

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: Haro 59 Event #: 1/2 Ship: Tully UTC Date (dd|mmm|yyyy): 09 | 06 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DIC	Oxy	Nut-fr	Sal	pH		BSi	NOT	DSi					
1		1	Bot-10	✓ 229	x	x	x		x									
2		2	200	✓ 200	xx	x	x		x									
3		3	175	✓ 175?	x	x	x		xxx									
4		4	150	✓ 150	x	x	x		x									
5		5	125	✓ 125	x	xx	x		x									
6		6	100	✓ 100	x	x	x		x									
7		7	80	✓ 80	xx	x	xx		x									
8		8	60	✓ 60	x	x	x		x									
9		9	50	✓ 50	x	x	x		x									
10		10	40	✓ 40	x	x	x		x									
11		11	30	✓ 30	x	x	x		x									
12		12	20	✓ 20	x	x	x		x									
13		13	10	✓ 10	xx	x	x		xxx									
14		14	5	✓ 5	x	xx	x		x									
15		15	0	✓	x	x	x		x									
16		16	Bot-10	✓ 229							x	x	x					
17		17	Bot-10	✓ 229							x							
18		18	Mid	✓ 100							x	x	x					
19		19	Mid	✓ 100							x							
20		20	0								x	x	x					
21		21	0								x							
22																		
23																		
24																		Not needed

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

Bottom Depth: 239 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0437	2137
Bottom	0442	
End	0508	

Positional Information
Start
Lat: 48 ° 36.87 N
Lon: 123 ° 14.89 W

Bottom
Lat: 48 ° 36.84 N
Lon: 123 ° 14.88 W

End
Lat: 48 ° 36.83 N
Lon: 123 ° 14.90 W

Extra comments:
Debby and Roger
OUT-OF-ORDER

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: JF2 Event #: 4 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Bsi	Nd											
1	1	22	Bot-10	✓	177.3		x										
2	2	23	Bot-10	✓	177.3		x										
3	3	24	Bot-10	✓	177.3	x											
4	4	25	Bot-10	✓	177.3	x											
5	5	26	Inter 1	✓	125.2	x											
6	6	27	Inter 1	✓	125.2	x											
7	7	28	Inter 2	✓	101.4	x											
8	8	29	Inter 2	✓	101.4	x											
9	9	30	Inter 3	✓	80.8	x											
10	10	31	Inter 3	✓	80.8	x											
11	11	32	Subs	✓	25.3	x											
12	12	33	Subs	✓	25.3	x											
13	13	34	0	✓	2.4	x											
14	14	35	0	✓	2.4	x											
15	15	36	0	✓	2.4		x										
16	16	37	0	✓	2.4		x										
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 187 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	10:34	03:34
Bottom	10:38	03:38
End	10:47	03:47

Positional Information
Start
Lat: 48 ° 18 00 N
Lon: 124 ° 0 09 W

Start

Bottom
Lat: 48 ° 17 99 N
Lon: 124 ° 0 10 W

Bottom

End
Lat: 48 ° 18 04 N
Lon: 124 ° 0 13 W

End

Extra comments:
Roger

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: JF2 Event #: 5 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	DIC	Oxy	Nut-fr	Sal	pH		BSi	Nd	HPIC	CHC			
1	1	38	Bot-10	✓ 176.6	x	x	x		x								
2	2	39	150	✓ 150.6	xx	x	x		x								
3	3	40	125	✓ 125.7	x	x	x		xxx								
4	4	41	100	✓ 100.3	x	x	x		x								
5	5	42	80	✓ 79.8	x	xx	x		x								
6	6	43	60	✓ 60.6	xx	x	x		x								
7	7	44	50	✓ 50.6	x	x	xx		x								
8	8	45	40	✓ 40.3	x	x	x		x								
9	9	46	30	✓ 30.3	x	x	x		x				xx	xx			
10	10	47	20	✓ 19.8	x	x	x		x								
11	11	48	10	✓ 10.1	x	x	x		xxx								
12	12	49	5	✓ 5.3	xx	x	x		x				xx	xx			
13	13	50	0	✓ 2.0	x	x	x		x								
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 187 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	11:16	4:16
Bottom	11:19	4:19
End	11:32	4:32

Positional Information
Lat: 48 ° 18 00 N
Lon: 124 ° 0 01 W

Lat: 48 ° 18 00 N
Lon: 124 ° 0 07 W

Lat: 48 ° 18 00 N
Lon: 124 ° 0 32 W

Extra comments:
Debby

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: Nina S @0730 Event #: 7 Ship: Tully UTC Date (dd|mmm|yyyy): 09 | Jun | 2009

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	DIC	Oxy	Nut-fr	Sal	pH		BSi				
1	9	51	5	✓ 4.6											
2	10	52	5	✓ 5.0											
3	6	53	30	✓ 29.8											
4	7	54	15	✓ 16.1											
5	8	55	15	✓ 16.1											
6	4	56	50	✓ 50.6											
7	5	57	50	✓ 50.6											
8	3	58	60	✓ 59.7											
9	2	59	80	✓ 80.6											
10	1	60	100	✓ 101.2											
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 186 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	14:35	7:35
Bottom	14:39	7:39
End	14:50	7:50

Positional Information
Start
Lat: 48 ° 31 71 N
Lon: 124 ° 44 46 W

Bottom
Lat: 48 ° 31 71 N
Lon: 124 ° 44 52 W

End
Lat: 48 ° 31 74 N
Lon: 124 ° 44 76 W

Extra comments:
Nina's rosette, 2 hr after sunrise
Out of Order!!

Cruise ID: 2014-18 Station: P1 Event #: 9 Ship: Tully UTC Date (dd|mmm|yyyy): 09 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	HPLC	Chl	DIC	pH		Bsi					
1	1	61	Bot-10	✓	102	x x		x		x x	x x x							
2	10	62	30 / Max	✓	30	x		x	x x	x	x							
3	13	63	5 MAX	✓	5	x		x	x x	x	x						Flow 13.	
4	2	64	Bot-10	✓	102								x					
5	3	65	Bot-10	✓	102								x					
6	4	66	90 100	✓	190								x					
7	5	67	90 100	✓	190								x					
8	6	68	70	✓	70								x					
9	7	69	70	✓	70								x					
10	8	70	40	✓	40								x					
11	9	71	40	✓	40								x					
12	11	72	15	✓	15								x					
13	12	73	15	✓	15								x					
14	14	74	0	✓	2								x					
15	15	75	0	✓	2								x					
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 115 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1805	1105
Bottom	1808	
End	1818	

Positional Information
Start
Lat: 48° 34.50 N
Lon: 125° 29.95 W

Bottom
Lat: 48° 34.51 N
Lon: 125° 29.93 W

End
Lat: 48° 34.49 N
Lon: 125° 29.97 W

Extra comments:
Out of order
1; 4 - 11; 2; 12 - 13 - 3 - 14 - 15

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P2 Event #: 10 Ship: Tully UTC Date (dd|mmm|yyyy): 09 | 06 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC								
1		76	100	✓ 105	x	x	x	xx	x									
2		77	75	✓ 75	x			x	x									
3		78	50	✓ 50	x			x	x									
4		79	40	✓ 40	x			x	x									
5		80	30	✓ 30	x			x	x									
6		81	25	✓ 25	x			x	xx*									
7		82	20	✓ 20	xx	xx	xx	x	x									
8		83	15	✓ 15	x			x	x									
9		84	10	✓ 10	x			x	x									
10		85	5	✓ 5	x	x	x	x	x									
11		86	0	✓ 2	x	x	x	x	x									
12		87	30 / M10	✓ 30					xx	xx								28
13		88	15 / Max	✓ 15					xx	xx								625
14		89	5	✓ 5					xx	xx								625
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	2039	1339
Bottom	2041	
End	2053	

