

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: Haro 59 Event #: 2 Ship: Tully UTC Date (dd mmm yyyy): 20 Aug 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure			Nd	Plastics							
1	1	1	Bot-10	✓	221			x							
2	2	2	Bot-10	✓	221				x						
3	3	3	100	✓	100				x						
4	4	4	5	✓	5				x						
5	5	5	5	✓	5			x							
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/SP

Bottom Depth:	231	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0123	1823
Bottom	0130	
End	0139	

Start	Positional Information	
	Lat: 48° 36.89	N
Bottom	Lon: 123° 14.87	W
	▼	
End	Lat: 48° 36.98	N
	Lon: 123° 14.89	W
	▼	
	Lat: 48° 37.13	N
	Lon: 123° 14.98	W

Extra comments:
Aram's and plastics cast

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

JF2

Event #:

4

Ship:

Tully

UTC Date (dd:mmm:yyyy):

20 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	Chl	Nuts	Nd							
1	1	6	Bot-10	✓ 178				x							
2	2	7	100	✓ 100				x							
3	3	8	30	✓ 30	xx	xx	x								
4	4	9	5	5.3	xx	xx	x								
5	5	10	5	5.3				x							
6	6	11	5					x							not needed.
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):

SP

Bottom Depth: 186 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0640	2340
Bottom	0645	2345
End	0654	2354

Positional Information

Start	Lat: 48 ° 18.110 N
	Lon: 124 ° 0.770 W

Bottom	Lat: 48 ° 18.090 N
	Lon: 124 ° 0.87 W

End	Lat: 48 ° 18.040 N
	Lon: 124 ° 1.120 W

Extra comments:

Aram's and HPLC cast

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2015-10

Station: 2801

Event #: 7

Vessel: TULLY

UTC Date (dd|mmm|yyyy): 20 | 8 | 15

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)												Comments	
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	HPD									
1		12	0			x		xx	xx									
2																		
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 (default) | TrMetlRos | X-Niskin
 Watchkeeper(s):
H.M / L.T.

Bottom Depth: 36 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>12:55</u>	:
Bottom (BO)	<u>12:56</u>	:
End (EN)	<u>12:57</u>	:

Positional Information

Lat:	<u>48</u> ° <u>40</u> . <u>37</u> N
Lon:	<u>124</u> ° <u>59</u> . <u>40</u> W

▼

Lat:	<u>48</u> ° <u>40</u> . <u>37</u> N
Lon:	<u>124</u> ° <u>59</u> . <u>39</u> W

▼

Lat:	<u>48</u> ° <u>40</u> . <u>38</u> N
Lon:	<u>124</u> ° <u>59</u> . <u>38</u> W

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

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2015-10 Station: L308 Event #: 11 Vessel: TULLY UTC Date (dd|mmm|yyyy): 20 | 8 | 15

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)												Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	Chl a	HPGC	Phylo	DNA						
1		13	Bot-10														✓
2		14	5														✓
3		15	0			x		xx	xx	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 (default) | TrMetlRos | X-Niskin
 Watchkeeper(s):
MG / H.M. / N.

Bottom Depth: 135 m
 Transmisso Cleaned: Y / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	17:04	10:04
Bottom (BO)	17:07	:
End (EN)	17:11	:

Positional Information

Lat:	48 ° 25 . 20	N
Lon:	125 ° 28 . 65	W

▼

Lat:	48 ° 25 . 20	N
Lon:	125 ° 28 . 66	W

▼

Lat:	48 ° 25 . 20	N
Lon:	125 ° 28 . 67	W

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

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2015-10

Station: LC04

Event #: 13

Vessel: TULLY

UTC Date (dd|mmm|yyyy): 20 | AUG | 2015

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)													Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy.	Nut	Sal	Chl a										
1		16	Bot-10	✓ 157				✓										
2		17	5	✓ 5				✓										
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 (default) | TrMetlRos | X-Niskin
 Watchkeeper(s):
SP

Bottom Depth: 165 m
 Transmisso Cleaned: (Y) / N
 Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	<u>20:10</u>	<u>13:10</u>
Bottom (BO)	<u>20:13</u>	<u>13:13</u>
End (EN)	<u>20:18</u>	<u>13:18</u>

Positional Information

Lat:	<u>48° 43.42</u>	N
Lon:	<u>125° 40.760</u>	W

▼

Lat:	<u>48° 43.41</u>	N
Lon:	<u>125° 40.76</u>	W

▼

Lat:	<u>48° 43.41</u>	N
Lon:	<u>125° 40.76</u>	W

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

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2015-10

Station: LC01

Event #: 15

Vessel: TULLY

UTC Date (dd|mmm|yyyy): 20 | Aug | 2015

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)												Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	PAR								
1		18	0	✓ 2.4		✓		✓✓	✓✓								
2																	
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 (default) ☐ TrMetlRos ☐ X-Niskin
 Watchkeeper(s):
SP

Bottom Depth: 87 m
 Transmisso Cleaned: ☒ Y ☐ N
 Fluorometer Cleaned: ☐ Y ☐ N

Time	UTC	Local
Start (BE)	22:27	15:27
Bottom (BO)	22:30	15:30
End (EN)	22:33	15:33

Positional Information

Start	Lat: <u>48° 50.71</u>	N
	Lon: <u>125° 27.71</u>	W
Bottom	Lat: <u>48° 50.48</u>	N
	Lon: <u>125° 27.70</u>	W
Finish	Lat: <u>48° 50.48</u>	N
	Lon: <u>125° 27.69</u>	W

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

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P1 Event #: 16 Ship: Tully UTC Date (dd mmm yyyy): 21 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	DIC	Oxy	pH	Nd							
1	1	19	Bot-10	✓	102	x				xx	xx	xxx							
2	4	20	(30) Max	✓	30	x		xx	xx	x	x	x							
3	6	21	5	✓	5	x	x	xx	xx	x	x	x							
4	2	22	Bot-10	✓	102								x						
5	3	23	50	✓	50								x						
6	7	24	3	✓	3								x						
7	5	25	8	✓	8								x						
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): SP

Bottom Depth: 112 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	02:30	19:30
Bottom	02:32	09:32
End	02:42	02

Positional Information
Start
Lat: 48 ° 34 510 N
Lon: 125 ° 29 890 WBottom
Lat: 48 ° 34 510 N
Lon: 125 ° 29 870 WEnd
Lat: 48 ° 34 510 N
Lon: 125 ° 29 860 WExtra comments:
IOS + Aram
OUT-OF-ORDER
1-4-5-2-7-3-6

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P2 Event #: 18 Ship: Tully UTC Date (dd mmm yyyy): 21 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC		NH4						
					MR	MB	MB	MR	MB	MB		Niko						
1		26	100	✓ 100	x	x	x	xx	x			x						
2		27	75	✓ 75	x			x	x			x						
3		28	50	✓ 50	x			x	x			x						
4		29	40	✓ 40	x			x	x									
5		30	30	✓ 30	x			x	x									
6		31	25	✓ 25	x			x	xx			x						
7		32	20	✓ 20	xx	xx	xx	x	x									
8		33	15	✓ 15	x			x	x									
9		34	10	✓ 10	x			x	x			x						
10		35	5	✓ 5	x	x	x	x	x			x						
11		36	0	✓ 2.9	x	x	x	x	x									
12		37	(30) pr M	✓ 30					xx	xx								
13		38	(15) pr M	✓ 15					xx	xx								
14		39	5	✓ 5					xx	xx								
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 116 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0532	2232
Bottom	0535	2235
End	0547	2247

