR

Bottom Depth: 180 m

Transmisso Cleaned: Y / N

Fluorometer Cleaned: Y / N

| Time        | UTC     | Local   |
|-------------|---------|---------|
| Start (BE)  | 01 : 40 | 18 : 40 |
| Bottom (BO) | 01 : 50 | 18 : 50 |
| End (EN)    | 02 : 01 | 19 : 01 |

Positional Information

Lat: 48 ° 39 . 11 N

Lon: 123 ° 30 . 03 W

▼

Lat: 48 ° 39 . 11 N

Lon: 123 ° 30 . 01 W

▼

Lat: 48 ° 39 . 11 N

Lon: 123 ° 29 . 99 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64 Station: 59 Event #: 004 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 22 | JUN | 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |     |     |    |    |       |  |  |  |  | Comments     |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|-----|-----|----|----|-------|--|--|--|--|--------------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPC | PAR | DC | DA | Phyto |  |  |  |  |              |
| 1                 |          | 10       | 6-5               | ✓ 225              | X                                                                 | X   |     |       |     |     | X  |    |       |  |  |  |  |              |
| 2                 |          | 11       | 200               | ✓ 200              | 1                                                                 | 1   | X   |       |     |     | X  |    |       |  |  |  |  |              |
| 3                 |          | 12       | 175               | ✓ 175              | xx                                                                | 1   |     |       |     |     |    |    |       |  |  |  |  |              |
| 4                 |          | 13       | 150               | ✓ 150              | 1                                                                 | 1   |     |       |     |     | X  |    |       |  |  |  |  |              |
| 5                 |          | 14       | 125               | ✓ 125              | 1                                                                 | 1   |     |       |     |     |    |    |       |  |  |  |  |              |
| 6                 |          | 15       | 100               | ✓ 100              | 1                                                                 | xx  |     |       |     |     | xx |    |       |  |  |  |  |              |
| 7                 |          | 16       | 75                | ✓ 75               | 1                                                                 | 1   |     |       |     |     | X  |    |       |  |  |  |  |              |
| 8                 |          | 17       | 50                | ✓ 50               | 1                                                                 | 1   |     |       |     |     | X  |    |       |  |  |  |  |              |
| 9                 |          | 18       | 40                | ✓ 40               | 1                                                                 | 1   |     |       |     |     |    |    |       |  |  |  |  |              |
| 10                |          | 19       | 30                | ✓ 30               | 1                                                                 | 1   |     |       |     |     | xx |    |       |  |  |  |  |              |
| 11                |          | 20       | 20                | ✓ 20               | xx                                                                | 1   |     | xx    |     |     | X  |    |       |  |  |  |  |              |
| 12                |          | 21       | 10                | ✓ 10               | 1                                                                 | 1   |     | xx    |     |     | X  |    |       |  |  |  |  |              |
| 13                |          | 22       | 5                 | ✓ 5                | 1                                                                 | xx  |     |       |     |     | X  |    |       |  |  |  |  |              |
| 14                |          | 23       | 0                 | ✓ 1.3              | X                                                                 | X   |     | xx xx |     |     |    | X  | X     |  |  |  |  |              |
| 15                |          | 24       | 0                 | ✓ 1.3              |                                                                   |     |     |       |     | xxx |    |    |       |  |  |  |  | did not fire |
| 16                |          | 25       | 0                 | ✓ 1.3              |                                                                   |     |     |       |     |     | X  |    |       |  |  |  |  |              |
| 17                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |
| 18                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |
| 19                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |
| 20                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |
| 21                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |
| 22                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |
| 23                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |
| 24                |          |          |                   |                    |                                                                   |     |     |       |     |     |    |    |       |  |  |  |  |              |

Profile type:  
Ros (default) | TrMetlRos | X-Niskin  
Watchkeeper(s):  
PC SR PJR

Bottom Depth: 229 m  
Transmisso Cleaned: Y / N  
Fluorometer Cleaned: Y / N

| Time        | UTC   | Local |
|-------------|-------|-------|
| Start (BE)  | 04:53 | 21:53 |
| Bottom (BO) | 05:00 | 22:00 |
| End (EN)    | :     | :     |

