

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

Haro 59

Event #:

2

Ship:

Tully

UTC Date (dd|mmm|yyyy):

06 6 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|--------|-----|--------|---|--|--|--|--|----------|--|--|--|
| | | | Target Pressure | Confirmed ✓ Pressure | DIC | Oxy | Nut-fr | Sal | Paw-16 | | | | | | | | | |
| 1 | 1 | 1 | Bot-10 | ✓ | 226 | x | x | x | | x | | | | | | | | |
| 2 | 2 | 2 | 200 | ✓ | | x x | x | x | | x | | | | | | | | |
| 3 | 3 | 3 | 175 | ✓ | | x | x | x | | x | | | | | | | | |
| 4 | 4 | 4 | 150 | ✓ | | x | x | x | | x | | | | | | | | |
| 5 | 5 | 5 | 125 | ✓ | | x | x x | x | | x | | | | | | | | |
| 6 | 6 | 6 | 100 | ✓ | | x | x | x | | x | | | | | | | | |
| 7 | 7 | 7 | 80 | ✓ | | x x | x | x x | | x | | | | | | | | |
| 8 | 8 | 8 | 60 | ✓ | | x | x | x | | x | | | | | | | | |
| 9 | 9 | 9 | 50 | ✓ | | x | x | x | | x | | | | | | | | |
| 10 | 10 | 10 | 40 | ✓ | | x | x | x | | x | | | | | | | | |
| 11 | 11 | 11 | 30 | ✓ | | x | x | x | | x | | | | | | | | |
| 12 | 12 | 12 | 20 | ✓ | | x | x | x | | x | | | | | | | | |
| 13 | 13 | 13 | 10 | ✓ | | x x | x | x | | x | | | | | | | | |
| 14 | 14 | 14 | 5 | ✓ | | x | x x | x | | x | | | | | | | | |
| 15 | 15 | 15 | 0 | ✓ | | x | x | x | | x | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): 74 60

Bottom Depth: 235 m

Transmisso Cleaned: Y N

Time UTC Local

Start 413 2113

Bottom 418

End 434

Positional Information

Lat: 48 ° 36.81 N

Lon: 123 ° 14.79 W

Lat: 48 ° 36.81 N

Lon: 123 ° 14.79 W

Lat: 48 ° 36.82 N

Lon: 123 ° 14.87 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

JF2

Event #:

5

Ship:

Tully

UTC Date (dd|mmm|yyyy):

6 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|--------|-----|--------|-----|------|------|--|--|----------|--|--------------|--|
| | | | Target Pressure | Confirmed ✓ Pressure | DIC | Oxy | Nut-fr | Sal | Paw-16 | Chl | HPLC | U BC | | | | | | |
| 1 | 1 | 16 | Bot-105 | ✓ | 185 | x | x | x | | x | | | | | | | | |
| 2 | 2 | 17 | 150 | ✓ | | x x | x | x | | x | | | | | | | | |
| 3 | 3 | 18 | 125 | ✓ | | x | x | x | | x | | | | | | | | |
| 4 | 4 | 19 | 100 | ✓ | | x | x | x | | x | | | | | | | | |
| 5 | 5 | 20 | 80 | ✓ | | x | x x | x | | x | | | | | | | | |
| 6 | 6 | 21 | 60 | ✓ | | x x | x | x | | x | | | | | | | | |
| 7 | 7 | 22 | 50 | ✓ | | x | x | x x | | x | | | | | | | | |
| 8 | 8 | 23 | 40 | ✓ | | x | x | x | | x | | | | | | | | |
| 9 | 9 | 24 | 30 | ✓ | | x | x | x | | x | | | | | | | | |
| 10 | 10 | 25 | 20 | ✓ | | x x | x | x | | x | | | | | | | | |
| 11 | 11 | 26 | 10 | ✓ | | x | x | x | | x | | x x | | | | | | |
| 12 | 12 | 27 | 5 | ✓ | | x | x | x | | x | x x | x x | | | | | FLUO: 8.0 µg | |
| 13 | 13 | 28 | 0 | ✓ | | x | x | x | | x | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:

☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): H.M.

Bottom Depth: 183 m

Transmisso Cleaned: ☒ Y ☐ N

Time UTC Local

Start 0950 0250

Bottom 0953

End 1008 0308

Positional Information

Lat: 48 ° 17 .96 N

Lon: 123 ° 59 .93 W

Lat: 48 ° 17 .95 N

Lon: 123 ° 59 .91 W

Lat: 48 ° 17 .94 N

Lon: 123 ° 59 .94 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P1 Event #: 9 Ship: Tully UTC Date (dd mmm yyyy): 6 6 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|-----|-----|-----|--------|-----|-------|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | DIC | Oxy | pH | Paw-16 | UBC | GASE3 | |
| 1 | 1 | 29 | Bot-10 | ✓ 108 | x | | | | xx | xx | xxx | x | | | |
| 2 | 2 | 30 | 30 | ✓ | x | | | | x | x | x | x | | | |
| 3 | 3 | 31 | 5 | | x | x | xx | xx | x | xx | x | x | xx | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☒ X-Niskin other?
Watchkeeper(s): H.M.

Bottom Depth: 117 m
Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1030 | 1130 |
| Bottom | 1841 | |
| End | 1846 | |

Positional Information
Start
Lat: 48 ° 34.51 N
Lon: 125 ° 30.01 W

Bottom
Lat: 48 ° 34.53 N
Lon: 125 ° 30.03 W

End
Lat: 48 ° 34.56 N
Lon: 125 ° 30.04 W

Extra comments:
Will also have loops for Chl x2
Sal x1, OxyLab x2,
and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P2

Event #:

10

Ship:

Tully

UTC Date (dd mmm yyyy):

6 6 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|------|------|--------|-----|------|------|------|--|--|----------------|
| | | | Target Pressure | Confirmed Pressure | DMS | DMSP | DMSP | Nut-Fr | Chl | HPLC | UVic | Bugs | | | |
| 1 | | 32 | 100 | ✓ 160 | | | | | | | | x | | | |
| 2 | | 33 | 100 | ✓ 100 | x | x | x | x | x | | x | 8.3 | | | |
| 3 | | 34 | 75 | ✓ 75 | x | | | x | x | | x | 8.7 | | | |
| 4 | | 35 | 50 | ✓ 49 | x | | | x | x | | x | 9.1 | | | |
| 5 | | 36 | 50 | ✓ 49 | | | | | | | | x | | | |
| 6 | | 37 | 40 | ✓ 40 | x | | | x | x | | | | | | Fluo 1.4 |
| 7 | | 38 | 30 | ✓ 30 | x | | | x | xx | xx | | | | | Fluo 1.4 |
| 8 | | 39 | 25 | ✓ 25 | x | | | x | xx | xx | | | | | Fluo 1.4 → 1.7 |
| 9 | | 40 | 20 | ✓ 20 | xx | xx | xx | x | xx | xx | x | 13.2 | | | Fluo 0.5 |
| 10 | | 41 | 15 | ✓ 15 | x | | | xx | xx | xx | | | | | Fluo 0.4 |
| 11 | | 42 | 10 | ✓ 10 | x | | | x | xx | xx | x | 13.5 | | | Fluo 0.4 |
| 12 | | 43 | 5 | ✓ 5 | x | x | x | x | xx | xx | x | 13.4 | | | |
| 13 | | 44 | 5 | ✓ 5 | | | | | | | | x | | | |
| 14 | | 45 | 0 | ✓ 3 | x | x | x | x | x | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

DY

Bottom Depth: 117 m

Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2149 | 1449 |
| Bottom | 2153 | |
| End | 2206 | |

Positional Information

| | | |
|------|------------|---|
| Lat: | 48 ° 36.07 | N |
| Lon: | 126 ° 0.03 | W |

| | | |
|------|------------|---|
| Lat: | 48 ° 36.03 | N |
| Lon: | 126 ° 0.03 | W |

| | | |
|------|------------|---|
| Lat: | 48 ° 36.04 | N |
| Lon: | 126 ° 0.02 | W |

Extra comments:

DMS cast

Will also have loops for Chl x2

43 B
CHL
P2
5 m
2016-06
Bot 12FROZEN VIAL FELL ON
DECK, FILTER ON DECK
TOO.

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P2

Event #: 12

Ship: Tully

UTC Date (dd mmm yyyy): 6 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | RT UBC gases | Paw16 | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-------|-------|-----|-----|-------|--|--------------|-------|--|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | Oxy | Nut-F | Nut-C | Sal | DIC | pH | | | | | | | | |
| 1 | | 46 | Bot-10 | ✓ 109 | x x | x | | | x | x | | | x | | | | | |
| 2 | | 47 | 100 | ✓ 100 | x | x | | | x | x | | | x | | | | | |
| 3 | | 48 | 75 | ✓ 76 | x | x | | | x x | x | | | x | | | | | |
| 4 | | 49 | 75 | ✓ 76 | x | x | | | x | x | | | | | | | | |
| 5 | | 50 | 50 | ✓ 50 | x | x | | | x | x x x | | | x | | | | | |
| 6 | | 51 | 25 | ✓ 25 | x | x x | | | x | x | | | x | | | | | |
| 7 | | 52 | 10 | ✓ 10 | x | x | | | x | x | | x x | x | | | | | |
| 8 | | 53 | 5 | ✓ 5 | x | x | | x | x | x | | | x | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): DY

Bottom Depth: 117 m

Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2252 | 1552 |
| Bottom | 2256 | |
| End | 2306 | |

Positional Information

Start Lat: 48 ° 36.04 N

Start Lon: 126 ° 0.05 W

Bottom Lat: 48 ° 36.05 N

Bottom Lon: 126 ° 0.03 W

End Lat: 48 ° 36.07 N

End Lon: 126 ° 0.04 W

Extra comments:

Deep cast

Will also have loops for Sal x1, OxyLab x2 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P3 Event #: 13 Ship: Tully UTC Date (dd|mmm|yyyy): 07|6|2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|------------|------------------------------------|-----|-----|------|-------|-------|--|--|--|--|----------|
| | | | Target | Confirmed | Nut-F | Sal | Chl | HPLC | Gases | Paw16 | | | | | |
| | | | Pressure | ✓ Pressure | | | | | UBC | | | | | | |
| 1 | | 54 | Bot-10 | ✓ 814 | | | | | | x | | | | | |
| 2 | | 55 | 10 | ✓ 11 | | | | | xx | | | | | | |
| 3 | | 56 | 5 | ✓ 5 | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): DY

Bottom Depth: 814 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0111 | 1811 |
| Bottom | | |
| End | 0147 | |

Positional Information

| | | |
|------|-------------|---|
| Lat: | 48 ° 37.45 | N |
| Lon: | 126 ° 19.91 | W |

▼

| | | |
|------|-------------|---|
| Lat: | 48 ° 37.46 | N |
| Lon: | 126 ° 19.92 | W |

▼

| | | |
|------|-------------|---|
| Lat: | 48 ° 37.45 | N |
| Lon: | 126 ° 19.94 | W |

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P4 Event #: 14 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-------|-------|-----|-------|-----|--|-----|-------|------|----------|--|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Oxy | Nut-F | Nut-C | Sal | DIC | pH | | DNA | gases | SAGs | Paw16 | | |
| | | | | | DY | JS | JS | DY | PM/WH | GC | | | | | WH | | |
| 1 | | 57 | Bot-10 | ✓ 1320 | x | x | x | | x | x | | x | xx | x | x | | |
| 2 | | 58 | 1250 | ✓ 1250 | x | x | x | x | x | x | | x | xx | x | x | | |
| 3 | | 59 | 1250 | ✓ 1250 | xx | x | x | xx | xx | x | | | | | | | |
| 4 | | 60 | 1000 | ✓ 1000 | x | x | x | xx | x | x | | x | xx | x | x | | |
| 5 | | 61 | 800 | ✓ 799 | x | x | x | x | x | x | | x | xx | x | x | | |
| 6 | | 62 | 600 | ✓ 601 | x | xx | xx | | x | x | | x | xx | x | x | | |
| 7 | | 63 | 400 | ✓ 400 | x | x | x | | x | x | | x | xx | x | x | | |
| 8 | | 64 | 300 | ✓ 299 | x | x | | | x | x | | x | xx | x | x | | |
| 9 | | 65 | 250 | ✓ 248 | x | x | | | x | xxx | | | | | x | | |
| 10 | | 66 | 200 | ✓ 201 | x | x | | | x | x | | x | xx | x | x | | |
| 11 | | 67 | 175 | ✓ 174 | x | x | | | x | x | | | | | x | | |
| 12 | | 68 | 150 | ✓ 151 | x | x | | | x | x | | x | xx | x | x | | |
| 13 | | 69 | 125 | ✓ 125 | x | xx | | | x | x | | | | | x | | |
| 14 | | 70 | 100 | ✓ 100 | x | x | | | x | x | | x | xx | x | x | | |
| 15 | | 71 | 75 | ✓ 75 | xx | x | | | x | x | | | | | x | | |
| 16 | | 72 | 50 | ✓ 49 | x | x | | | x | x | | x | xx | x | x | | |
| 17 | | 73 | 25 | ✓ 25 | x | x | | | x | x | | x | xx | x | x | | |
| 18 | | 74 | 10 | ✓ 10 | x | x | | | x | x | | x | xx | x | x | | |
| 19 | | 75 | 5 | ✓ 5 | x | x | | x | x | xxx | | | | | x | | |
| 20 | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM X-Niskin other?
 Watchkeeper(s): DY

Bottom Depth: 1314 m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0404 | 2104 |
| Bottom | 0429 | |
| End | 0510 | |

Positional Information

| | | |
|------|-------------|---|
| Lat: | 48 ° 38.98 | N |
| Lon: | 126 ° 39.96 | W |

Start

Lat: 48 ° 39.00 N
 Lon: 126 ° 39.95 W

Bottom

Lat: 48 ° 38.99 N
 Lon: 126 ° 39.89 W

End

Extra comments:
 Deep cast
 Will also have loops for Sal x1,
 OxyLab x2 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P4 Event #: 15 Ship: Tully UTC Date (dd|mmm|yyyy): 07 | JUN | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|---------------------------------|--|------------------------------------|--------|--------------------|----------------------|--|--|--|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed <div>√</div> Pressure | | Sal | Nut-fr | Fe <div>filt</div> | Fe <div>unfilt</div> | | | | | | | | | |
| 1 | | 76 | 35 | | | | | x x | x x | | | | | | | | | |
| 2 | | 77 | 25 | | | | | x | x | | | | | | | | | |
| 3 | | 78 | 10 | | | | | x | x | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM X-Niskin ☒ other?
 Watchkeeper(s): TM PUMP

Bottom Depth: _____ m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0545 | |
| Bottom | | |
| End | 0800 | |

Positional Information

| | |
|--------|--------------------|
| Start | Lat: 48 ° 38.98 N |
| | Lon: 126 ° 10.03 W |
| Bottom | Lat: ° N |
| | Lon: ° W |
| End | Lat: 48 ° 38.98 N |
| | Lon: 126 ° 39.82 W |