Positional Information
Start
Lat: 48 ° 35.92 N
Lon: 126 ° 0.0 W

Bottom
Lat: 48 ° 35.90 N
Lon: 126 ° 0.1 W

End
Lat: 48 ° 35.86 N
Lon: 126 ° 0.2 W

Extra comments:
DMS cast; out-of-order
1-2-3-4-5-12
6-7-8-13-9
10-14-11

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P2 Event #: 21 Ship: Tully UTC Date (dd mmm yyyy): 21 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials							Comments							
			Target	Confirmed	Oxy	Nut-F	Nut-C	Sal	DIC	pH									
			Pressure	✓ Pressure	HM/MG	AM		HM	KS/RN	GH									
1	1	40	Bot-10	✓	105	x	x			x	x								
2	2	41	100	✓	100	x	x			x	x								
3	3	42	75	✓	75	x	x			xx	x								
4	4	43	75	✓	75	xx	x			x	x								
5	5	44	50	✓	50	x	x			x	xxx								
6	6	45	25	✓	25	x	xx			x	x								
7	7	46	10	✓	10	x	x			x	x								
8	8	47	5	✓	5	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): SP

Bottom Depth: 116 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0628	1128
Bottom	0631	1131
End	0640	1140

Positional Information

Lat:	48 ° 35.8	N
Lon:	126 ° 0.72	W

▼

Lat:	48 ° 35.77	N
Lon:	126 ° 0.8	W

▼

Lat:	48 ° 35.73	N
Lon:	126 ° 0.98	W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P3 Event #: 22 Ship: Tully UTC Date (dd mmm/yyyy): 21 0 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC		Nd					
1	1	48	Bot-10	811						x					σ _t = 27.21
2	2	49	150							x					σ _t = 26.52
3	3	50	50							x					σ _t = 25.69
4	6	51	5	30						x					} Closed @
5	4	52	30 / Max	5	x		x x	x x							} wrong depth
6	5	53	5		x	x	x x	x x							
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: 821 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0849	0149
Bottom	0906	
End	0925	

Positional Information

Lat:	48 ° 37.53	N
Lon:	126 ° 19.95	W

▼

Lat:	48 ° 37.50	N
Lon:	126 ° 20.02	W

▼

Lat:	48 ° 37.50	N
Lon:	126 ° 20.01	W

Extra comments:
IOS & Aram
OUT-OF-ORDER

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P4 Event #: 23 Ship: Tully UTC Date (dd mmm yyyy): 2 9 15

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed			Cs												
			Pressure	√	Pressure														
1		54	150				x												
2		55	150				x												
3		56	150				x												
4		57	150				x												
5		58	150				x												
6		59	150				x												
7		60	150 100				x												
8		61	100				x												
9		62	100				x												
10		63	100				x												
11		64	100				x												
12		65	100				x												
13		66	50				x												
14		67	50				x												
15		68	50				x												
16		69	50				x												
17		70	50				x												
18		71	50				x												
19		72	0				x												
20		73	0				x												
21		74	0				x												
22		75	0				x												
23		76	0				x												
24		77	0				x												

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

Bottom Depth:	1313	m
Transmisso Cleaned:	☒ Y / ☐ N	

Time	UTC	Local
Start	1140	0440
Bottom	1143	
End	1152	

Positional Information		
Start	Lat: 48 ° 38.99	N
	Lon: 126 ° 39.96	W

Bottom	Lat: 48 ° 38.97	N
	Lon: 126 ° 39.99	W

End	Lat: 48 ° 39.00	N
	Lon: 126 ° 39.99	W

Extra comments:
Shallow Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P4 Event #: 27 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | AUG | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Nut-F IOS	Sal IOS	Chl IOS	18O	NO3	NH4 incub	17O	ONAr	DO	NH4		
1		78	Below ML	23		x					x x					
2		79	1%	19	x	x	x	x x x	x x	x			x x	x x		
3		80	15%	9	x	x	x	x x x	x x	x			x x	x x		
4		81	30%	6	x	x	x	x x x	x	x			x x	x x		
5		82	50%	5	x	x	x	x x x	x	x			x x	x x		
6		83	100%	2.5	x		x		x x x	x x x				x x		
7		84	100%	2.5				x x x			x x	x x	x x			
8		85	in ML	SURF								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): HM

Bottom Depth: 1312 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1230	0530
Bottom	1232	
End	1239	

Positional Information

Start	Lat: 48° 38.99	N
	Lon: 126° 39.97	W

Bottom

Lat: 48° 38.99	N
Lon: 126° 39.98	W

End

Lat: 48° 38.99	N
Lon: 126° 39.98	W

Extra comments:

Lianna's cast

~~OUT-OF-ORDER~~

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10

Station: P4

Event #:

25

Ship: Tully

UTC Date (dd mmm yyyy):

21 08 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments	
			Target Pressure	Confirmed ✓	Pressure	Sal	Nut-fr	Fe	Fe					
								filt	unfilt					
1		86	35			X	X	x x	x x					Kink Tube
2		87	25					x	x					Poor flow
3		88	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: PUMP
ROS TRM X-Niskin other?
Watchkeeper(s): K.S. HM.

Bottom Depth: 1313 m
Transmisso Cleaned: Y T N

Time	UTC	Local
Start	<u>1350</u>	
Bottom		
End	<u>15105</u>	

Positional Information

Start	Lat: <u>48 ° 39.03</u>	<u>N</u>
	Lon: <u>126 ° 39.95</u>	<u>W</u>
Bottom	Lat: <u>°</u>	<u>N</u>
	Lon: <u>°</u>	<u>W</u>
End	Lat: <u>48 ° 39.98</u>	<u>N</u>
	Lon: <u>126 ° 39.99</u>	<u>W</u>

Extra comments:
TM pumping
REPLACE HOSE
10m of Kinks
Removed. K.S.

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P4 Event #: 26 Ship: Tully UTC Date (dd mmm/yyyy): 21 8 15

			Rosette Operation		Samples Taken / Sampler's Initials												Comments	
Niskin #	Firing #	Sample #	Target Pressure	Confirmed														
				✓ Pressure	Niko													
					gases													
1		89	250	✓			x x											
2		90	200	✓			x x											
3		91	175	✓			x x											
4		92	150	✓			x x											
5		93	115	✓			x x											
6		94	95	✓			x x											
7		95	80	✓			x x											
8		96	70	✓			x x											
9		97	185	✓			x x											
10		98	60	✓			x x											
11		99	55	✓			x x											
12		100	50	✓			x x											
13		101	45	✓			x x											
14		102	40	✓			x x											
15		103	40	✓			x x											
16		104	35	✓			x x											
17		105	30	✓			x x											
18		106	25	✓			x x											
19		107	20	✓			x x											
20		108	15	✓			x x											
21		109	10	✓			x x											
22		110	5	✓			x x											
23		111	2	✓	2.4		x x											
24		112	2	✓	2.4		x x											

Version: 25 Nov 2014

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

Bottom Depth: 1313 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1511	0811
Bottom	1517	
End	1542	

Positional Information

Start	Lat: 48 ° 39 98 N
	Lon: 126 ° 39 99 W
Bottom	Lat: 48 ° 38 99 N
	Lon: 126 ° 39 99 W
End	Lat: 48 ° 38.98 N
	Lon: 126 ° 40.02 W

Extra comments:
Niko's cast

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P4

Event #: 28

Ship: Tully

UTC Date (dd mmm yyyy): 21 0 15

Cruise ID: 2015-10			Station: P4		Event #: 20		Ship: Sully		Comments										
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		NH4	DCF	H2S	
				✓		Ammonia	SP	SP	SP	Kbr	GC			Niko		Celine	Niko	Niko	
1		113	Bot-10		1321	x	x	x		x	x		x	xx	x	x	x	x	
2		114	1250	✓		x	x	x	x	xx	x		x	xx	x	x			
3		115	1250	✓		xx	x	x	xx	x	x						x		
4		116	1000	✓		x	x	x	xx	x	x		x	xx	x	x	x	x	
5		117	800	✓		x	x	x	x	x	x		x	xx	x	x	x		
6		118	600	✓		x	xx	xx		x	x		x	xx	x	x	x	x	
7		119	400	✓		x	x	x		x	x		x	xx	x	x	x		
8		120	300	✓		x	x			x	x		x	xx	x	x	x		
9		121	250	✓		x	x			x	xxx			xx		x	x		
10		122	200	✓		x	x			x	x		x	xx	x	x	x		
11		123	175	✓		x	x			x	x			xx		x	x		
12		124	150	✓		x	x			x	x		x	xx	x	x	x		
13		125	125	✓		x	xx			x	x					x	x		
14		126	100	✓		x	x			x	x		x	xx	x	x	x		
15		127	75	✓		xx	x			x	x			xx		x	x		
16		128	50	✓		x	x			x	x		x	xx	x	x	x		
17		129	25	✓		x	x			x	x		x	xx	x	x	x		
18		130	10	✓		x	x			x	x		x	xx	x	x	x		
19		131	5	✓		x	x		x	x	xxx					x	x		
20																			
21																			
22																			
23																			
24																			

http://www.pac.d

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

Bottom Depth: 1310 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1709	1009
Bottom	1732	
End	1814	

