

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LB01 Event #: 2 Ship: Tully UTC Date (dd mmm yyyy): 01 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4						
1	1	1	Bot-10	✓		x		x		x x		x x						
2	2	2	10	✓		x x		x		x x		x x						
3	3	3	5	✓		x		x x		x x	x x	x x					Fluo: 2.3	
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	36	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	1008	0308
Bottom	1009	
End	1012	

Positional Information
Lat: 48° 40.41 N
Lon: 124° 59.42 W

Start

Bottom

End

Lat: 48° 40.40 N
Lon: 124° 59.41 W

Lat: 48° 40.39 N
Lon: 124° 59.40 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2012-59

Station:

LB02

Event #: 03

Ship: Tully

UTC Date (dd/mm/yyyy): 01 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases UBC			
1	1	4	Bot-10	✓	x		x					xx			
2	2	5	30	✓	x		x					xx			
3	3	6	20	✓	xx		x		xx		xx	xxx			
4	4	7	10	✓	x		x		xx		xx	xx			
5	5	8	5	✓	x		xx		xx	xx	xx	xx			Fluo: ~0.9
6		9	Max	X					xx	xx					Fluo:
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): SR

Bottom Depth:	57 m
Transmisso Cleaned:	Y / N

Time	UTC	Local
Start	1057	0357
Bottom	1059	
End	1105	

Positional Information	
Start	Lat: 48 ° 39.02 N
	Lon: 125 ° 2.45 W

Bottom	Lat: 48 ° 39.04 N
	Lon: 125 ° 2.44 W

End	Lat: 48 ° 39.10 N
	Lon: 125 ° 2.45 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LB04 Event #: 5 Ship: Tully UTC Date (dd/mm/yyyy): 01 Sep 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														Comments
			Target Pressure	Confirmed ☒	Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	UBC gases	UVic					
1	1	10	Bot-10	☒		x		x											
2	2	11	75	☒		xx		x											
3	3	12	50	☒		x		xx											
4	4	13	30	☒		x		x											
5	5	14	20	☒		x		x		xx		xx							
6	6	15	10	☒		x		x		xx		xx							
7	7	16	5	☒		x		x		xx	xx	xx						Fluo: 3.3	
8		17	Chl Max	☒						xx	xx							Fluo:	
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): SR

Bottom Depth: 112 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1231	0531
Bottom	1234	
End	1243	

Positional Information

Start Lat: 48 ° 35.72 N
Lon: 125 ° 8.82 W

Bottom Lat: 48 ° 35.77 N
Lon: 125 ° 8.82 W

End Lat: 48 ° 35.72 N
Lon: 125 ° 8.82 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LB06

Event #: 9

Ship: Tully

UTC Date (dd:mmm/yyyy): 01 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	UBC gases	UVic		
1		18	Bot-10	107	x		x								
2		19	75		x x		x								
3		20	50		x		x x								
4		21	30		x		x								
5		22	20		x		x		x x		x x				
6		23	10		x		x		x x		x x				
7		24	5		x		x		x x	x x	x x				Fluo: 0.8
8		25	Chl Max	10					x x	x x					Fluo: 0.8
9		26	Chl Max										x		
10		27	Chl Max										x		
11		28	Chl Max										x		
12		29	Chl Max										x		
13		30	Chl Max										x		
14		31	Chl Max										x		
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

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

Time	UTC	Local
Start	1529	0829
Bottom	1532	
End		

Positional Information
Start
Lat: 48 ° 32.12 N
Lon: 125 ° 15.80 W

Bottom
Lat: 48 ° 32.09 N
Lon: 125 ° 15.82 W

End
Lat: 48 ° 32.08 N
Lon: 125 ° 15.84 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LB08 Event #: 23 Ship: Tully IJC Date (dd:mmm/yyyy): 02 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	DIC						
1	1	32	Bot-5	✓	135	x x		x										
2	2	33	Bot-10	✓	128	x x		x				x						
3	3	34	Bot-15	✓	124	x x		x										
4	4	35	100	✓	100	x		x x				x x						
5	5	36	75	✓	75	x		x				x						
6	6	37	50	✓	50	x		x				x						
7	7	38	30	✓	30	x		x				x						
8	8	39	20	✓	20	x		x	x x		x x	x						
9	9	40	10	✓	9	x x		x	x x		x x	x						
10	10	41	5	✓	A	x		x	x x	x x	x x	x					Fluo:	
11		42	Max	X					x x	x x							Fluo: NOT NEEDED	
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	140	m
Transmisso Cleaned:	(Y) /	N