Extra comments:
 TM pumping

Cruise ID: 2016-06 Station: P4 Event #: 16 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|---|--|--|--|--|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | | UBC | | | | | | | | | | | |
| 1 | | 79 | Bot-10 | ✓ | 1322 | | x | | | | | | | | | | |
| 2 | | 80 | Bot-10 | ✓ | | | | | | | | | | | | | |
| 3 | | 81 | Bot-10 | ✓ | | | | | | | | | | | | | |
| 4 | | 82 | Bot-10 | ✓ | | | | | | | | | | | | | |
| 5 | | 83 | 1000 | ✓ | | | x | | | | | | | | | | |
| 6 | | 84 | 1000 | ✓ | | | | | | | | | | | | | |
| 7 | | 85 | 1000 | ✓ | | | | | | | | | | | | | |
| 8 | | 86 | 1000 | ✓ | | | | | | | | | | | | | |
| 9 | | 87 | 500 | ✓ | | | x | | | | | | | | | | |
| 10 | | 88 | 500 | ✓ | | | | | | | | | | | | | |
| 11 | | 89 | 500 | ✓ | | | | | | | | | | | | | |
| 12 | | 90 | 500 | ✓ | | | | | | | | | | | | | |
| 13 | | 91 | 10 | ✓ | | | x | | | | | | | | | | |
| 14 | | 92 | 10 | ✓ | | | | | | | | | | | | | |
| 15 | | 93 | 10 | ✓ | | | | | | | | | | | | | |
| 16 | | 94 | 10 | ✓ | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s):

Bottom Depth: 1320 m
Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0819 | 0119 |
| Bottom | 0841 | |
| End | 0907 | 0207 |

Positional Information

| | | | |
|------|-------|-------|---|
| Lat: | 48 ° | 38.96 | N |
| Lon: | 126 ° | 40.01 | W |

▼

| | | | |
|------|-------|-------|---|
| Lat: | 48 ° | 38.97 | N |
| Lon: | 126 ° | 39.93 | W |

▼

| | | | |
|------|-------|-------|---|
| Lat: | 48 ° | 39.00 | N |
| Lon: | 126 ° | 39.94 | W |

Extra comments:
Jade's cast

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P4 Event #: 19 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|------|-----|---------|---------|---------|-----|--------|------|-----|-----|------|----------|--|--|
| | | | Target Pressure | Confirmed Pressure | 17O | ONAr | Oxy | 18O inc | NO3 inc | NH4 inc | CHL | Nut-Fr | NH4 | Sal | C14 | UVic | bugs | | |
| 1 | | 95 | O2 max | ✓ 35 | xx | | xx | | | | | | | x | | | | | |
| 2 | | 96 | 5 m | ✓ | xx | xx | xx | | x | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | |
| 4 | | 97 | 250 | ✓ | | | | | | | | | | | | x | | | |
| 5 | | 98 | 150 | ✓ | | | | | | | | | | | | x | | | |
| 6 | | 99 | 50 | ✓ | | | | | | | | | | | | x | | | |
| 7 | | 100 | 20 | ✓ | | | | | | | | | | | | x | | | |
| 8 | | 101 | 10 | ✓ | | | | | | | | | | | | x | | | |
| 9 | | 102 | 5 | ✓ | | | | | | | | | | | | x | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | 103 | 100 | ✓ | | | | | | | | | | | | | x | | |
| 12 | | 104 | 50 | ✓ | | | | | | | | | | | | | x | | |
| 13 | | 105 | 5 | ✓ | | | | | | | | | | | | | x | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | |
| 17 | | 106 | 100% | ✓ 0 | | | xx | xxx | xxxxx | | x | x | | | | | | | |
| 18 | | 107 | 100% | ✓ 0 | | | | | | xxxxx | | | xx | | | | | | |
| 19 | | 108 | 55% | ✓ 0 | | xx | xx | xxx | x | x | x | x | xx | x | | | | | |
| 20 | | 109 | 30% | ✓ 5 | | | xx | xxx | x | x | x | x | xxxx | x | | | | | |
| 21 | | 110 | 15% | ✓ 7 | | | xx | xxx | x | x | x | x | xx | x | | | | | |
| 22 | | 111 | 1% | ✓ 24 | | | xx | xxx | x | x | x | x | xx | x | | | | | |
| 23 | | 112 | 55% | ✓ 0 | | | | | | | | | | | x | | | | |
| 24 | | | | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): H.M.

Bottom Depth: 1320 m
Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|-------|-------|
| Start | 11 12 | 04 12 |
| Bottom | 11 17 | |
| End | 11 39 | 04 39 |

Positional Information
Start
Lat: 48 ° 38 97 N
Lon: 126 ° 39 95 W

Bottom
Lat: 48 ° 38 98 N
Lon: 126 ° 39 93 W

End
Lat: 48 ° 38 97 N
Lon: 126 ° 39 91 W

Extra comments:
4, 5, 11, 12, 6, 1, 22, 7
8, 21, 20, 2, 9, 13,
17, 18, 19, 23

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P4 Event #: 20 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|------------|------------------------------------|------|------|--------|------|-------|-------|-----|--|--|----------|--|--|--------------|
| | | | Target | Confirmed | DMS | DMSP | DMSP | Nut-Fr | Chl | HPLC | Phyto | | | | | | | |
| | | | Pressure | ✓ Pressure | HR | t PA | d PA | TV | BYAV | TV/HR | MR | | | | | | | |
| 1 | | 113 | 300 | ✓ | | x | | | x | | | | | | | | | top valve |
| 2 | | 114 | 200 | ✓ | | x | x | x | x | | | | | | | | | |
| 3 | | 115 | 175 | ✓ | | x | x | x | x | | | | | | | | | |
| 4 | | 116 | 100 | ✓ | | x | x | x | xx | x | | | | | | | | |
| 5 | | 117 | 75 | ✓ | | x | | | x | x | | | | | | | | |
| 6 | | 118 | 60 | ✓ | - | | | | x | xx | xx | | | | | | | Fluo 0.5 ug |
| 7 | | 119 | 50 | ✓ | - | x | | | x | xx | xx | | | | | | | Fluo 0.5 ug |
| 8 | | 120 | 40 | ✓ | - | x | | | x | xx | xx | | | | | | | Fluo 0.65 ug |
| 9 | | 121 | 30 | ✓ | - | x | | | x | xx | xx | | | | | | | Fluo 0.60 ug |
| 10 | | 122 | 25 | ✓ | | x | | | x | x | | | | | | | | |
| 11 | | 123 | 20 | ✓ | | xx | xx | xx | x | x | | | | | | | | |
| 12 | | 124 | 15 | ✓ | - | x | | | x | xx | xx | | | | | | | Fluo ~1.4 |
| 13 | | 125 | 10 | ✓ | | x | | | x | x | | | | | | | | |
| 14 | | 126 | 5 | ✓ | - | x | x | x | x | xx | xx | xxx | | | | | | Fluo ~1.4 |
| 15 | | 127 | 0 | ✓ | 3.0 | x | x | x | x | x | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): H.A.

Bottom Depth: 1305 m
 Transmisso Cleaned: ☒ Y ☐ N

| | Time | UTC | Local |
|--------|------|------|-------|
| Start | | 1316 | 0616 |
| Bottom | | 1321 | |
| End | | 1339 | |

Positional Information
 Lat: 48 ° 39.05 N
 Lon: 126 ° 39.90 W

Lat: 48 ° 39.04 N
 Lon: 126 ° 39.91 W

Lat: 48 ° 39.00 N
 Lon: 126 ° 39.88 W

Extra comments:
 DMS cast
 Will also have loops for Chl.x2
 NOT ENOUGH BOTTLES

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P5 Event #: 21 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|---|------------------------------------|-------|-----|-----|------|--|-----------|--------|--|--|----------|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> | Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | |
| 1 | 1 | 128 | 2005 | <input checked="" type="checkbox"/> | | | x | | | | | x | | | |
| 2 | 2 | 129 | 10 | <input checked="" type="checkbox"/> | | | | | | | xx | | | | |
| 3 | 3 | 130 | 5 | <input checked="" type="checkbox"/> | | x | x | xx | xx | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM X-Niskin other?
 Watchkeeper(s): H. M. / GAC

Bottom Depth: 2009 m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1701 | 1001 |
| Bottom | 1735 | |
| End | 1809 | 1109 |

Positional Information

| | |
|-------|----------------------|
| Start | Lat: 49 ° 41 . 44 N |
| | Lon: 127 ° 10 . 00 W |

Start

Bottom

End

| | |
|--------|----------------------|
| Bottom | Lat: 48 ° 41 . 45 N |
| | Lon: 127 ° 09 . 93 W |

| | |
|-----|----------------------|
| End | Lat: 48 ° 41 . 42 N |
| | Lon: 127 ° 09 . 90 W |

Extra comments:
 Will also have loops for Chl x2
 Sal x1, OxyLab x2,
 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P6

Event #:

22

Ship:

Tully

UTC Date (dd|mmm|yyyy):

7 | 6 | 2016

| | | | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-----|------|-------|--------|--|--|--|--|----------------|--|--|--|
| Niskin # | Firing # | Sample # | Target Pressure | Confirmed Pressure | Nut-F | Sal | Chl | HPLC | UBC | Paw-16 | | | | | | | | |
| | | | | ✓ | | | | | gases | | | | | | Waterkeeper(s) | | | |
| 1 | 1 | 131 | 2005 | ✓ 2005 | | x | | | | x | | | | | | | | |
| 2 | 2 | 132 | 10 | ✓ 10 | | | | | xx | | | | | | | | | |
| 3 | 3 | 133 | 5 | ✓ 5 | x | x | xx | xx | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): DY

Bottom Depth: 2545 m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2136 | 1436 |
| Bottom | 2211 | |
| End | 2249 | |

Positional Information

| | | |
|-------|-----------------|---|
| Start | Lat: 48° 44.56 | N |
| | Lon: 127° 39.97 | W |

Bottom

| | |
|-----------------|---|
| Lat: 48° 44.58 | N |
| Lon: 127° 39.99 | W |

End

| | |
|-----------------|---|
| Lat: 48° 44.58 | N |
| Lon: 127° 40.01 | W |

Extra comments:
 Will also have loops for Chl x2
 Sal x1, Oxy x2,
 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P7

Event #: 23

Ship: Tully

UTC Date (dd|mmm|yyyy): 8 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|--|--|--|--|--------|-------------------------|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | | | | | Paw-16 | |
| 1 | 1 | 134 | 2005 | ✓ 2006 | | x | | | | | | | | x | |
| 2 | 2 | 135 | 5 | ✓ 5 | x | x | xx | xx | | | | | | | Accidental trip @ 543 m |
| 3 | 3 | 135 | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): DY

Bottom Depth: 2503 m

Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0146 | 1846 |
| Bottom | 0223 | |
| End | 0300 | |

Positional Information

Start Lat: 48 ° 46.70 N

Start Lon: 128 ° 9.99 W

Bottom Lat: 48 ° 46.60 N

Bottom Lon: 128 ° 9.97 W

End Lat: 48 ° 46.64 N

End Lon: 128 ° 9.90 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P8

Event #: 25

Ship: Tully

UTC Date (dd|mmm|yyyy): 8 | 6 | 2016

| Niskin # | | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials .. | | | | | | | | | | Ship: Tully | | | | UTC Date (dd/r | |
|----------|--|----------|----------|-------------------|--------------------|---------------------------------------|-----|--------|-------|-----|------|--|--|-----------|------|-------------|--|--|--|----------------|--|
| | | | | Target Pressure | Confirmed Pressure | Oxy | Sal | Nut Fr | Nut C | Chl | HPLC | | | UBC gases | UVic | Paw16 | | | Comments | | |
| 1 | | | 136 | 2000 | ✓ 2000 | x | xx | x | x | | | | | | | | | | | | |
| 2 | | | 137 | 1500 | ✓ | x | x | x | x | | | | | xx | | x | | | SUSPECT - T=13.1 OPENED @ SURFACE OR HOOKED UP IN OFFSET | | |
| 3 | | | 138 | 1250 | ✓ | x | x | xx | xx | | | | | xx | | x | | | | | |
| 4 | | | 139 | 1000 | ✓ | x | xx | x | x | | | | | xx | | x | | | | | |
| 5 | | | 140 | 800 | ✓ | x | x | x | x | | | | | xx | | x | | | | | |
| 6 | | | 141 | 600 | ✓ | xx | | x | x | | | | | xx | | x | | | | | |
| 7 | | | 142 | 400 | ✓ | x | | x | x | | | | | xx | | x | | | | | |
| 8 | | | 143 | 300 | ✓ | x | | x | | | | | | xx | | x | | | | | |
| 9 | | | 144 | 250 | ✓ | x | | x | | | | | | xx | | x | | | | | |
| 10 | | | 145 | 200 | ✓ | x | | x | | | | | | | x | x | | | | | |
| 11 | | | 146 | 175 | ✓ | x | | x | | | | | | xx | | x | | | | | |
| 12 | | | 147 | 150 | ✓ | x | | xx | | | | | | | | x | | | | | |
| 13 | | | 148 | 125 | ✓ | xx | | x | | | | | | xx | x | x | | | | | |
| 14 | | | 149 | 100 | ✓ | x | | x | | x | | | | | | x | | | | | |
| 15 | | | 150 | 75 | ✓ | x | | x | | x | | | | xx | | x | | | | | |
| 16 | | | 151 | 60 | ✓ | x | | x | | xx | xx | | | | | x | | | | | |
| 17 | | | 152 | 50 | ✓ | x | | x | | xx | xx | | | | | x | | | | | |
| 18 | | | 153 | 40 | ✓ | x | | x | | xx | xx | | | xx | x | x | | | | | |
| 19 | | | 154 | 30 | ✓ | x | | x | | xx | xx | | | | | x | | | | | |
| 20 | | | 155 | 25 | ✓ | x | | x | | x | | | | | | x | | | | | |
| 21 | | | 156 | 20 | ✓ | xx | | x | | x | | | | xx | | x | | | | | |
| 22 | | | 157 | 15 | ✓ | x | | x | | xx | xx | | | | x | x | | | | | |
| 23 | | | 158 | 10 | ✓ | x | | x | | x | | | | | | x | | | | | |
| 24 | | | 159 | 5 | ✓ | x | x | x | | xx | xx | | | xx | x | x | | | | | |

Version: 25 Nov 2011

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

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): DY/H.M.

Bottom Depth: 2576 m
Transmisso Cleaned: Y/N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0616 | 2316 |
| Bottom | 0652 | |
| End | 0749 | 0049 |

Positional Information

Start
Lat: 48° 49.01 N
Lon: 128° 39.97 W

Bottom
Lat: 48° 49.00 N
Lon: 128° 39.97 W

End
Lat: 48° 48.97 N
Lon: 128° 39.95 W

Extra comments:
Will have loops for 2x Oxy,
2x Chl and 1x Sal.

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P9

Event #:

26

Ship:

Tully

UTC Date (dd/mmm/yyyy):

8 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--|------------------------------------|-----|-----|------|----|--|--|--|--|--------|----------|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Nut-F | Sal | Chl | HPLC | | | | | | Paw-16 | |
| 1 | 1 | 160 | 2005 | <input checked="" type="checkbox"/> | | | x | | | | | | | x | |
| 2 | 2 | 161 | 5 | <input checked="" type="checkbox"/> | | x | x | xx | xx | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): H. M.