Positional Information

Lat:	48 ° 39.00	N
Lon:	126 ° 39.94	W

Start

Lat:	48 ° 38.99	N
Lon:	126 ° 40.00	W

Bottom

Lat:	48 ° 38.99	N
Lon:	126 ° 39.99	W

End

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P4 Event #: 30 Ship: Tully UTC Date (dd mmm yyyy): 21 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	UBC										
1	1	132	Bot-10	✓	1322	x									
2	2	133	Bot-10	✓	1322										
3	3	134	Bot-10	✓	1322										
4	4	135	Bot-10	✓	1322										
5	6	136	1000	✓	999	x									
6	7	137	1000	✓	999										
7	8	138	1000	✓	999										
8	9	139	1000	✓	999										
9	13	140	500	✓	500	x									
10	14	141	500	✓	500										
11	15	142	500	✓	500										
12	16	143	500	✓	500										
13		144	10	✓	10	x									
14		145	10	✓	10										
15		146	10	✓	10										
16		147	10	✓	10										
17	5	148	Bot-10	✓	1322										
18	10	149	1000	✓	999										
19	11	150	800	✓	800										
20	12	151	600	✓	600										
21	17	152	400	✓	400										
22	18	153	300	✓	300										
23	19	154	200	✓	200										
24															

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

Watchkeeper(s): SP

Bottom Depth: 1323 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	20:50	13:50
Bottom	21:13	14:13
End	21:49	14:49

Positional Information

Start Lat: 48° 38.97' N

Start Lon: 126° 40.06' W

Bottom Lat: 48° 38.94' N

Bottom Lon: 126° 40.07' W

End Lat: 48° 39.00' N

End Lon: 126° 40.04' W

Extra comments:

Jade's cast

1-2-3-4-17-5-6

7-8-18-19-20-

9-10-11-12-21-22-23

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P4

Event #:

31

Ship:

Tully

UTC Date (dd:mmm:yyyy): 21 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS MB	DMSP MB	DMSP MB	Nut-F MB/SP		Chl MB/MB	HPLC SP	Phyto MB		pH GC				
1	1	179	300	✓ 300	x			x						x				-not using this bottle. used
2	3	180	200	✓ 200	x	x	x	x										#21 for 300m sample.
3	4	181	175	✓ 175	x	x	x	x						x				
4	5	182	100	✓ 100	x	x	x	x		x				x				
5	6	183	75	✓ 75	x			x		x				x				
6	7	184	50	✓ 50	x			x		x				x				
7	8	185	40	✓ 40	x			x		x								
8	9	186	30	✓ 30	x			x		x								Top valve open!!
9	11	187	25	✓ 25	x			x		x				x				
10	12	188	20	✓ 20	x x	x x	x x	x		x x								
11	13	189	15	✓ 15	x			x		x								
12	15	190	10	✓ 10	x			x x		x								
13	16	191	5	✓ 5	x	x	x	x		x								
14	18	192	0	✓ 2.7	x	x	x	x		x								
15	10	193	(30) M	✓ 30						x x	x x							
16	14	194	(15) M	✓ 15						x x	x x							
17	17	195	5	✓ 5						x x	x x	x x x						
18																		
19																		
20																		
21	2		300	✓ 300														as spare for #1 suspected valve issue on niskin 1
22																		
23																		
24																		

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

Bottom Depth:	1311	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	22:25	15:25
Bottom	22:33	15:33
End	22:56	15:56

Start	Positional Information	
Lat:	48 ° 39.01	N
Lon:	126 ° 39.98	W

Bottom	Lat: 48 ° 39.98 N	
	Lon: 126 ° 40.01 W	

End	Lat: 48 ° 39.94 N	
	Lon: 126 ° 40.07 W	

Extra comments:
DMS cast - OUT-OF-ORDER
1-21-213-4-5-6-7
8-15-9-10-11
-16-12-13-17-14

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P4

Event #:

32

Ship:

Tully

UTC Date (dd mmm yyyy):

21 AUG 2015

Cruise ID: 2015-10			Station: 14		Event: 1														Comments	
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials															
			Target Pressure	Confirmed Pressure	Cs															
1		155	500	✓	500		x													
2		156	500	✓	500		x													
3		157	500	✓	500		x													
4		158	500	✓	500		x													
5		159	500	✓	500		x													
6		160	500	✓	500		x													
7		161	400	✓	400		x													
8		162	400	✓	400		x													
9		163	400	✓	400		x													
10		164	400	✓	400		x													
11		165	400	✓	400		x													
12		166	400	✓	400		x													
13		167	300	✓	300		x													
14		168	300	✓	300		x													
15		169	300	✓	300		x													
16		170	300	✓	300		x													
17		171	300	✓	300		x													
18		172	300	✓	300		x													
19		173	200	✓	200		x													
20		174	200	✓	200		x													
21		175	200	✓	200		x													
22		176	200	✓	200		x													
23		177	200	✓	200		x													
24		178	200	✓	200		x													

http://www.pac

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

Bottom Depth: 1314 m
Transmisso Cleaned: Y/N

Time	UTC	Local
Start	23:29	16:29
Bottom	23:41	16:41
End	23:59	16:59

Positional Information

Lat:	48 ° 38.94	N
Lon:	126 ° 39.96	W

Start

Lat:	48 ° 38.93	N
Lon:	126 ° 40.01	W

Bottom

Lat:	48 ° 38.95	N
Lon:	126 ° 40.07	W

End

Extra comments:
Deep Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P5 Event #: 33 Ship: Tully UTC Date (dd mmm yyyy): 21 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	NH4						
				✓	Jade	SP	SP	SP	Jade						
1	1	189	250	✓ 250	x				x						NH4 water for La Perouse
2	2	190	30 Max	✓ 30	x		xx	xx							
3	3	191	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): SP

Bottom Depth:	2100	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0301	2001
Bottom	0344	2044
End	0428	2128

Positional Information		
Start	Lat:	48 ° 41.40 N
	Lon:	127 ° 10.07 W
▼		
Bottom	Lat:	48 ° 41.26 N
	Lon:	127 ° 10.36 W
▼		
End	Lat:	48 ° 41.11 N
	Lon:	127 ° 10.49 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P6 Event #: 34 Ship: Tully UTC Date (dd mmm yyyy): 22 8 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC	NH4		Nd							
1	2	199	250			x				x								NH4 water for La Perouse
2	5	200	30 / Max		77 _{MAX}	x		xx	xx									OBVIOUS MAX
3	6	201	5			x	x	xx	xx									
4	1	202	$\sigma = 27.22$		805							x						
5	3	203	$\sigma = 26.52$		215							x						
6	4	204	$\sigma = 25.69$		125							x						
7	7	205	5									x						
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15			NOTE:															
16		805	$\sigma = 27.22$		was at 811 at P3													
17		215	$\sigma = 26.52$		was at 150 at P3													
18		125	$\sigma = 25.69$		was at 50 at P3													
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 2539 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0722	0022
Bottom	0757	
End	0836	

Positional Information

Lat:	48 ° 44.61	N
Lon:	127 ° 40.00	W

▼

Lat:	48 ° 44.61	N
Lon:	127 ° 39.98	W

▼

Lat:	48 ° 44.60	N
Lon:	127 ° 40.00	W

Extra comments:
IOS & Aram
4, 1, 5, 6, 2, 3, 7

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P7 Event #: 35 Ship: Tully UTC Date (dd mmm yyyy): 22 8 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC							
1		206	30 / Max	77	x		x x	x x							
2		207	5		x	x	x x	x 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): H.M.