Time	UTC	Local
Start	0036	1736
Bottom	0040	1740
End	0052	1752

Positional Information
Start
Lat: 48 ° 25.48 N
Lon: 125 ° 28.81 W

Start

Bottom

End

Bottom
Lat: 48 ° 25.51 N
Lon: 125 ° 28.78 W

End
Lat: 48 ° 25.50 N
Lon: 125 ° 28.68 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LB09 Event #: 24 Ship: Tully UTC Date (dd|mmm|yyyy): 02|09|2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4						
1	1	43	Bot-10	✓ 140	x		x										
2	2	44	125	✓ 124	x		x x										
3	3	45	100	✓ 100	x		x										
4	4	46	75	✓ 75	x		x										
5	5	47	50	✓ 50	x		x										
6	6	48	30	✓ 29	x		x										
7	7	49	20	✓ 19	x x		x		x x		x x						
8	9	50	10	✓ 10	x		x		x x		x x						
9	10	51	5	✓ 5	x		x		x x	x x	x x						Fluo: 3.0
10	8	52	Max	✓ 15					max	x x							Fluo: 3.5
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 180 m
 Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0136	1836
Bottom	0139	1839
End	0150	1850

Positional Information
 Start
 Lat: 48 ° 21.979 N
 Lon: 125 ° 34.762 W

Bottom
 Lat: 48 ° 21.989 N
 Lon: 125 ° 34.746 W

End
 Lat: 48 ° 21.893 N
 Lon: 125 ° 34.762 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2012-59

Station:

LB11

Event #: 26

Ship: Tully

UTC Date (dd|mmm|y:y): 02 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4					
1		53	Bot-10	✓ 194	x		x									
2		54	175	✓ 175	x		xx									
3		55	150	✓ 150	x		x									
4		56	125	✓ 125	x		x									
5		57	100	✓ 99	x		x									
6		58	75	✓ 75	x		x									
7		59	50	✓ 50	xx		x									
8		60	30	✓ 30	x		x									
9		61	20	✓ 20	x		x		xx		xx					
10		62	10	✓ 10	x		x		xx	xx	xx				Fluo: 2.3	
11		63	5	✓ 5	x		x		xx	xx	xx				Fluo: 7.0	
12		64	Max	X					xx	xx					Fluo:	
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 205 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0330	
Bottom	0334	
End	0348	

Positional Information

Lat: 48 ° 15.174	N
Lon: 125 ° 47.777	W

▼

Lat: 48 ° 15.163	N
Lon: 125 ° 47.786	W

▼

Lat: 48 ° 15.154	N
Lon: 125 ° 47.813	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LB12 Event #: 28 Ship: Tully UTC Date (dd mmm/yyyy): 02 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4				
1		65	Bot-10	✓ 494	x		x	x							
2		66	400	✓ 400	x		x	x							
3		67	300	✓ 300	xx		x								
4		68	250	✓ 250	x		xx								
5		69	200	✓ 199	x		x								
6		70	175	✓ 174	x		x								
7		71	150	✓ 149	x		x								
8		72	125	✓ 125	x		x								
9		73	100	✓ 100	x		x								
10		74	75	✓ 75	x		x								
11		75	50	✓ 50	x		x								
12		76	30	✓ 30	x		x								
13		77	20	✓ 20	x		x		xx		xx				
14		78	10	✓ 10	xx		x		xx		xx				
15		79	5	✓ 5	x		x		xx	xx	xx				Fluo: 1.5
16		80	Max	X					xx	xx					Fluo:
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth:	504	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0441	
Bottom	0449	
End	0510	