Bottom Depth: 2342 m

Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1027 | 0327 |
| Bottom | 1057 | |
| End | 1131 | |

Positional Information

Start
Lat: 48 ° 51 . 44 N
Lon: 129 ° 09 . 94 WBottom
Lat: 48 ° 51 . 38 N
Lon: 129 ° 09 . 92 WEnd
Lat: 48 ° 51 . 36 N
Lon: 129 ° 10 . 02 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P10 Event #: 29 Ship: Tully UTC Date (dd|mmm|yyyy): 08 | JUN | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|--|------------------------------------|-------|-----|-----|------|--|-----------|--|--------|--|----------|--|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | | Nut-F | Sal | Chl | HPLC | | UBC gases | | Paw-16 | | | | |
| 1 | 1 | 162 | 2005 | <input checked="" type="checkbox"/> 2006 | | | x | | | | | | x | | | | |
| 2 | 2 | 163 | 10 | <input checked="" type="checkbox"/> 10 | | | | | | | x x | | | | | | |
| 3 | 3 | 164 | 5 | <input checked="" type="checkbox"/> 5 | | x | x | x x | x x | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): MR

Bottom Depth: 26.40 m
Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1405 | 0705 |
| Bottom | 1442 | |
| End | 1518 | |

Positional Information
Start
Lat: 48° 53.59 N
Lon: 129° 40.12 W

Bottom
Lat: 48° 53.70 N
Lon: 129° 39.82 W

End
Lat: 48° 53.62 N
Lon: 129° 40.01 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P11 Event #: 31 Ship: Tully UTC Date (dd|mmm|yyyy): 08 | Jun | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--|------------------------------------|-----|-----|------|--|--|--|--|--------|--|----------|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Nut-F | Sal | Chl | HPLC | | | | | Paw-16 | | |
| 1 | 1 | 165 | 2005 | <input checked="" type="checkbox"/> | | x | | | | | | | x | | |
| 2 | 2 | 166 | 5 | <input checked="" type="checkbox"/> | x | x | xx | xx | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): GC/H.N.V.

Bottom Depth: 2751 m
Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1750 | 1050 |
| Bottom | 1824 | |
| End | 1858 | |

Positional Information
Start
Lat: 48 ° 56.00 N
Lon: 130 ° 09.97 W

Bottom
Lat: 48 ° 56.05 N
Lon: 130 ° 10.00 W

End
Lat: 48 ° 56.07 N
Lon: 130 ° 9.95 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P12 Event #: 32 Ship: Tully UTC Date (dd|mmm|yyyy): 08 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|-------------|------------------------------------|-----|------|------|--------|-------|-------|-------|--|--|----------|--|------|--|
| | | | Target Pressure | Confirmed ✓ | Pressure | DMS | DMSP | DMSP | Nut-Fr | Chl | HPLC | Phyto | | | | | | |
| | | | | | | MR | t MA | d MA | AT | MR/DR | AT/HV | | | | | | | |
| 1 | | 167 | 300 | | | x | | | x | | | | | | | | | |
| 2 | | 168 | 200 | | | x | x | x | x | | | | | | | | | |
| 3 | | 169 | 175 | | | x | x | x | x | | | | | | | | | |
| 4 | | 170 | 100 | | | x | x | x | x | x | | | | | | | | |
| 5 | | 171 | 75 | | | x | | | x | x | | | | | | | | |
| 6 | | 172 | 60 | | | | | | x | xx | xx | | | | | | Fluo | |
| 7 | | 173 | 50 | | | x | | | x | xx | xx | | | | | | Fluo | |
| 8 | | 174 | 40 | | | x | | | x | xx | xx | | | | | | Fluo | |
| 9 | | 175 | 30 | | | x | | | x | xx | xx | | | | | | Fluo | |
| 10 | | 176 | 25 | | | x | | | xx | x | | | | | | | | |
| 11 | | 177 | 20 | | | xx | xx | xx | x | x | | | | | | | | |
| 12 | | 178 | 15 | | | x | | | x | xx | xx | | | | | | Fluo | |
| 13 | | 179 | 10 | | | x | | | x | x | | | | | | | | |
| 14 | | 180 | 5 | | | x | x | x | x | xx | xx | | | | | | Fluo | |
| 15 | | 181 | 0 | | | x | x | x | x | x | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
(ROS) TRM X-Niskin other?
Watchkeeper(s): DY

Bottom Depth: 3236 m
Transmisso Cleaned: (Y) / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2126 | 1426 |
| Bottom | 2135 | |
| End | 2154 | |

Positional Information

| | | |
|------|------------|---|
| Lat: | 48° 58 18 | N |
| Lon: | 130° 40 03 | W |

Start

Bottom

Lat: 48° 58 24 N
Lon: 130° 40 00 W

End

Lat: 48° 58 22 N
Lon: 130° 39 99 W

Extra comments:
DMS cast
Will also have loops for Chl x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P12

Event #: 32

Ship: Tully

UTC Date (dd|mmm|yyyy): 8 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|------|------|--------|-------|-------|-------|--|--|--|----------|--|------|
| | | | Target Pressure | Confirmed ✓ Pressure | DMS | DMSP | DMSP | Nut-Fr | Chl | HPLC | Phyto | | | | | | |
| | | | | | MR | t MA | d MA | AT | MA/BR | AT/KV | | | | | | | |
| 1 | | 167 | 300 | ✓ 300 | x | | | x | | | | | | | | | |
| 2 | | 168 | 200 | ✓ 200 | x | x | x | x | | | | | | | | | |
| 3 | | 169 | 175 | ✓ 175 | x | x | x | x | | | | | | | | | |
| 4 | | 170 | 100 | ✓ 100 | x | x | x | x | x | | | | | | | | |
| 5 | | 171 | 75 | ✓ 75 | x | | | x | x | | | | | | | | |
| 6 | | 172 | 60 | ✓ 60 | | | | x | xx | xx | | | | | | | Fluo |
| 7 | | 173 | 50 | ✓ 50 | x | | | x | xx | xx | | | | | | | Fluo |
| 8 | | 174 | 40 | ✓ 40 | x | | | x | xx | xx | | | | | | | Fluo |
| 9 | | 175 | 30 | ✓ 30 | x | | | x | xx | xx | | | | | | | Fluo |
| 10 | | 176 | 25 | ✓ 25 | x | | | xx | x | | | | | | | | |
| 11 | | 177 | 20 | ✓ 20 | xx | xx | xx | x | x | | | | | | | | |
| 12 | | 178 | 15 | ✓ 15 | x | | | x | xx | xx | | | | | | | Fluo |
| 13 | | 179 | 10 | ✓ 10 | x | | | x | x | | | | | | | | |
| 14 | | 180 | 5 | ✓ 5 | x | x | x | x | xx | xx | | | | | | | Fluo |
| 15 | | 181 | 0 | ✓ 2 | x | x | x | x | x | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): *WJ*

Bottom Depth: 3.236 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2126 | 1426 |
| Bottom | 2135 | |
| End | | |

Positional Information

| | | | |
|------|-------|-------|---|
| Lat: | 48 ° | 58.18 | N |
| Lon: | 130 ° | 40.03 | W |

Start

Bottom

| | | | |
|------|-------|-------|---|
| Lat: | 48 ° | 58.24 | N |
| Lon: | 130 ° | 40.00 | W |

End

| | | | |
|------|---|--|---|
| Lat: | ° | | N |
| Lon: | ° | | W |

Extra comments:
DMS cast
Will also have loops for Chl x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P12 Event #: 33 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|--------|---------|-----------|--|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | | |
| 1 | | 182 | 50 | | x | x | x | x | | | | | | | |
| 2 | | 183 | 40 | | | | x | x | | | | | | | |
| 3 | | 184 | 25 | | | | x | x | | | | | | | |
| 4 | | 185 | 10 | | | | x | x | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): DT

Bottom Depth: 3200 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2200 | 1500 |
| Bottom | 2245 | 1545 |
| End | 2310 | 1610 |

Positional Information
Start
Lat: 48 ° 58.22 N
Lon: 130 ° 39.99 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: 48 ° 58.22 N
Lon: 130 ° 39.99 W

Extra comments:
Go-flo 50

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P12

Event #: 34

Ship: Tully

UTC Date (dd|mmm|yyyy): 8 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-------|-------|-----|----|--|--|------|-----|----------|--|-------|--|--|
| | | | Target Pressure | Confirmed Pressure | OXY | Sal | Nut-F | Nut-C | DIC | pH | | | SAGs | DNA | Gases | | Paw16 | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |
| | | | | ✓ | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

Bottom Depth: 3236 m

Transmisso Cleaned: Y / N

Time

UTC

Local

| | | |
|--------|------|------|
| Start | 2326 | 1626 |
| Bottom | 0025 | |
| End | 0145 | |

Positional Information

| | | |
|--------|------------------|---|
| Start | Lat: 48 ° 58.24 | N |
| | Lon: 130 ° 39.96 | W |
| Bottom | Lat: 48 ° 58.20 | N |
| | Lon: 130 ° 39.97 | W |
| End | Lat: 48 ° 58.27 | N |
| | Lon: 130 ° 39.93 | W |

Extra comments:

Deep cast

Will also have loops for Sal x1,
OxyLab x2 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P12 Event #: 35 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|--------|---------|-----------|--|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | | |
| 1 | | 209 | 200 | | x | x | x | x | | | | | | | |
| 2 | | 210 | 150 | | | | xx | xx | | | | | | | |
| 3 | | 211 | 100 | | | | x | x | | | | | | | |
| 4 | | 212 | 75 | | | | x | x | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type: ROS TRM X-Niskin other?
 Watchkeeper(s): NY

Bottom Depth: 3280 m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0220 | |
| Bottom | 0245 | |
| End | 0303 | |

Positional Information

| | |
|--------|--------------------|
| Start | Lat: 48 ° 58.15 N |
| | Lon: 130 ° 40.19 W |
| Bottom | Lat: 48 ° 5 N |
| | Lon: 130 ° 40.19 W |
| End | Lat: 48 ° 58.17 N |
| | Lon: 130 ° 39.88 W |

Extra comments:
 Go-flo 200

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P12

Event #: 37

Ship: Tully

UTC Date (dd|mmm|yyyy): 9 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|--------|---------|-----------|-------|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | Nut-C | | | | | | |
| 1 | | 213 | 800 | | x | x | x | x | x | | | | | | |
| 2 | | 214 | 600 | | | | x | x | | | | | | | |
| 3 | | 215 | 400 | | | | x | x | | | | | | | |
| 4 | | 216 | 300 | | | | x | x | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM ☒ X-Niskin other?
 Watchkeeper(s): DY

Bottom Depth: 3238 m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0440 | 2140 |
| Bottom | 0517 | |
| End | 0557 | |

Positional Information

| | | |
|--------|--------------------|---------------------|
| Start | Lat: 48° 58' 19" N | Lon: 130° 40' 06" W |
| Bottom | Lat: 48° 58' 23" N | Lon: 130° 40' 00" W |
| End | Lat: 48° 58' 21" N | Lon: 130° 39' 40" W |

Extra comments:
 Go-flo 800

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Ship: Tully

UTC Date (dd/mm/yyyy): 9 / 6 / 2016

Extra comments:
Jade's cast

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P12 Event #: 40 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|------|-----|---------|---------|---------|-----|--------|------|-----|-------|------|----------|-----|
| | | | Target Pressure | Confirmed ✓ Pressure | 17O | ONAr | Oxy | 18O inc | NO3 inc | NH4 inc | CHL | Nut-Fr | NH4 | Sal | Phyto | UVic | | C14 |
| 1 | | 233 | O2 max | ✓ 36 | xx | | xx | | | | | | | x | | | | |
| 2 | | 234 | 5 m | ✓ | xx | xx | xx | | x | | | | | | xxx | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | 235 | 250 | ✓ | | | | | | | | | | | | | x | |
| 5 | | 236 | 150 | ✓ | | | | | | | | | | | | | x | |
| 6 | | 237 | 50 | ✓ | | | | | | | | | | | | | x | |
| 7 | | 238 | 20 | ✓ | | | | | | | | | | | | | x | |
| 8 | | 239 | 10 | ✓ | | | | | | | | | | | | | x | |
| 9 | | 240 | 5 | ✓ | | | | | | | | | | | | | x | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | 241 | 100% | ✓ 0 | | | xx | xxx | xxxxx | | x | x | | | | | | |
| 18 | | 242 | 100% | ✓ 0 | | | | | | xxxxx | | | xx | | | | | |
| 19 | | 243 | 55% | ✓ 0 | | xx | xx | xxx | x | x | x | x | xx | x | | | | |
| 20 | | 244 | 30% | ✓ 5 | | | xx | xxx | x | x | x | x | xxxx | x | | | | |
| 21 | | 245 | 15% | ✓ 7 | | | xx | xxx | x | x | x | x | xx | x | | | | |
| 22 | | 246 | 1% | ✓ 60 | | | xx | xxx | x | x | x | x | xx | x | | | | |
| 23 | | 247 | 55% | ✓ 0 | | | | | | | | | | | | | | x |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
(ROS) TRM X-Niskin other?
Watchkeeper(s): H. n.

Bottom Depth: 3236 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0824 | 0124 |
| Bottom | 0828 | |
| End | 0946 | |

Positional Information

| | | |
|------|---------------|---|
| Lat: | 48 ° 58 . 25 | N |
| Lon: | 130 ° 39 . 91 | W |

Start

| | | |
|------|---------------|---|
| Lat: | 48 ° 58 . 23 | N |
| Lon: | 130 ° 39 . 95 | W |

Bottom

| | | |
|------|---------------|---|
| Lat: | 48 ° 58 . 19 | N |
| Lon: | 130 ° 39 . 11 | W |

End

Extra comments: out-of-order!
Amanda, Theresa, Robert
4, 5, 22, 6, 1, 7, 8, 21, 20
9, 2, 17, 18, 19, 23

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P13

Event #:

42

Ship:

Tully

UTC Date (dd|mmm|yyyy):

9 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|-----------|--|--------|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | | Paw-16 | | | |
| 1 | 1 | 248 | 2005 | ✓ 2005 | | x | | | | | | x | | | |
| 2 | 2 | 249 | 10 | ✓ | | | | | | xx | | | | | |
| 3 | 3 | 250 | 5 | ✓ | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM X-Niskin other?
 Watchkeeper(s): H.A.