Bottom Depth: 2501 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	11 19	04 19
Bottom	11 56	
End	12 30	

Positional Information

Start	Lat: 48 ° 46. 62 N
	Lon: 128 ° 09. 91 W
Bottom	Lat: 48 ° 46. 59 N
	Lon: 128 ° 09. 95 W
End	Lat: 48 ° 46. 58 N
	Lon: 128 ° 09. 97 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P8 Event #: 39 Ship: Tully UTC Date (dd mmm yyyy): 22 8 15

			Rosette Operation		Samples Taken / Sampler's Initials										Comments				
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ☒ Pressure	Oxy	Sal	Nut Fr	Nut C		Chl	HPLC	UBC gases							
1		208	2000	☒		x x	x x	x	x			x x							
2		209	1500	☒		x	x	x	x			x x							
3		210	1250	☒		x	x	x x	x x			x x							
4		211	1000	☒		x	x x	x	x			x x							
5		212	800	☒		x	x	x	x			x x							
6		213	600	☒		x		x	x			x x							
7		214	400	☒		x		x	x			x x							
8		215	300	☒		x		x				x x							
9		216	250	☒		x x		x				x x							
10		217	200	☒		x		x				x x							
11		218	175	☒		x		x				x x							
12		219	150	☒		x		x x				x x							
13		220	125	☒		x		x											
14		221	100	☒		x		x		x		x x							
15		222	75	☒		x		x		x		x x							
16		223	50	☒		x		x		x		x x							
17		224	25	☒		x x		x		x		x x							
18		225	10	☒		x		x		x		x x							
19		226	5	☒		x	x	x		x									
20		227	50 (Max)	☒	75					x x	x x								
21		228	20 (Max)	☒	65					x x	x x								
22		229	5	☒						x x	x x								
23																			
24																			

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

Bottom Depth: 2514 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1701	1001
Bottom	1735	
End	1837	

Positional Information

Lat:	48 ° 49.01	N
Lon:	128 ° 39.95	W

Bottom

Lat:	48 ° 49.02	N
Lon:	128 ° 39.96	W

End

Lat:	48 ° 49.00	N
Lon:	128 ° 39.97	W

Extra comments:
Firing out of order
1-15, 20, 21, 16-19, 22

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10

Station: P9

Event #: 41

Ship: Tully

UTC Date (dd mmm yyyy): 22 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC		AML						
1		230	2000	✓ 2001		x				x						
2		231	2000	✓ 2000						x						
3		232	2000	✓ 2000						x						
4		233	2000	✓ 2001						x						
5		234	2000	✓ 2000						x						
6		235	2000	✓ 2000						x						
7		236	2000	✓ 2001						x						
8		237	2000	✓ 2000						x						
9		238	2000	✓ 2000						x						
10		239	2000	✓ 2000						x						
11		240	2000	✓ 2000						x						
12		241	2000	✓ 2000						x						
13		242	2000	✓ 2000						x						
14		243	2000	✓ 2000						x						
15		244	2000	✓ 2000						x						
16		245	2000	✓ 2000						x						
17		246	2000	✓ 2000						x						
18		247	2000	✓ 2000						x						
19		248	2000	✓ 2000						x						
20		249	2000	✓ 2000						x						
21		250	2000	✓ 2000						x						
22		251	2000	✓ 2000						x						
23		252	30 (Max)	✓ 70	x		xx	xx								
24		253	5	✓ 5	x	x	xx	xx								

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

Bottom Depth:	2335	m
Transmisso Cleaned:	☒ Y ☐ N	

	UTC	Local
Start	2136	1436
Bottom	22:10	15:10
End	22:49	15:49

Positional Information		
Start	Lat: 48 ° 51.45	N
	Lon: 129 ° 9.90	W

Bottom	Lat: 48 ° 51.43	N
	Lon: 129 ° 9.94	W

End	Lat: 48 ° 51.41	N
	Lon: 129 ° 9.93	W

Extra comments:
IOS and water for AML

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P10 Event #: 42 Ship: Tully UTC Date (dd mmm yyyy): 23 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC		Cs					
					JS	JS	SR	JS		Field					
1		254	300	☒ 300						x					
2		255	300	☒ 300						x					
3		256	300	☒ 300						x					
4		257	300	☒ 300						x					
5		258	300	☒ 300						x					
6		259	300	☒ 300						x					
7		260	200	☒ 200						x					
8		261	200	☒ 200						x					
9		262	200	☒ 200						x					
10		263	200	☒ 200						x					
11		264	200	☒ 200						x					
12		265	200	☒ 200						x					
13		266	50 / Max	☒ 60	x		xx	xx							
14		267	5	☒	x	x	xx	xx							
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth:	2638	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0121	1821
Bottom	0156	1856
End	0236	1936

Positional Information
Start
Lat: 48° 53.61 N
Lon: 129° 39.98 W

Start

Bottom
Lat: 48° 53.64 N
Lon: 129° 39.91 W

Bottom

End
Lat: 48° 53.67 N
Lon: 129° 39.84 W

End

Extra comments:
IOS and Cesium

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P10

Event #:

43

Ship:

Tully

UTC Date (dd mmm yyyy):

23 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC		Cs					
1		268	150	✓ 150						x					
2		269	150	✓ 150						x					
3		270	150	✓ 150						x					
4		271	150	✓ 150						x					
5		272	150	✓ 150						x					
6		273	150	✓ 150						x					
7		274	50	✓ 50						x					
8		275	50	✓ 50						x					
9		276	50	✓ 50						x					
10		277	50	✓ 50						x					
11		278	50	✓ 50						x					
12		279	50	✓ 50						x					
13		280	5	✓ 5						x					
14		281	5	✓ 5						x					
15		282	5	✓ 5						x					
16		283	5	✓ 5						x					
17		284	5	✓ 5						x					
18		285	5	✓ 5						x					
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 2659 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0301	2001
Bottom	0305	2005
End	0311	2011

Positional Information

Lat:	48 ° 53.76	N
Lon:	129 ° 39.85	W

Start

Lat:	48 ° 53.77	N
Lon:	129 ° 39.88	W

Bottom

Lat:	48 ° 53.77	N
Lon:	129 ° 39.87	W

End

Extra comments:
2nd half of Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P11

Event #:

44

Ship:

Tully

UTC Date (dd mmm yyyy):

23 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC		AML					
1	1	286	2000	✓ 2000		x				x					
2	2	287	2000	✓ 2000						x					
3	3	288	2000	✓ 2000						x					
4	4	289	2000	✓ 2000						x					
5	5	290	2000	✓ 2000						x					
6	6	291	2000	✓ 2000						x					
7	7	292	2000	✓ 2000						x					
8	8	293	2000	✓ 2000						x					
9	9	294	2000	✓ 2000						x					
10	10	295	2000	✓ 2000						x					
11	11	296	2000	✓ 2000						x					
12	12	297	2000	✓ 2000						x					
13	13	298	2000	✓ 2000						x					
14	14	299	2000	✓ 2000						x					
15	15	300	2000	✓ 2000						x					
16	16	301	2000	✓ 2000						x					
17	17	302	2000	✓ 2000						x					
18	18	303	2000	✓ 2000						x					
19	19	304	2000	✓ 2000						x					
20	20	305	2000	✓ 2000						x					
21	21	306	2000	✓ 2000						x					
22	22	307	2000	✓ 2000						x					
23	23	308	50 (Max)	50	x		xx	xx							
24	24	309	5		x	x	xx	xx							