Positional Information
Lat: 48 ° 36.01 N
Lon: 126 ° 0.01 W

Lat: 48 ° 36.03 N
Lon: 126 ° 0.02 W

Lat: 48 ° 35.96 N
Lon: 126 ° 0.11 W

Extra comments:
DMS cast; out-of-order

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P2 Event #: 12 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | JUL | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH								
			Pressure	✓		Pressure	MR	D-1			MS/MF	GL							
1	1	90	Bot-10	✓	108	x x	x			x	x								
2	2	91	100	✓	100	x	x			x	x								
3	3	92	75	✓	75	x	x			x x	x								
4	4	93	75	✓	75	x	x			x	x								
5	5	94	50	✓	50	x	x			x	x x x								
6	6	95	25	✓	25	x	x x			x	x								
7	7	96	10	✓	10	x	x			x	x								
8	8	97	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): MR/DY

Bottom Depth: 118 m
 Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2122	1422
Bottom	2125	
End	2132	

Positional Information

Lat:	48 ° 36.01	N
Lon:	126 ° 00.16	W

▼

Lat:	48 ° 36.01	N
Lon:	126 ° 00.16	W

▼

Lat:	48 ° 36.01	N
Lon:	126 ° 00.15	W

Extra comments:
 Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P3 Event #: 13 Ship: Tully UTC Date (dd|mmm|yyyy): 09|06|2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed	Nut-F	Sal	Chl	HPLC						Bsi				
				✓ Pressure														
1		98	30 / Max	✓	15	x		xx	xx									
2		99	5	✓	5	x	x	xx	xx									
3		100	Bot-10	✓	810									x				
4		101	Bot-10	✓	810									x				
5		102	750	✓	750									x				
6		103	750	✓	750									x				
7		104	600	✓	600									x				
8		105	600	✓	600									x				
9		106	450	✓	450									x				
10		107	450	✓	450									x				
11		108	300	✓	300									x				
12		109	300	✓	300									x				
13		110	150	✓	150									x				
14		111	150	✓	150									x				
15		112	50	✓	50									x				
16		113	50	✓	50									x				
17		114	25	✓	25									x				
18		115	25	✓	25									x				
19		116	0	✓	2									x				
20		117	0	✓	2									x				
21																		
22																		
23																		
24																		

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

Bottom Depth: 815 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2312	1612
Bottom	2325	
End	2349	

Positional Information
Start
Lat: 48 ° 37.49 N
Lon: 126 ° 19.96 W

Bottom
Lat: 48 ° 37.47 N
Lon: 126 ° 19.98 W

End
Lat: 48 ° 37.48 N
Lon: 126 ° 19.98 W

Extra comments:
Out of order

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P4 Event #: 16 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | 6 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	UBC												
1	1	118	Bot-10	✓ 1324	x												
2	2	119	Bot-10	✓ 1324	x												
3	3	120	Bot-10	✓ 1324	x												
4	4	121	Bot-10	✓ 1324	x												
5	5	122	1000	✓ 1000	x												
6	6	123	1000	✓ 1	x												
7	7	124	1000	✓ 1	x												
8	8	125	1000	✓ 1	x												
9	9	126	500	✓ 500	x												
10	10	127	500	✓ 1	x												
11	11	128	500	✓ 1	x												
12	12	129	500	✓ 1	x												
13	13	130	10		x												
14	14	131	10		x												
15	15	132	10		x												
16	16	133	10		x												
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 1324 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0342	2042
Bottom	0407	
End	0432	

Positional Information
Start
Lat: 48° 39.00 N
Lon: 126° 40.01 W

Bottom
Lat: 48° 39.00 N
Lon: 126° 40.00 W

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

Extra comments:
UBC

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P4 Event #: 17 Ship: Tully UTC Date (dd|mmm|yyyy): 10|6|14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure			Plastics								
							MC CP								
1		134	Bot-10	✓ 1323			x								
2		135	1250	✓ 1250			x								
3		136	1000	✓ 1000			x								
4		137	800	✓ 800			x								
5		138	600	✓ 600			x								
6		139	400	✓ 400			x								
7		140	300	✓ 300			x								
8		141	250	✓ 249			x								
9		142	200	✓ 200			x								
10		143	175	✓ 176			x								
11		144	150	✓ 150			x								
12		145	125	✓ 125			x								
13		146	100	✓ 100			x								
14		147	75	✓ 75			x								
15		148	50	✓ 49			x								
16		149	25	✓ 24			x								
17		150	10	✓ 10			x								
18		151	5	✓ 5			x								
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 1324 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0511	2211
Bottom	0538	
End	0621	

Positional Information
Start
Lat: 48 ° 39.02 N
Lon: 126 ° 39.99 W

Bottom
Lat: 48 ° 39.01 N
Lon: 126 ° 40.02 W

End
Lat: 48 ° 39.03 N
Lon: 126 ° 40.04 W

Extra comments:
Plastics cast

Cruise ID: 2014-18 Station: P4 Event #: 18 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments					
			Target Pressure	Confirmed ✓ Pressure	Oxy MP/AM	Nut-F MB	Nut-C MB	Sal MS	DIC MP/USN	pH GC	UBC AM							
1	1	152	Bot-10	✓ 1322	x	x	x		x	x	x							
2	2	153	1250	✓ 1250	x	x	x	x	xx	x	x							
3	3	154	1250	✓ 1250	xx	x	x	xx	x	x								
4	4	155	1000	✓ 1000	x	x	x	xx	x	x	x							
5	5	156	800	✓ 801	x	x	x	x	x	x	x							
6	6	157	600	✓ 600	x	xx	xx		x	xxx	x							
7	7	158	400	✓ 400	x	x	x		x	x	x							
8	8	159	300	✓ 299	x	x			x	x	x							
9	9	160	250	✓ 250	x	x			x	x								
10	10	161	200	✓ 200	x	x			x	x	x							
11	11	162	175	✓ 175	x	x			x	x								
12	12	163	150	✓ 150	x	x			x	x	x							
13	13	164	125	✓ 125	x	xx			x	x								
14	14	165	100	✓ 100	x	x			x	x	x							
15	15	166	75	✓ 75	xx	x			x	x								
16	16	167	50	✓ 50	x	x			x	x	x							
17	17	168	25	✓ 25	x	x			x	xxx	x							
18	18	169	10	✓ 11	x	x			x	x	x							
19	19	170	5	✓ 5	x	x		x	x	x								
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 1323 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	11:37	04:37
Bottom	12:02	
End	12:41	

Positional Information
Start
Lat: 48 ° 38 99 N
Lon: 126 ° 40 08 W

Bottom
Lat: 48 ° 38 99 N
Lon: 126 ° 40 08 W

End
Lat: 48 ° 39 09 N
Lon: 126 ° 39 98 W

Extra comments:
Deep cast

Go down to 150m

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P4 Event #: 19 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH	UBC							
			Pressure	✓															
1	9	171	5	✓	5														
2	10	172	5	✓	5														
3	8	173	10	✓	10														
4	6	174	15	✓	15														
5	7	175	15	✓	15														
6	2	176	50	✓	50														
7	3	177	50	✓	50														
8	5	178	30	✓	30														
9	4	179	40	✓	40														
10	1	180	60	✓	60														
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 1324 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	14:33	7:33
Bottom	14:35	
End	14:45	