Positional Information  
Start  
Lat: 48° 37' . 80 N  
Lon: 123° 14' . 60 W

Bottom  
Lat: 48° 37' . 80 N  
Lon: 123° 14' . 60 W

Finish  
Lat: 48° 37' . 79 N  
Lon: 123° 14' . 59 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64 Station: 102 Event #: 7 Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 22 Jun 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |      |    |       |  |  | UTC Date (dd mmm yy) |  |          |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|------|----|-------|--|--|----------------------|--|----------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPIC | PART | DA | Phyto |  |  |                      |  | Comments |
| 1                 |          | 26       | 5-5               | ✓ 245              | X                                                                 | XX  |     |       |      |      |    |       |  |  |                      |  |          |
| 2                 |          | 27       | 200               | ✓                  |                                                                   |     | X   |       |      |      |    |       |  |  |                      |  |          |
| 3                 |          | 28       | 175               | ✓                  |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 4                 |          | 29       | 150               | ✓                  |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 5                 |          | 30       | 125               | ✓                  |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 6                 |          | 31       | 100               | ✓                  | XX                                                                |     |     |       |      |      |    |       |  |  |                      |  |          |
| 7                 |          | 32       | 75                | ✓                  |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 8                 |          | 33       | 50                | ✓ 48               |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 9                 |          | 34       | 40                | ✓ 41               |                                                                   | XX  |     |       |      |      |    |       |  |  |                      |  |          |
| 10                |          | 35       | 30                |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 11                |          | 36       | 20                |                    |                                                                   |     |     | XX    |      |      |    |       |  |  |                      |  |          |
| 12                |          | 37       | 10                |                    |                                                                   |     |     | XX    |      |      |    |       |  |  |                      |  |          |
| 13                |          | 38       | 5                 |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 14                |          | 39       | 0                 |                    | XX                                                                | X   |     | XX    | XX   |      | X  | X     |  |  |                      |  |          |
| 15                |          | 40       | 0                 |                    |                                                                   |     |     |       |      | XXX  |    |       |  |  |                      |  |          |
| 16                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |      |    |       |  |  |                      |  |          |

Version: 14 February 2013

Transmissometer and Fluorometer are to be cleaned before each cast -- do not use Ammonia products

Profile type:  
☒ Ros (default) ☐ TrMetlRos ☐ X-Niskin  
Watchkeeper(s):  
SR

Bottom Depth: 252 m  
Transmisso Cleaned: ☒ Y / ☐ N  
Fluorometer Cleaned: ☐ Y / ☐ N

| Time        | UTC   | Local |
|-------------|-------|-------|
| Start (BE)  | 17:13 | 10:13 |
| Bottom (BO) | 17:17 | :     |
| End (EN)    | 17:38 | :     |

Positional Information  
Start  
Lat: 48° 30.02 N  
Lon: 124° 44.04 W

Bottom  
Lat: 48° 30.05 N  
Lon: 124° 44.12 W

Finish  
Lat: 48° 30.04 N  
Lon: 124° 43.89 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64 Station: 75 Event #: 010 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 22 | JUN | 2017