Bottom Depth: 3052 m
 Transmisso Cleaned: (Y) / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1306 | 0606 |
| Bottom | 1339 | |
| End | 1412 | 0712 |

Positional Information

| | |
|-------|--------------------|
| Start | Lat: 49 ° 02.59 N |
| | Lon: 131 ° 40.03 W |

Bottom

| |
|--------------------|
| Lat: 49 ° 02.57 N |
| Lon: 131 ° 39.95 W |

End

| |
|--------------------|
| Lat: 49 ° 02.58 N |
| Lon: 131 ° 40.03 W |

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P14 Event #: 45 Ship: Tully UTC Date (dd|mmm|yyyy): 09 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|-----------|--|--------|--|--|----------|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | | Paw-16 | | | | |
| 1 | 1 | 251 | 2005 | ✓ 2004 | | x | | | | | | x | | | | |
| 2 | 2 | 252 | 10 | - 10 | | | | | | xx | | | | | | |
| 3 | 3 | 253 | 5 | - 5 | x | x | xx | xx | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): HM/DC

Bottom Depth: 3315 m
 Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1831 | 1131 |
| Bottom | 1903 | |
| End | 1939 | |

Positional Information
 Start
 Lat: 49° 07.42 N
 Lon: 132° 40.12 W

Bottom
 Lat: 49° 07.46 N
 Lon: 132° 40.21 W

End
 Lat: 49° 07.40 N
 Lon: 132° 40.11 W

Extra comments:
 ?
 Will also have loops for Chl x2
 Sal x1, OxyLab x2,
 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P14

Event #:

45

Ship:

Tully

UTC Date (dd|mmm|yyyy):

9 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|-----------|--------|--|--|--|----------|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | | |
| 1 | 1 | 251 | 2005 | ✓ 2004 | | x | | | | | x | | | | | |
| 2 | 2 | 252 | 10 | ✓ 10 | | | | | | xx | | | | | | |
| 3 | 3 | 253 | 5 | ✓ 5 | x | x | xx | xx | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): HM

Bottom Depth: 3315 m
Transmisso Cleaned: (Y) / N

| Time | UTC | Local |
|------------|------|-------|
| Start 1831 | | 1131 |
| Bottom | 1903 | |
| End | 1939 | 1939 |

Positional Information

| |
|-------------------|
| Lat: 49 ° 7 42 N |
| Lon: 132 ° 0 12 W |

Start

Bottom

End

| |
|--------------------|
| Lat: 49 ° 07.41 N |
| Lon: 132 ° 40.21 W |

| |
|--------------------|
| Lat: 49 ° 07.40 N |
| Lon: 132 ° 40.11 W |

Extra comments:
Will also have loops for Chl x2
Sal x1, OxyLab x2,
and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P15 Event #: 46 Ship: Tully UTC Date (dd|mmm|yyyy): 10 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|-------------|----------|------------------------------------|-----|-----|------|--|-----------|--|--------|--|--|----------|
| | | | Target Pressure | Confirmed ✓ | Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | | Paw-16 | | | |
| 1 | 1 | 254 | 2005 | ✓ | 2005 | | x | | | | | | x | | | |
| 2 | 2 | 255 | 10 | ✓ | 10 | | | | | | xx | | | | | |
| 3 | 3 | 256 | 5 | ✓ | 5 | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): DY

Bottom Depth: 3411 m

Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0001 | 1701 |
| Bottom | 0036 | |
| End | 0114 | |

Positional Information

Start Lat: 49° 12.00 N

Start Lon: 133° 39 98 W

Bottom Lat: 49° 11 99 N

Bottom Lon: 133° 40.01 W

End Lat: 49° 11.97 N

End Lon: 133° 40.05 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P15 Event #: 46 Ship: Tully UTC Date (dd|mmm|yyyy): 10/6/2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-----|------|--|-----------|--------|--|--|--|----------|--|
| | | | Target Pressure | Confirmed Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | | |
| 1 | 1 | 254 | 2005 | ✓ 2005 | | x | | | | | x | | | | | |
| 2 | 2 | 255 | 10 | ✓ 10 | | | | | | xx | | | | | | |
| 3 | 3 | 256 | 5 | ✓ 5 | x | x | xx | xx | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM ☒ Niskin other?
Watchkeeper(s):

Bottom Depth: m 3411
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0001 | |
| Bottom | 0036 | |
| End | 0114 | |

Positional Information

| | | | | |
|------|-----|---|-------|---|
| Lat: | 49 | ° | 12.00 | N |
| Lon: | 133 | ° | 39.98 | W |

Start

| | | | | |
|------|-----|---|-------|---|
| Lat: | 49 | ° | 16.99 | N |
| Lon: | 133 | ° | 40.01 | W |

Bottom

| | | | | |
|------|-----|---|-------|---|
| Lat: | 49 | ° | 16.97 | N |
| Lon: | 133 | ° | 40.05 | W |

End

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P16 Event #: 47 Ship: Tully UTC Date (dd|mmm|yyyy): 10 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|-------------|------------------------------------|-----|--------|---------|-----------|--|--|--|--|--|----------|--|
| | | | Target Pressure | Confirmed ✓ | Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | | |
| 1 | | 257 | 50 | | | x | x | x | x | | | | | | | |
| 2 | | 258 | 40 | | | | | x | x | | | | | | | |
| 3 | | 259 | 25 | | | | | x | x | | | | | | | |
| 4 | | 260 | 10 | | | | | x | x | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM ☒ X-Niskin other?
 Watchkeeper(s): AR

Bottom Depth: m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0555 | 22:55 |
| Bottom | 0608 | 23:08 |
| End | 0615 | 23:15 |

Positional Information

| | | |
|------|------------|---|
| Lat: | 49° 17.01 | N |
| Lon: | 134° 40.03 | W |

Bottom

| | | |
|------|------------|---|
| Lat: | 49° 16.98 | N |
| Lon: | 134° 40.11 | W |

End

| | | |
|------|------------|---|
| Lat: | 49° 17.00 | N |
| Lon: | 134° 40.20 | W |

Extra comments:
 Go-flo 50

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P16 Event #: 49 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | JUN | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|---|------------------------------------|-----|--------|------------|--------------|--|--|--|--|--|----------|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> | Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | | |
| 1 | | 261 | 200 | | | x | x | x | x | | | | | | | |
| 2 | | 262 | 150 | | | | | x | x | | | | | | | |
| 3 | | 263 | 100 | | | | | x | x | | | | | | | |
| 4 | | 264 | 75 | | | | | x | x | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM ☒ X-Niskin other?
Watchkeeper(s): ARBottom Depth: m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0750 | 00:50 |
| Bottom | 0810 | 01:10 |
| End | 0830 | 01:30 |

Positional Information
Start
Lat: 49 ° 17.03 N
Lon: 134 ° 40.00 WBottom
Lat: ° N
Lon: ° WEnd
Lat: 49 ° 17.05 N
Lon: 134 ° 40.03 WExtra comments:
Go-flo 200

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P16

Event #:

50

Ship:

Tully

UTC Date (dd|mmm|yyyy):

10 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|------|-----|---------|---------|---------|-----|--------|------|-----|-------|------|----------|--|--|--|
| | | | Target Pressure | Confirmed Pressure | 17O | ONAr | Oxy | 18O ind | NO3 ind | NH4 ind | CHL | Nut-Fr | NH4 | Sal | Phyto | UVic | C14 | | | |
| 1 | | 265 | O2 max | ✓ 24 250 | xx | | xx | | | | | | | x | | | | | | |
| 2 | | 266 | 5 m | ✓ 8 | xx | xx | xx | | x | | | | | | xxx | | | | | |
| 3 | | | O2 MAX | ✓ 24 | | | | | | | | | | | | | | | | |
| 4 | | 267 | 250 | ✓ | | | | | | | | | | | | x | | | | |
| 5 | | 268 | 150 | ✓ | | | | | | | | | | | | x | | | | |
| 6 | | 269 | 50 | ✓ | | | | | | | | | | | | x | | | | |
| 7 | | 270 | 20 | ✓ | | | | | | | | | | | | x | | | | |
| 8 | | 271 | 10 | ✓ | | | | | | | | | | | | x | | | | |
| 9 | | 272 | 5 | ✓ | | | | | | | | | | | | x | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | | |
| 17 | | 273 | 100% | ✓ 0 | | | xx | xxx | xxxxx | | x | x | | | | | | | | |
| 18 | | 274 | 100% | ✓ 0 | | | | | | xxxxx | | | xx | | | | | | | |
| 19 | | 275 | 55% | ✓ 8 | | xx | xx | xxx | x | x | x | x | xx | x | | | | | | |
| 20 | | 276 | 30% | ✓ 12 | | | xx | xxx | x | x | x | x | xxxx | x | | | | | | |
| 21 | | 277 | 15% | ✓ 18 | | | xx | xxx | x | x | x | x | xx | x | | | | | | |
| 22 | | 278 | 1% | ✓ 45 | | | xx | xxx | x | x | x | x | xx | x | | | | | | |
| 23 | | 279 | 55% | ✓ 8 | | | | | | | | | | | | | x | | | |
| 24 | | | | | | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

H.7

Bottom Depth: 3635 m

Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0838 | 0138 |
| Bottom | 0843 | |
| End | 0902 | |

Positional Information

Start
Lat: 49 ° 17 . 03 N
Lon: 134 ° 39 . 94 W

Bottom
Lat: 49 ° 17 . 03 N
Lon: 134 ° 39 . 93 W

End
Lat: 49 ° 17 . 01 N
Lon: 134 ° 39 . 96 W

Extra comments: out-of-order!

Amanda, Theresa, Robert

4, 5, 6, 22, 8, 7, 21, 20
8, 19, 23, 2, 9, 17, 18

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P16 Event #: 52 Ship: Tully UTC Date (dd|mmm|yyyy): 09 | JUN | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|--------|----|----|-------|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Sal | Nut-fr | Fe | Fe | Nut-C | | | | | | |
| 1 | | 280 | 800 | | x | x | x | x | x | | | | | | |
| 2 | | 281 | 600 | | | | xx | xx | | | | | | | |
| 3 | | 282 | 400 | | | | x | x | | | | | | | |
| 4 | | 283 | 300 | | | | x | x | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): AR

Bottom Depth: _____ m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0950 | 02:50 |
| Bottom | 0027 | 03:27 |
| End | 1130 | 04:30 |

Positional Information
Lat: 49 ° 17.02 N
Lon: 134 ° 40.04 W

Start

Lat: 49 ° 17.03 N
Lon: 134 ° 39.99 W

Bottom

Lat: 49 ° 16.94 N
Lon: 134 ° 40.02 W

End

Extra comments:
Go-flo 800

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P16 Event #: 53 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-------|-------|-----|-----|--|--|----------|------|----------|--|-------|--|
| | | | Target Pressure | Confirmed Pressure | OXY | Sal | Nut-F | Nut-C | DIC | pH | | | Gases | SAGs | DNA | | Paw16 | |
| | | | | | MR/HR BY | MR | MR | RR/KV | GL | | | | SS/RT JS | ALL | | | BY | |
| 1 | | 284 | Bot-10 | ✓ 3686 | x | | x | x | x | x | | | xx | x | x | | x | |
| 2 | | 285 | 3500 | ✓ | x | xx | xx | xx | xx | x | | | | | | | | |
| 3 | | 286 | 3500 | ✓ | xx | x | x | x | x | x | | | | | | | x | |
| 4 | | 287 | 3000 | ✓ | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 5 | | 288 | 2500 | ✓ 2500 | x | x | x | x | x | xxx | | | | | | | x | |
| 6 | | 289 | 2000 | ✓ 2000 | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 7 | | 290 | 1500 | ✓ | x | x | x | x | x | x | | | xx | x | x | | x | |
| 8 | | 291 | 1250 | ✓ | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 9 | | 292 | 1000 | ✓ | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 10 | | 293 | 800 | ✓ | xx | | x | x | x | x | | | xx | x | x | | x | |
| 11 | | 294 | 600 | ✓ | x | | x | x | x | x | | | xx | x | x | | x | |
| 12 | | 295 | 400 | ✓ | x | | x | x | x | x | | | xx | x | x | | x | |
| 13 | | 296 | 300 | ✓ | x | | x | | x | x | | | xx | x | x | | x | |
| 14 | | 297 | 250 | ✓ | x | | x | | x | xxx | | | | | | | x | |
| 15 | | 298 | 200 | ✓ | x | | x | | x | x | | | xx | x | x | | x | |
| 16 | | 299 | 175 | ✓ | xx | | x | | x | x | | | | | | | x | |
| 17 | | 300 | 150 | ✓ | x | | x | | x | x | | | xx | x | x | | x | |
| 18 | | 301 | 125 | ✓ | x | | xx | | x | x | | | | | | | x | |
| 19 | | 302 | 100 | ✓ | x | | x | | x | x | | | xx | x | x | | x | |
| 20 | | 303 | 75 | ✓ | x | | x | | x | x | | | | | | | x | |
| 21 | | 304 | 50 | ✓ | x | | x | | x | x | | | xx | x | x | | x | |
| 22 | | 305 | 25 | ✓ | xx | | x | | x | x | | | xx | x | x | | x | |
| 23 | | 306 | 10 | ✓ | x | | x | | x | x | | | xx | x | x | | x | |
| 24 | | 307 | 5 | ✓ | x | x | x | | x | x | | | | | | | x | |

Profile type:
 ROS TRM X-Niskin other?
 Watchkeeper(s): A.K.

Bottom Depth: 3636 m
 Transmisso Cleaned: (Y) / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1158 | 0458 |
| Bottom | 1307 | 0607 |
| End | 1431 | |

Positional Information

| | | |
|------|-------------|---|
| Lat: | 49 ° 17.18 | N |
| Lon: | 134 ° 40.00 | W |

Start

| | | |
|------|-------------|---|
| Lat: | 49 ° 17.15 | N |
| Lon: | 134 ° 39.97 | W |

Bottom

| | | |
|------|-------------|---|
| Lat: | 49 ° 16.99 | N |
| Lon: | 134 ° 39.96 | W |

End

Extra comments:
 Deep cast
 Will also have loops for Sal x1,
 OxyLab x2 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P16

Event #: 54

Ship: Tully

UTC Date (dd|mmm|yyyy): 10 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|-------------------------|------------------------------------|------|------|--------|-----|------|-------|--|--|--|----------|--|--|----------|
| | | | Target Pressure | Confirmed √ Pressure | DMS | DMSP | DMSP | Nut-Fr | Chl | HPLC | Phyto | | | | | | | |
| | | | | | | t | d | | | | | | | | | | | |
| 1 | | 308 | 300 | ✓ | | x | | | x | | | | | | | | | |
| 2 | | 309 | 200 | ✓ | | x | x | x | x | | | | | | | | | |
| 3 | | 310 | 175 | ✓ | | x | x | x | x | | | | | | | | | |
| 4 | | 311 | 100 | ✓ | | x | x | x | x | x | | | | | | | | |
| 5 | | 312 | 75 | ✓ | | x | | | x | x | | | | | | | | |
| 6 | | 313 | 60 | ✓ | | | | | x | xx | xx | | | | | | | Fluo |
| 7 | | 314 | 50 | ✓ | | x | | | x | xx | xx | | | | | | | Fluo |
| 8 | | 315 | 40 | ✓ | | x | | | x | xx | xx | | | | | | | Fluo |
| 9 | | 316 | 30 | ✓ | | x | | | x | xx | xx | | | | | | | Fluo |
| 10 | | 317 | 25 | ✓ | | x | | | x | x | | | | | | | | |
| 11 | | 318 | 20 | ✓ | | xx | xx | xx | x | x | | | | | | | | |
| 12 | | 319 | 15 | ✓ | | x | | | x | xx | xx | | | | | | | Fluo 1.4 |
| 13 | | 320 | 10 | ✓ | | x | | | xx | x | | | | | | | | |
| 14 | | 321 | 5 | ✓ | | x | x | x | x | xx | xx | | | | | | | Fluo |
| 15 | | 322 | 0 | ✓ | | x | x | x | x | x | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): H.M.