Positional Information
 Start
 Lat: 48 ° 38 94 N
 Lon: 126 ° 40 02 W

Bottom
 Lat: 48 ° 38 93 N
 Lon: 126 ° 40 00 W

End
 Lat: 48 ° 38 92 N
 Lon: 126 ° 40 96 W

Extra comments:
 Light cast
 OUT-OF-ORDER!
 10, 6, 7, 9, 8, 4, 5, 3,
 1.2

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P4 Event #: 70 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC	Phyto	ONAr				
1	1	181	300	✓ 301	x			x									
2	2	182	200	✓ 199	x	x	x	x									
3	3	183	175	✓ 175	x	x	x	x									
4	4	184	100	✓ 101	x	x	x	x		x							
5	5	185	75	✓ 75	x			x		x							
6	6	186	50	✓ 50	x			x		x							
7	7	187	40	✓ 40	x			x		x							
8	8	188	30	✓ 30	x			x		x							
9	10	189	25	✓ 25	x			x		x							
10	11	190	20	✓ 20	x x	x x	x x	x		x x *							
11	12	191	15	✓ 15	x			x		x							
12	14	192	10	✓ 10	x			x x		x							
13	15	193	5	✓ 5	x	x	x	x		x							
14	18	194	0	✓ 2	x	x	x	x		x							
15	9	195	30	✓ 30						x x	x x						
16	13	196	15/Max	✓ 15						x x	x x						
17	16	197	5	✓ 5						x x	x x	x x x					
18	17	198	5	✓ 5									x				
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 1324 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	15:21	8:21
Bottom	15:27	8:27
End	15:43	8:43

Positional Information
Lat: 48 ° 38 96 N
Lon: 126 ° 39 96 W

Lat: 48 ° 38 99 N
Lon: 126 ° 39 93 W

Lat: 48 ° 39 02 N
Lon: 126 ° 39 87 W

Extra comments:
DMS cast; out-of-order.
1-8, 15, 9, 10, 11, 16, 12, 13, 17, 18, 14

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P5 Event #: 21 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	Bsi									
1	1	199	Bot-10	✓ 2095				x									
2	2	200	Bot-10	✓ 2095				x									
3	3	201	Bot-10	✓ 2095				x									
4	4	202	Bot-10	✓ 2095				x									
5	5	203	1800	✓ 1799				x									
6	6	204	1800	✓ 1799				x									
7	7	205	1800	✓ 1799				x									
8	8	206	1800	✓ 1799				x									
9	9	207	1400	✓ 1400				x									
10	10	208	1400	✓ 1400				x									
11	11	209	1400	✓ 1400				x									
12	12	210	1000	✓ 999				x									
13	13	211	1000	✓ 1000				x									
14	14	212	1000	✓ 999				x									
15	15	213	600	✓ 600				x									
16	16	214	600	✓ 600				x									
17	17	215	300	✓ 299				x									
18	18	216	300	✓ 299				x									
19	19	217	100	✓ 100				x									
20	20	218	100	✓ 100				x									
21	21	219	10	✓ 10				x									
22	22	220	10	✓ 10				x									
23	23	221	30/Max	✓ 15	x x	x x	x										
24	24	222	5	✓ 5	x x	x x	x										

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

Bottom Depth: 2090 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	18:01	11:01
Bottom	18:36	
End	19:22	

Positional Information

Start
Lat: 48 ° 41 57 N
Lon: 127 ° 9 94 W

Bottom
Lat: 48 ° 41 71 N
Lon: 127 ° 9 08 W

End
Lat: 48 ° 41 97 N
Lon: 127 ° 10 20 W

Extra comments:

Nico and Aram's cast
Out of sequence!
1-20, 23, 21-22, 24

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P6 Event #: 22 Ship: Tully UTC Date (dd|mmm|yyyy): 10 | 6 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	pH	SAL								
1	1	223	110	✓ 110				6	x								
2	2	224	100	✓ 99				6	x								
3	3	225	90	✓ 89				6	x								
4	4	226	80	✓ 79				6	x								
5	5	227	30/Max	✓ 30													Max @ 30
6	6	228	5	✓ 5													
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: 2546 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2145	1445
Bottom	2216	
End	2257	

Positional Information

Lat:	48 ° 44.64	N
Lon:	127 ° 39.96	W

▼

Lat:	48 ° 44.60	N
Lon:	127 ° 39.96	W

▼

Lat:	48 ° 44.62	N
Lon:	127 ° 39.98	W

Extra comments:
pH experiment

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P7 Event #: 23 Ship: Tully UTC Date (dd|mmm|yyyy): 11|6|14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	Bsi									
1	1	229	2500	✓ 2500				x									
2	2	230	2500	✓ 2500				x									
3	3	231	2500	✓ 2500				x									
4	4	232	2500	✓ 2500				x									
5	5	233	1800	✓ 1800				x									
6	6	234	1800	✓				x									
7	7	235	1800	✓				x									
8	8	236	1800	✓				x									
9	9	237	1400	✓ 1400				x									
10	10	238	1400	✓				x									
11	11	239	1400	✓				x									
12	12	240	1400	✓				x									
13	13	241	1000	✓ 1000				x									
14	14	242	1000	✓ 1000				x									
15	15	243	600	✓ 600				x									
16	16	244	600	✓ 600				x									
17	17	245	300	✓ 300				x									
18	18	246	300	✓ 300				x									
19	19	247	100	✓ 100				x									
20	20	248	100	✓ 99				x									
21	22	249	10	✓ 10				x									
22	23	250	10	✓ 10				x									
23	21	251	300/1000	✓ 30	x x	x x	x										may near 30
24	24	252	5	✓ 5	x x	x x	x										

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

Bottom Depth: 2506 m db
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0108	1808
Bottom	0158	
End	0254	

Positional Information

Lat:	48 ° 46.64	N
Lon:	128 ° 9.95	W

Bottom

Lat:	48 ° 46.63	N
Lon:	128 ° 10.15	W

End

Lat:	48 ° 46.62	N
Lon:	128 ° 10.25	W

Extra comments:
Nico's cast
Out of order

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P8 Event #: 26 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut Fr	Nut C	pH	Chl	HPLC	ONAr					
1	1	253	2000	✓ 2000	x x	x x	x	x									
2	2	254	1500	✓ 1500	x	x	x	x									
3	3	255	1250	✓ 1250	x	x	x x	x x									
4	4	256	1000	✓ 1000	x	x x	x	x									
5	5	257	800	✓ 800	x	x	x	x									
6	6	258	600	✓ 600	x		x	x									
7	7	259	400	✓ 400	x		x	x									
8	8	260	300	✓ 300	x		x										
9	9	261	250	✓ 250	x x		x										
10	10	262	200	✓ 200	x		x										
11	11	263	175	✓ 175	x		x										
12	12	264	150	✓ 150	x		x x										
13	13	265	125	✓ 125	x		x										
14	14	266	100	✓ 100	x		x			x							
15	15	267	75	✓ 75	x		x			x							
16	16	268	50	✓ 50	x		x			x							
17	18	269	25	✓ 25	x x		x			x							
18	20	270	10	✓ 10	x		x			x							
19	21	271	5	✓ 5	x	x	x			x							
20	17	272	50	✓ 50						x x	x x						
21	19	273	20/Max	✓ 20						x x	x x						
22	22	274	5	✓ 5						x x	x x						
23	23	275	5	✓ 5								x					
24																	

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

Bottom Depth: 2522 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	6:57	23:57
Bottom	7:31	00:31
End	8:29	01:29

Positional Information

Lat:	48 ° 48 99	N
Lon:	128 ° 40 05	W

Start

Bottom

End

Lat:	48 ° 48 97	N
Lon:	128 ° 39 94	W

Lat:	48 ° 49 08	N
Lon:	128 ° 39 88	W

Extra comments:
Firing out of order
1-16, 20, 17, 21, 18,
19, 22, 23

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P9 Event #: 27 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | Jul | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	HPLC	CHL	Nut												
			Pressure	✓													Pressure		
1	1	276	25 50/Max	✓	25	xx	xx	x											
2	2	277	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): MB

Bottom Depth: 2348 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	11:00	04:00
Bottom	11:43	04:43
End	12:23	05:23

Positional Information

Lat:	48 ° 51 38	N
Lon:	129 ° 10 02	W

▼

Lat:	48 ° 51 26	N
Lon:	129 ° 10 03	W

▼

Lat:	48 ° 51 36	N
Lon:	129 ° 10 18	W

Extra comments:

Cruise ID: 2014-18 Station: P10 Event #: 28 Ship: Tully UTC Date (dd|mmm|yyyy): 11 Jun 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed		HPLC	CHL	Nut											
			Pressure	✓	Pressure														
1		278	50/Max	✓	30	x x	x x	x											~ 2.8 1L
2		279	5			x x	x x	x											~ 1.7 2L
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): MB / MR