| Bottles & Samples |          |          | Rosette Operation |                      | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |     |  |  |  |  |  |  |  |  | Comments   |
|-------------------|----------|----------|-------------------|----------------------|-------------------------------------------------------------------|-----|-----|-------|------|-----|--|--|--|--|--|--|--|--|------------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed ✓ Pressure | Oxy                                                               | Nut | Sal | Chl a | HPLC | PAR |  |  |  |  |  |  |  |  |            |
| 1                 |          | 41       | 5-10              | ✓ 215                | X                                                                 | X   |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 2                 |          | 42       | 200               | ✓ 198                | 1                                                                 | 1   | X   |       |      |     |  |  |  |  |  |  |  |  |            |
| 3                 |          | 43       | 175               | ✓ 174                | XX                                                                | 1   |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 4                 |          | 44       | 150               | ✓ 150                | 1                                                                 | 1   |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 5                 |          | 45       | 125               | ✓ 125                | 1                                                                 | 1   |     |       |      |     |  |  |  |  |  |  |  |  | sonden 220 |
| 6                 |          | 46       | 100               | ✓ 100                | 1                                                                 | XX  |     |       |      |     |  |  |  |  |  |  |  |  | alt 60     |
| 7                 |          | 47       | 75                | ✓ 75                 | 1                                                                 | 1   |     |       |      |     |  |  |  |  |  |  |  |  | press 166  |
| 8                 |          | 48       | 50                | ✓ 50                 | 1                                                                 | 1   |     |       |      |     |  |  |  |  |  |  |  |  | 226        |
| 9                 |          | 49       | 40                | ✓ 40                 | 1                                                                 | 1   |     |       |      |     |  |  |  |  |  |  |  |  | +6         |
| 10                |          | 50       | 30                | ✓ 30                 | 1                                                                 | 1   |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 11                |          | 51       | 20                | ✓ 20                 | XX                                                                | 1   |     | XX    |      |     |  |  |  |  |  |  |  |  |            |
| 12                |          | 52       | 10                | ✓ 10                 | 1                                                                 | 1   |     | XX    |      |     |  |  |  |  |  |  |  |  |            |
| 13                |          | 53       | 5                 | ✓ 5                  | 1                                                                 | 1   |     |       |      |     |  |  |  |  |  |  |  |  | sonden 270 |
| 14                |          | 54       | 0                 | ✓ .8                 | X                                                                 | XX  |     | XX    | XX   |     |  |  |  |  |  |  |  |  | alt 24     |
| 15                |          |          |                   | ✓ .8                 |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  | press 200  |
| 16                |          | 55       | 0                 | ✓ .8                 |                                                                   |     |     |       |      | XXX |  |  |  |  |  |  |  |  | 224        |
| 17                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  | +4         |
| 18                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 19                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 20                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 21                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 22                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 23                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |            |
| 24                |          |          |                   |                      |                                                                   |     |     |       |      |     |  |  |  |  |  |  |  |  |            |

Profile type:  
Ros (default) | TrMetlRos | X-Niskin  
Watchkeeper(s):  
E SR RB RP

Bottom Depth: 220 m  
Transmisso Cleaned: Y / N  
Fluorometer Cleaned: Y / N  
Time UTC Local  
Start (BE) 20 : 57 13 : 57  
Bottom (BO) 21 : 03 14 : 03  
End (EN) 21 : 20 14 : 20

Positional Information  
Start  
Lat: 48 ° 28 . 18 N  
Lon: 124 ° 32 . 77 W  
Bottom  
Lat: 48 ° 28 . 18 N  
Lon: 124 ° 32 . 78 W  
Finish  
Lat: 48 ° 28 . 18 N  
Lon: 124 ° 32 . 82 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)  
slippy seastate

# Water Properties Group

## Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64

Station: 72

Event #: 13

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 22 | Jun | 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |      |     |    |      |   |  |  | Comments |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|------|-----|----|------|---|--|--|----------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPLC | PART | DIC | DA | phdo |   |  |  |          |
| 1                 |          | 56       | 6-5               | ✓ 181              | X                                                                 | X   |     |       |      |      |     | X  |      |   |  |  |          |
| 2                 |          | 57       | 175               | ✓ 175              |                                                                   | XX  | X   |       |      |      |     |    |      |   |  |  |          |
| 3                 |          | 58       | 150               | ✓ 150              |                                                                   |     |     |       |      |      |     | XX |      |   |  |  |          |
| 4                 |          | 59       | 125               | ✓ 125              |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 5                 |          | 60       | 100               | ✓ 100              |                                                                   |     |     |       |      |      |     | X  |      |   |  |  |          |
| 6                 |          | 61       | 75                | ✓ 75               | XX                                                                |     |     |       |      |      |     | X  |      |   |  |  |          |
| 7                 |          | 62       | 50                | ✓ 50               |                                                                   |     |     |       |      |      |     | X  |      |   |  |  |          |
| 8                 |          | 63       | 40                | ✓ 40               |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 9                 |          | 64       | 30                | ✓ 30               |                                                                   | XX  |     |       |      |      |     | XX |      |   |  |  |          |
| 10                |          | 65       | 20                | ✓ 20               |                                                                   |     |     | XX    |      |      |     | X  |      |   |  |  |          |
| 11                |          | 66       | 10                | ✓ 10               | XX                                                                |     |     | XX    |      |      |     | X  |      |   |  |  |          |
| 12                |          | 67       | 5                 | ✓ 5                |                                                                   |     |     |       |      |      |     | X  |      |   |  |  |          |
| 13                |          | 68       | 0                 | ✓ 1.0              | X                                                                 | X   |     | XX    | XX   |      |     | X  | X    | X |  |  |          |
| 14                |          | 69       | 0                 | ✓ 1.0              |                                                                   |     |     |       |      | XXX  |     |    |      |   |  |  |          |
| 15                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 16                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |    |      |   |  |  |          |

Version: 14 February 2013

Transmissometer and Fluorometer are to be cleaned before each use.