Positional Information
Start
Lat: 48 ° 12.979 N
Lon: 125 ° 51.864 W

Bottom
Lat: 48 ° 12.991 N
Lon: 125 ° 51.851 W

End
Lat: 48 ° 12.984 N
Lon: 125 ° 51.869 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LB14

Event #: 30

Ship: Tully

UTC Date (dd|mmm|yyyy): 02 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4				
1		81	Bot-10	/	1176	x		x	x						
2		82	1000	/		xx	xx	x	x						
3		83	750	/		x	x	x	x						
4		84	500	/		x	x	xx	xx						
5		85	400	/		x		x	x						
6		86	300	/		x		x							
7		87	250	/		x		x							
8		88	200	/		x		x							
9		89	175	/		x		x							
10		90	150	/		x		x							
11		91	125	/		xx		x							
12		92	100	/		x		x							
13		93	75	/		x		x							
14		94	50	/		x		x							
15		95	30	/		x		xx							
16		96	20	/		x		x	xx		xx				
17		97	10	/		x		x	xx		xx				
18		98	5	/		x		x	xx	xx	xx				
19		99	Max	/	14				xx	xx					Fluo: 0.4 Fluo: 4.3
20															
21															
22															
23															
24															

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

Bottom Depth:	<u>1176</u> m
Transmisso Cleaned:	☒ Y ☐ N

Time	UTC	Local
Start	<u>0727</u>	<u>0027</u>
Bottom	<u>0749</u>	
End	<u>0831</u>	

Positional Information
Start
Lat: <u>48</u> ° <u>8.52</u> N
Lon: <u>126</u> ° <u>0.03</u> W

Bottom
Lat: <u>48</u> ° <u>8.59</u> N
Lon: <u>125</u> ° <u>59.91</u> W

End
Lat: <u>48</u> ° <u>8.57</u> N
Lon: <u>125</u> ° <u>59.68</u> W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LC12 Event #: 35 Ship: Tully UTC Date (dd/mmm/yyyy): 2 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	UVic			
1		106	Max	30								x			
2		107	Max									x			
3		108	Max									x			
4		109	Max									x			
5		110	Max									x			
6		111	Max									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): SR

Bottom Depth: 2520 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1407	0707
Bottom		
End		

Positional Information

Start Lat: 48 ° 14.99 N

Start Lon: 126 ° 39.93 W

Bottom Lat: 48 ° 14.94 N

Bottom Lon: 126 ° 39.90 W

End Lat: 48 ° 14.92 N

End Lon: 126 ° 39.77 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LC11

Event #: 37

Ship: Tully

UTC Date (dd/mmm/yyyy): 02 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases					
1	1	112	Bot-10	✓	1420	x		x	x			xx					
2	2	113	1250	✓		xx	x	x	x			xx					
3	3	114	1000	✓		x	xx	x	x			xx					
4	4	115	750	✓		x	x	xx	xx			xx					
5	5	116	500	✓		x	x	x	x			xxx					
6	6	117	400	✓		x		x	x			xx					
7	7	118	300	✓		x		x				xx					
8	8	119	250	✓		x		x				xxx					
9	9	120	200	✓		x		x				xx					
10	10	121	175	✓		x		x				xx					
11	11	122	150	✓		x		x				xxx					
12	12	123	125	✓		xx		x				xx					
13	13	124	100	✓		x		x				xx					
14	14	125	75	✓		x		xx				xxx					
15	15	126	50	✓		x		x				xx					
16	16	127	30	✓		x		x				xx					
17	17	128	20	✓		x		x	xx	xx	xx	xxx					
18	18	129	10	✓		x		x	xx		xx	xx					Fluo: 2.1 Max
19	19	130	5	✓		x		x	xx	xx	xx	xx					
20	X	131	Max	X	20				xx	xx							Fluo: 0.39 NOT closed
21																	
22																	
23																	
24																	

