| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| Northwest Explorer 2017 | Survey NW1701 | leg SECM | 21012 |

| CTD consec CAST # | LATITUDE | | | LONGITUDE | | | GMT DATE (note if not) | | | GMT Time | | Surface Temp | BOTTOM DEPTH | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEG | MIN | | DEG | MIN | | DAY | MO | YR | HR | MIN | (°C) | (m) | | |
| 1 | | | N | | | W | 01 | JUL | 17 | 15 | | | | 21012 | |

**Sensor IDS (initially & swap-outs)**

| | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | 0775 |
| TEMP 1 &2 SNs | 4354 & 4394 |
| COND 1&2 S/Ns | 2879 & 3072 |
| FLUOR S/N | WS-3S-994P |
| O2 (SBE43) S/N | 0604 |
| Transmiss S/N | CST 676-PS |
| PAR S/N | 70631 |
| O2 SBE43 S/N | 1301 |
| 3 (2) | Turbid.: 2615 |

**Weather:**

CTD MAX. DEPTH =

**COMMENT: Difficult conditions, factors that may affect measurements or aid processing**

(See Fastcat cast)

NO CTD, Stream of Scan Length errors; begin troubleshoot

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Hydro Team Nut.Btl | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | 1 |
| 2 | 0 | | | 1 | 250 | | | | | | | 2 |
| 3 | 10 | | | 2 | 250 | 250 | 250 | | | | | 3 |
| 4 | 20 | | | 3 | 250 | | | | | | | 4 |
| 5 | 30 | | | 4 | 250 | | | | | | | 5 |
| 6 | 40 | | | 5 | 250 | | | | | | | 6 |
| 7 | 50 | | | 6 | 250 | | | | | | | 7 |
| 8 | 200 | | | 7 | | | | | | | | 8 |
| 9 | | | | | | | | | | | | 9 |
| 10 | | | | | | | | | | | | 10 |
| 11 | | | | | | | | | | | | 11 |
| 12 | | | | | | | | | | | | 12 |

| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| Northwest Explorer 2017 | Survey | leg | |

| CTD consec CAST # | LATITUDE | | | LONGITUDE | | | GMT DATE (note if not) | | | GMT Time | | Surface Temp | BOTTOM DEPTH | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEG | MIN | | DEG | MIN | | DAY | MO | YR | HR | MIN | (°C) | (m) | | |
| 2 | | | N | | | W | | | 17 | | | | | 21013 | |

**Sensor IDS (initially & swap-outs)**

| | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | |
| TEMP 1 &2 SNs | |
| COND 1&2 S/Ns | |
| FLUOR S/N | |
| O2 (SBE43) S/N | |
| Transmiss S/N | |
| PAR S/N | |
| O2 SBE42S/N | |

**Weather:**

CTD MAX. DEPTH =

**COMMENT: Difficult conditions, factors that may affect measurements or aid processing**

(See fastcat cast)

NO CTD, Troubleshooting

Pigtail was taped over on a cut in line. Replaced some RS-232 connections that were also suspect.

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Nut.Btl | | | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | 1 |
| 2 | | | | | | | | | | | | | | 2 |
| 3 | | | | | | | | | | | | | | 3 |
| 4 | | | | | | | | | | | | | | 4 |
| 5 | | | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | | | 9 |
| 10 | | | | | | | | | | | | | | 10 |
| 11 | | | | | | | | | | | | | | 11 |
| 12 | | | | | | | | | | | | | | 12 |

| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| Northwest Explorer 2017 | Survey NW17-01 | leg SECM | |

| CTD consec CAST # | LATITUDE | | | LONGITUDE | | | GMT DATE (note if not) | | | GMT Time | | Surface Temp | BOTTOM DEPTH | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEG | MIN | | DEG | MIN | | DAY | MO | YR | HR | MIN | (°C) | (m) | | |
| 3 | 58 | | N | 135 | | W | 01 | JUL | 17 | 20 | 55 | | 220 | 21014 | UCB |

**Sensor IDS (initially & swap-outs)**

| | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | |
| TEMP 1 &2 SNs | |
| COND 1&2 S/Ns | |
| FLUOR S/N | |
| O2 (SBE43) S/N | |
| Transmiss S/N | |
| PAR S/N | |
| O2 SBE42S/N | |

**Weather:**

CTD MAX. DEPTH = 700

**COMMENT: Difficult conditions, factors that may affect measurements or aid processing**

SEE CLAMS for Lat/Lon

It worked!