Bottom Depth: 3636 m

Transmisso Cleaned: (Y) / N

Time UTC Local

Start 1537 0837

Bottom 1543

End 1600

Positional Information

Lat: 49 ° 16.99 N

Lon: 134 ° 39.92 W

Lat: 49 ° 16.99 N

Lon: 134 ° 39.93 W

Lat: 49 ° 16.99 N

Lon: 134 ° 39.92 W

Extra comments:

DMS cast

Will also have loops for Chl x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P17 Event #: 58 Ship: Tully UTC Date (dd mmm yyyy): 10 Jun 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|-------------|----------|------------------------------------|-----|-----|------|--|-----------|--------|----------|--|--|----------|
| | | | Target Pressure | Confirmed ✓ | Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | NH4 Bulk | | | |
| 1 | 1 | 323 | 2005 | ✓ | 2005 | | x | | | | | x | x | | | |
| 2 | 2 | 324 | 10 | ✓ | 10 | | | | | | xx | | | | | |
| 3 | 3 | 325 | 5 | ✓ | 5 | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): DRY

Bottom Depth: 3648 m

Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2101 | 1401 |
| Bottom | 2138 | |
| End | 2213 | |

| Positional Information | | |
|------------------------|-----------------|---|
| Start | Lat: 49° 21.04 | N |
| | Lon: 135° 40.08 | W |

| | | |
|--------|-----------------|---|
| Bottom | Lat: 49° 21.03 | N |
| | Lon: 135° 39.97 | W |

| | | |
|-----|-----------------|---|
| End | Lat: 49° 21.01 | N |
| | Lon: 135° 40.03 | W |

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P17 Event #: 58 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|-------------|------------------------------------|-------|-----|-----|------|--|-----------|--------|-----|--|----------|--|--|
| | | | Target Pressure | Confirmed ✓ | Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | NH4 | | | | |
| 1 | 1 | 323 | 2005 | ✓ | 2005 | | x | | | | | x | X | | | | |
| 2 | 2 | 324 | 10 | ✓ | 10 | | | | | | xx | | | | | | |
| 3 | 3 | 325 | 5 | ✓ | 5 | x | x | xx | xx | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): DAY

Bottom Depth: m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2101 | |
| Bottom | 2101 | |
| End | 2213 | |

Positional Information

| | | |
|--------|----------------|---|
| Start | Lat: 49 21.04 | N |
| | Lon: 135 40.08 | W |
| Bottom | Lat: 49 21.04 | N |
| | Lon: 135 39.97 | W |
| End | Lat: 49 21.01 | N |
| | Lon: 135 40.03 | W |

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P18 Event #: 59 Ship: Tully UTC Date (dd mmm yyyy): 11 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|-----------|--|--------|-----|--|----------|--|--|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | | Paw-16 | 0xy | | | | | |
| 1 | 1 | 326 | 2005 | ✓ 2006 | | x | | | | | | x | | | | | | |
| 2 | 2 | 327 | 10 | ✓ 11 | | | | | | xx | | | | | | | | |
| 3 | 3 | 328 | 5 | ✓ 5 | x | x | xx | xx | | | | | xx | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

| |
|--|
| Profile type: |
| <input checked="" type="radio"/> ROS <input type="radio"/> TRM <input type="radio"/> X-Niskin <input type="radio"/> other? |
| Watchkeeper(s): DRY |

| | |
|---------------------|--|
| Bottom Depth: | 3835 m |
| Transmisso Cleaned: | <input checked="" type="radio"/> Y <input type="radio"/> N |

| Time | UTC | Local |
|--------|------|-------|
| Start | 0233 | 1933 |
| Bottom | 0308 | |
| End | 0344 | |

| |
|------------------------|
| Positional Information |
| Lat: 49° 26.09 N |
| Lon: 136° 40.01 W |

| |
|-------------------|
| Start |
| Lat: 49° 26.04 N |
| Lon: 136° 40.12 W |

| |
|-------------------|
| Bottom |
| Lat: 49° 26.01 N |
| Lon: 136° 40.06 W |

| |
|-----------------|
| End |
| Extra comments: |

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P18 Event #: 59 Ship: Tully UTC Date (dd|mmm|yyyy):

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-----|------|--|-----------|--|--------|----|--|----------|--|--|--|
| | | | Target Pressure | Confirmed Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | | Paw-16 | | | | | | |
| 1 | 1 | 326 | 2005 | ✓ 2006 | | x | | | | | | x | | | | | | |
| 2 | 2 | 327 | 10 | ✓ 11 | | | | | | xx | | | | | | | | |
| 3 | 3 | 328 | 5 | ✓ 5 | x | x | xx | xx | | | | | xx | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM ☒ Niskin other?
Watchkeeper(s):

Bottom Depth: m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-----|-------|
| Start | | 0223 |
| Bottom | | 0308 |
| End | | 0344 |

Positional Information

| | |
|------|----------------|
| Lat: | 49° 26' 09" N |
| Lon: | 136° 40' 01" W |

Start

| | |
|------|----------------|
| Lat: | 49° 26' 04" N |
| Lon: | 136° 01' 12" W |

Bottom

| | |
|------|----------------|
| Lat: | 49° 26' 01" N |
| Lon: | 136° 01' 06" W |

End

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P19 Event #: 62 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|-----------|--------|--|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | |
| 1 | 1 | 329 | 2005 | ✓ | | x | | | | | x | | | | |
| 2 | 2 | 330 | 10 | ✓ | | | | | | xx | | | | | |
| 3 | 3 | 331 | 5 | ✓ | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): H.M.

Bottom Depth: 3923 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0815 | 0115 |
| Bottom | 0847 | |
| End | 0920 | |

Positional Information
Start
Lat: 49 ° 29 . 92 N
Lon: 137 ° 39 . 92 W

Bottom
Lat: 49 ° 29 . 98 N
Lon: 137 ° 39 . 95 W

End
Lat: 49 ° 29 . 99 N
Lon: 137 ° 40 . 00 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06-

Station:

P20

Event #:

64

Ship:

Tully

UTC Date (dd|mmm|yyyy): 11 | 6 | 16

| Cruise ID: 2016-06- | | | Station: P20 | | Event #: 64 | | Ship: Rully | | Comments | | | | | | | | | |
|---------------------|----------|----------|-------------------|--------------------|------------------------------------|------|-------------|---------|----------|---------|-----|--------|------|-----|-----|---|-------|------|
| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | C14 | | | |
| | | | Target Pressure | Confirmed Pressure | 17O | ONAr | Oxy | 18O ind | NO3 ind | NH4 ind | CHL | Nut-Fr | NH4 | Sal | | | Phyto | UVic |
| 1 | | 332 | O2 max | ✓ 32 | xx | | xx | | | | | | | x | | | | |
| 2 | | 333 | 5 m | 0 | xx | xx | xx | | x | | | | | | xxx | | | |
| 3 | | | | | | | | | | | | | | | | x | | |
| 4 | | 334 | 250 | ✓ | | | | | | | | | | | | x | | |
| 5 | | 335 | 150 | ✓ | | | | | | | | | | | | x | | |
| 6 | | 336 | 50 | ✓ | | | | | | | | | | | | x | | |
| 7 | | 337 | 20 | ✓ | | | | | | | | | | | | x | | |
| 8 | | 338 | 10 | ✓ | | | | | | | | | | | | x | | |
| 9 | | 339 | 5 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | 340 | 100% | 0 | | | xx | xxx | xxxxx | | | x | x | | | | | |
| 18 | | 341 | 100% | 0 | | | | | | xxxxx | | | | xx | | | | |
| 19 | | 342 | 55% | ✓ 8 | | xx | xx | xxx | x | x | x | x | xx | x | | | | |
| 20 | | 343 | 30% | ✓ 14 | | | xx | xxx | x | x | x | x | xxxx | x | | | | |
| 21 | | 344 | 15% | ✓ 21 | | | xx | xxx | x | x | x | x | xx | x | | | | |
| 22 | | 345 | 1% | ✓ 59 | | | xx | xxx | x | x | x | x | xx | x | | | x | |
| 23 | | 346 | 55% | 0 | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

http://www

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

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): H.M.Bottom Depth: 3966 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1405 | 0705 |
| Bottom | 1411 | |
| End | 1432 | |

| Positional Information | | |
|------------------------|-------------|---|
| Lat: | 49 ° 34.00 | N |
| Lon: | 138 ° 40.14 | W |
| ▼ | | |
| Lat: | 49 ° 34.03 | N |
| Lon: | 138 ° 40.16 | W |
| ▼ | | |
| Lat: | 49 ° 34.07 | N |
| Lon: | 138 ° 40.17 | W |

Extra comments: out-of-order!
Amanda, Theresa, Robert
4, 5, 22, 6, 1, 21, 7, 20
8, 19, 23, 9, 17, 18, 2<http://www.pac.dfo-mpo.gc.ca/sci/osap/projects/waterproperties/>

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P20 Event #: 65 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | 06 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|--------|---------|-----------|--|--|--|--|--|--|----------|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | | | |
| 1 | | 347 | 50 | | x | x | x | x | | | | | | | | |
| 2 | | 348 | 40 | | | | xx | xx | | | | | | | | |
| 3 | | 349 | 25 | | | | x | x | | | | | | | | |
| 4 | | 350 | 10 | | | | x | x | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type: ROS TRM X-Niskin other?
Watchkeeper(s): AR

Bottom Depth: _____ m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-------|-------|
| Start | 15:20 | 08:20 |
| Bottom | 15:30 | 08:30 |
| End | 15:38 | 08:38 |

Positional Information

| | | | |
|------|-------|-------|---|
| Lat: | 49 ° | 34.04 | N |
| Lon: | 138 ° | 39.98 | W |

Start
Bottom
End

Lat: ° N
Lon: ° W

Lat: 49 ° 34.05 N
Lon: 138 ° 39.95 W

Extra comments:
Go-flo 50

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P20 Event #: 67 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | 06 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|--------|---------|-----------|--|--|--|--|--|--|----------|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | | | |
| 1 | | 351 | 200 | | x | x | x | x | | | | | | | | |
| 2 | | 352 | 150 | | | | x | x | | | | | | | | |
| 3 | | 353 | 100 | | | | x | x | | | | | | | | |
| 4 | | 354 | 75 | | | | x | x | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM X-Niskin other?
 Watchkeeper(s): AR

Bottom Depth: m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-------|-------|
| Start | 17:25 | 10:25 |
| Bottom | 17:40 | 10:40 |
| End | 17:52 | 10:52 |

Positional Information

| | | |
|------|-------------|---|
| Lat: | 49 ° 34.02 | N |
| Lon: | 138 ° 39.99 | W |

Bottom

| | | |
|------|-------------|---|
| Lat: | 49 ° 34.01 | N |
| Lon: | 138 ° 40.03 | W |

End

| | | |
|------|-------------|---|
| Lat: | 49 ° 33.99 | N |
| Lon: | 138 ° 39.96 | W |

Extra comments:
 Go-flo 200
 75m. sampling bottle
 leaking badly from
 lower ball-valve.

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P20 Event #: 68 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-------|-------|-----|-----|--|--|-------|------|----------|--|-------|--|
| | | | Target Pressure | Confirmed Pressure | OXY | Sal | Nut-F | Nut-C | DIC | pH | | | Gases | SAGs | DNA | | Paw16 | |
| 1 | | 355 | Bot-10 | ✓ 4025 | x | | x | x | x | x | | | xx | x | x | | x | |
| 2 | | 356 | 3500 | ✓ 3500 | x | xx | xx | xx | xx | x | | | | | | | | |
| 3 | | 357 | 3500 | ✓ 3500 | xx | x | x | x | x | x | | | | | | | x | |
| 4 | | 358 | 3000 | ✓ 3000 | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 5 | | 359 | 2500 | ✓ 2499 | x | x | x | x | x | xxx | | | | | | | x | |
| 6 | | 360 | 2000 | ✓ 1999 | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 7 | | 361 | 1500 | ✓ 1500 | x | x | x | x | x | x | | | xx | x | x | | x | |
| 8 | | 362 | 1250 | ✓ 1249 | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 9 | | 363 | 1000 | ✓ 1001 | x | xx | x | x | x | x | | | xx | x | x | | x | |
| 10 | | 364 | 800 | ✓ 800 | xx | x | x | x | x | x | | | xx | x | x | | x | |
| 11 | | 365 | 600 | ✓ 600 | x | x | x | x | x | x | | | xx | x | x | | x | |
| 12 | | 366 | 400 | ✓ 400 | x | x | x | x | x | x | | | xx | x | x | | x | |
| 13 | | 367 | 300 | ✓ 300 | x | x | x | | x | x | | | xx | x | x | | x | |
| 14 | | 368 | 250 | ✓ 250 | x | x | x | | x | xxx | | | | | | | x | |
| 15 | | 369 | 200 | ✓ 200 | x | x | x | | x | x | | | xx | x | x | | x | |
| 16 | | 370 | 175 | ✓ 174 | xx | x | x | | x | x | | | | | | | x | |
| 17 | | 371 | 150 | ✓ 150 | x | x | x | | x | x | | | xx | x | x | | x | |
| 18 | | 372 | 125 | ✓ 125 | x | x | xx | | x | x | | | | | | | x | |
| 19 | | 373 | 100 | ✓ 101 | x | x | x | | x | x | | | xx | x | x | | x | |
| 20 | | 374 | 75 | ✓ 75 | x | x | x | | x | x | | | | | | | x | |
| 21 | | 375 | 50 | ✓ 50 | x | x | x | | x | x | | | xx | x | x | | x | |
| 22 | | 376 | 25 | ✓ 25 | xx | x | x | | x | x | | | xx | x | x | | x | |
| 23 | | 377 | 10 | ✓ 10 | x | x | x | | x | x | | | xx | x | x | | x | |
| 24 | | 378 | 5 | ✓ 5 | x | x | x | | x | x | | | | | | | x | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): H.M

Bottom Depth: 3965 m
 Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1802 | 1102 |
| Bottom | 1928 | |
| End | 2056 | |

Positional Information

| | | |
|------|-------------|---|
| Lat: | 49 ° 33.98 | N |
| Lon: | 138 ° 39.94 | W |

Bottom

| | | |
|------|-------------|---|
| Lat: | 49 ° 34.07 | N |
| Lon: | 138 ° 39.96 | W |

End

| | | |
|------|-------------|---|
| Lat: | 49 ° 34.02 | N |
| Lon: | 138 ° 39.90 | W |

Extra comments:
 Deep cast
 Will also have loops for Sal x1,
 OxyLab x2 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P20

Event #:

69

Ship:

Tully

UTC Date (dd|mmm|yyyy): 11 | 06 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | Comments | | | | | | | | | |
|----------|----------|----------|-------------------|--|------------------------------------|--------|---------|-----------|-------|----------|--|--|--|--|--|--|--|--|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | Nut-C | | | | | | | | | | |
| 1 | | 379 | 800 | | x | x | x | x | x | | | | | | | | | | |
| 2 | | 380 | 600 | | | | x | x | | | | | | | | | | | |
| 3 | | 381 | 400 | | | | x | x | | | | | | | | | | | |
| 4 | | 382 | 300 | | | | x | x | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

Bottom Depth: _____ m

Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-------|-------|
| Start | 21:34 | 14:34 |
| Bottom | 22:00 | 15:00 |
| End | 22:28 | 15:28 |

Positional Information

| | | |
|------|-------------|---|
| Lat: | 49 ° 34.02 | N |
| Lon: | 138 ° 39.94 | W |

| | | |
|------|-------------|---|
| Lat: | 49 ° 33.72 | N |
| Lon: | 138 ° 39.97 | W |

| | | |
|------|-------------|---|
| Lat: | 49 ° 34.10 | N |
| Lon: | 138 ° 39.63 | W |

Extra comments:

Go-flo 800

Spigot on 400m
bottle may have been
lost prior during
deployment.