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

Bottom Depth:	1430 m
Transmisso Cleaned:	☒ Y ☐ N

Time	UTC	Local
Start	1901	1201
Bottom	1927	
End	2008	

Positional Information
Start
Lat: 48° 18.98 N
Lon: 126° 26.26 W

Bottom
Lat: 48° 18.98 N
Lon: 126° 26.45 W

End
Lat: 48° 18.97 N
Lon: 126° 26.58 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LC09 / A3 Event #: 40 Ship: Tully UTC Date (dd|mmm|yyy): 02 | Sep | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DIC					
				✓		MR		MR	MR	SL	SL	SL	UBC	NDIV				
1	1	132	Bot-10	✓	644	x		xx	xx				xx	x				
2	2	133	500	✓		x		x	x				xxx	xx				
3	3	134	400	✓		x		x	x				xx	x				
4	4	135	300	✓		x		x					xx	xx				
5	5	136	250	✓		xx		x					xxx	x				
6	6	137	200	✓		x		x					xx	x				
7	7	138	175	✓		x		x					xx					
8	8	139	150	✓		x		x					xxx					
9	9	140	125	✓		x		x					xx					
10	10	141	100	✓		x		xx					xx	x				
11	11	142	75	✓		x		x					xxx					
12	12	143	50	✓		x		x					xx	x				
13	13	144	30	✓		xx		x					xx	x				
14	14	145	20	✓		x		x		xx		xx	xxx					
15	15	146	10	✓		x		x		xx		xx	xx	x				
16	17	147	5	✓		x		x				xx	xx	x				
17	18	148	5	✓						xx	xx							Fluo: 5.2
18	16	149	Max	✓	10					xx	xx							Fluo: 6.2
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	644 m
Transmisso Cleaned:	☒ Y ☐ N

Time	UTC	Local
Start	2237	1537
Bottom	2249	
End	2314	

Positional Information
Start
Lat: 48° 25.87 N
Lon: 126° 14.00 W

Bottom
Lat: 48° 25.84 N
Lon: 126° 14.05 W

End
Lat: 48° 25.77 N
Lon: 126° 14.24 W

Extra comments:
out-of-order

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LC08 Event #: 43 Ship: Tully UTC Date (dd|mmm|yyyy): 03 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases					
					CS/ND		ND		JEN	JEN	JEN	UBC					
1		150	Bot-10	✓	180	x		x				x x					
2		151	175	✓	175	x		x				x x					
3		152	150	✓	150	x		x				x x x					
4		153	125	✓	125	x		x				x x					
5		154	100	✓	100	x		x				x x					
6		155	75	✓	75	x		x x				x x x					
7		156	50	✓	50	x x		x				x x					
8		157	30	✓	30	x		x				x x					
9		158	20	✓	20	x		x		x x		x x	x x x				
10		159	10	✓	10	x		x		x x		x x	x x				CHL MIGHT BE MIXED UP
11		160	5	✓	5	x		x		x x	x x	x x	x x				FWO S.4
12		161	Max	X						x x							
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Watchkeeper(s): CHSD

Bottom Depth: 198 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0212	
Bottom	0216	
End	0229	

Positional Information

Start Lat: 48 ° 29 . 462 N

Start Lon: 126 ° 07 115 W

Bottom Lat: 48 ° 29 . 47 N

Bottom Lon: 126 ° 07 08 W

End Lat: 48 ° 29 . 48 N

End Lon: 126 ° 08 . 93 W

Extra comments:

SAMPLED SURF
→ BTM

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LC06

Event #: 46

Ship: Tully

UTC Date (dd mmm yyyy): 03 Sep 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DIC				
				✓								UBC					
1		162	Bot-10	✓ 82	x		x					x x	x				
2		163	75	✓ 75	x		x					x x x	x x				
3		164	50	✓ 50	x		x					x x	x				
4		165	30	✓ 30	x		x					x x	x				
5		166	20	✓ 20	x		x		x x		x x	x x x	x				
6		167	10	✓ 10	x		x x		x x		x x	x x	x				
7		168	5	✓ 5	x x		x				x x	x x	✖				
8		169	5	✓ 5					x x	x x			x				Fluo: 3.5
9		170	Max	X					x x	x x							Fluo:
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth:	91	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	04 28	
Bottom	04 32	
End	04 39	