Bottom Depth: 2642 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1441	0741
Bottom	1516	
End	1549	

Positional Information

Start

Lat: 48 ° 53 62 N

Lon: 129 ° 39 92 W

Bottom

Lat: 48 ° 53 58 N

Lon: 129 ° 39 93 W

End

Lat: 48 ° 53 60 N

Lon: 129 ° 39 96 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P11 Event #: 29 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed	Pressure	HPLC	CHL	Nut											
				✓															
1		280	50/Max	✓	25	x x	x x	x											30
2		281	5	✓	5	x x	x x	x											10
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: 2753 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1759	1059
Bottom	1830	
End	1905	

Positional Information

Start

Lat: 48° 56.00 N

Lon: 130° 10.16 W

Bottom

Lat: 48° 56.09 N

Lon: 130° 10.14 W

End

Lat: 48° 56.16 N

Lon: 130° 10.13 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P12 Event #: 30 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments	
			Target	Confirmed		Bsi														
			Pressure	✓	Pressure															
1		282	3000					x												
2		283	2750					x												
3		284	2600					x												
4		285	2450					x												
5		286	2300					x												
6		287	2150					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): *in-situ pumps*

Bottom Depth: *3230* m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<i>2118</i>	<i>1418</i>
Bottom	<i>2227</i>	
End		

Positional Information

Start

Lat: *48 ° 58.17* N

Lon: *130 ° 40.13* W

Bottom

Lat: *48 ° 58.16* N

Lon: *130 ° 39.82* W

End

Lat: ° N

Lon: ° W

Extra comments:

Deep UBC in-situ pumps

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P12 Event #: 31 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH				UBC				
					0118	AN	AN	AN	AN	6.6				AN				
1		288	Bot-10	✓ 3275	x		x	x	x	x				x				
2		289	3000	✓ 3000	x	x	x	x	xx	x								
3		290	3000	✓ 3000	xx	x	x	x	x	x				x				
4		291	2500	✓ 2500	x	xx	xx	xx	x	x								
5		292	2000	✓ 2000	x	x	x	x	x	x				x				
6		293	1500	✓ 1500	x	x	x	x	x	x				x				
7		294	1250	✓ 1250	x	x	x	x	x	xxx				x				
8		295	1000	✓ 1001	xx	xx	x	x	x	x				x				
9		296	800	✓ 800	x		x	x	x	x				x				
10		297	600	✓ 600	x		x	x	x	x				x				
11		298	400	✓ 400	x		x	x	x	x				x				
12		299	300	✓ 301	x		x		x	x				x				
13		300	250	✓ 250	x		x		x	x								
14		301	200	✓ 200	x		x		x	xxx				x				
15		302	175	✓ 174	x		x		x	x								
16		303	150	✓ 150	xx		x		x	x				x				
17		304	125	✓ 125	x		x		x	x								
18		305	100	✓ 100	x		xx		x	x				x				
19		306	75	✓ 75	x		x		x	x								
20		307	50	✓ 50	xx		x		x	x				x				
21		308	25	✓ 25	x		x		x	x				x				
22		309	10	✓ 10	x		x		x	x				x				
23		310	5	✓ 5	x	x	x		x	x								
24																		

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

Bottom Depth: 3229 m
 Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0211	1911
Bottom	0310	
End	0428	

Positional Information

Lat:	48° 58.21	N
Lon:	130° 39.99	W

Start

Lat:	48° 58.24	N
Lon:	130° 40.00	W

Bottom

Lat:	48° 58.31	N
Lon:	130° 40.01	W

End

Extra comments:
 Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P12 Event #: 34 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓	Pressure	UBC													
1	1	311	2000	✓	2000		x												
2	2	312	2000	✓	2000		x												
3	3	313	2000	✓	2000		x												
4	4	314	2000	✓	2000		x												
5	5	315	1000	✓	999		x												
6	6	316	1000	✓	999		x												
7	7	317	1000	✓	999		x												
8	8	318	1000	✓	999		x												
9	9	319	500	✓	500		x												
10	10	320	500	✓	500		x												
11	11	321	500	✓	500		x												
12	12	322	500	✓	500		x												
13	13	323	10	✓	10		x												
14	14	324	10	✓	10		x												
15	15	325	10	✓	10		x												
16	16	326	10	✓	10		x												
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 3231 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	07:34	00:34
Bottom	08:09	
End	08:49	

Positional Information

Lat:	48 ° 58 65	N
Lon:	130 ° 40 34	W

Bottom

Lat:	48 ° 58 66	N
Lon:	130 ° 40 37	W

End

Lat:	48 ° 58 71	N
Lon:	130 ° 40 33	W

Extra comments:
UBC - Andreas
Lds of Uat/kalle in water
UBC Cast Andreas

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P12 Event #: 35 Ship: Tully UTC Date (dd|mmm|yyyy): 12 Jun 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed ✓ Pressure	Bsi													
1	1	327	1000	✓ 1000		x												
2	2	328	1000	✓ 1000		x												
3	3	329	1000	✓ 1000		x												
4	4	330	1000	✓ 1000		x												
5	5	331	750	✓ 750		x												
6	6	332	750	✓ 750		x												
7	7	333	750	✓ 750		x												
8	8	334	750	✓ 750		x												
9	9	335	500	✓ 500		x												
10	10	336	500	✓ 500		x												
11	11	337	300	✓ 300		x												
12	12	338	300	✓ 300		x												
13	13	339	100	✓ 100		x												
14	14	340	100	✓ 100		x												
15	15	341	80	✓ 81		x												
16	16	342	80	✓ 81		x												
17	17	343	60	✓ 61		x												
18	18	344	60	✓ 61		x												
19	19	345	40	✓ 39		x												
20	20	346	40	✓ 39		x												
21	21	347	20	✓ 20		x												
22	22	348	20	✓ 20		x												
23	23	349	5	✓ 5		x												
24	24	350	5	✓ 5		x												

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

Bottom Depth: 3228 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	13:02	06:08
Bottom	13:20	
End	13:47	

Positional Information
Start
Lat: 48 ° 58 20 N
Lon: 130 ° 40 00 W

Bottom
Lat: 48 ° 58 70 N
Lon: 130 ° 40 04 W

End
Lat: 48 ° 58 18 N
Lon: 130 ° 40 06 W

Extra comments:
UBC - Maureen (Nico)

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P12 Event #: 36 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH	UBC							
1	1	351	100	✓	100													
2	2	352	80	✓	80													
3	3	353	60	✓	61													
4	4	354	50	✓	50													
5	5	355	50	✓	50													
6	6	356	50	✓	50													
7	7	357	40	✓	40													
8	8	358	30	✓	31													
9	9	359	25	✓	25													
10	10	360	25	✓	25													
11	11	361	25	✓	25													
12	12	362	10	✓	11													
13	13	363	5	✓	5													
14	14	364	5	✓	5													
15	15	365	5	✓	5													
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3228 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	14:41	7:41
Bottom	14:43	
End	14:56	

Positional Information
Start
Lat: 48 ° 58 12 N
Lon: 130 ° 40 00 W

Bottom
Lat: 48 ° 58 12 N
Lon: 130 ° 39 99 W

End
Lat: 48 ° 58 18 N
Lon: 130 ° 40 14 W

Extra comments:
Light cast
~~OUT-OF-ORDER~~
PAR ON

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P12 Event #: 37 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒	Pressure			Bsi									
1		366	1900					x									
2		367	1750					x									
3		368	1600					x									
4		369	1450					x									
5		370	1300					x									
6		371	1150					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): in-situ pumps

Bottom Depth: 3229 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1506	
Bottom	1550	
End	1948	