Profile type:  
 Ros (default) | TrMetIRos | X-Niskin  
 Watchkeeper(s):  
fe

Bottom Depth: 186 m  
 Transmisso Cleaned: Y / N  
 Fluorometer Cleaned: Y / N

| Time        | UTC            | Local          |
|-------------|----------------|----------------|
| Start (BE)  | <u>01 : 50</u> | <u>18 : 50</u> |
| Bottom (BO) | <u>01 : 54</u> | <u>18 : 54</u> |
| End (EN)    | <u>02 : 08</u> | <u>19 : 08</u> |

Positional Information  
 Start  
 Lat: 48 ° 18 . 64 N  
 Lon: 124 ° 04 . 02 W

Bottom  
 Lat: 48 ° 18 . 61 N  
 Lon: 124 ° 03 . 99 W

Finish  
 Lat: 48 ° 18 . 45 N  
 Lon: 124 ° 04 . 04 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Cruise ID: 2017-64 Station: 69 Event #: 17 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 22 | Jun | 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |      |  |  |  |  |  |  |  |  | Comments |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|------|--|--|--|--|--|--|--|--|----------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPLC | PART |  |  |  |  |  |  |  |  |          |
| 1                 |          | 70       | 6-5               | ✓ 174              | X                                                                 | X   |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 2                 |          | 71       | 150               | ✓ 150              |                                                                   | XX  | X   |       |      |      |  |  |  |  |  |  |  |  |          |
| 3                 |          | 72       | 125               | ✓ 125              |                                                                   | I   |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 4                 |          | 73       | 100               | ✓ 100              |                                                                   | XX  |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 5                 |          | 74       | 75                | ✓ 75               |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 6                 |          | 75       | 50                | ✓ 50               | XX                                                                |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 7                 |          | 76       | 40                | ✓ 40               | I                                                                 |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 8                 |          | 77       | 30                | ✓ 30               |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 9                 |          | 78       | 20                | ✓ 20               | XX                                                                |     |     | XX    |      |      |  |  |  |  |  |  |  |  |          |
| 10                |          | 79       | 10                | ✓ 10               |                                                                   |     |     | XX    |      |      |  |  |  |  |  |  |  |  |          |
| 11                |          | 80       | 5                 | ✓ 5                | I                                                                 |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 12                |          | 81       | 0                 | ✓ 1.3              | X                                                                 | X   |     | XX    | XX   |      |  |  |  |  |  |  |  |  |          |
| 13                |          | 82       | 0                 | ✓ 1.3              |                                                                   |     |     |       |      | XXX  |  |  |  |  |  |  |  |  |          |
| 14                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 15                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 16                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |

Profile type:  
Ros (default) | TrMetlRos | X-Niskin

Watchkeeper(s):  
DVB, PC, SR, RJP

Bottom Depth: 177 m

Transmisso Cleaned: Y / N

Fluorometer Cleaned: Y / N

| Time        | UTC    | Local  |
|-------------|--------|--------|
| Start (BE)  | 04 :53 | 21 :53 |
| Bottom (BO) | 04 :56 | 21 :56 |
| End (EN)    | 05 :10 | 22 :10 |