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): SP/HM

Bottom Depth: 2751 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0559	2259
Bottom	0644	2344
End	0721	

Positional Information

Start	Lat: 48 ° 56.0	N
	Lon: 130 ° 9.89	W

Bottom	Lat: 48 ° 55.86	N
	Lon: 130 ° 9.89	W

End	Lat: 48 ° 55.94	N
	Lon: 130 ° 09.97	W

Extra comments:

IOS and water for AML

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P12 Event #: 45 Ship: Tully UTC Date (dd mmm yyyy): 23 0 15

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments			
			Target Pressure	Confirmed ✓	Pressure	Nut-F	Sal	Chl		18O	NO3	NH4	17O	ONAr	DO	NH4					
						IOS	IOS	IOS				incub									
1	2	310	Below ML		35		x						x x								
2	1	311	1%		71	x	x	x		x x x	x x	x			x x	x x					
3	3	312	15%		10	x	x	x		x x x	x x	x			x x	x x					
4	5	313	30%		4	x	x	x		x x x	x	x			x x	x x					
5	6	314	50%		3	x	x	x		x x x	x	x			x x	x x					
6	7	315	100%		2.5	x		x			x x x	x x x				x x					
7	8	316	100%		2.5					x x x			x x	x x	x x						
8	4	317	in ML		5									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): H.m.

Bottom Depth: 3232 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0951	0251
Bottom	0950	
End	1008	

Positional Information

Lat:	48 ° 58.16	N
Lon:	120 ° 39.99	W

▼

Lat:	48 ° 58.16	N
Lon:	130 ° 40.01	W

▼

Lat:	48 ° 58.19	N
Lon:	130 ° 40.00	W

Extra comments:
Lianna's cast
OUT-OF-ORDER
2, 1, 3, 8, 4-7

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

UTC Date (dd mmm yyyy): 23 08 15

Extra comments:
Deep Go-flo cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P12 Event #: 47 Ship: Tully UTC Date (dd mmm yyyy): 23 8 15

			Rosette Operation		Samples Taken / Sampler's Initials															UTC Date (dd r
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure		OXY	Sal	Nut-F	Nut-C	DIC	pH			SAGs	DNA	Gases	NH4			Comments
				✓	Pressure															
1		322	Bot-10	✓	3276	x		x	x	x	x			x	x	xx	x			
2		323	3000	✓		xx	xx	x	x	xx	x									
3		324	3000	✓		x	x	x	x	x	x			x	x	xx	x			FORGOT TO
4		325	2500	✓		x	xx	x	x	x	xxx									START ACTIVE
5		326	2000	✓		x	x	x	x	x	x						x			WILL COLLECT
6		327	1500	✓		x	xx	x	x	x	x			x	x	xx	x			WATER ON
7		328	1250	✓		x	x	xx	xx	x	x			x	x	xx	x			UP CAST
8		329	1000	✓		x	xx	x	x	x	x			x	x	xx	x			AND REDO
9		330	800	✓		xx		x	x	x	x			x	x	xx	x			DOWN CAST
10		331	600	✓		x		x	x	x	x			x	x	xx	x			ON LATE
11		332	400	✓		x		x	x	x	x			x	x	xx	x			2000 m CAST
12		333	300	✓		x		x		x	x			x	x	xx	x			- WILL GO TO
13		334	250	✓		x		x		x	x			x	x	xx	x			3276 ON
14		335	200	✓		x		x		x	x					xx	x			TOAT CAST
15		336	175	✓		xx		x		x	x			x	x	xx	x			
16		337	150	✓		x		x		x	x					xx	x			
17		338	125	✓		x		x		x	xxx			x	x	xx	x			
18		339	100	✓		x		xx		x	x						x			
19		340	75	✓	50	x		x		x	x			x	x	xx	x			
20		341	50	✓	25	x		x		x	x					xx	x			
21		342	25	✓	10	x		x		x	x			x	x	xx	x			
22		343	10	✓	5	x		x		x	x			x	x	xx	x			
23		344	5	✓		xx	x	x		x	x			x	x	xx	x			
24																	x			

Version: 25 Nov 2011

Transmissometer to be cleaned before each cast, do not use a

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): H.r.Bottom Depth: 3232 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1229	0529
Bottom	1328	
End		

Positional Information
Start
Lat: 48 ° 58 .20 N
Lon: 130 ° 39 .99 WBottom
Lat: 48 ° 58 19 N
Lon: 130 ° 39 93 WEnd
Lat: 48 ° 59 N
Lon: 130 ° W

Extra comments:

Deep cast
NISKIN
not

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P12 Event #: 48 Ship: Tully UTC Date (dd mmm yyyy): 23 08 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ☒ Pressure	Sal	Nut-fr	Fe	Fe								
							filt	unfilt								
1		345	50		x	x	x x	x x								
2		346	40				x	x								
3		347	25				x	x								
4		348	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 ☒ Niskin other?
Watchkeeper(s): K.S.

Bottom Depth: 3232 m
Transmisso Cleaned: ~~Y~~ N

Time	UTC	Local
Start	15:45	08:45
Bottom		
End	16:13	09:13

Positional Information
Start
Lat: 48 ° 58.24 N
Lon: 130 ° 40.00 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: 48 ° 58.19 N
Lon: 130 ° 39.96 W

Extra comments:
Shallow Go-flo cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P12 Event #: 50 Ship: Tully UTC Date (dd mmm yyyy): 23 8 15

			Rosette Operation		Samples Taken / Sampler's Initials												Comments		
Niskin #	Firing #	Sample #	Target Pressure	Confirmed	Niko gases														
			✓	Pressure															
1		349	200	✓		x x													
2		350	160	✓		x x													
3		351	140	✓		x x													
4		352	120	✓		x x													
5		353	100	✓		x x													
6		354	85	✓		x x													
7		355	75	✓		x x													
8		356	70	✓		x x													
9		357	65	✓		x x													
10		358	60	✓		x x													
11		359	55	✓		x x													
12		360	50	✓		x x													
13		361	45	✓		x x													
14		362	50	✓		x x												OUT OF ORDER	
15		363	40	✓		x x													
16		364	35	✓		x x													
17		365	30	✓		x x													
18		366	25	✓		x x													
19		367	20	✓		x x													
20		368	15	✓		x x													
21		369	10	✓		x x													
22		370	5	✓		x x													
23		371	2	✓		x x													
24		372	2	✓		x x													

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): H.M.Bottom Depth: 3235 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1649	0949
Bottom	1655	
End	1721	

Positional Information
Start
Lat: 48 ° 58.13 N
Lon: 130 ° 39.99 WBottom
Lat: 48 ° 58.20 N
Lon: 130 ° 39.97 WEnd
Lat: 48 ° 58.19 N
Lon: 130 ° 39.96 WExtra comments:
Niko's cast
1-12, 14, 13, 15-24
OUT OF ORDER

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P12

Event #:

53

Ship:

Tully

UTC Date (dd mmm yyyy):

23 AUG 2015

Cruise ID:			2015-10			Station:			P12			Event #:			Smp:			Comments			
Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials								Chl	HPLC						
			Target Pressure	Confirmed ✓	Pressure	DMS	DMSP	DMSP	Nut-F												
						MR MB	t MR MB	d MR MB	SP			GC	GC								
1	1	373	300	✓	300	x			x												
2	2	374	200	✓	200	x	x	x	x												
3	3	375	175	✓	175	x	x	x	x												
4	4	376	100	✓	100	x	x	x	x			x									
5	5	377	75	✓	75	x			x			x									
6	6	378	50	✓	50	x			x			x									
7	8	379	40	✓	40	x			x			xx									
8	10	380	30	✓	30	x			x			x									
9	11	381	25	✓	25	x			x			x									
10	12	382	20	✓	20	xx	xx	xx	x			x									
11	13	383	15	✓	15	x			x			x									
12	14	384	10	✓	10	x			xx			x									
13	15	385	5	✓	5	x	x	x	x			x									
14	17	386	0	✓	3	x	x	x	x			x									
15	7	387	50 (M)	✓	50							xx	xx								10 below max.
16	9	388	20 (M)	✓	40							xx	xx								chl max
17	16	389	5	✓	5							xx	xx								
18																					
19																					
20																					
21																					
22																					
23																					
24																					

