

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 16 Event #: 2 Ship: Tully UTC Date (dd|mmm|yyyy): 2 Sept 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal	Nut-F	Chl	DIC								
1		1	Bot-5	✓	143	x		x										
2		2	125	✓		x	x	x										
3		3	100	✓		x x		x										
4		4	75	✓		x		x										
5		5	50	✓		x		x										
6		6	40	✓		x		x x										
7		7	30	✓		x		x										
8		8	20	✓		x		x	x x									
9		9	10	✓		x		x	x x									
10		10	5	✓		x x		x										
11		11	0			x		x x	x x									
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Watchkeeper(s): SR

Bottom Depth: 147 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1503	0803
Bottom	1507	
End	1520	

Positional Information

Start Lat: 49 ° 57.45 N

Start Lon: 125 ° 8.80 W

Bottom Lat: 49 ° 57.44 N

Bottom Lon: 125 ° 8.76 W

End Lat: 49 ° 57.33 N

End Lon: 125 ° 8.57 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 14 Event #: 7 Ship: Tully UTC Date (dd|mmm|yyyy): 02 | 09 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments							
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC	Ammonia										
1		12	Bot-5	✓	305	x		x												
2		13	250	✓	250	x	x	x												
3		14	200	✓	200	x x		x												
4		15	175	✓	175	x		x												
5		16	150	✓	150	x		x												
6		17	125	✓	124	x		x x												
7		18	100	✓	100	x		x												
8		19	75	✓	75	x		x												
9		20	50	✓	50	x		x												
10		21	40	✓	40	x x		x												
11		22	30	✓	30	x		x x												
12		23	20	✓	20	x		x	x x											
13		24	10	✓	10	x		x	x x		xx							Ammonia took 2 O2 samples		
14		25	5	✓	5	x		x												
15		26	0	✓	1.3	x		x	x x											
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				

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

Bottom Depth: 316 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1926	1226
Bottom	1931	
End	1951	

Positional Information
Start
Lat: 49 ° 52.98 N
Lon: 124 ° 59.56 W

Bottom
Lat: 49 ° 52.97 N
Lon: 124 ° 59.49 W

End
Lat: 49 ° 52.99 N
Lon: 124 ° 59.42 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 12 Event #: 12 Ship: Tully UTC Date (dd|mmm|yyyy): 02 | 09 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	Oxy MB/MG	Sal K/P	Nut-F K/P	Chl KR/RN	DIC BR/KS								
1		27	Bot-5	✓	345	x		x	X								
2		28	300	✓	300	x	x	x									
3		29	250	✓	250	x		x									
4		30	200	✓	200	x		x									
5		31	175	✓	174	x		x									
6		32	150	✓	150	x x		x	xx								
7		33	125	✓	125	x		x									
8		34	100	✓	100	x		x x	X								
9		35	75	✓	75	x		x									
10		36	50	✓	50	x		x	X								
11		37	40	✓	40	x		x									
12		38	30	✓	30	x x		x	xx								
13		39	20	✓	20	x		x	x x	X							
14		40	10	✓	10	x		x x	x x	X							
15		41	5	✓	5	x		x									
16		42	0	✓	1.2	x		x	x x								
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 355 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2341	1641
Bottom	2347	
End	0007	

Positional Information
Start
Lat: 49 ° 43.61 N
Lon: 124 ° 40.94 W

Bottom
Lat: 49 ° 43.63 N
Lon: 124 ° 40.96 W

End
Lat: 49 ° 43.73 N
Lon: 124 ° 40.87 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 9 Event #: 14 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | 09 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy MB/MG	Sal RN	Nut-F RN	Chl RN	DIC						
1		43	Bot-5	✓ 164	x x		x								
2		44	150	✓ 150	x	x	x								
3		45	125	✓ 126	x		x x								
4		46	100	✓ 100	x		x								
5		47	75	✓ 75	x		x								
6		48	50	✓ 50	x		x								
7		49	40	✓ 40	x		x								
8		50	30	✓ 30	x		x								
9		51	20	✓ 20	x		x x	x x							
10		52	10	✓ 10	x		x	x x							
11		53	5	✓ 5	x x		x								
12		54	0	✓ 1.5	x		x	x x							
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth:	171	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0152	1852
Bottom	0155	
End	0209	