Positional Information

Lat: 48 ° 15 . 58 N

Lon: 123 ° 43 . 19 W

▼

Lat: 48 ° 15 . 59 N

Lon: 123 ° 43 . 26 W

▼

Lat: 48 ° 15 . 59 N

Lon: 123 ° 43 . 21 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

# Water Properties Group

## Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64

Station: ADCP

Event #: 020

Vessel: VECTOR

UTC Date (dd|mmm|yyyy): 23 Jun 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |     |     |     |      |  |  | Comments |  |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|-----|-----|-----|------|--|--|----------|--|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HLR | ART | DMA | PATO |  |  |          |  |
| 1                 |          | 83       | 65                | ✓ 118              | X                                                                 | X   |     |       |     |     |     |      |  |  |          |  |
| 2                 |          | 84       | 100               | ✓ 101              | XX                                                                |     | X   |       |     |     |     |      |  |  |          |  |
| 3                 |          | 85       | 75                | ✓                  |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 4                 |          | 86       | 50                | ✓                  |                                                                   | XX  |     |       |     |     |     |      |  |  |          |  |
| 5                 |          | 87       | 40                | ✓                  | XX                                                                |     |     |       |     |     |     |      |  |  |          |  |
| 6                 |          | 88       | 30                | ✓                  |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 7                 |          | 89       | 20                | ✓                  |                                                                   |     |     | XX    |     |     |     |      |  |  |          |  |
| 8                 |          | 90       | 10                | ✓                  |                                                                   |     |     | XX    |     |     |     |      |  |  |          |  |
| 9                 |          | 91       | 5                 | ✓                  |                                                                   | XX  |     |       |     |     |     |      |  |  |          |  |
| 10                |          | 92       | 0                 | ✓                  | X                                                                 | X   |     | XX    | XX  |     | X   | X    |  |  |          |  |
| 11                |          | 93       | 0                 | ✓                  |                                                                   |     |     |       |     | XXX |     |      |  |  |          |  |
| 12                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 13                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 14                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 15                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 16                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 17                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 18                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 19                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 20                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 21                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 22                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 23                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |
| 24                |          |          |                   |                    |                                                                   |     |     |       |     |     |     |      |  |  |          |  |

Profile type:  
☒ Ros (default) ☐ TrMet/Ros ☐ X-Niskin  
 Watchkeeper(s):  
SR

Bottom Depth: 85 m  
 Transmisso Cleaned: ☒ Y / ☐ N  
 Fluorometer Cleaned: ☐ Y / ☐ N

| Time        | UTC   | Local |
|-------------|-------|-------|
| Start (BE)  | 08:00 | 01:00 |
| Bottom (BO) | 08:03 | :     |
| End (EN)    | 08:20 | :     |

Positional Information

|        |                          |
|--------|--------------------------|
| Start  | Lat: <u>48° 13.97</u> N  |
|        | Lon: <u>123° 18.02</u> W |
| ▼      |                          |
| Bottom | Lat: <u>48° 13.97</u> N  |
|        | Lon: <u>123° 18.03</u> W |
| ▼      |                          |
| Finish | Lat: <u>48° 13.87</u> N  |
|        | Lon: <u>123° 17.72</u> W |

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64 Station: 65 Event #: 24 Vessel: Vefur

UTC Date (dd/mmm/yyyy): 23 Jun 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |      |  |  |  |  |  |  |  |  | Comments |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|------|--|--|--|--|--|--|--|--|----------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPLC | Part |  |  |  |  |  |  |  |  |          |
| 1                 |          | 94       | B-5               | ✓ 122              | X                                                                 |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 2                 |          | 95       | 100               | ✓                  | ↓                                                                 |     | X   |       |      |      |  |  |  |  |  |  |  |  |          |
| 3                 |          | 96       | 75                | ✓                  |                                                                   | XX  |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 4                 |          | 97       | 50                | ✓                  | ↓                                                                 |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 5                 |          | 98       | 40                | ✓                  | XX                                                                |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 6                 |          | 99       | 30                | ✓                  | ↓                                                                 |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 7                 |          | 100      | 20                | ✓                  |                                                                   |     |     | XX    |      |      |  |  |  |  |  |  |  |  |          |
| 8                 |          | 101      | 10                | ✓                  | ↓                                                                 | XX  |     | XX    |      |      |  |  |  |  |  |  |  |  |          |
| 9                 |          | 102      | 5                 | ✓                  | XX                                                                | ↓   |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 10                |          | 103      | 0                 | ✓                  | ↓                                                                 | ↓   |     | XX    | XX   |      |  |  |  |  |  |  |  |  |          |
| 11                |          | 104      | 0                 | ✓                  | ↓                                                                 |     |     |       |      | XX   |  |  |  |  |  |  |  |  |          |
| 12                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 13                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 14                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 15                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 16                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |          |

Profile type:  
Ros (default) | TrMetIRos | X-Niskin

Watchkeeper(s):  
  