Positional Information
Start
Lat: 48° 58.13 N
Lon: 130° 40.13 W

Bottom
Lat: 48° 58.18 N
Lon: 130° 40.22 W

End
Lat: 48° 58.66 N
Lon: 130° 40.69 W

Extra comments:
Shallow UBC in-situ pumps

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P12 Event #: 38 Ship: Tully UTC Date (dd/mm/yyyy): 12/6/2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC		ONAr					
1	1	372	300	✓ 300	x			x										
2	2	373	200	✓ 200	x	x	x	x										
3	3	374	175	✓ 175	x	x	x	x										
4	4	375	100	✓ 100	x	x	x	x		x								
5	5	376	75	✓ 75	x			x		x								
6	6	377	50	✓ 50	x			xx		x								
7	7	378	40	✓ 40	x			x		xx*								
8	9	379	30	✓ 30	x			x		x								
9	10	380	25	✓ 25	x			x		x								
10	12	381	20	✓ 20	xx	xx	xx	x		x								
11	13	382	15	✓ 15	x			x		x								
12	14	383	10	✓ 10	x			x		x								
13	15	384	5	✓ 5	x	x	x	x		x								
14	19	385	0	✓ 2	x	x	x	x		x								
15	8	386	20/M*10	✓ 40						xx	xx							
16	11	387	20/Max	✓ 25						xx	xx							
17	16	388	5	✓ 5						xx	xx							
18	17	389	5	✓ 5									x					
19	18																	← Fired in Error
20																		
21																		
22																		
23																		
24																		

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

Watchkeeper(s):

Bottom Depth: 3229 m

Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Start	2012	1312
Bottom	2018	
End	2035	

Positional Information

Start Lat: 48° 58.19' N

Start Lon: 130° 40.25' W

Bottom Lat: 48° 58.10' N

Bottom Lon: 130° 40.34' W

End Lat: 48° 58.29' N

End Lon: 130° 40.47' W

Extra comments:

DMS cast; out-of-order.

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P14 Event #: 39 Ship: Tully UTC Date (dd|mmm|yyyy): 13 Jun 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target	Confirmed	HPLC	CHL	Nut	pH	SAL						
			Pressure	✓ Pressure											
1	1	390	50/Max	✓ 50	x x	x x	x								
2	2	391	5	✓ 5	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): MB

Bottom Depth: 3313 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	08:12	07:12
Bottom	08:47	
End	09:22	

Positional Information

Lat:	49 ° 7 44	N
Lon:	132 ° 39 99	W

▼

Lat:	49 ° 7 39	N
Lon:	132 ° 40 11	W

▼

Lat:	49 ° 7 34	N
Lon:	132 ° 40 18	W

Extra comments:
~~pl. comment~~

Cruise ID: 2014-18 Station: ^{P15} Light @ 0750 Event #: 41 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	pH	SAL									
1	1	393	100	✓	100													
2	2	394	80	✓	80													
3	3	395	60	✓	60													
4	4	396	50	✓	50													
5	5	397	50	✓	50													
6	6	398	50	✓	50													
7	7	399	40	✓	40													
8	11	400	20	✓	20													
9	8	401	30	✓	30													
10	9	402	30	✓	30													
11	10	403	30	✓	30													
12	12	404	10	✓	10													
13	13	405	5	✓	5													
14	14	406	5	✓	5													
15	15	407	5	✓	5													
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3397 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	14:48	07:48
Bottom	14:51	07:51
End	15:05	08:05

Positional Information
Start
Lat: 49 ° 11 95 N
Lon: 133 ° 39 88 W

Bottom
Lat: 49 ° 11 96 N
Lon: 133 ° 39 87 W

End
Lat: 49 ° 11 94 N
Lon: 133 ° 39 91 W

Extra comments:
Light Cast 1-7, 9, 10, 11
PAR ON 8, 12, 13, 14, 15
Out of Order!

Cruise ID: 2014-18 Station: P15 Event #: 42 Ship: Tully UTC Date (dd mmm yyyy): 13 Jun 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	pH	SAL						
1	1	408	50/Max	✓ 51	x x	x x	x								
2	2	409	5	✓ 5	x x	x x	x								
3															
4															
5															
6															
7															
8															
9															
10															
11															
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13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 3397 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	15:44	08:44
Bottom	16:25	09:25
End	17:07	10:07

Positional Information
Start
Lat: 49 ° 11 99 N
Lon: 133 ° 39 93 W

Bottom
Lat: 49 ° 12 03 N
Lon: 133 ° 39 96 W

End
Lat: 49 ° 11 99 N
Lon: 133 ° 39 76 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P16 Event #: 43 Ship: Tully UTC Date (dd|mmm|yyyy): 13 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC		ONAr					
1	1	410	300	✓ 300	x			x x										
2	2	411	200	✓ 200	x	x	x	x										
3	3	412	175	✓ 175	x	x	x	x										
4	4	413	100	✓ 100	x	x	x	x		x								
5	5	414	75	✓ 75	x			x		x								
6	6	415	50	✓ 50	x			x		x								
7	7	416	40	✓ 39	x			x		x								
8	8	417	30	✓ 30	x			x		x x *								
9	10	418	25	✓ 25	x			x		x								
10	11	419	20	✓ 20	x x	x x	x x	x		x								
11	13	420	15	✓ 14	x			x		x								
12	14	421	10	✓ 10	x			x		x								
13	15	422	5	✓ 5	x	x	x	x		x								
14	18	423	0	✓ 2	x	x	x	x		x								
15	9	424	20 Max	✓ 30						x x	x x							
16	12	425	20 Max	✓ 20						x x	x x							
17	16	426	5	✓ 5						x x	x x							
18	17	427	5	✓ 5									x					
19																		
20										* precision CHL								
21																		
22																		
23																		
24																		

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

Bottom Depth: 3624 m
Transmisso Cleaned: 9 / N

Time	UTC	Local
Start	2156	1456
Bottom	2203	
End	2225	

Positional Information

Lat:	49° 17.05	N
Lon:	134° 39.90	W

Start

Bottom

End

Lat: 49° 17.00 N
Lon: 134° 39.83 W

Lat: 49° 16.94 N
Lon: 134° 39.80 W

Extra comments:
DMS cast; out-of-order.

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P16 Event #: 45 Ship: Tully UTC Date (dd|mmm|yyyy): 13 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed		OXY	Sal	Nut-F	Nut-C	DIC	pH				UBC					
				✓	Pressure															
						0.18	AM	PM	PM	MM/HC	GC				AM					
1	1	428	Bot-10	✓	3685	x		x	x	x	x				x					
2		429	3500	✓	3500	x	x	x	x	xx	x									
3		430	3500	✓	3500	x	x	x	x	x	x									
4		431	3000	✓	3000	x	xx	x	x	x	x				x					
5		432	2500	✓	2500	x	x	x	x	x	xxx									
6		433	2000	✓	2000	xx	xx	x	x	x	x				x					
7		434	1500	✓	1500	x	x	x	x	x	x				x					
8		435	1250	✓	1250	x	x	xx	xx	x	x				x					
9		436	1000	✓	1000	x	xx	x	x	x	x				x					
10		437	800	✓	801	x		x	x	x	x				x					
11		438	600	✓	602	x		x	x	x	x				x					
12		439	400	✓	400	x		x	x	x	x				x					
13		440	300	✓	299	xx		x		x	x				x					
14		441	250	✓	250	x		x		x	xxx									
15		442	200	✓	200	x		x		x	x				x					
16		443	175	✓	175	xx		x		x	x									
17		444	150	✓	150	x		x		x	x				x					
18		445	125	✓	125	x		x		x	x									
19		446	100	✓	99	x		x		x	x				x					
20		447	75	✓	75	xx		x		x	x									
21		448	50	✓	50	x		xx		x	x				x					
22		449	25	✓	25	x		x		x	x				x					
23		450	10	✓	10	x		x		x	x				x					
24		451	5	✓	5	x	x	x		x	x									

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

Bottom Depth: 3624 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2308	1608
Bottom	0036	
End	0214	