Positional Information		
Lat:	49 ° 35.52	N
Lon:	124 ° 38.21	W

Start

Lat:	49 ° 35.53	N
Lon:	124 ° 38.20	W

Bottom

Lat:	49 ° 35.57	N
Lon:	124 ° 38.18	W

End

Extra comments:
BOTTLE 3 DID NOT FIRE

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 6 Event #: 16 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | 09 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure		Oxy	Sal	Nut-F	Chl	DIC								
						MG/AM	AT	ATR/N	RIN									
1		55	Bot-5	✓	188	x		x										
2		56	175	✓	175	x	x	x										
3		57	150	✓	150	x		x										
4		58	125	✓	125	x		x										
5		59	100	✓	100	x x		x x										
6		60	75	✓	75	x		x										
7		61	50	✓	50	x x		x										
8		62	40	✓	40	x		x										
9		63	30	✓	30	x		x										
10		64	20	✓	20	x		x	x x									
11		65	10	✓	10	x		x	x x									
12		66	5	✓	5	x		x										
13		67	0	✓	1.3	x		x x	x x									
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 196 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0400	2100
Bottom	0404	
End	0420	

Positional Information

Lat:	49 ° 30.58	N
Lon:	124 ° 27.75	W

▼

Lat:	49 ° 30.58	N
Lon:	124 ° 27.77	W

▼

Lat:	49 ° 30.59	N
Lon:	124 ° 27.26	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 3 Event #: 20 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | 09 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC								
					SR	AM	AM	BG	BG								
1		68	Bot-5	✓ 317	x		x										
2		69	300		x	x	x										
3		70	250		x		x x										
4		71	200		x		x										
5		72	175		x x		x										
6		73	150		x		x										
7		74	125		x		x										
8		75	100		x		x										
9		76	75		x		x										
10		77	50		x		x										
11		78	40		x x		x										
12		79	30		x		x										
13		80	20		x		x	x x									
14		81	10		x		x x	x x									
15		82	5		x		x										
16		83	0		x		x	x x									
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Watchkeeper(s): MG

Bottom Depth: 324 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0701	0001
Bottom	0707	
End	0726	

Positional Information

Start

Lat: 49 ° 26.61 N

Lon: 124 ° 20.22 W

Bottom

Lat: 49 ° 26.61 N

Lon: 124 ° 20.20 W

End

Lat: 49 ° 26.62 N

Lon: 124 ° 20.25 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 2 Event #: 22 Ship: Tully UTC Date (dd|mmm|yyyy): 3 | Sept | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC						
					SR+AM	AM	BB	BG							
1		84	Bot-5	✓ 275	x		x								
2		85	250		x x	x	x								
3		86	200		x		x								
4		87	175		x		x								
5		88	150		x x		x								
6		89	125		x		x x								
7		90	100		x		x								
8		91	75		x		x								
9		92	50		x		x								
10		93	40		x		x								
11		94	30		x		x								
12		95	20		x		x	x x							
13		96	10		x		x	x x							
14		97	5		x		x x								
15		98	0		x		x	x x							
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Watchkeeper(s): SR

Bottom Depth: 283 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0917	0217
Bottom	0922	
End	0937	

Positional Information

Start

Lat: 49 ° 24.05 N

Lon: 124 ° 9.43 W

Bottom

Lat: 49 ° 24.08 N

Lon: 124 ° 9.43 W

End

Lat: 49 ° 24.13 N

Lon: 124 ° 9.46 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 27 Event #: 28 Ship: Tully UTC Date (dd|mmm|yyyy): 3 Sept 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC								
1		99	Bot-5	✓ 340	x		x										
2		100	300	✓	x	x	x										
3		101	250	✓	x		x x										
4		102	200	✓	x		x										
5		103	175	✓	x		x										
6		104	150	✓	x		x										
7		105	125	✓	x		x										
8		106	100	✓	x		x										
9		107	75	✓	x x		x										
10		108	50	✓	x		x										
11		109	40	✓	x		x x										
12		110	30	✓	x		x										
13		111	20	✓	x		x	x x									
14		112	10	✓	x		x	x x									
15		113	5		x x		x										
16		114	0		x		x	x x									
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 350 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1717	1017
Bottom	1723	
End	1742	