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Hydro Team Nut.Btl | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 200 | | | 7 | 250 | | | | | | | 1 |
| 2 | 50 | | 25 | 6 | 250 | | | | | | | 2 |
| 3 | 40 | | | 5 | 250 | | | | | | | 3 |
| 4 | 30 | | | 4 | 250 | | | | | | | 4 |
| 5 | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | 9 |
| 10 | 20 | | | 3 | 250 | | | | 200 | | | 10 |
| 11 | 10 | | | 2 | 250 | 250 | | | 200 | | | 11 |
| 12 | 20 | | 25 | 1 | 250 | | | | 200 | | | 12 |

| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| **Northwest Explorer 2017** | **Survey** NW1701 | leg SECM | 21015 |

| CTD consec CAST # | LATITUDE | | | LONGITUDE | | | GMT DATE *(note if not)* | | | GMT Time | | Surface Temp | BOTTOM DEPTH | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEG | MIN | | DEG | MIN | | DAY | MO | YR | HR | MIN | (°C) | (m) | | |
| 4 | 58 | 07405 | N | 134 | 99788 | W | 01 | JUL | 17 | 23 | 02 | 10.2 | 444 | 21015 | UCA |

**Sensor IDS (initially & swap-outs)**

| | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | |
| TEMP 1 &2 S/Ns | |
| COND 1&2 S/Ns | |
| FLUOR S/N | |
| O2 (SBE43) S/N | |
| Transmiss S/N | |
| PAR S/N | |
| O2 SBE42S/N | |

**Weather:**

CTD MAX. DEPTH = 200

**COMMENT: Difficult conditions, factors that may affect measurements or aid processing**

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Hydro Team Nut.Btl | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 200 | | | 14 | | | | | | | | 1 |
| 2 | 50 | | | 13 | 250 | | | | | | | 2 |
| 3 | 40 | | | 12 | 250 | | | | | | | 3 |
| 4 | 30 | | | 11 | 250 | | | | | | | 4 |
| 5 | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | 9 |
| 10 | 20 | | | 10 | 250 | | | | | | | 10 |
| 11 | 10 | | | 9 | 250 | 250 | | | | | | 11 |
| 12 | 0 | | | 8 | 250 | | 250 | | | | | 12 |

| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| **Northwest Explorer 2017** | **Survey** NW1701 | leg SECM | 21016 |

| CTD consec CAST # | LATITUDE | | | LONGITUDE | | | GMT DATE (note if not) | | | GMT Time | | Surface Temp | BOTTOM DEPTH | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEG | MIN | | DEG | MIN | | DAY | MO | YR | HR | MIN | (°C) | (m) | | |
| 5 | 58. | 220 | N | 135. | 5288 | W | 02 | JUL | 17 | 14 | 58 | 8.2 | 100 | 21016 | ISA |

**Sensor IDS (initially & swap-outs)**

| | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | |
| TEMP 1 &2 SNs | |
| COND 1&2 S/Ns | |
| FLUOR S/N | |
| O2 (SBE43) S/N | |
| Transmiss S/N | |
| PAR S/N | |
| O2 SBE42S/N | |

**Weather:**

CTD MAX. DEPTH = 90

**COMMENT: Difficult conditions, factors that may affect measurements or aid processing**

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Hydro Team Nut.Btl | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 90 | | | 21 | | | | | | | | 1 |
| 2 | 50 | | | 20 | 250 | | | | | | | 2 |
| 3 | 40 | | | 19 | 250 | | | | | | | 3 |
| 4 | 30 | | | 18 | 250 | | | | | | | 4 |
| 5 | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | 9 |
| 10 | 20 | | | 17 | 250 | | | | 400 | | | 10 |
| 11 | 10 | | | 16 | 250 | 250 | | | 200 | | | 11 |
| 12 | 0 | | | 15 | 250 | | | | 200 | | | 12 |

| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| Northwest Explorer 2017 | Survey NW1701 | leg SECM | 21019 |

| CTD consec CAST # | LATITUDE DEG | LATITUDE ~~MIN~~ | | LONGITUDE DEG | LONGITUDE ~~MIN~~ | | GMT DATE (note if not) DAY | MO | YR | GMT Time HR | MIN | Surface Temp (°C) | BOTTOM DEPTH (m) | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 58. | 2374 | N | 135. | 4870 | W | 02 | JUL | 17 | 18 | 27 | 10.8°C | 187 | 21019 | ISB |

| Sensor IDS (initially & swap-outs) | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | |
| TEMP 1 &2 SNs | |
| COND 1&2 S/Ns | |
| FLUOR S/N | |
| O2 (SBE43) S/N | |
| Transmiss S/N | |
| PAR S/N | |
| O2 SBE42S/N | |