SR

Bottom Depth: 126 m

Transmisso Cleaned: (Y) N

Fluorometer Cleaned: Y / N

| Time        | UTC   | Local |
|-------------|-------|-------|
| Start (BE)  | 10:49 | 03:49 |
| Bottom (BO) | 10:53 | :     |
| End (EN)    | 11:04 | :     |

Positional Information

Start

Lat: 48° 15.93 N

Lon: 123° 9.80 W

Bottom

Lat: 48° 15.94 N

Lon: 123° 9.80 W

Finish

Lat: 48° 15.94 N

Lon: 123° 9.79 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Cruise ID: 2017-64 Station: 63 Event #: 27 Vessel: Vector UTC Date (dd|mmm|yyyy): 23 Jun 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |      |  |  |  |  |  |  |  |  | Comments                        |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|------|--|--|--|--|--|--|--|--|---------------------------------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPMC | Part |  |  |  |  |  |  |  |  |                                 |
| 2                 |          | 105      | 20                | ✓                  |                                                                   |     |     | xx    |      |      |  |  |  |  |  |  |  |  | Bot 1 Fired at B-S by accident. |
| 3                 |          | 106      | 10                |                    |                                                                   |     |     | xx    |      |      |  |  |  |  |  |  |  |  |                                 |
| 4                 |          | 107      | 0                 |                    |                                                                   |     |     | xx    | xx   |      |  |  |  |  |  |  |  |  |                                 |
| 5                 |          | 108      | 0                 |                    |                                                                   |     |     |       |      | xxx  |  |  |  |  |  |  |  |  |                                 |
| 5                 |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 6                 |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 7                 |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 8                 |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 9                 |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 10                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 11                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 12                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 13                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 14                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 15                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 16                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |      |  |  |  |  |  |  |  |  |                                 |

Profile type:  

Ros (default) | TrMetlRos | X-Niskin

Watchkeeper(s):  
SR

Bottom Depth: 153 m

Transmisso Cleaned: Y / N

Fluorometer Cleaned: Y / N

| Time        | UTC   | Local |
|-------------|-------|-------|
| Start (BE)  | 12:37 | 05:37 |
| Bottom (BO) | 12:40 | :     |
| End (EN)    | 12:45 | :     |

Positional Information

Start

Lat: 48° 14.59 N

Lon: 122° 58.51 W

Bottom

Lat: 48° 14.59 N

Lon: 122° 58.51 W

Finish

Lat: 48° 14.60 N

Lon: 122° 58.51 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64 Station: 62 Event #: 028 Vessel: Vector

UTC Date (dd|mmm|yyyy): 23 | Jun | 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |     |  |  |  |  | UTC Date (dd mmm yy) |  |  |          |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|-----|--|--|--|--|----------------------|--|--|----------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPLC | PAR |  |  |  |  |                      |  |  | Comments |
| 1                 |          | 109      | B-5               | ✓ 145              |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 2                 |          | 110      | 125               | ✓                  |                                                                   |     | X   |       |      |     |  |  |  |  |                      |  |  |          |
| 3                 |          | 111      | 100               |                    |                                                                   | XX  |     |       |      |     |  |  |  |  |                      |  |  |          |
| 4                 |          | 112      | 75                |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 5                 |          | 113      | 50                |                    | XX                                                                |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 6                 |          | 114      | 40                |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 7                 |          | 115      | 30                |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 8                 |          | 116      | 20                |                    |                                                                   |     |     | XX    |      |     |  |  |  |  |                      |  |  |          |
| 9                 |          | 117      | 10                |                    |                                                                   | XX  |     | XX    |      |     |  |  |  |  |                      |  |  |          |
| 10                |          | 118      | 5                 |                    | XX                                                                |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 11                |          | 119      | 0                 |                    | ↓                                                                 | ↓   |     | XX    | XX   |     |  |  |  |  |                      |  |  |          |
| 12                |          | 120      | 0                 |                    |                                                                   |     |     |       |      | XXX |  |  |  |  |                      |  |  |          |
| 13                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 14                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 15                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 16                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |     |  |  |  |  |                      |  |  |          |

Version: 14 February 2013

Transmissometer and Fluorometer are to be cleaned before each cast -- do not use Ammonia products