Positional Information
Start
Lat: 49 ° 19.09 N
Lon: 123 ° 47.94 W

Bottom
Lat: 49 ° 19.10 N
Lon: 123 ° 47.94 W

End
Lat: 49 ° 19.13 N
Lon: 123 ° 47.95 W

Extra comments:

Cruise ID: 2014-60 Station: 39 Event #: 31 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | 09 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC							
1		115	Bot-5	✓ 373	x		x									
2		116	350	✓ 350	x x	x	x									
3		117	300	✓ 300	x		x x									
4		118	250	✓ 250	x		x									
5		119	200	✓ 200	x		x									
6		120	175	✓ 175	x		x									
7		121	150	✓ 150	x		x									
8		122	125	✓ 125	x		x									
9		123	100	✓ 100	x		x									
10		124	75	✓ 75	x		x									
11		125	50	✓ 50	x x		x									
12		126	40	✓ 40	x		x x									
13		127	30	✓ 30	x		x									
14		128	20	✓ 20	x		x	x x								
15		129	10	✓ 10	x		x	x x								
16		130	5	✓ 5	x		x									
17		131	0	✓ 1.2	x		x	x x								
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 376 m
Transmisso Cleaned: Y N

Time	UTC	Local
Start	2032	1332
Bottom	2038	
End	2102	

Positional Information

Lat:	49 ° 9.75	N
Lon:	123 ° 32.94	W

Start

Lat:	49 ° 9.75	N
Lon:	123 ° 32.97	W

Bottom

Lat:	49 ° 9.78	N
Lon:	123 ° 33.04	W

End

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 42 Event #: 37 Ship: Tully UTC Date (dd|mmm|yyyy): 4 | SEP | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments	
			Target	Confirmed	Oxy	Sal	Nut-F	Chl	DIC										
			Pressure	✓ Pressure	MB/MB	MB	MR	DT	Pg/P1										
1		132	Bot-5	✓	315	x		x		x									
2		133	300	✓	300	x	x	xx											
3		134	250	✓	250	x		x											
4		135	200	✓	200	x		x											
5		136	175	✓	175	x		x											
6		137	150	✓	150	x		x		x									
7		138	125	✓	125	xx		x		x									
8		139	100	✓	100	x		x		xx									
9		140	75	✓	75	x		x		x									
10		141	50	✓	50	x		x											
11		142	40	✓	40	x		xx											
12		143	30	✓	30	x		x		x									
13		144	20	✓	20	x		x	xx	xx									AT THE NECK DIC BOTTLE WITH CRACK
14		145	10	✓	10	xx		x	xx	x									
15		146	5	✓	5	x		x											
16		147	0	✓	1.1	x		x	xx	x									
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 320 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0105	1805
Bottom	0110	
End	0132	

Positional Information
Start
Lat: 49 ° 1.79 N
Lon: 123 ° 26.16 W

Bottom
Lat: 49 ° 1.79 N
Lon: 123 ° 26.14 W

End
Lat: 49 ° 1.78 N
Lon: 123 ° 26.09 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 46 Event #: 40 Ship: Tully UTC Date (dd|mmm|yyyy): 04 | 09 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target	Confirmed	MG/AT	Oxy	Sal	Nut-F	Chl	DIC						
			Pressure	✓ Pressure												
1		148	Bot-5	✓	184	x		x								
2		149	150	✓	150	x	x	xx								
3		150	125	✓	125	xx		x								
4		151	100	✓	100	x		x								
5		152	75	✓	75	x		x								
6		153	50	✓	50	x		x								
7		154	40	✓	40	xx		x								
8		155	30	✓	30	x		x								
9		156	20	✓	20	x		x	xx							
10		157	10	✓	10	x		x	xx							
11		158	5	✓	5	x		xx								
12		159	0	✓	1.2	x		x	xx							
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 189 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0411	2111
Bottom	0414	
End	0428	