**Weather:**

CTD MAX. DEPTH = 175

**COMMENT: Difficult conditions, factors that may affect measurements or aid processing**

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Hydro Team Nut.Btl | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 175 | | 26 | 28 | | | | | | | | 1 |
| 2 | 50 | | | 27 | 250 | | | | | | | 2 |
| 3 | 40 | | | 26 | 250 | | | | | | | 3 |
| 4 | 30 | | | 25 | 250 | | | | | | | 4 |
| 5 | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | 9 |
| 10 | 20 | | | 24 | 250 | | | | | | | 10 |
| 11 | 10 | | | 23 | 250 | 250 | 250 | | | | | 11 |
| 12 | 0 | | | 22 | 250 | | | | | | | 12 |

| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| Northwest Explorer 2017 | Survey NW1701 | leg SECM | 21022 |

| CTD consec CAST # | LATITUDE | | | LONGITUDE | | | GMT DATE (note if not) | | | GMT Time | | Surface Temp | BOTTOM DEPTH | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEG | MIN | | DEG | MIN | | DAY | MO | YR | HR | MIN | (°C) | (m) | | |
| 7 | 58. | 2549 | N | 135. | 4447 | W | 02 | JUL | 17 | 22 | 45 | | 261 | 21022 | ISC |

| Sensor IDS (initially & swap-outs) | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | |
| TEMP 1 &2 SNs | |
| COND 1&2 S/Ns | |
| FLUOR S/N | |
| O2 (SBE43) S/N | |
| Transmiss S/N | |
| PAR S/N | |
| O2 SBE42S/N | |

Weather:

CTD MAX. DEPTH = 200

COMMENT: Difficult conditions, factors that may affect measurements or aid processing

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Hydro Team Nut.Btl | | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 200 | | | 35 | | | | | | | | | 1 |
| 2 | 50 | | | 34 | | 250 | | | | | | | 2 |
| 3 | 40 | | | 33 | | 250 | | | | | | | 3 |
| 4 | 30 | | | 32 | | 150 | | | | 200 | | | 4 |
| 5 | | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | | 9 |
| 10 | 20 | | | 31 | | 250 | | | | | | | 10 |
| 11 | 10 | | | 30 | | 250 | 250 | | | 200 | | | 11 |
| 12 | 0 | | | 29 | | 250 | | | | 200 | | | 12 |

| VESSEL | CRUISE ID | PROJECT & LEG ( if needed) | CTD FileName (None if data is live feed) |
|---|---|---|---|
| Northwest Explorer 2017 | Survey NW1701 | leg SECM | 21025 |

| CTD consec CAST # | LATITUDE | | | LONGITUDE | | | GMT DATE (note if not) | | | GMT Time | | Surface Temp | BOTTOM DEPTH | STATION NUMBER | STN. NAME/ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | DEG | ~~MIN~~ | | DEG | ~~MIN~~ | | DAY | MO | YR | HR | MIN | (°C) | (m) | | |
| 4 | 58. | 2719 | N | 135 | .3979 | W | 03 | JUL | 17 | 15 | 07 | 11.0 | 215 | 21025 | ISD |

**Sensor IDS (initially & swap-outs)**

| | |
|---|---|
| SBE type and S/N | SBE 9-11 w/duplicate sensors |
| PRESS S/N | |
| TEMP 1 &2 SNs | |
| COND 1&2 S/Ns | |
| FLUOR S/N | |
| O2 (SBE43) S/N | |
| Transmiss S/N | |
| PAR S/N | |
| O2 SBE42S/N | |

**Weather:**

CTD MAX. DEPTH = 20-

**COMMENT: Difficult conditions, factors that may affect measurements or aid processing**

SEE CLAMS for lat/lon

| Nisk # | DEPTH DESIRED | Rosette Notes | Hydro Team SALT Btl | Hydro Team Nut.Btl | GFF vol | >10 Large Vol | GFF dup vol | >10 dup vol (large) | Phyto preserve | | Comments or other samples | Nisk # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 200 | | | 42 | | | | | | | | 1 |
| 2 | 50 | | | 41 | 250 | | | | | | | 2 |
| 3 | 40 | | | 40 | 250 | | | | | | | 3 |
| 4 | 30 | | | 39 | 250 | | | | 200 | | | 4 |
| 5 | | | | | | | | | | | | 5 |
| 6 | | | | | | | | | | | | 6 |
| 7 | | | | | | | | | | | | 7 |
| 8 | | | | | | | | | | | | 8 |
| 9 | | | | | | | | | | | | 9 |
| 10 | 20 | | | 38 | 250 | | 250 | | | | | 10 |
| 11 | 10 | | | 37 | 250 | 250 | | | 200 | | | 11 |
| 12 | 0 | | 27 | 36 | 250 | | | | 200 | | | 12 |