Profile type:  
Ros (default) | TrMetlRos | X-Niskin  
Watchkeeper(s):  
SR

Bottom Depth: 147 m  
Transmisso Cleaned: (Y) N  
Fluorometer Cleaned: Y / N

| Time        | UTC   | Local |
|-------------|-------|-------|
| Start (BE)  | 13:51 | 06:51 |
| Bottom (BO) | 13:54 | :     |
| End (EN)    | 14:08 | :     |

Positional Information  
Start  
Lat: 48° 22.79 N  
Lon: 123° 2.65 W

Bottom  
Lat: 48° 22.79 N  
Lon: 123° 2.64 W

Finish  
Lat: 48° 22.80 N  
Lon: 123° 2.64 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2017-64 Station: 56 Event #: 034 Vessel: VECTOR UTC Date (dd|mmm|yyyy): 23 | Jul | 2017

| Bottles & Samples |          |          | Rosette Operation |                    | Samples Taken (↓ write samplers' initials under each sample type) |     |     |       |      |      |     |       |   |  |  |  |  |  | Comments |
|-------------------|----------|----------|-------------------|--------------------|-------------------------------------------------------------------|-----|-----|-------|------|------|-----|-------|---|--|--|--|--|--|----------|
| Niskin #          | Firing # | Sample # | Target Pressure   | Confirmed Pressure | Oxy                                                               | Nut | Sal | Chl a | HPLC | PART | DA  | Phyto |   |  |  |  |  |  |          |
| 1                 |          | 121      | B-5               | ✓                  | 200                                                               |     |     |       |      |      |     |       |   |  |  |  |  |  | 01 07    |
| 2                 |          | 122      | 200               | ✓                  | 200                                                               |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 3                 |          | 123      | 175               | ✓                  | 175                                                               |     |     |       |      |      |     |       |   |  |  |  |  |  | 16 → 23  |
| 4                 |          | 124      | 150               | ✓                  | 150                                                               |     | XX  | X     |      |      |     |       |   |  |  |  |  |  | 17 → 24  |
| 5                 |          | 125      | 125               | ✓                  | 125                                                               |     |     |       |      |      |     |       |   |  |  |  |  |  | 18 → 01  |
| 6                 |          | 126      | 100               | ✓                  | 100                                                               | XX  |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 7                 |          | 127      | 75                | ✓                  | 75                                                                |     |     | X     |      |      |     |       |   |  |  |  |  |  | 18 07    |
| 8                 |          | 128      | 50                | ✓                  | 50                                                                |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 9                 |          | 129      | 40                | ✓                  | 40                                                                |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 10                |          | 130      | 30                | ✓                  | 30                                                                |     |     | X     |      |      |     |       |   |  |  |  |  |  |          |
| 11                |          | 131      | 20                | ✓                  | 20                                                                |     |     |       | XX   |      |     |       |   |  |  |  |  |  |          |
| 12                |          | 132      | 10                | ✓                  | 10                                                                | XX  | XX  |       | XX   |      |     |       |   |  |  |  |  |  |          |
| 13                |          | 133      | 5                 | ✓                  | 5                                                                 |     |     | X     |      |      |     |       |   |  |  |  |  |  |          |
| 14                |          | 134      | 0                 | ✓                  | 1.4                                                               | ↓   | ↓   |       | XX   | XX   |     | X     | X |  |  |  |  |  |          |
| 15                |          | 135      | 0                 | ✓                  | 1.4                                                               |     |     |       |      |      | XXX |       |   |  |  |  |  |  |          |
| 16                |          |          | 0                 | ✓                  | 1.4                                                               |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 17                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 18                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 19                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 20                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 21                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 22                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 23                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |
| 24                |          |          |                   |                    |                                                                   |     |     |       |      |      |     |       |   |  |  |  |  |  |          |

Profile type:  
Ros (default) | TrMetlRos | X-Niskin  
Watchkeeper(s):  
PC 22 RB RP

Bottom Depth: 205 m  
Transmisso Cleaned: Y / N  
Fluorometer Cleaned: Y / N  
Time UTC Local  
Start (BE) 22:45 15:45  
Bottom (BO) 22:52 15:52  
End (EN) 23:06 16:06

Positional Information  
Start Lat: 48°46.40 N  
Lon: 123°01.64 W  
Bottom Lat: 48°46.46 N  
Lon: 123°01.56 W  
Finish Lat: 48°46.64 N  
Lon: 123°01.92 W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)