Positional Information

Lat:	48 °	51.28	N
Lon:	123 °	10.79	W

▼

Lat:	48 °	51.27	N
Lon:	123 °	10.78	W

▼

Lat:	48 °	51.27	N
Lon:	123 °	10.75	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 56 Event #: 46 Ship: Tully UTC Date (dd|mmm|yyyy): 4 Sept 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Oxy	Sal	Nut-F	Chl	DIC									
			Pressure	✓ Pressure	SR	AM	SR	BG	BG									
1		160	Bot-5	✓	220	x		x										
2		161	200	✓		x	x	x										
3		162	175	✓		x		x										
4		163	150	✓		x x		x x										
5		164	125	✓		x		x										
6		165	100	✓		x		x										
7		166	75	✓		x		x										
8		167	50	✓		x		x										
9		168	40	✓		x		x x										
10		169	30	✓		x		x										
11		170	20	✓		x		x	x x									
12		171	10	✓		x		x	x x									
13		172	5	✓		x		x										
14		173	0	✓		x x		x	x x									
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 218 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0832	0132
Bottom	0836	
End	0853	

Positional Information
Start
Lat: 48 ° 46.31 N
Lon: 123 ° 1.66 W

Bottom
Lat: 48 ° 46.24 N
Lon: 123 ° 1.78 W

End
Lat: 48 ° 46.13 N
Lon: 123 ° 1.97 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 59 Event #: 50 Ship: Tully UTC Date (dd|mmm|yyyy): 05 | Sep | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed		Oxy	Sal	Nut-F	Chl	DIC									
				✓	Pressure														
1		174	Bot-5	✓	221	x		x		JA									
2		175	200	✓	200	x	x	x											
3		176	175	✓	175	x		x		JA									
4		177	150	✓	150	x x		x x		JA									
5		178	125	✓	125	x		x											
6		179	100	✓	100	x		x		JA									
7		180	75	✓		x		x		JA									
8		181	50	✓		x		x		JA									
9		182	40	✓		x		x x											
10		183	30	✓		x		x		JA									
11		184	20	✓		x		x	x x	JA									
12		185	10	✓		x		x	x x	JA									
13		186	5	✓		x		x		JA									
14		187	0			x x		x	x x	JA									
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 225 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0328	2028
Bottom	0332	
End	0347	

Positional Information
Start
Lat: 48 ° 37 77 N
Lon: 123 ° 14 72 W

Bottom
Lat: 48 ° 37 79 N
Lon: 123 ° 14 72 W

End
Lat: 48 ° 37 75 N
Lon: 123 ° 14 74 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 62 Event #: 53 Ship: Tully UTC Date (dd|mmm|yyyy): 05 | Sep | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC								
						SR	RL	KY	KY								
1		200	Bot-5	✓	144	x		x									
2		201	125	✓		x	x	x									
3		202	100	✓		x		x									
4		203	75	✓		x		x x									
5		204	50	✓		x		x									
6		205	40	✓		x x		x									
7		206	30	✓		x		x									
8		207	20	✓		x		x x	x x								
9		208	10	✓		x		x	x x								
10		209	5	✓		x x		x									
11		210	0			x		x	x x								
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:	150	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0639	2339
Bottom	0642	
End	0654	

Positional Information
Start
Lat: 48° 22.86 N
Lon: 123° 02.67 W

Bottom
Lat: 48° 22.88 N
Lon: 123° 02.66 W

End
Lat: 48° 22.92 N
Lon: 123° 02.61 W

Extra comments:

Cruise ID: 2014-60 Station: 65 Event #: 56 Ship: Tully UTC Date (dd|mmm|yyyy): 5 Sept 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC						
					SR/RL	KY	KY	KY							
1		211	Bot-5	✓ 123	x		x								
2		212	100	✓	x x	x	x								
3		213	75	✓	x		x								
4		214	50	✓	x		x x								
5		215	40	✓	x		x								
6		216	30	✓	x		x								
7		217	20	✓	x		x	x x							
8		218	10	✓	x x		x	x x							
9		219	5	✓	x		x x								
10		220	0	✓	x		x	x x							
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 128 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0948	0248
Bottom	0951	
End	1002	