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P20

Event #:

70

Ship:

Tully

UTC Date (dd|mmm|yyyy):

11 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|------|------|--------|-----|------|-------|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | DMS | DMSP | DMSP | Nut-Fr | Chl | HPLC | Phyto | | | | |
| 1 | | 383 | 300 | ✓ 299 | x | | | x | | | | | | | |
| 2 | | 384 | 200 | ✓ 200 | x | x | x | x | | | | | | | |
| 3 | | 385 | 175 | ✓ 175 | x | x | x | xx | | | | | | | |
| 4 | | 386 | 100 | ✓ 100 | x | x | x | x | x | | | | | | |
| 5 | | 387 | 75 | ✓ 75 | x | | | x | x | | | | | | Fluo |
| 6 | | 388 | 60 | ✓ 60 | | | | x | xx | xx | | | | | Fluo |
| 7 | | 389 | 50 | ✓ 50 | x | | | x | xx | xx | | | | | Fluo |
| 8 | | 390 | 40 | ✓ 40 | x | | | x | xx | xx | | | | | Fluo |
| 9 | | 391 | 30 | ✓ 30 | x | | | x | xx | xx | | | | | |
| 10 | | 392 | 25 | ✓ 25 | x | | | x | x | | | | | | |
| 11 | | 393 | 20 | ✓ 20 | xx | xx | xx | x | x | | | | | | Fluo |
| 12 | | 394 | 15 | ✓ 15 | x | | | x | xx | xx | | | | | |
| 13 | | 395 | 10 | ✓ 10 | x | | | x | x | | | | | | Fluo |
| 14 | | 396 | 5 | ✓ 5 | x | x | x | x | xx | xx | | | | | |
| 15 | | 397 | 0 | ✓ 3 | x | x | x | x | x | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

DY

Bottom Depth: 3965 m

Transmisso Cleaned: Y / N

| | UTC | Local |
|--------|------|-------|
| Start | 2240 | 1540 |
| Bottom | 2245 | |
| End | 2304 | |

Positional Information

| | | |
|------|------------|---|
| Lat: | 49° 34.00 | N |
| Lon: | 138° 39.80 | W |

| | | |
|------|------------|---|
| Lat: | 49° 34.01 | N |
| Lon: | 138° 40.00 | W |

| | | |
|------|------------|---|
| Lat: | 49° 34.01 | N |
| Lon: | 138° 40.04 | W |

Extra comments:

DMS cast

Will also have loops for Chl x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P21

Event #: 72

Ship: Tully

UTC Date (dd|mmm|yyyy): 12 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-----|------|-----------|--------|--|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | Nut-F | Sal | Chl | HPLC | UBC gases | Paw-16 | | | | | |
| 1 | 1 | 398 | 2005 | ✓ 2005 | | x | | | | x | | | | | |
| 2 | 2 | 399 | 10 | ✓ 10 | | | | | xx | | | | | | |
| 3 | 3 | 400 | 5 | ✓ 5 | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): DRY

Bottom Depth: 3959 m

Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0435 | 2135 |
| Bottom | 0510 | |
| End | 0545 | |

Positional Information

Start Lat: 49° 37.99 N
Lon: 139° 40.05 W

Bottom Lat: 49° 38.01 N
Lon: 139° 39.95 W

End Lat: 49° 38.10 N
Lon: 139° 39.97 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P21 Event #: 72 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|-----|------|--|-----------|--------|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | |
| 1 | 1 | 398 | 2005 | ✓ 2005 | | x | | | | | x | | | | |
| 2 | 2 | 399 | 10 | ✓ 10 | | | | | | xx | | | | | |
| 3 | 3 | 400 | 5 | ✓ 5 | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): DY

Bottom Depth: 3959 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0435 | 2135 |
| Bottom | 0540 | |
| End | 0545 | |

Positional Information
Start
Lat: 49° 47.99' N
Lon: 139° 40.05' W

Bottom
Lat: 49° 38.01' N
Lon: 139° 39.95' W

End
Lat: 49° 38.10' N
Lon: 139° 39.97' W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P22 Event #: 74 Ship: Tully UTC Date (dd mmm yyyy): 12 Jun 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--|------------------------------------|-----|-----|------|----|-----------|--------|--|--|--|----------|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | |
| 1 | 1 | 401 | 2005 | <input checked="" type="checkbox"/> | | x | | | | | x | | | | |
| 2 | 2 | 402 | 10 | <input checked="" type="checkbox"/> | | | | | | xx | | | | | |
| 3 | 3 | 403 | 5 | <input checked="" type="checkbox"/> | | x | x | xx | xx | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): HM

Bottom Depth: 3894 m
Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1344 | 0644 |
| Bottom | 1418 | |
| End | 1449 | |

Positional Information

| | | |
|-------|-----------------|---|
| Start | Lat: 49° 42.07 | N |
| | Lon: 140° 40.01 | W |

Bottom

| | |
|-----------------|---|
| Lat: 49° 42.00 | N |
| Lon: 140° 39.96 | W |

End

| | |
|-----------------|---|
| Lat: 49° 42.10 | N |
| Lon: 140° 39.98 | W |

Extra comments:
Will also have loops for Chl x2
Sal x1, OxyLab x2,
and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P22

Event #: 74

Ship: Tully

UTC Date (dd|mmm|yyyy): 12 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|----|-----------|--------|--|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | |
| 1 | 1 | 401 | 2005 | ✓ | | x | | | | | x | | | | |
| 2 | 2 | 402 | 10 | ✓ | | | | | | xx | | | | | |
| 3 | 3 | 403 | 5 | ✓ | | x | x | xx | xx | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): H.M.

Bottom Depth: 38.5 m

Transmisso Cleaned: Y N

Time UTC Local
Start 1344 0644
Bottom 13 0144
End 1444 0744

Positional Information
Start Lat: 49 7 N
Lon: 140 40 01 W

Bottom Lat: 49 42 00 N
Lon: 140 39 96 W

End Lat: 49 42 10 N
Lon: 140 39 98 W

Extra comments:
Will also have loops for Chl x2
Sal x1, OxyLab x2, 7
and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P23 Event #: 75 Ship: Tully UTC Date (dd|mmm|yyyy): 12 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|-----------|-------|-------|-------|-----|--|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | UBC gases | pH | DIC | Paw16 | Oxy | | | | |
| 1 | | 404 | 2000 | ✓ | 2000 | | x | | | x x x | x x x | x | | | | | |
| 2 | | 405 | 2000 | ✓ | | | x x | | | x x x | x x x | | | | | | |
| 3 | | 406 | 2000 | ✓ | | | x | | | x x x | x x x | | | | | | |
| 4 | | 407 | 2000 | ✓ | | | x | | | x x x | x x x | | | | | | |
| 5 | | 408 | 2000 | ✓ | | | x | | | x x x | x x x | | | | | | |
| 6 | | 409 | 2000 | ✓ | | | x | | | | | | x x | | | | |
| 7 | | 410 | 2000 | ✓ | | | x | | | | | | x x | | | | |
| 8 | | 411 | 2000 | ✓ | | | x | | | | | | x x | | | | |
| 9 | | 412 | 2000 | ✓ | | | x | | | | | | x x | | | | |
| 10 | | 413 | 2000 | ✓ | | | x | | | | | | x x | | | | |
| 11 | | 414 | 2000 | ✓ | | | x | | | | | | x x | | | | |
| 12 | | 415 | 2000 | ✓ | | | x | | | | | | | | | | |
| 13 | | 416 | 2000 | ✓ | | | x | | | | | | | | | | |
| 14 | | 417 | 2000 | ✓ | | | x | | | | | | | | | | |
| 15 | | 418 | 2000 | ✓ | | | x | | | | | | | | | | |
| 16 | | 419 | 2000 | ✓ | | | x | | | | | | | | | | |
| 17 | | 420 | 2000 | ✓ | | | x | | | | | | | | | | |
| 18 | | 421 | 2000 | ✓ | | | x | | | | | | | | | | |
| 19 | | 422 | 2000 | ✓ | | | x | | | | | | | | | | |
| 20 | | 423 | 2000 | ✓ | | | x | | | | | | | | | | |
| 21 | | 424 | 2000 | ✓ | | | x | | | | | | | | | | |
| 22 | | 425 | 2000 | ✓ | | | x | | | | | | | | | | |
| 23 | | 426 | 10 | ✓ | 10 | | | | | | | x x | | | | | |
| 24 | | 427 | 5 | ✓ | 5 | x | x | x x | x x | | | | | | | | |

Profile type: ROS TRM X-Niskin other?
Watchkeeper(s): DY

Bottom Depth: 4052 m
Transmisso Cleaned: (Y) / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2049 | 1349 |
| Bottom | 2127 | |
| End | 2208 | |

Positional Information

| | | |
|------|------------|---|
| Lat: | 49° 46 00 | N |
| Lon: | 141° 39.97 | W |

Start

Bottom

End

| | | |
|------|------------|---|
| Lat: | 49° 46 00 | N |
| Lon: | 141° 39.98 | W |

| | | |
|------|------------|---|
| Lat: | 49° 46.01 | N |
| Lon: | 141° 40 00 | W |

Extra comments:
Calibration cast
Will also have loops for Chl x2
Sal x1

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P23

Event #:

75

Ship:

Tully

UTC Date (dd|mmm|yyyy):

12 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|-----------|-------|-------|-------|------|--|----------|--|--|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | UBC gases | pH | DIC | Paw16 | Oxy | | | | | |
| 1 | | 404 | 2000 | ✓ 2000 | | x | | | | x x x | x x x | x | | | | | | |
| 2 | | 405 | 2000 | ✓ | | x x | | | | x x x | x x x | | | | | | | |
| 3 | | 406 | 2000 | ✓ | | x | | | | x x x | x x x | | | | | | | |
| 4 | | 407 | 2000 | ✓ | | x | | | | x x x | x x x | | | | | | | |
| 5 | | 408 | 2000 | ✓ | | x | | | | x x x | x x x | | | | | | | |
| 6 | | 409 | 2000 | ✓ | | x | | | | | | | x x | | | | | |
| 7 | | 410 | 2000 | ✓ | | x | | | | | | | x x | | | | | |
| 8 | | 411 | 2000 | ✓ | | x | | | | | | | x x | | | | | |
| 9 | | 412 | 2000 | ✓ | | x | | | | | | | x x | | | | | |
| 10 | | 413 | 2000 | ✓ | | x | | | | | | | x 12 | | | | | |
| 11 | | 414 | 2000 | ✓ | | x | | | | | | | x x | | | | | |
| 12 | | 415 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 13 | | 416 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 14 | | 417 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 15 | | 418 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 16 | | 419 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 17 | | 420 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 18 | | 421 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 19 | | 422 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 20 | | 423 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 21 | | 424 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 22 | | 425 | 2000 | ✓ | | x | | | | | | | | | | | | |
| 23 | | 426 | 10 | ✓ 10 | | | | | x x | | | | | | | | | |
| 24 | | 427 | 5 | ✓ 5 | | x | x | x x | x x | | | | | | | | | |

Profile type:
ROS TRM X Niskin other?
Watchkeeper(s):

Bottom Depth: m
Transmisso Cleaned: Y / N

Time UTC Local
Start
Bottom
End

Positional Information
Start
Lat: N
Lon: W

Bottom
Lat: N
Lon: W

End
Lat: N
Lon: W

Extra comments:
Calibration cast
Will also have loops for Chl x2
Sal x1

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P24 Event #: 76 Ship: Tully UTC Date (dd|mmm|yyyy): 13 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--|------------------------------------|-------|-----|-----|------|-----|-----------|--|--------|--|----------|--|--|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | | Nut-F | Sal | Chl | HPLC | Oxy | UBC gases | | Paw-16 | | | | | |
| 1 | 1 | 428 | 2005 | <input checked="" type="checkbox"/> 2005 | | | x | | | | | | x | | | | | |
| 2 | 2 | 429 | 10 | <input checked="" type="checkbox"/> 10 | | | | | | | xx | | | | | | | |
| 3 | 3 | 430 | 5 | <input checked="" type="checkbox"/> 5 | | x | x | xx | xx | xx | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): DY

Bottom Depth: 3986 m
Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0320 | 2020 |
| Bottom | 0357 | |
| End | 0432 | |

Positional Information
Start
Lat: 49° 50.24 N
Lon: 142° 39.97 W

Bottom
Lat: 49° 50.21 N
Lon: 142° 39.96 W

End
Lat: 49° 50.18 N
Lon: 142° 39.99 W

Extra comments:
Will also have loops for Chl x2
Sal x1, OxyLab x2,
and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P24 Event #: 76 Ship: Tully UTC Date (dd|mmm|yyyy): 13|6|2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|-----------|--|--------|----|--|----------|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | | Paw-16 | | | | |
| 1 | 1 | 428 | 2005 | ✓ 2005 | | x | | | | | | x | | | | |
| 2 | 2 | 429 | 10 | ✓ 10 | | | | | | xx | | | | | | |
| 3 | 3 | 430 | 5 | ✓ 5 | x | x | xx | xx | | | | | xx | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): DY

Bottom Depth: m
 Transmisso Cleaned: Y / N

Time UTC Local
 Start
 Bottom
 End

Positional Information
 Lat: ° N
 Lon: ° W

Lat: ° N
 Lon: ° W

Lat: ° N
 Lon: ° W

Extra comments:
 Will also have loops for Chl x2
 Sal x1, OxyLab x2,
 and OxyT x2

SORRY

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P25 Event #: 79 Ship: Tully UTC Date (dd|mmm|yyyy): 13 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|--|-----------|--------|--|--|--|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | |
| 1 | 1 | 431 | 2005 | ✓ | | x | | | | | x | | | | |
| 2 | 2 | 432 | 10 | ✓ | | | | | | xx | | | | | |
| 3 | 3 | 433 | 5 | ✓ | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): HM

Bottom Depth: 4143 m
Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1039 | 0339 |
| Bottom | 1117 | |
| End | 1151 | |

Positional Information
Start
Lat: 49° 59.99 N
Lon: 143° 36.15 W

Bottom
Lat: 49° 59.94 N
Lon: 143° 36.24 W

End
Lat: 49° 59.98 N
Lon: 143° 36.24 W

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P25

Event #: 79

Ship: Tully

UTC Date (dd|mmm|yyyy): 13 | 06 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|-----|------|----|-----------|--------|--|--|--|----------|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Nut-F | Sal | Chl | HPLC | | UBC gases | Paw-16 | | | | | |
| 1 | 1 | 431 | 2005 | ✓ | | x | | | | | x | | | | | |
| 2 | 2 | 432 | 10 | ✓ | | | | | | xx | | | | | | |
| 3 | 3 | 433 | 5 | ✓ | | x | x | xx | xx | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): 11M

Bottom Depth: 449 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-----|-------|
| Start | 39 | 0339 |
| Bottom | 17 | 1279 |
| End | | 1151 |

Positional Information

| | | |
|----------|----|------|
| Lat: 49 | 59 | 99 N |
| Lon: 143 | 36 | 15 W |

Start

| | | |
|----------|----|------|
| Lat: 49 | 59 | 94 N |
| Lon: 143 | 36 | 24 W |

Bottom

| | | |
|----------|----|------|
| Lat: 49 | 59 | 98 N |
| Lon: 143 | 36 | 24 W |

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P35 Event #: 80 Ship: Tully UTC Date (dd/mmm/yyyy): 13/6/16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--|------------------------------------|-----|-----|------|--|--|--|--|--|--------|----------|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Nut-F | Sal | Chl | HPLC | | | | | | Paw-16 | |
| 1 | 1 | 434 | 2005 | <input checked="" type="checkbox"/> | | x | | | | | | | | x | |
| 2 | 2 | 435 | 5 | <input checked="" type="checkbox"/> | x | x | xx | xx | | | | | | | |
| 3 | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): H.M.