Positional Information
Start
Lat: 49 ° 17.04 N
Lon: 134 ° 39.90 W

Bottom
Lat: 49 ° 17.04 N
Lon: 134 ° 40.07 W

End
Lat: 49 ° 16.94 N
Lon: 134 ° 40.20 W

Extra comments:
Deep cast

Cruise ID: 2014-18 Station: P17 Event #: 48 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	pH	SAL								
1	1	452	50/Max	✓ 50	x x	x x	x										
2	2	453	5	✓ 5	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): MB

Bottom Depth: 3712 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	10:26	03:26
Bottom	10:59	03:59
End	11:39	04:39

Positional Information

Start

Lat: 49 ° 20 99 N

Lon: 135 ° 40 00 W

Bottom

Lat: 49 ° 21 00 N

Lon: 135 ° 40 01 W

End

Lat: 49 ° 20 98 N

Lon: 135 ° 39 02 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P18 Event #: 49 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut-Fr		Bsi								
1	1	454	900	✓ 900					x								
2	2	455	900	✓ 900					x								
3	3	456	900	✓ 900					x								
4	4	457	900	✓ 900					x								
5	5	458	700	✓ 700					x								
6	6	459	700	✓ 700					x								
7	7	460	700	✓ 700					x								
8	8	461	700	✓ 700					x								
9	9	462	500	✓ 500					x								
10	10	463	500	✓ 500					x								
11	11	464	300	✓ 300					x								
12	12	465	300	✓ 300					x								
13	13	466	100	✓ 100					x								
14	14	467	100	✓ 100					x								
15	15	468	60	✓ 60					x								
16	16	469	60	✓ 60					x								
17	18	470	40	✓ 40					x								
18	19	471	40	✓ 40					x								
19	20	472	20	✓ 20					x								
20	21	473	20	✓ 20					x								
21	22	474	5	✓ 5					x								
22	23	475	5	✓ 5					x								
23	17	476	50/Max	✓ 50	x x	x x	x										
24	24	477	5	✓ 5	x x	x x	x										

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

Bottom Depth: 3816 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	16:40	09:40
Bottom	17:21	10:21
End	18:14	11:14

Positional Information
Start
Lat: 49 ° 25 99 N
Lon: 136 ° 39 99 W

Bottom
Lat: 49 ° 25 97 N
Lon: 136 ° 39 94 W

End
Lat: 49 ° 26 02 N
Lon: 136 ° 39 95 W

Extra comments:
OUT-OF-ORDER!!!
Bottles: 1 → 16, 23, 17, 18
19, 20, 21, 22, 24

Cruise ID: 2014-18 Station: P19 Event #: 52 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	pH	SAL						
1		478	50/Max	✓ 25	x x	x x	x								
2		479	5	✓ 5	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): DY

Bottom Depth: 3910 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2322	1622
Bottom	2356	
End	0029	

Positional Information

Lat:	49 ° 29.34	N
Lon:	137 ° 40.03	W

Bottom

Lat:	49 ° 29.98	N
Lon:	137 ° 40.11	W

End

Lat:	49 ° 29.97	N
Lon:	137 ° 40.26	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P20 Event #: 53 Ship: Tully UTC Date (dd|mmm|yyyy): 15 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH					UBC			
1	1	480	Bot-10	✓ 4023	x		x	x	x	x					x			
2	2	481	3500	✓ 3500	x	x	x	x	xx	x								
3	3	482	3500	✓ 3500	xx	x	x	x	x	xxx								
4	4	483	3000	✓ 3000	x	xx	x	x	x	x					x			
5	5	484	2500	✓ 2500	x	x	x	x	x	x								
6	6	485	2000	✓ 2000	x	xx	x	x	x	x					x			
7	7	486	1500	✓ 1500	x	x	x	x	x	x					x			
8	8	487	1250	✓ 1250	xx	x	x	x	x	x					x			
9	9	488	1000	✓ 1000	x	xx	x	x	x	x					x			
10	10	489	800	✓ 800	x	x	x	x	x	x					x			
11	11	490	600	✓ 600	x	x	xx	xx	x	x					x			
12	12	491	400	✓ 400	x	x	x	x	x	x					x			
13	13	492	300	✓ 300	xx	x	x		x	x					x			
14	14	493	250	✓ 250	x	x	x		x	x								
15	15	494	200	✓ 200	x	x	x		x	x					x			
16	16	495	175	✓ 175	x	x	x		x	x								
17	17	496	150	✓ 150	x	x	xx		x	x					x			
18	18	497	125	✓ 125	x	x	x		x	xxx								
19	19	498	100	✓ 100	x	x	x		x	x					x			
20	20	499	75	✓ 75	xx	x	x		x	x								
21	21	500	50	✓ 50	x	x	x		x	x					x			
22	22	501	25	✓ 25	x	x	x		x	x					x			
23	23	502	10	✓ 10	x	x	x		x	x					x			
24	24	503	5	✓ 5	x	x	x		x	x								

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

Bottom Depth: 3946 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0518	2218
Bottom	10641	
End	0814	

Positional Information

Lat:	49° 34.04	N
Lon:	138° 39.98	W

Start

▼

Lat:	49° 34.07	N
Lon:	138° 40.00	W

Bottom

▼

Lat:	49° 34.00	N
Lon:	138° 39.96	W

End

Extra comments:
 Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P20 Event #: 56 Ship: Tully UTC Date (dd|mmm|yyyy): 15 Jun 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials					Comments							
			Target Pressure	Confirmed Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC		ONAr				
				✓	✓	✓	✓	✓		514 MB	514 MB		✓				
1	1	504	300	✓ 300	x			x		NS	NS						Leaking Badly
2	2	505	200	✓ 200	x	x	x	x									
3	3	506	175	✓ 175	x	x	x	x									
4	4	507	100	✓ 100	x	x	x	x		x							
5	5	508	75	✓ 75	x			x x		x							
6	6	509	50	✓ 50	x			x		x							
7	8	510	40	✓ 40	x			x		x							
8	9	511	30	✓ 30	x			x		x							
9	10	512	25	✓ 25	x			x		x							
10	11	513	20	✓ 20	x x	x x	x x	x		x							
11	13	514	15	✓ 15	x			x		x x *							
12	14	515	10	✓ 10	x			x		x							
13	15	516	5	✓ 5	x	x	x	x		x							
14	18	517	0	✓ 0	x	x	x	x		x							
15	7	518	50/M*10	✓ 50						x x	x x						
16	12	519	20/Max	✓ 20						x x	x x						
17	16	520	5	✓ 5						x x	x x						
18	17	521	5	✓ 5									x				
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 3946 m
 Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1402	702
Bottom	1407	
End	1426	

Positional Information:
 Lat: 49 ° 34 01 N
 Lon: 138 ° 40 00 W

Lat: 49 ° 34 02 N
 Lon: 138 ° 39 99 W

Lat: 49 ° 34 04 N
 Lon: 138 ° 40 03 W

Extra comments:
 DMS cast; out-of-order. PAR on bottles
 1-6, 15, 7, 8, 9, 10, 16, 11, 12, 13, 17, 18, 14

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P20 Event #: 57 Ship: Tully UTC Date (dd|mmm|yyyy): 15 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓	Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH	UBC						
1	1	522	100	✓	100													
2	2	523	80	✓	80													
3	3	524	60	✓	61													
4	4	525	50	✓	50													
5	5	526	50	✓	50													
6	6	527	50	✓	50													
7	7	528	40	✓	40													
8	8	529	30	✓	30													
9	9	530	20	✓	20													
10	10	531	20	✓	20													
11	11	532	20	✓	20													
12	12	533	10	✓	10													
13	13	534	5	✓	5													
14	14	535	5	✓	5													
15	15	536	5	✓	5													
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): MB

Bottom Depth: 3945 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	15:11	08:11
Bottom	15:15	
End	15:27	