Positional Information	
Start	Lat: 48 ° 36.41 N
	Lon: 125 ° 54.05 W

Bottom	Lat: 48 ° 36.41 N
	Lon: 125 ° 54.07 W

End	Lat: 48 ° 36.43 N
	Lon: 125 ° 54.10 W

Extra comments:
DIC TAKEN
FROM BT 8
FDR SM

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: C04 Event #: 50 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | sep | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	UBC					
1		171	Bot-10	✓	156	x		x					x x					
2		172	150	✓	150	x		x					x x x					
3		173	125	✓	125	x		x					x x					
4		174	100	✓	100	x		x					x x					
5		175	75	✓	75	x		x					x x x					
6		176	50	✓	50	x		x x					x x					
7		177	30	✓	30	x x		x					x x					
8		178	20	✓	20	x		x		x x		x x	x x x					
9		179	10	✓	10	x		x		x x		x x	x x					
10		180	5	✓	5	x		x		x x	x x	x x	x x				Fluo: 4.6	
11		181	Max	X						x x	x x						Fluo.	
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	166	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	06 39	
Bottom	06 42	
End	06 50	

Positional Information
Start
Lat: 48 ° 43.36 N
Lon: 125 ° 40.94 W

Bottom
Lat: 48 ° 43.35 N
Lon: 125 ° 40.93 W

End
Lat: 48 ° 43.35 N
Lon: 125 ° 40.834 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LC02

Event #: 52

Ship: Tully

ITC Date (dd/mm/yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DIC	UBC	
1		182	Bot-10	102	x		x					xx	x		
2		183	75		xx		x					xxx	xx		
3		184	50		x		x					xx	x		
4		185	30		x		x					xx	x		
5		186	20		x		xx		xx		xx	xxx	x		
6		187	10		x		x		xx		xx	xx	x		
7		188	5		x		x				xx	xx	x		
8		189	5						xx	xx					Fluo: 4.2
9		190	Max	8					xx	xx					Fluo: 4.7
10															
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: 111 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0812	0112
Bottom	0815	
End	0824	

Positional Information

Start Lat: 48° 48.69' N

Start Lon: 125° 30.89' W

Bottom Lat: 48° 48.69' N

Bottom Lon: 125° 30.90' W

End Lat: 48° 48.70' N

End Lon: 125° 30.93' W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LC01 Event #: 53 Ship: Tully UTC Date (dd/mm/yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases UBC	UVic						
1		191	Bot-10	88	x		x					x x							
2		192	75	76	x		x x					x x x							
3		193	50		x x		x					x x							
4		194	30		x		x					x x							
5		195	20		x		x		x x		x x	x x x							
6		196	10		x		x		x x		x x	x x							
7		197	5		x		x		x x	x x	x x	x x					Fluo: 3.8		
8		198	Max	8					x x	x x							Fluo: 4.2		
9		199	Max										x						
10		200	Max										x						
11		201	Max										x						
12		202	Max										x						
13		203	Max										x						
14		204	Max										x						
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 97 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0859	0159
Bottom	0903	
End	0914	

Positional Information
Start
Lat: 48 ° 50.44 N
Lon: 125 ° 27.73 W

Bottom
Lat: 48 ° 50.45 N
Lon: 125 ° 27.73 W

End
Lat: 48 ° 50.44 N
Lon: 125 ° 27.70 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LD01 Event #: 54 Ship: Tully UTC Date (dd mmm/yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							
1		205	Bot-10		28	x		x										
2		206	20			x		x		x x		x x						
3		207	10			x x		x		x x		x x						
4		208	5			x		x x		x x	x x	x x						Fluo: 6.3
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): SR

Bottom Depth: 37 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1040	0340
Bottom	1042	
End	1045	