Bottom Depth: 4151 m
 Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1631 | 0931 |
| Bottom | 1707 | |
| End | 1741 | |

Positional Information

| | |
|--------|---------------------|
| Start | Lat: 49 ° 59. 96 N |
| | Lon: 144 ° 18. 16 W |
| Bottom | Lat: 49 ° 59. 98 N |
| | Lon: 144 ° 18. 23 W |
| End | Lat: 49 ° 59. 99 N |
| | Lon: 144 ° 18. 15 W |

Extra comments:

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P26

Event #: 81

Ship: Tully

UTC Date (dd|mmm|yyyy): 13 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|--------------------|------------------------------------|------|------|--------|-----|------|-------|-----|--|--|--|--|----------|------------------|
| | | | Target Pressure | Confirmed Pressure | DMS | DMSP | DMSP | Nut-Fr | Chl | HPLC | Phyto | | | | | | | |
| | | | | ✓ | | | t | d | | | | | | | | | | |
| 1 | | 436 | 300 | ✓ | 300 | x | | | x | | | | | | | | | Valve not closed |
| 2 | | 437 | 200 | ✓ | 200 | x | x | x | x | | | | | | | | | |
| 3 | | 438 | 175 | ✓ | 175 | x | x | x | x | | | | | | | | | |
| 4 | | 439 | 100 | ✓ | 100 | x | x | x | xx | x | | | | | | | | |
| 5 | | 440 | 75 | ✓ | 75 | x | | | x | x | | | | | | | | |
| 6 | | 441 | 60 | ✓ | 60 | | | | x | xx | xx | | | | | | | |
| 7 | | 442 | 50 | ✓ | 50 | x | | | x | xx | xx | | | | | | | Fluo |
| 8 | | 443 | 40 | ✓ | 40 | x | | | x | xx | xx | | | | | | | Fluo |
| 9 | | 444 | 30 | ✓ | 30 | x | | | x | xx | xx | | | | | | | Fluo |
| 10 | | 445 | 25 | ✓ | 25 | x | | | x | x | | | | | | | | Fluo |
| 11 | | 446 | 20 | ✓ | 20 | xx | xx | xx | x | x | | | | | | | | |
| 12 | | 447 | 15 | ✓ | 15 | x | | | x | xx | xx | | | | | | | |
| 13 | | 448 | 10 | ✓ | 10 | x | | | x | x | | | | | | | | Fluo |
| 14 | | 449 | 5 | ✓ | 5 | x | x | x | x | xx | xx | xxx | | | | | | |
| 15 | | 450 | 0 | ✓ | 2 | x | x | x | x | x | | | | | | | | Fluo |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Version: 25 Nov 2011

Transmissometer to be cleaned before use

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): DY

Bottom Depth: 4088 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2235 | 1535 |
| Bottom | 2242 | |
| End | | |

Positional Information

| | | |
|------|-------------|---|
| Lat: | 50 ° 0.01 | N |
| Lon: | 144 ° 59.97 | W |

Start

Bottom

End

| | | |
|------|-------------|---|
| Lat: | 50 ° 0.00 | N |
| Lon: | 144 ° 59.96 | W |

| | | |
|------|-------------|---|
| Lat: | 49 ° 59.96 | N |
| Lon: | 144 ° 59.98 | W |

Extra comments:
DMS cast
Will also have loops for Chl x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P26 Event #: 82 Ship: Tully UTC Date (dd|mmm|yyyy): 13 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|------------|------------------------------------|-----|-------|-------|------|------|------|-------|-------|------|----------|------|------|--|
| | | | Target | Confirmed | OXY | Sal | Nut-F | Nut-C | DIC | Alk | pH | Paw16 | Gases | DNA | | SAGs | | |
| | | | Pressure | ✓ Pressure | | | | | | | | | | | | | | |
| | | | | | DY | DY | Jade | Jade | Jade | Jade | Jade | Jade | Jade | Jade | Jade | Jade | Jade | |
| 1 | 1 | 451 | Bot-10 | ✓ | 4319 | x | | xx | x | x | x | x | | x | xx | x | x | |
| 2 | 2 | 452 | 4000 | ✓ | 4000 | x | x | xx | x | x | x | x | | x | xx | x | x | |
| 3 | 3 | 453 | 3500 | ✓ | 3499 | x | xx | xxxx | xx | xx | x | x | | x | | | | |
| 4 | 4 | 454 | 3000 | ✓ | 3000 | x | x | xx | x | x | x | x | | x | xx | x | x | |
| 5 | 5 | 455 | 2500 | ✓ | 2500 | xx | xx | xx | x | x | x | xxx | | x | | | | |
| 6 | 6 | 456 | 2000 | ✓ | 2000 | x | x | xx | x | x | x | x | | x | xx | x | x | |
| 7 | 7 | 457 | 1500 | ✓ | 1499 | x | x | xx | x | x | x | x | | x | xx | x | x | |
| 8 | 8 | 458 | 1250 | ✓ | 1250 | x | x | xx | x | x | x | x | | x | xx | x | x | |
| 9 | 9 | 459 | 1000 | ✓ | 999 | x | x | xx | x | x | x | x | | x | xx | x | x | |
| 10 | 10 | 460 | 800 | ✓ | 800 | x | | xx | x | x | x | x | | x | xx | x | x | |
| 11 | 11 | 461 | 600 | ✓ | 600 | x | | xx | x | x | x | x | | x | xx | x | x | |
| 12 | 12 | 462 | 400 | ✓ | 400 | x | | xx | x | x | x | x | | x | xx | x | x | |
| 13 | 13 | 463 | 300 | ✓ | 300 | x | | xx | | x | x | x | | x | xx | x | x | |
| 14 | 14 | 464 | 250 | ✓ | 250 | xx | | xx | | x | x | x | | x | | | | |
| 15 | 15 | 465 | 200 | ✓ | 200 | x | | xx | | x | x | x | | x | xx | x | x | |
| 16 | 16 | 466 | 175 | ✓ | 175 | x | | xxxx | | x | x | x | | x | | | | |
| 17 | 17 | 467 | 150 | ✓ | 150 | x | | xx | | x | x | x | | x | xx | x | x | |
| 18 | 18 | 468 | 125 | ✓ | 125 | x | | xx | | x | x | x | | x | | | | |
| 19 | 19 | 469 | 100 | ✓ | 100 | x | | xx | | x | x | x | | x | xx | x | x | |
| 20 | 20 | 470 | 75 | ✓ | 75 | xx | | xx | | x | x | xxx | | x | | | | |
| 21 | 21 | 471 | 50 | ✓ | 50 | x | | xx | | x | x | x | | x | xx | x | x | |
| 22 | 22 | 472 | 25 | ✓ | 25 | x | | xx | | x | x | x | | x | xx | x | x | |
| 23 | 23 | 473 | 10 | ✓ | 10 | x | | xx | | x | x | x | | x | xx | x | x | |
| 24 | 24 | 474 | 5 | ✓ | 5 | xx | x | xx | | x | x | x | | x | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): DY

Bottom Depth: 4253 m

Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 2346 | 1646 |
| Bottom | 0102 | |
| End | 0242 | |

Positional Information
Start
Lat: 50 ° 0.03 N
Lon: 144 ° 59.96 WBottom
Lat: 49 ° 59.98 N
Lon: 144 ° 59.98 WEnd
Lat: 50 ° 0.00 N
Lon: 144 ° 59.98 WExtra comments:
Deep cast
Will also have loops for Sal x1,
OxyLab x2 and OxyT x2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P26

Event #: 83

Ship: Tully

UTC Date (dd|mmm|yyyy): 14 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|--|--|--|--|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | | | | | | | | | | | |
| 1 | | 475 | 200 | ✓ 200 | | | | | | | | | | | |
| 2 | | 476 | 150 | ✓ 150 | | | | | | | | | | | |
| 3 | | 477 | 100 | ✓ 100 | | | | | | | | | | | |
| 4 | | 478 | 75 | ✓ 75 | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): DY

Bottom Depth: 4254 m
 Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0400 | 2100 |
| Bottom | 0404 | |
| End | 0411 | |

Positional Information
 Start
 Lat: 50° 0.03 N
 Lon: 144° 59.94 W

Bottom
 Lat: 50° 0.401 N
 Lon: 144° 59.96 W

End
 Lat: 50° 0.03 N
 Lon: 144° 59.96 W

Extra comments:
 17 O cast of Paul Quay
 200 m cast

Cruise ID: 2016-06 Station: P26 Event #: 84 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|----------------------|------------------------------------|--|--|--|--|--|--|--|--|----|----------|
| | | | Target Pressure | Confirmed ✓ Pressure | | | | | | | | | | | |
| 1 | | 479 | 50 | ✓ | 50 | | | | | | | | | xx | |
| 2 | | 480 | 25 | ✓ | 25 | | | | | | | | | xx | |
| 3 | | 481 | 10 | ✓ | 10 | | | | | | | | | xx | |
| 4 | | 482 | 5 | ✓ | 5 | | | | | | | | | xx | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): DY

Bottom Depth: 4253 m

Transmisso Cleaned: Y N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0441 | 2141 |
| Bottom | 0444 | |
| End | 0451 | |

Positional Information

Start

Lat: 50° 0.00 N

Lon: 144° 59.94 W

Bottom

Lat: 50° 0.02 N

Lon: 144° 59.93 W

End

Lat: 50° 0.04 N

Lon: 144° 59.10 W

Extra comments:

¹⁷O cast of Paul Quay

150 m CTD cast

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06

Station: P26

Event #: 85

Ship: Tully

UTC Date (dd|mmm|yyyy): 14 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|------|-----|---------|---------|---------|-----|--------|------|-----|-----|------|----|----------|
| | | | Target Pressure | Confirmed Pressure | 170 | ONAr | Oxy | 180 ind | NO3 ind | NH4 ind | CHL | Nut-Fr | NH4 | Sal | C14 | UVic | TM | |
| 1 | | 483 | O2 max | ✓ 45.44 | xx | | xx | | | | | | | x | | | | |
| 2 | | 484 | 5 | | xx | xx | xx | | x | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | 485 | 250 | ✓ | | | | | | | | | | | | x | | |
| 5 | | 486 | 150 | ✓ | | | | | | | | | | | | x | | |
| 6 | | 487 | 50 | ✓ | | | | | | | | | | | | x | | |
| 7 | | 488 | 20 | ✓ | | | | | | | | | | | | x | | |
| 8 | | 489 | 10 | ✓ | | | | | | | | | | | | x | | |
| 9 | | 490 | 5 | | | | | | | | | | | | | x | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | 491 | 100 | ✓ | | | | | | | | | | | | | x | |
| 12 | | 492 | 50 | ✓ | | | | | | | | | | | | | x | |
| 13 | | 493 | 5 | | | | | | | | | | | | | | x | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | 494 | 10 | ✓ | | | | | | | | | | | | | xx | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | 495 | 100% | 0 | | | xx | xxx | xxxxx | | x | x | | | | | | |
| 18 | | 496 | 100% | 0 | | | | | | xxxxx | | | xx | | | | | |
| 19 | | 497 | 55% | 0.5 | | xx | xx | xxx | x | x | x | x | xx | x | | | | |
| 20 | | 498 | 30% | 6 | | | xx | xxx | x | x | x | x | xxxx | x | | | | |
| 21 | | 499 | 15% | 9 | | | xx | xxx | x | x | x | x | xx | x | | | | |
| 22 | | 500 | 1% | 41 | | | xx | xxx | x | x | x | x | xx | x | | | | |
| 23 | | 501 | 55% | 5 | | | | | | | | | | | x | | | |
| 24 | | 502 | 10 | ✓ | | | | | | | | | | | | | xx | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): H.1

Bottom Depth: 4215 m

Transmisso Cleaned: y / N

| Time | UTC | Local |
|--------|-------|-------|
| Start | 11 04 | 0406 |
| Bottom | 11 11 | |
| End | 11 34 | |

Positional Information

Start
Lat: 50 ° 00 . 06 N
Lon: 144 ° 59 . 06 W

Bottom
Lat: 50 ° 00 . 00 N
Lon: 144 ° 59 . 86 W

End
Lat: 50 ° 00 . 02 N
Lon: 144 ° 59 . 90 W

Extra comments:

Amanda, Theresa, Robert
4, 5, 11, 12, 6, 1, 22, 7, 8, 24
15, 21, 20, 23, 19, 2, 9, 13
17, 18

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P26 Event #: 86 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | Jun | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|-------------------------|------------------------------------|--------|------------|--------------|------|------|--|--|--|--|----------|--|--|--|
| | | | Target Pressure | Confirmed √ Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | Ligs | | | | | | | | | |
| 1 | | 503 | 40 | | | X | X | x | x | 8 | | | | | | | | |
| 2 | | 504 | 25 | | | X | X | x | x | | | | | | | | | |
| 3 | | 505 | 10 | | | | | x | x | xxxx | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM ☒ Niskin other?
Watchkeeper(s): ABottom Depth: 1250 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1405 | 07:05 |
| Bottom | 1425 | 07:25 |
| End | 1445 | 07:45 |

Positional Information
Start
Lat: 50 ° 00.0236 N
Lon: 144 ° 59.9638 WBottom
Lat: 50 ° 00.1450 N
Lon: 144 ° 59.5683 WEnd
Lat: ° N
Lon: ° WExtra comments:
Go-flo 40
No water left for Sal
and Nut-Fr at 40m,
so Sal and Nut-Fr
collected from 25m.