<http://www.pa>

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

SP

Bottom Depth: 3002 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	21:26	14:26
Bottom	21:32	14:32
End	21:55	14:55

Positional Information

Lat:	48 ° 58.16	N
Lon:	130 ° 40.12	W

Lat:	48 ° 58.16	N
Lon:	130 ° 40.13	W

Lat:	48 ° 58.16	N
Lon:	130 ° 40.11	W

Extra comments:

DMS cast - OUT-OF-ORDER

1-2-3-4-5-6-15-

7-16-8-9-10-11

12-13-17-14

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P12 Event #: 50 54 Ship: Tully UTC Date (dd mmm yyyy): 23 08 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Sal	Nut-fr	Fe filt	Fe unfilt									
1		390	200	300	x	x	x x	x x									
2		391	150				x	x									
3		392	100				x	x									
4		393	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 ☒ Niskin other?
Watchkeeper(s): K.S.

Bottom Depth:	2990	m
Transmisso Cleaned:	YTN	

Time	UTC	Local
Start	22:06	15:06
Bottom	22:35	15:35
End	22:50	15:50

Positional Information			
Start	Lat:	48 ° 50.17	N
	Lon:	130 ° 40.11	W
▼			
Bottom	Lat:	48 ° 50.11	N
	Lon:	130 ° 40.14	W
▼			
End	Lat:	48 ° 50.03	N
	Lon:	130 ° 40.13	W

Extra comments:
Mid Go-flo cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P12 Event #: 55 Ship: Tully UTC Date (dd mmm yyyy): 23 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	UBC	DCF	H2S								
1	1	394	2000	✓		x									
2	2	395	2000	✓											
3	3	396	2000	✓											
4	4	397	2000	✓											
5	7	398	1000	✓		x									
6	8	399	1000	✓											
7	9	400	1000	✓											
8	10	401	1000	✓											
9	12	402	500	✓	500	x									
10	13	403	500	✓	500	.									
11	14	404	500	✓	500										
12	15	405	500	✓	500										
13	18	406	10	✓	10	x									
14	19	407	10	✓	10										
15	20	408	10	✓	10										
16	21	409	10	✓	10										
17	5	410	1500	✓	1500			x	x						
18	6	411	1000	✓	1000			x	x						
19	11	412	600	✓	600			x	x						
20	16	413	200	✓	200			x							
21	17	414	100	✓	100			x							
22															
23															
24															

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

Bottom Depth:	3238	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	23:05	16:05
Bottom	00:05	17:05
End	01:08	18:08

Positional Information		
Start	Lat: 48 ° 58.11	N
	Lon: 130 ° 40.17	W

Bottom	Lat: 48 ° 58.16	N
	Lon: 130 ° 40.15	W

End	Lat: 48 ° 58.18	N
	Lon: 130 ° 40.26	W

Extra comments:
Jade's cast
1-2-3-4-17-5-6-7
8-18-19-9-10-11-12
20-21-13-14-15-16

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P13 Event #: 56 Ship: Tully UTC Date (dd mmm yyyy): 24 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC		AML					
1		415	2000	✓ 2000		x				x					
2		416	2000	✓ 2000						x					
3		417	2000	✓ 2000						x					
4		418	2000	✓ 2000						x					
5		419	2000	✓ 2000						x					
6		420	2000	✓ 2000						x					
7		421	2000	✓ 2000						x					
8		422	2000	✓ 2000						x					
9		423	2000	✓ 2000						x					
10		424	2000	✓ 2000						x					
11		425	2000	✓ 2000						x					
12		426	2000	✓ 2000						x					
13		427	2000	✓ 2000						x					
14		428	2000	✓ 2000						x					
15		429	2000	✓ 2000						x					
16		430	2000	✓ 2000						x					
17		431	2000	✓ 2000						x					
18		432	2000	✓ 2000						x					
19		433	2000	✓ 2000						x					
20		434	2000	✓ 2000						x					
21		435	2000	✓ 2000						x					
22		436	2000	✓ 2000						x					
23		437	50 (Max)	✓ 40	x		x x	x x							
24		438	5	✓	x	x	x x	x x							

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

Bottom Depth:	3152	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	06:06	23:06
Bottom	0641	
End	0719	

Positional Information		
Start	Lat: 49 ° 2.62	N
	Lon: 131 ° 39.99	W

Bottom	Lat: 49 ° 02.61	N
	Lon: 131 ° 39.97	W

End	Lat: 49 ° 02.61	N
	Lon: 131 ° 39.93	W

Extra comments:
IOS and water for AML

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P14 Event #: 57 Ship: Tully UTC Date (dd mmm yyyy): 24 9 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	
1		439	30 (Max)	✓ 45	x		x x	x x	
2		440	5	✓	x	x	x x	x 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): H.M.

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

Time	UTC	Local
Start	1205	
Bottom	1239	
End	1312	

Start	Positional Information		
	Lat:	49 ° 07.36	N
	Lon:	132 ° 39.98	W
Bottom	▼		
	Lat:	49 ° 07.37	N
	Lon:	132 ° 39.96	W
End	▼		
	Lat:	49 ° 07.39	N
	Lon:	132 ° 40.00	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P15

Event #:

59

Ship:

Tully

UTC Date (dd|mmm|yyyy): 24 | 8 | 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	AML						
1	1	441	2000	✓ 2000		x			x						
2	2	442	2000	✓ 2000					x						
3	3	443	2000	✓ 2000					x						
4	4	444	2000	✓ 2000					x						
5	5	445	2000	✓ 2000					x						
6	6	446	2000	✓ 2000					x						
7	7	447	2000	✓ 2000					x						
8	8	448	2000	✓ 2000					x						
9	9	449	2000	✓ 2000					x						
10	10	450	2000	✓ 2000					x						
11	11	451	2000	✓ 2000					x						
12	12	452	2000	✓ 2000					x						
13	13	453	2000	✓ 2000					x						
14	14	454	2000	✓ 2000					x						
15	15	455	2000	✓ 2000					x						
16	16	456	2000	✓ 2000					x						
17	17	457	2000	✓ 2000					x						
18	18	458	2000	✓ 2000					x						
19	19	459	2000	✓ 2000					x						
20	20	460	2000	✓ 2000					x						
21	21	461	2000	✓ 2000					x						
22	22	462	2000	✓ 2000					x						
23	23	463	50 Max	✓ 50	x		xx	xx							
24	24	464	5	✓ 5	x	x	xx	xx							

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

Bottom Depth: 3407 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1817	1117
Bottom	1855	1155
End	1941	1241

Positional Information

Lat:	49 ° 12.01	N
Lon:	133 ° 40.00	W

Start

Lat:	49 ° 12.04	N
Lon:	133 ° 39.99	W

Bottom

Lat:	49 ° 12.07	N
Lon:	133 ° 40.39	W

End

Extra comments:
IOS and water for AML

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10

Station: P16

Event #: 61

Ship: Tully

UTC Date (dd mmm yyyy): 25 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC				
					mk	t mg	dmg	58		mf	mg				
1	1	465	300	✓ 300	x			x							
2	2	466	200	✓ 200	x	x	x	x							
3	3	467	175	✓ 175	x	x	x	x							
4	4	468	100	✓ 100	x	x	x	x		x					
5	5	469	75	✓ 75	x			x		x					
6	7	470	50	✓ 50	x			x		xx					
7	9	471	40	✓ 40	x			x		x					
8	10	472	30	✓ 30	x			x		x					
9	11	473	25	✓ 25	x			x		x					
10	12	474	20	✓ 20	xx	xx	xx	x		x					
11	13	475	15	✓ 15	x			x		x					
12	14	476	10	✓ 10	x			xx		x					
13	15	477	5	✓ 5	x	x	x	x		x					
14	17	478	0	✓ 3	x	x	x	x		x					
15	6	479	50 (M)	✓ 50						xx	xx				
16	8	480	20 (M)	✓ 50						xx	xx				
17	16	481	5	✓ 5						xx	xx				
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 3632 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	00:48	17:48
Bottom	00:53	17:53
End	01:15	18:15