Positional Information
Start
Lat: 48 ° 15.88 N
Lon: 123 ° 9.97 W

Bottom
Lat: 48 ° 15.88 N
Lon: 123 ° 9.99 W

End
Lat: 48 ° 15.87 N
Lon: 123 ° 10.17 W

Extra comments:

Cruise ID: 2014-60 Station: ADCP Event #: 60 Ship: Tully UTC Date (dd|mmm|yyyy): 5 | Sept | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed		Oxy	Sal	Nut-F	Chl	DIC									
				✓	Pressure														
1		221	Bot-5	✓	104	x		x x											
2		222	100	✓		x	x	x											
3		223	75	✓		x		x											
4		224	50	✓		x x		x											
5		225	40	✓		x		x											
6		226	30	✓		x		x x											
7		227	20	✓		x		x	x x										
8		228	10	✓		x		x	x x										
9		229	5	✓		x		x											
10		230	0	✓		x x		x	x x										
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Watchkeeper(s): SR

Bottom Depth: 112 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1242	0542
Bottom	1244	
End		

Positional Information

Start

Lat: 48 ° 14.54 N

Lon: 123 ° 18.16 W

Bottom

Lat: 48 ° 14.55 N

Lon: 123 ° 18.26 W

End

Lat: 48 ° 14.55 N

Lon: 123 ° 18.30 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 69 Event #: 63 Ship: Tully UTC Date (dd|mmm|yyyy): 5 Sept 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC						
1		231	Bot-5	✓ 172	x		x x								
2		232	150	✓ 151	x	x	x								
3		233	125	✓	x		x								
4		234	100	✓	x x		x								
5		235	75	✓	x		x								
6		236	50	✓	x		x x								
7		237	40	✓	x		x								
8		238	30	✓ 31	x		x								
9		239	20	✓	x		x	x x							
10		240	10	✓	x x		x	x x							
11		241	5	✓	x		x								
12		242	0	✓	x		x	x x							
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 179 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1545	0845
Bottom	1548	
End	1605	

Positional Information
 Start
 Lat: 48° 15.71 N
 Lon: 123° 43.23 W

Bottom
 Lat: 48° 15.73 N
 Lon: 123° 43.27 W

End
 Lat: 48° 15.95 N
 Lon: 123° 42.99 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 72 Event #: 66 Ship: Tully UTC Date (dd|mmm|yyyy): 05 | SEP | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC						
					22/10	58	58	58	2/10						
1		243	Bot-5	✓ 183	x		xx		x						
2		244	175	✓	x	x	x								
3		245	150	✓	x		x		x						
4		246	125	✓	x		x								
5		247	100	✓	x		x		xx						DIC B SAMPLED BEFORE A
6		248	75	✓	x		xx		x						
7		249	50	✓	x		x		x						
8		250	40	✓	x		x		x						
9		251	30	✓	x		x		x						
10		252	20	✓	x		x	xx	xx						
11		253	10	✓	x		x	xx	x						
12		254	5	✓	x		x		x						
13		255	0		x		x	xx	x						
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Watchkeeper(s): MR

Bottom Depth: 188 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1856	1156
Bottom	1900	
End	1913	

Positional Information

Start Lat: 48° 18' 67" N
Lon: 124° 03' 89" W

Bottom Lat: 48° 18' 67" N
Lon: 124° 03' 83" W

End Lat: 48° 18' 58" N
Lon: 124° 03' 55" W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 75 Event #: 70 Ship: Tully UTC Date (dd|mmm|yyyy): 06 | SEP | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC							
1		256	Bot-5	✓ 217	x		x									
2		257	200	✓	x x	x	x									
3		258	175	✓	x		x									
4		259	150	✓	x		x									
5		260	125	✓	x		x									
6		261	100	✓	x		x									
7		262	75	✓	x		x									
8		263	50	✓	x x		x x									
9		264	40	✓	x		x									
10		265	30	✓	x		x									
11		266	20	✓	x		x	x x								
12		267	10	✓	x		x	x x								
13		268	5	✓	x		x									
14		269	0		x		x x	x x								
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 222 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0041	1741
Bottom	0045	
End	0100	