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P26

Event #:

87

Ship:

Tully

UTC Date (dd|mmm|yyyy): 14 | JUN | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | Comments | |
|----------|----------|----------|-------------------|--|------------------------------------|--------|---------|-----------|--|--|--|--|----------|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | |
| 1 | | 506 | 100 | | x | x | x | x | | | | | | |
| 2 | | 507 | 75 | | | | x | x | | | | | | |
| 3 | | 508 | 50 | | | | x | x | | | | | | |
| 4 | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | |

Profile type:

ROS TRM ☒ X-Niskin other?

Watchkeeper(s):

AR

Bottom Depth: 4250 m

Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1540 | 08:40 |
| Bottom | 1550 | 08:50 |
| End | 1605 | 09:05 |

Positional Information

Start
Lat: 50 ° 00.25 N
Lon: 144 ° 59.80 WBottom
Lat: 50 ° 00.17 N
Lon: 144 ° 59.81 WEnd
Lat: 50 ° 00.19 N
Lon: 144 ° 59.79 W

Extra comments:

Go-flo 100

75m. bottle failed to trip.
Re-deployed during extra
cast at 12:26 (50°00.02'N,
145°00.02'W) to 12:45
(50°00.01'N, 145°00.04'W)

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P26 Event #: 88 Ship: Tully UTC Date (dd|mmm|yyyy): 14 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--|------------------------------------|--------|---------|-----------|--|--|--|--|----------|--|--|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | | | | | | | | |
| 1 | | 509 | 300 | | x | x | xx | xx | | | | | | | | |
| 2 | | 510 | 200 | | | | x | x | | | | | | | | |
| 3 | | 511 | 150 | | | | x | x | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
 ROS TRM ☒ X-Niskin other?
 Watchkeeper(s): AR

Bottom Depth: 4250 m
 Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-------------|--------------|
| Start | <u>1630</u> | <u>09:30</u> |
| Bottom | <u>1640</u> | <u>09:40</u> |
| End | <u>1709</u> | <u>10:09</u> |

Positional Information

| | | |
|-------|--------------------------------|----------|
| Start | Lat: <u>50</u> ° <u>00.14</u> | <u>N</u> |
| | Lon: <u>144</u> ° <u>59.77</u> | <u>W</u> |

Bottom

| | |
|--------------------------------|----------|
| Lat: <u>50</u> ° <u>00.07</u> | <u>N</u> |
| Lon: <u>144</u> ° <u>59.82</u> | <u>W</u> |

End

| | |
|--------------------------------|----------|
| Lat: <u>49</u> ° <u>59.89</u> | <u>N</u> |
| Lon: <u>145</u> ° <u>00.12</u> | <u>W</u> |

Extra comments:
Go-flo 300

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P26 Event #: 89 Ship: Tully UTC Date (dd|mmm|yyyy): 14 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|---------------------------------|------------------------------------|--------|--------------------|----------------------|-------|---|--|--|--|--|----------|--|--|--|
| | | | Target Pressure | Confirmed <div>✓</div> Pressure | Sal | Nut-fr | Fe <div>filt</div> | Fe <div>unfilt</div> | Nut-C | | | | | | | | | |
| 1 | | 512 | 800 | | | x | x | x x | x x | x | | | | | | | | |
| 2 | | 513 | 600 | | | | | x | x | | | | | | | | | |
| 3 | | 514 | 400 | | | | | x | x | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type: ROS TRM ☒ Niskin other?
Watchkeeper(s): AR

Bottom Depth: 4250 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1746 | 10:46 |
| Bottom | 1813 | 11:13 |
| End | 1840 | 11:40 |

Positional Information
Start
Lat: 50 ° 00.12 N
Lon: 145 ° 00.05 W

Bottom
Lat: 49 ° 59.99 N
Lon: 145 ° 00.08 W

End
Lat: 49 ° 59.83 N
Lon: 145 ° 00.09 W

Extra comments:
Go-flo 800

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID:

2016-06

Station:

P26

Event #:

93

Ship:

Tully

UTC Date (dd|mmm|yyyy):

14 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments |
|----------|----------|----------|-------------------|--------------------|------------------------------------|-----|--|------|--|--|--|--|--|--|--|--|----------|
| | | | Target Pressure | Confirmed Pressure | | UBC | | ONAr | | | | | | | | | |
| 1 | | 518 | 2000 | ✓ 2000 | | x | | | | | | | | | | | |
| 2 | | 519 | 2000 | ✓ | | | | | | | | | | | | | |
| 3 | | 520 | 2000 | ✓ | | | | | | | | | | | | | |
| 4 | | 521 | 2000 | ✓ | | | | | | | | | | | | | |
| 5 | | 522 | 1000 | ✓ 1000 | | x | | | | | | | | | | | |
| 6 | | 523 | 1000 | ✓ | | | | | | | | | | | | | |
| 7 | | 524 | 1000 | ✓ | | | | | | | | | | | | | |
| 8 | | 525 | 1000 | ✓ | | | | | | | | | | | | | |
| 9 | | 526 | 500 | ✓ 500 | | x | | | | | | | | | | | |
| 10 | | 527 | 500 | ✓ | | | | | | | | | | | | | |
| 11 | | 528 | 500 | ✓ | | | | | | | | | | | | | |
| 12 | | 529 | 500 | ✓ | | | | | | | | | | | | | |
| 13 | | 530 | 10 | ✓ 10 | | x | | | | | | | | | | | |
| 14 | | 531 | 10 | ✓ | | | | | | | | | | | | | |
| 15 | | 532 | 10 | ✓ | | | | | | | | | | | | | |
| 16 | | 533 | 10 | ✓ | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | | 534 | 4000 | ✓ 4002 | | | | xx | | | | | | | | | |
| 19 | | 535 | 3500 | ✓ 3499 | | | | xx | | | | | | | | | |
| 20 | | 536 | 3000 | ✓ 3000 | | | | xx | | | | | | | | | |
| 21 | | 537 | 2500 | ✓ 2500 | | | | xx | | | | | | | | | |
| 22 | | 538 | 2000 | ✓ 2000 | | | | xx | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

DY

Bottom Depth: 4252 m

Transmissio Cleaned: (Y) N

Time UTC Local

Start 2159 1609

Bottom 2309

End 0026

Positional Information

Start Lat: 50° 0.01' N

Lon: 144° 59.97' W

Bottom Lat: 50° 0.01' N

Lon: 145° 0.10' W

End Lat: 50° 0.05' N

Lon: 144° 59.95' W

Extra comments: out-of-order

Jade and ONAr cast

18 to 22 then 1 to 16

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: PA-010 Event #: 95 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | 6 | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-----|------|-----|--|-----|-------|-------|--|--|--|--|----------|--|--|
| | | | Target Pressure | Confirmed ✓ Pressure | ONAr | Oxy | Salt | DIC | | DIC | pH | | | | | | | | |
| | | | | | UW | UW | UW | UW | | IOS | IOS | | | | | | | | |
| 1 | | 539 | 10 | ✓ 10 | | | | x x | | | x x | x x x | | | | | | | |
| 2 | | 540 | 10 | ✓ 10 | x x | x x | x | | | | | | | | | | | | |
| 3 | | 541 | 5 | ✓ 5 | x x | x x | x | | | | | | | | | | | | |
| 4 | | 542 | 5 | ✓ 5 | | | | x x | | | x x x | x x x | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): DY

Bottom Depth: 4230 m
 Transmisso Cleaned: ☒ Y ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0303 | 2003 |
| Bottom | 0312 | |
| End | 0322 | |

Positional Information

| | | | |
|------|------|-------|---|
| Lat: | 50° | 1.47 | N |
| Lon: | 144° | 52.74 | W |

Start
Bottom
End

| | | | |
|------|------|-------|---|
| Lat: | 50° | 1.46 | N |
| Lon: | 144° | 52.76 | W |

| | | | |
|------|------|-------|---|
| Lat: | 50° | 1.43 | N |
| Lon: | 144° | 52.80 | W |

Extra comments:
 CTD to 500 m
 flooring site?

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P26 Event #: 96 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | JUN | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|---|----------|------------------------------------|--------|-------------------|---------------------|-------|--|--|--|--|--|----------|--|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> | Pressure | Sal | Nut-fr | Fe <i>filt</i> | Fe <i>unfilt</i> | Nut-C | | | | | | | | |
| 1 | 3 | 515 | 2000 | | | x | x | x | x | x | | | | | | | | |
| 2 | 2 | 516 | 1500 | | | | | x | x | | | | | | | | | |
| 3 | 1 | 517 | 1000 | | | | | x | x | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM ☒ X-Niskin other?
Watchkeeper(s): A.R., D.Y.

Bottom Depth: m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-------|-------|
| Start | 04:18 | 21:18 |
| Bottom | 05:00 | 22:00 |
| End | 05:55 | 22:55 |

Positional Information
Start
Lat: 50° 00.03 N
Lon: 145° 00.00 W

Bottom
Lat: 49° 59.99 N
Lon: 145° 00.26 W

End
Lat: 49° 59.97 N
Lon: 145° 00.25 W

Extra comments:
Go-flo 2000

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: PA-009 Event #: 97 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | JUN | 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | |
|----------|----------|----------|-------------------|------------|------------------------------------|-----|------|--|--|--|--|--|--|--|----------|--|
| | | | Target | Confirmed | ONAr | Oxy | Salt | | | | | | | | | |
| | | | Pressure | ✓ Pressure | UW | UW | UW | | | | | | | | | |
| 1 | | 543 | 10 | ✓ 10 | xx | xx | x | | | | | | | | | |
| 2 | | 544 | 5 | ✓ 5 | xx | xx | x | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | |

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): MR

Bottom Depth: 4227 m
Transmisso Cleaned: ☒ Y / ☐ N

| Time | UTC | Local |
|--------|------|-------|
| Start | 1340 | 0640 |
| Bottom | 1348 | |
| End | 1358 | |

Positional Information
Start
Lat: 50 ° 07.85 N
Lon: 144 ° 52.20 W

Bottom
Lat: 50 ° 07.83 N
Lon: 144 ° 52.21 W

End
Lat: 50 ° 07.80 N
Lon: 144 ° 52.24 W

Extra comments:
CTD to 500 m

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P4 Event #: 105 Ship: Tully UTC Date (dd|mmm|yyyy): 19 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|-------------------------|------------------------------------|--------|------------|--------------|-------|---|--|--|--|--|----------|--|--|--|
| | | | Target Pressure | Confirmed √ Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | Nut-C | | | | | | | | | |
| 1 | 3 | 545 | 400 | | | x | x | x | x | x | | | | | | | | |
| 2 | 2 | 546 | 200 | | | | | x | x | | | | | | | | | |
| 3 | 1 | 547 | 100 | | | | | x | x | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): AR/HM

Bottom Depth: 1326 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|--------------|--------------|
| Start | <u>08:35</u> | <u>01:35</u> |
| Bottom | <u>08:50</u> | <u>01:50</u> |
| End | <u>09:03</u> | <u>02:03</u> |

Positional Information

| | | |
|------|-------------------|----------|
| Lat: | <u>48° 38.99</u> | <u>N</u> |
| Lon: | <u>126° 39.93</u> | <u>W</u> |

Start

| | | |
|------|-------------------|----------|
| Lat: | <u>48° 38.92</u> | <u>N</u> |
| Lon: | <u>126° 39.91</u> | <u>W</u> |

Bottom

| | | |
|------|-------------------|----------|
| Lat: | <u>48° 38.83</u> | <u>N</u> |
| Lon: | <u>126° 39.84</u> | <u>W</u> |

End

Extra comments:
P4-return
Deep go-flo

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P4 Event #: 106 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 6 | 16

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | |
|----------|----------|----------|-------------------|----------------------|------------------------------------|-------|-------|-----|-----|-------|-------|--|--|--|----------|--|--|
| | | | Target Pressure | Confirmed ✓ Pressure | Oxy | Nut-F | Nut-C | Sal | Chl | gases | Paw16 | | | | | | |
| 1 | | 548 | Bot-10 | ✓ 1325 | x | x | x | | | | x | | | | | | |
| 2 | | 549 | 1000 | | x | x | x | x | | | x | | | | | | |
| 3 | | 550 | 800 | ✓ | x x | x | x | x x | | | x | | | | | | |
| 4 | | 551 | 600 | ✓ | x | x | x | x | | | x | | | | | | |
| 5 | | 552 | 400 | ✓ | x | x x | x x | | | | | | | | | | |
| 6 | | 553 | 300 | ✓ | x | x | | | | | x | | | | | | |
| 7 | | 554 | 200 | ✓ | x | x | | | | | | | | | | | |
| 8 | | 555 | 150 | ✓ | x | x | | | | | x | | | | | | |
| 9 | | 556 | 100 | ✓ | x x | x | | | | | | | | | | | |
| 10 | | 557 | 75 | ✓ | x | x | | | x | | x | | | | | | |
| 11 | | 558 | 50 | ✓ | x | x | | | x | | | | | | | | |
| 12 | | 559 | 25 | ✓ | x | x | | | x x | | x | | | | | | |
| 13 | | 560 | 10 | ✓ | x | x x | | | x | x x | | | | | | | |
| 14 | | 561 | 5 | ✓ | x | x | | x | x | | x | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): H.M.

Bottom Depth: 1327 m
Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|------|-------|
| Start | 0914 | 0214 |
| Bottom | 0936 | |
| End | 1009 | |

Positional Information
Start
Lat: 48 ° 38.92 N
Lon: 126 ° 40.00 W

Bottom
Lat: 48 ° 38.87 N
Lon: 126 ° 39.83 W

End
Lat: 48 ° 38.77 N
Lon: 126 ° 39.78 W

Extra comments:
P4 return
Loop for Chlx2 and Salx1
Oxy Lab x2, Oxy Tr x 2

Water Properties Group

Sampling Log

Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2016-06 Station: P4 Event #: 107 Ship: Tully UTC Date (dd|mmm|yyyy): 19 JUN 2016

| Niskin # | Firing # | Sample # | Rosette Operation | | Samples Taken / Sampler's Initials | | | | | | | | | | Comments | | | |
|----------|----------|----------|-------------------|--|------------------------------------|--------|------------|--------------|------|------|--|--|--|--|----------|--|--|--|
| | | | Target Pressure | Confirmed <input checked="" type="checkbox"/> Pressure | Sal | Nut-fr | Fe filt | Fe unfilt | Ligs | | | | | | | | | |
| 1 | 3 | 562 | 40 | | | x | x | x | x | xxxx | | | | | | | | |
| 2 | 2 | 563 | 25 | | | | | x | x | | | | | | | | | |
| 3 | 1 | 564 | 10 | | | | | xx | xx | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |

Profile type:
ROS TRM ☒ Niskin other?
Watchkeeper(s): AR/HM

Bottom Depth: 132 m

Transmisso Cleaned: Y / N

| Time | UTC | Local |
|--------|-------|-------|
| Start | 10:25 | 03:25 |
| Bottom | 10:44 | 03:44 |
| End | 10:49 | 03:49 |

Positional Information
Start
Lat: 48 ° 38.84 N
Lon: 126 ° 39.99 WBottom
Lat: 48 ° 38.81 N
Lon: 126 ° 39.97 WEnd
Lat: 48 ° 38.80 N
Lon: 126 ° 39.96 W

Extra comments:

P4-return

Shallow go-flo