Positional Information
Start
Lat: 49 ° 17.02 N
Lon: 134 ° 39.86 W

Bottom
Lat: 49 ° 17.03 N
Lon: 134 ° 40.05 W

End
Lat: 49 ° 17.03 N
Lon: 134 ° 40.08 W

Extra comments:

DMS cast - OUT-OF-ORDER

1-2-3-4-5-15-6-16

7-8-9-10-11-12

13-17-14

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P16

Event #:

62

Ship:

Tully

UTC Date (dd mmm yyyy):

25 AUG 2015

			Rosette Operation		Samples Taken / Sampler's Initials												Comments	
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Cs													
				✓														
						Rick												
1	1	482	500	✓	500	x												
2	2	483	500	✓	500	x												
3	3	484	500	✓	500	x												
4	4	485	500	✓	500	x												
5	5	486	500	✓	500	x												
6	6	487	500	✓	500	x												
7	7	488	400	✓	400	x												
8	8	489	400	✓	400	x												
9	9	490	400	✓	400	x												
10	10	491	400	✓	400	x												
11	11	492	400	✓	400	x												
12	12	493	400	✓	400	x												
13	13	494	300	✓	300	x												
14	14	495	300	✓	300	x												
15	15	496	300	✓	300	x												
16	16	497	300	✓	300	x												
17	17	498	300	✓	300	x												
18	18	499	300	✓	300	x												
19	19	500	200	✓	200	x												
20	20	501	200	✓	200	x												
21	21	502	200	✓	200	x												
22	22	503	200	✓	200	x												
23	23	504	200	✓	200	x												
24	24	505	200	✓	200	x												

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

Bottom Depth:	3632	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0206	2106
Bottom	0215	2115
End	0231	2131

Positional Information	
Start	Lat: 49 ° 17.06 N
	Lon: 134 ° 40.1 W

Bottom	Lat: 49 ° 17.07 N
	Lon: 134 ° 40.12 W

End	Lat: 49 ° 17.09 N
	Lon: 134 ° 40.17 W

Extra comments:

Deep Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P16 Event #: 64 Ship: Tully UTC Date (dd:mmm:yyyy): 25 9 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments									
			Target Pressure	Confirmed ☒ Pressure	Sal	Nut-fr	Fe filt	Fe unfilt														
1		506	50		x	x	x x	x x														
2		507	40				x	x														
3		508	25				x	x														
4		509	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): K.S.

Bottom Depth: 3680 m
Transmisso Cleaned: Y + N

Time	UTC	Local
Start	<u>06:07</u>	<u>23 07</u>
Bottom		
End	<u>06 35</u>	<u>23 35</u>

Positional Information -
Start
Lat: 49 ° 16.97 N
Lon: 134 ° 40.75 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: 49 ° 17.30 N
Lon: 134 ° 41.05 W

Extra comments:
Shallow Go-flo cast
25m PTL Broken

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P16 Event #: 66 Ship: Tully UTC Date (dd mmm yyyy): 25 8 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Sal	Nut-fr	Fe filt	Fe unfilt									
1		510 300			x	x	xx	xx									
2		511	150				x X	xx									
3		512	100				x	x									
4		513	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): K.S.

Bottom Depth: 3632 m
Transmisso Cleaned: Y L N

Time	UTC	Local
Start	<u>0720</u>	
Bottom	<u>0733</u>	
End	<u>0745</u>	

Positional Information

Start	Lat: <u>49 ° 17.02</u>	<u>N</u>
	Lon: <u>137 ° 39.93</u>	<u>W</u>

▼

Bottom	Lat: °	<u>N</u>
	Lon: °	<u>W</u>

▼

End	Lat: <u>49 ° 16.98</u>	<u>N</u>
	Lon: <u>137 ° 39.93</u>	<u>W</u>

Extra comments:
Mid Go-flo cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P16 Event #: 67 Ship: Tully UTC Date (dd mmm/yyyy): 25 08 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Sal	Nut-fr	Fe filt	Fe unfilt									
1		514	800		x	x	x x	x x									
2		515	600				x	x									
3		516	400				x	x									
4		517	200				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 ☒ Niskin ☐ other?
Watchkeeper(s): KS

Bottom Depth: 3832 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0815	
Bottom	0844	
End	0915	

Positional Information

Start	Lat:	49 ° 16.96	N
	Lon:	134 ° 39.90	W
Bottom	Lat:	°	N
	Lon:	°	W
End	Lat:	49 ° 17.07	N
	Lon:	134 ° 39.95	W

Extra comments:
Deep Go-flo cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P16 Event #: 68 Ship: Tully UTC Date (dd mmm yyyy): 25 9 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F IOS	Sal IOS	Chl IOS	180	NO3	NH4 incub	170	ONAr	DO	NH4	
1	2	518	Below ML	43		x					xx				
2	1	519	1%	53	x	x	x	xxx	xx	x			xx	xx	
3	3	520	15%	8	x	x	x	xxx	xx	x			xx	xx	
4	5	521	30%	4	x	x	x	xxx	x	x			xx	xx	
5	6	522	50%	3	x	x	x	xxx	x	x			xx	xx	
6	7	523	100%	2.5	x		x		xxx	xxx				xx	
7	8	524	100%	2.5				xxx			xx	xx	xx		
8	4	525	in ML	5								xx	xx		
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: 363 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	10 04	03 04
Bottom	10 06	
End	10 16	

Positional Information
Start
Lat: 49 ° 17.02 N
Lon: 134 ° 39.94 W

Bottom
Lat: 49 ° 17.02 N
Lon: 134 ° 39.95 W

End
Lat: 49 ° 17.00 N
Lon: 134 ° 39.90 W

Extra comments:
Lianna's cast
OUT-OF-ORDER
2, 1, 3, 8, 4, 5, 6, 7

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P16 Event #: 69 Ship: Tully UTC Date (dd mmm yyyy): 25 8 15

			Rosette Operation		Samples Taken / Sampler's Initials													Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ✓ Pressure		Cs												
1		526	150	✓			x											
2		527	150	✓			x											
3		528	150	✓			x											
4		529	150	✓			x											
5		530	150	✓			x											
6		531	150	✓			x											
7		532	100	✓			x											
8		533	100	✓			x											
9		534	100	✓			x											
10		535	100	✓			x											
11		536	100	✓			x											
12		537	100	✓			x											
13		538	50	✓			x											
14		539	50	✓			x											
15		540	50	✓			x											
16		541	50	✓			x											
17		542	50	✓			x											
18		543	50	✓			x											
19		544	5	✓			x											
20		545	5	✓			x											
21		546	5	✓			x											
22		547	5	✓			x											
23		548	5	✓			x											
24		549	5	✓			x											

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

Bottom Depth: 3631 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1152	0452
Bottom	1155	
End	1205	

Positional Information

Lat:	49 ° 16.95	N
Lon:	134 ° 39.88	W

Start

Lat:	49 ° 16.96	N
Lon:	134 ° 39.89	W

Bottom

Lat:	49 ° 16.99	N
Lon:	134 ° 39.90	W

End

Extra comments:
Shallow Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P16 Event #: 70 Ship: Tully UTC Date (dd mmm yyyy): 25 0 15