Positional Information
Start
Lat: 48 ° 28.24 N
Lon: 124 ° 32.82 W

Bottom
Lat: 48 ° 28.24 N
Lon: 124 ° 32.80 W

End
Lat: 48 ° 28.22 N
Lon: 124 ° 32.85 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 102 Event #: 73 Ship: Tully UTC Date (dd|mmm|yyyy): 06 | SEP | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal	Nut-F	Chl	DIC	HPLC								
1		270	Bot-5	✓	251	x		x											
2		271	200	✓		x	x	x											
3		272	175	✓		x		x x											
4		273	150	✓		x x		x											
5		274	125	✓		x		x											
6		275	100	✓		x		x											
7		276	75	✓		x		x											
8		277	50	✓		x		x											
9		278	40	✓		x		x											
10		279	30	✓		x		x											
11		280	20	✓		x		x x	x x										
12		281	10	✓		x x		x	x x										
13		282	5	✓		x		x	xx		xx								
14		283	0	✓		x		x	x x										
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 257 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0305	2005
Bottom	0310	
End	0327	

Positional Information

Lat:	48° 30.06	N
Lon:	124° 44.06	W

▼

Lat:	48° 30.11	N
Lon:	124° 44.11	W

▼

Lat:	48° 30.23	N
Lon:	124° 44.09	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-22⁶⁰ Station: 12 Event #: 74 Ship: Tully UTC Date (dd|mmm|yyyy): 14 Sept 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	DIC						
1	1	416	Bot-5	✓ 350	x		x		x						
2	2	417	300	✓	x	x	x								
3	3	418	250	✓	x	x	x		x						
4	4	419	200	✓	x	x	x		x						
5	5	420	175	✓	x		x								
6	6	421	150	✓	xx		x		xx						
7	7	422	125	✓	x		x		x						
8	8	423	100	✓	x		xx		x						
9	9	424	75	✓	x		x		x						
10	10	425	50	✓	x		x		x						
11	11	426	40	✓	x		x		x						
12	12	427	30	✓	x		x		xx						
13	13	428	20	✓	xx		x	xx	x						
14	14	429	10	✓	x		xx	xx	x						
15	15	430	5	✓ 4.8	x		x		x						
16	16	431	0	✓ 1.5	x		x	xx	x						
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 355 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1419	0719
Bottom	1426	0726
End	1445	0745

Positional Information
Start
Lat: 49 ° 43.61 N
Lon: 124 ° 40.80 W

Bottom
Lat: 49 ° 43.60 N
Lon: 124 ° 40.81 W

End
Lat: 49 ° 43.59 N
Lon: 124 ° 40.79 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-60 Station: 42 Event #: 75 Ship: Tully UTC Date (dd|mmm|yyyy): 15 | 09 | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Pressure	Oxy	Sal	Nut-F	Chl	DIC									
			Pressure	✓		Pressure	N ² MG	N ²	SP		K	IP							
1		432	Bot-5	✓	314	x		x		x									
2		433	300	✓		x	x	x x											
3		434	250	✓		x	x	x		x									
4		435	200	✓		x	x	x		x									
5		436	175	✓		x		x											
6		437	150	✓		x		x		x									
7		438	125	✓		x x		x		x									
8		439	100	✓		x		x		x x									
9		440	75	✓		x		x		x									
10		441	50	✓		x		x		x									
11		442	40	✓		x		x x		x									
12		443	30	✓		x		x		x									
13		444	20	✓		x		x	x x	x x									
14		445	10	✓		x x		x	x x	x									
15		446	5	✓		x		x		x									
16		447	0	✓		x		x	x x	x									
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 319 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0149	1849
Bottom	0154	
End	0213	

Positional Information
Start
Lat: 49 ° 1.83 N
Lon: 123 ° 26.12 W

Bottom
Lat: 49 ° 1.84 N
Lon: 123 ° 26.08 W

End
Lat: 49 ° 1.89 N
Lon: 123 ° 26.05 W

Extra comments:
SAVED IN 2014-22 FOLDER