Positional Information

Start

Lat: 49 ° 34 00 N

Lon: 138 ° 39 98 W

Bottom

Lat: 49 ° 34 01 N

Lon: 138 ° 39 95 W

End

Lat: 49 ° 33 98 N

Lon: 138 ° 39 99 W

Extra comments:

Light cast - PAR on

OUT-OF-ORDER

Cruise ID: 2014-18 Station: P21 Event #: 60 Ship: Tully UTC Date (dd|mmm|yyyy): 15 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	pH	SAL									
1		537	250	✓ 251														Water for Ammonia
2		538	50/Max	✓ 25	xx	xx	x											chl > 2 ug/l
3		539	5	✓ 5	xx	xx	x											
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
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14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): DY

Bottom Depth: 3939 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2003	1303
Bottom	2039	
End	2118	

Positional Information

Start

Lat: 49 ° 38.01 N

Lon: 139 ° 39.93 W

Bottom

Lat: 49 ° 38.06 N

Lon: 139 ° 39.95 W

End

Lat: 49 ° 38.04 N

Lon: 139 ° 39.93 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P22 Event #: 61 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	HPLC	CHL	Nut	pH	SAL						
1		540	50 Max	✓ 25	x x	x x	x								
2		541	5		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): DY

Bottom Depth: 3925 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0150	1850
Bottom	0231	
End	0311	

Positional Information

Lat:	49 ° 41.93	N
Lon:	140 ° 40.05	W

Start

Lat:	49 ° 41.87	N
Lon:	140 ° 40.17	W

Bottom

Lat:	49 ° 41.83	N
Lon:	140 ° 40.32	W

End

Extra comments:

Cruise ID: 2014-18 Station: P23 Event #: 64 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | Jan | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓	Pressure	HPLC	CHL	Nut	pH	SAL									
1	1	542	30 50/Max	✓	30	x x	x x	x											
2	2	543	5	✓	5	x x	x x	x											
3																			
4																			
5																			
6																			
7																			
8																			
9																			
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14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 4030 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	07:20	00:20
Bottom	07:56	
End	08:31	

Positional Information
Start
Lat: 49 ° 46 03 N
Lon: 141 ° 39 87 W

Bottom
Lat: 49 ° 46 05 N
Lon: 141 ° 39 84 W

End
Lat: 49 ° 46 03 N
Lon: 141 ° 39 76 W

Extra comments:

Cruise ID: 2014-18 Station: P24 Event #: 65 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓	Pressure	HPLC	CHL	Nut	pH	SAL								
1	1	544	180	✓	180				6	x								
2	2	545	160	✓	160				6	x								
3	3	546	140	✓	140				6	x								
4	4	547	120	✓	120				6	x								
5	5	548	50/Max	✓	50	x x	x x	x										
6	6	549	5	✓	5	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): MB

Bottom Depth: 3968 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1408	0708
Bottom	1444	
End	1522	

Positional Information

Start

Lat: 49 ° 50 24 N

Lon: 142 ° 39 93 W

Bottom

Lat: 49 ° 50 17 N

Lon: 142 ° 39 94 W

End

Lat: 49 ° 50 16 N

Lon: 142 ° 39 87 W

Extra comments:

pH experiment

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P25 Event #: 68 Ship: Tully UTC Date (dd|mmm|yyyy): 16|6|2011

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	pH	SAL	DIC					
1		550	50/Max	✓ 200	x x	x x	x								Oops. Fuck.
2		551	5	✓ 5	x x	x x	x								
3		552	2000	✓ 2000					x						
4		553	2000	✓					x						
5		554	2000	✓				x x x	x	x x x					
6		555	2000	✓				x x x	x	x x x					
7		556	2000	✓				x x x	x	x x x					
8		557	2000	✓				x x x	x	x x x					
9		558	2000	✓				x x x	x	x x x					
10		559	2000	✓					x						
11		560	2000	✓					x						
12		561	2000	✓					x						
13		562	2000	✓					x						
14		563	2000	✓					x						
15		564	2000	✓					x						
16		565	2000	✓					x						
17		566	2000	✓					x						
18		567	2000	✓					x						
19		568	2000	✓					x						
20		569	2000	✓					x						
21		570	2000	✓					x						
22		571	2000	✓					x						
23		572	2000	✓					x						
24		573	2000	✓					x						

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

Bottom Depth: 4124 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2122	1422
Bottom	2153	
End	2231	

Positional Information

Lat:	50 ° 0.07	N
Lon:	143 ° 36.23	W

▼

Lat:	50 ° 0.08	N
Lon:	143 ° 36.17	W

▼

Lat:	50 ° 0.07	N
Lon:	143 ° 36.11	W

Extra comments:
OUT-OF-ORDER !!
3 - 24; 1 - 2

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P35 Event #: 69 Ship: Tully UTC Date (dd|mmm|yyyy): 17 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	pH	SAL						
1		574	50/Max	✓ 40	x x	x x	x								
2		575	5	✓ 5	x x	x x	x								
3															
4															
5															
6															
7															
8															
9															
10															
11															
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13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): 24

Bottom Depth: 04128 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0327	2027
Bottom	0405	
End	0447	

Positional Information

Start

Lat: 50 ° 00.00 N

Lon: 144 ° 18.15 W

Bottom

Lat: 49 ° 59.82 N

Lon: 144 ° 18.10 W

End

Lat: 49 ° 59.70 N

Lon: 144 ° 18.25 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P26 Event #: 72 Ship: Tully UTC Date (dd|mmm|yyyy): 17 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	OXY	Sal	Nut-F	Nut-C	DIC	Alk	pH		Nut	UBC			
				✓									250				
1	1	600	Bot-10	✓	4317	x		xx	x	x	x			x			
2	2	601	4000	✓	4001	xx	xx	xx	x	x	x		x	x			
3	3	602	3500	✓	3500	x	x	xx	x	xx	x		x				
4	4	603	3000	✓	3000	x	x	xx	x	x	x		x	x			
5	5	604	2500	✓	2500	x	x	xx	x	x	xxx		x				
6	6	605	2000	✓	2000	x	xx	xx	x	x	x		x	x			
7	7	606	1500	✓	1500	x	x	xx	x	x	x		x	x			
8	8	607	1250	✓	1250	xx	x	xx	x	x	x		x	x			
9	9	608	1000	✓	1001	x	x	xx	x	x	x		x	x			
10	10	609	800	✓	800	x		xxx	xx	x	x			x			
11	11	610	600	✓	600	x		xx	x	x	x			x			
12	12	611	400	✓	400	x		xx	x	x	x			x			
13	13	612	300	✓	300	x		xx		x	x			x			
14	14	613	250	✓	250	xx		xx		x	x						
15	15	614	200	✓	200	x		xx		x	x			x			
16	16	615	175	✓	175	x		xxx		x	x						
17	17	616	150	✓	150	x		xx		x	x			x			
18	18	617	125	✓	125	xx		xx		x	x						
19	19	618	100	✓	100	x		xx		x	x			x			
20	20	619	75	✓	75	x		xx		x	x	xxx					
21	21	620	50	✓	50	x		xx		x	x			x			
22	22	621	25	✓	25	x		xx		x	x			x			
23	23	622	10	✓	10	x		xx		x	x			x			
24	24	623	5	✓	5	x	x	xx		x	x						

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

Bottom Depth: 4227 m
Transmisso Cleaned: Y N

Time	UTC	Local
Start	12:35	05:35
Bottom	13:54	
End	15:27	

Positional Information

Lat:	50 ° 0 01	N
Lon:	144 ° 59 99	W

Start

Lat:	50 ° 0 00	N
Lon:	144 ° 59 95	W

Bottom

Lat:	49 ° 59 99	N
Lon:	144 ° 59 95	W

End

Extra comments:
Deep cast



Cruise ID: 2014-18 Station: P26 Event #: 73 Ship: Tully UTC Date (dd|mmm|yyyy): 17 JUN 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓	Pressure			Bsi									
								Not									
1		624	202					x									
2		625	200					x									
3		626	16					x									
4		627	14					x									
5		628	12					x									
6		629	10					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): in-situ pumps