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		
					HM/HR				K ² /NR	GC					HF/SS				
1		550	Bot-10	✓	3695	x		x	x	x	x				xx	x	x		
2		551	3500	✓		x	xx	xx	xx	xx	x								
3		552	3500	✓		xx	x	x	x	x	x								
4		553	3000	✓	3000	x	xx	x	x	x	x				xx	x	x		
5		554	2500	✓	2500	x	x	x	x	x	xxx							SPIGOT KNOCKED OFF	
6		555	2000	✓		x	xx	x	x	x	x				xx	x	x		
7		556	1500	✓		x	x	x	x	x	xxx				xx	x	x		
8		557	1250	✓		x	xx	x	x	x	x				xx	x	x		
9		558	1000	✓		x	x	x	x	x	x				xx	x	x		
10		559	800	✓		xx	x	x	x	x	x				xx	x	x		
11		560	600	✓		x	x	x	x	x	x				xx	x	x		
12		561	400	✓		x	x	x	x	x	x				xx	x	x		
13		562	300	✓		x	x	x		x	x				xx	x	x		
14		563	250	✓		x	x	x		x	xxx								
15		564	200	✓		x	x	x		x	x				xx	x	x		
16		565	175	✓		xx	x	x		x	x								
17		566	150	✓		x	x	x		x	x				xx	x	x		
18		567	125	✓		x	x	xx		x	x								
19		568	100	✓		x	x	x		x	x				xx	x	x		
20		569	75	✓		x	x	x		x	x				xx				
21		570	50	✓		x	x	x		x	x				xx	x	x	SPIGOT CLOSED NOT LEAKING	
22		571	25	✓		xx	x	x		x	x				xx	x	x		
23		572	10	✓		x	x	x		x	x				xx	x	x		
24		573	5	✓		x	x	x		x	x								

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

Bottom Depth:	3631	m
Transmisso Cleaned:	(Y) / N	

	Time	UTC	Local
Start	1237		0537
Bottom	1343		
End	1527		0837

Positional Information		
Start	Lat: 49 ° 16.97	N
	Lon: 134 ° 39.95	W

Start

Bottom

End

Bottom	Lat: 49 ° 17.02	N
	Lon: 134 ° 40.11	W

End	Lat: 49 ° 17.07	N
	Lon: 134 ° 39.96	W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P17

Event #: 72

Ship: Tully

UTC Date (dd.mmm.yyyy): 25 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC		AML					
1	1	574	2000	✓ 2000		x				x					
2	2	575	2000	✓ 2000						x					
3	3	576	2000	✓ 2000						x					
4	4	577	2000	✓ 2000						x					
5	5	578	2000	✓ 2000						x					
6	6	579	2000	✓ 2000						x					
7	7	580	2000	✓ 2000						x					
8	8	581	2000	✓ 2000						x					
9	9	582	2000	✓ 2000						x					
10	10	583	2000	✓ 2000						x					
11	11	584	2000	✓ 2000						x					
12	12	585	2000	✓ 2000						x					
13	13	586	2000	✓ 2000						x					
14	14	587	2000	✓ 2000						x					
15	15	588	2000	✓ 2000						x					
16	16	589	2000	✓ 2000						x					
17	17	590	2000	✓ 2000						x					
18	18	591	2000	✓ 2000						x					
19	19	592	2000	✓ 2000						x					
20	20	593	2000	✓ 2000						x					
21	21	594	2000	✓ 2000						x					
22	22	595	2000	✓ 2000						x					
23	23	596	50 (Max)	✓ 40	x		x x	x x							
24		597	5	✓ 5	x	x	x x	x x							

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): SP

Bottom Depth: 3640 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	20:05	1305
Bottom	20:40	1340
End	21:19	1419

Positional Information

Lat:	49 ° 21.04	N
Lon:	135 ° 39.87	W

Lat:	49 ° 21.00	N
Lon:	135 ° 39.89	W

Lat:	49 ° 21.02	N
Lon:	135 ° 39.88	W

Extra comments:

IOS and water for AML

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P18

Event #: 73

Ship: Tully

UTC Date (dd:mmm:yyyy): 26 AUG 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments							
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	NH4	Nd										
1		598	$\sigma = 27.22$	✓	805							x								
2		599	$\sigma = 26.52$	✓	201							x								
3		600	$\sigma = 25.69$	✓	120							x								
4		601	5	✓	5							x								
5		602	50 / Max	✓	45	x		xx	xx											
6		603	5	✓	5	x	x	xx	xx											
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15			NOTE:																	
16			$\sigma = 27.22$		was at 759 at P17	805														
17			$\sigma = 26.52$		was at 171 at P17	201														
18			$\sigma = 25.69$		was at 96 at P17	115														
19																				
20																				
21																				
22																				
23																				
24																				

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

Bottom Depth:	3832	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	0157	1857
Bottom	0232	1932
End	0317	2017

Positional Information
Start
Lat: 49 ° 26.01 N
Lon: 136 ° 39.95 W

Bottom
Lat: 49 ° 26.04 N
Lon: 136 ° 39.95 W

End
Lat: 49 ° 26.01 N
Lon: 136 ° 310.00 W

Extra comments:
IOS & Aram
OUT-OF-ORDER
1-2-3-5-4-6

Water Properties Group

Sampling Log

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

Cruise ID:

2015-10

Station:

P19

Event #: 74

Ship: Tully

UTC Date (dd mmm yyyy): 26 8 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC		AML					
1		604	2000	✓		x				x					
2		605	2000	✓						x					
3		606	2000	✓						x					
4		607	2000	✓						x					
5		608	2000	✓						x					
6		609	2000	✓						x					
7		610	2000	✓						x					
8		611	2000	✓						x					
9		612	2000	✓						x					
10		613	2000	✓						x					
11		614	2000	✓						x					
12		615	2000	✓						x					
13		616	2000	✓						x					
14		617	2000	✓						x					
15		618	2000	✓						x					
16		619	2000	✓						x					
17		620	2000	✓						x					
18		621	2000	✓						x					
19		622	2000	✓						x					
20		623	2000	✓						x					
21		624	2000	✓						x					
22		625	2000	✓						x					
23		626	50 / Max	50	x		x x	x x							
24		627	5		x	x	x x	x x							

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): H.M.

Bottom Depth: 3926 m

Transmisso Cleaned: Y N

Time	UTC	Local
Start	0752	0052
Bottom	0826	
End	0904	

Positional Information

Lat: 49 ° 30.00 N
Lon: 137 ° 40.11 W

Lat: 49 ° 29.98 N
Lon: 137 ° 40.09 W

Lat: 49 ° 30.01 N
Lon: 137 ° 40.15 W

Extra comments:

IOS and water for AML

Water Properties Group

Sampling Log

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

Cruise ID: 2015-10 Station: P20 Event #: 75 Ship: Tully UTC Date (dd mmm yyyy): 26 8 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F IOS	Sal IOS	Chl IOS	180	NO3	NH4 incub	170	ONAr	DO	NH4			
1	2	628	Below ML	42		x					xx						
2	1	629	1%	44	x	x	x	xxx	xx	x			xx	xx			
3	3	630	15%	6	x	x	x	xxx	xx	x			xx	xx			
4	5	631	30%	3	x	x	x	xxx	x	x			xx	xx			
5	6	632	50%	3	x	x	x	xxx	x	x			xx	xx			
6	7	633	100%	2.5	x		x		xxx	xxx				xx			
7	0	634	100%	2.5				xxx			xx	xx	xx				
8	4	635	in ML	5								xx	xx				
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: 3941 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1359	0659
Bottom	1403	
End	1410	

Positional Information

Lat:	49 ° 34.01	N
Lon:	138 ° 40.02	W

Start

Lat:	49 ° 34.00	N
Lon:	138 ° 40.03	W

Bottom

Lat:	49 ° 34.00	N
Lon:	138 ° 40.02	W

End

Extra comments:
Lianna's cast
OUT-OF-ORDER
2, 1, 3, 8, 4, 5, 6, 7