Bottom Depth: _____ m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1600	
Bottom		
End		

Positional Information

Lat:	49° 59.98	N
Lon:	144° 59.94	W

Start

Lat:	°	N
Lon:	°	W

Bottom

Lat:	°	N
Lon:	°	W

End

Extra comments:
First UBC in-situ pumps

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: P26 Event #: 74 Ship: Tully UTC Date (dd|mmm|yyyy): 17|6|2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed	DMS	DMSP	DMSP	Nut-F		Chl	HPLC	Phyto	ONAr					
				Pressure														
				✓		MF	t	MA	d	MA	DT			MF	BT	MF	MR	MT
1		630	300	✓	300	x			x									
2		631	200	✓	200	x		x	x									
3		632	175	✓	175	x		x	x									
4		633	100	✓	100	x		x	x		x							
5		634	75	✓	74	x			xx		x							Vent leaking
6		635	50	✓	50	x			x		xx*							
7		636	40	✓	40	x			x		x							
8		637	30	✓	30	x			x		x							Vent leaking
9		638	25	✓	25	x			x		x							
10		639	20	✓	20	xx		xx	xx		x							
11		640	15	✓	14	x			x		x							
12		641	10	✓	10	x			x		x							
13		642	5	✓	5	x		x	x		x							
14		643	0	✓	2	x		x	x		x							
15		644	50/M*10	✓	50						xx		xx					
16		645	20/Max	✓	40						xx		xx					
17		646	5	✓	5						xx		xx		xxx			
18		647	5	✓	5									x				
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 4223 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2132	1432
Bottom	2138	
End	2156	

Positional Information

Lat:	50° 0.05	N
Lon:	144° 59.96	W

Start

Lat:	50° 0.04	N
Lon:	144° 59.96	W

Bottom

Lat:	49° 59.99	N
Lon:	144° 59.87	W

End

Extra comments:
DMS cast; out-of-order. PAR on

Cruise ID: 2014-18 Station: P26 Event #: 75 Ship: Tully UTC Date (dd|mmm|yyyy): 17 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓	Pressure			Nd									
1		648	205					x									
2		649	200					x									
3		650	30					x									
4		651	25					x									
5		652	20					x									
6		653	15	10				x									
7				0													
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): in-situ pumps

Bottom Depth: _____ m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2230	
Bottom		
End	0117	

Positional Information

Start

Lat: 50°00.00 N

Lon: 144°59.87 W

Bottom

Lat: ° N

Lon: ° W

End

Lat: 50°00.09 N

Lon: 145°00.06 W

Extra comments:

Second UBC in-situ pumps

Cruise ID: 2014-18 Station: P26 Event #: 77 Ship: Tully UTC Date (dd|mmm|yyyy): 18 June 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure													
1		654	3000	✓	3000												
2		655	3000	✓	1												
3		656	3000	✓	1												
4		657	3000	✓	1												
5		658	1500	✓	1499												
6		659	1500	✓	1												
7		660	1500	✓	1												
8		661	1500	✓	1												
9		662	10	✓	10												
10		663	10		1												
11		664	10														
12		665	10														
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 4225 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0242	1942
Bottom	0340	
End	0436	

Positional Information
Start
Lat: 50 ° 0.01 N
Lon: 144 ° 59.93 W

Bottom
Lat: 50 ° 0.04 N
Lon: 145 ° 0.04 W

End
Lat: 50 ° 0.03 N
Lon: 145 ° 0.05 W

Extra comments:
Maureen's cast

Cruise ID: 2014-18 Station: P26 Event #: 78 Ship: Tully UTC Date (dd|mmm|yyyy): 18 JUN 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure													
1	1	666	2000	✓ 2000													
2	2	667	2000	✓ 2000													
3	3	668	2000	✓ 2000													
4	4	669	2000	✓ 2000													
5	5	670	2000	✓ 2000													
6	6	671	1000	✓ 1000													
7	7	672	1000	✓ 1000													
8	8	673	1000	✓ 1000													
9	9	674	1000	✓ 1000													
10	10	675	1000	✓ 1000													
11	11	676	500	✓ 500													
12	12	677	500	✓ 500													
13	13	678	500	✓ 500													
14	14	679	500	✓ 500													
15	15	680	10	✓ 11													
16	16	681	10	✓ 11													
17	17	682	10	✓ 11													
18	18	683	10	✓ 11													
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 4225 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0721	0821
Bottom	0756	
End	0834	

Positional Information

Lat:	49 ° 59 99	N
Lon:	144 ° 59 96	W

▼

Lat:	49 ° 59 99	N
Lon:	144 ° 59 97	W

▼

Lat:	50 ° 0 04	N
Lon:	145 ° 0 04	W

Extra comments:
Andreas' cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-18 Station: PA-008 Event #: 80 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | 6 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure		ONAr	Oxy								
1		684	10	✓ 10		x	x								
2		685	5	✓ 5		x	x								
3		686	0	✓ 2		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): DY

Bottom Depth: 4203 m

Transmisso Cleaned: (Y) 1 N

Time	UTC	Local
Start	2103	1403
Bottom	2109	
End	2117	

Positional Information

Start

Lat: 50 ° 3.27 N

Lon: 144 ° 53.02 W

Bottom

Lat: 50 ° 3.27 N

Lon: 144 ° 53.01 W

End

Lat: 50 ° 3.28 N

Lon: 144 ° 53.00 W

Extra comments:

ONAr cast

CTD to 300 dbar

Cruise ID: 2014-18 Station: PA-007 Event #: 81 Ship: Tully UTC Date (dd|mmm|yyyy): 18|6|2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure		ONAr	Oxy UW										
1		687	10	✓ 10		x	x										
2		688	5	✓ 5		x	x										
3		689	0	✓ 2		x	x										
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
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20																	
21																	
22																	
23																	
24																	

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): 04

Bottom Depth: 4189 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2304	1604
Bottom	2310	
End	2318	

Positional Information

StartLat: 50 ° 7.61 N
Lon: 144 ° 48.83 W

BottomLat: 50 ° 7.61 N
Lon: 144 ° 48.81 W

EndLat: 50 ° 7.60 N
Lon: 144 ° 48.83 W

Extra comments:

ONAr cast

CTD to 300 dbar

Cruise ID: 2014-18 Station: P26 Event #: 83 Ship: Tully UTC Date (dd|mmm|yyyy): 17 Jun 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed		Plastics													
				✓	Pressure														
1	1	576	Bot-10	✓	4317		x												
2	2	577	4000	✓	4000		x												
3	3	578	3500	✓	3500		x												slow leak on vent
4	4	579	3000	✓	3000		x												
5	5	580	2500	✓	2500		x												
6	6	581	2000	✓	2000		x												
7	7	582	1500	✓	1500		x												
8	8	583	1250	✓	1250		x												slow spigot leak on 8
9	9	584	1000	✓	1000		x												
10	10	585	800	✓	800		x												
11	11	586	600	✓	600		x												Bottom of spray bottle organic matter?
12	12	587	400	✓	400		x												
13	13	588	300	✓	300		x												
14	14	589	250	✓	250		x												
15	15	590	200	✓	200		x												
16	16	591	175	✓	175		x												
17	17	592	150	✓	150		x												
18	18	593	125	✓	125		x												
19	19	594	100	✓	100		x												
20	20	595	75	✓	75		x												
21	21	596	50	✓	50		x												
22	22	597	25	✓	25		x												
23	23	598	10	✓	10		x												
24	24	599	5	✓	5		x												

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

Bottom Depth: 4225 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1140	0440
Bottom	1257	
End	1439	

Positional Information

Lat:	50 ° 0 03	N
Lon:	144 ° 59 96	W

▼

Lat:	50 ° 0 01	N
Lon:	144 ° 59 96	W

▼

Lat:	49 ° 59 99	N
Lon:	144 ° 59 93	W

Extra comments:
Plastics cast