Positional Information

Lat: 49 ° 0.06 N

Lon: 125 ° 43.87 W

Lat: 49 ° 0.07 N

Lon: 125 ° 43.87 W

Lat: ° N

Lon: ° W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LD02 Event #: 55 Ship: Tully UTC Date (dd/mmm/yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DIC						
1		209	Bot-10	✓	36	x		x				xx	x						
2		210	30			x		x				xx	xx						
3		211	20			xx		x		xx		xx	xxx	x					NISKIN NOT CLOSED
4		212	10			x		xx		xx		xx	xx	x					
5		213	5			x		x				xx	xx	x					
6		214	5							xx	xx								Fluo: 4.6
7		215	Max		13					xx	xx								Fluo: 7.2
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): SR

Bottom Depth: 45 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1121	0421
Bottom	1123	
End	1130	

Positional Information

Lat:	48 ° 58.34	N
Lon:	125 ° 47.03	W

Start

Lat:	48 ° 58.34	N
Lon:	125 ° 47.03	W

Bottom

Lat:	48 ° 58.34	N
Lon:	125 ° 47.03	W

End

Lat:	48 ° 58.34	N
Lon:	125 ° 47.00	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LDN4 Event #: 58 Ship: Tully UTC Date (dd|mmm|yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							
1		216	Bot-10	✓	54	x		x										
2		217	30	✓		x		x										
3		218	20	✓		x x		x		x x		x x						
4		219	10	✓		x		x x		x x		x x						
5		220	5	✓		x		x		x x	x x	x x					Fluo: 12.5	
6		221	Max	✓	13					x x	x x						Fluo: 15.4	
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): 802

Bottom Depth:	64	m
Transmisso Cleaned:	(Y) 1	N

Time	UTC	Local
Start	1305	0605
Bottom	1307	
End	1316	

Positional Information		
Start	Lat: 48° 53.17	N
	Lon: 125° 57.06	W

Bottom	Lat: 48° 53.18	N
	Lon: 125° 57.08	W

End	Lat: 48° 53.19	N
	Lon: 125° 57.10	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LD06

Event #: 60

Ship: Tully

UTC Date (d-mmm-yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	DIC			
1		222	Bot-10	✓ 125	x		x					x			
2		223	100	✓	x		xx					xx			
3		224	75	✓	x		x					x			
4		225	50	✓	x		x					x			
5		226	30	✓	x		x					x			
6		227	20	✓	x		x		xx		xx	x			
7		228	10	✓	xx		x		xx		xx	x			
8		229	5		x		x		xx	xx	xx	x			
9		230	Max	8					xx	xx					Fluo: 3.8
10															Fluo: 5.1
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth:	136	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	1510	0810
Bottom	1513	
End	1523	

Start	Positional Information	
	Lat: 48 ° 46.17	N
Bottom	Lon: 126 ° 10.14	W
	Lat: 48 ° 46.17	N
End	Lon: 126 ° 10.14	W
	Lat: 48 ° 46.17	N
	Lon: 126 ° 10.12	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LD08 Event #: 62 Ship: Tully UTC Date (dd/mm/yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	DIC						
1		231	Bot-10	✓	768	x		x	x			x						
2		232	750	✓		x	x	xx	xx									
3		233	500	✓		xx	x	x	x			x						
4		234	400	✓		x		x	x			x						
5		235	300	✓		x		x				xx						
6		236	250	✓		x		x										
7		237	200	✓		x		x				x						
8		238	175	✓		x		x										fired @ 200 m, goto bot 20 for 175m water
9		239	150	✓		x		x										
10		240	125	✓		x		x										
11		241	100	✓		x		x				xx						
12		242	75	✓		x		xx										
13		243	50			x		x				x						
14		244	30			xx		x				x						
15		245	20			x		x	xx		xx							
16		246	10			x		x	xx		xx	x						
17		247	5	✓		x		x	xx	xx	xx	x						Fluo: 1.4
18		248	Max						xx	xx								Fluo
19																		
20		238	175			x		x										20 is the new 8!
21																		
22																		
23																		
24																		

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

Bottom Depth: 773 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1705	1005
Bottom	1718	
End		

Positional Information

Start	Lat: 48° 39.13 N
	Lon: 126° 23.36 W

Bottom

Lat: 48° 39.11 N
Lon: 126° 23.36 W

End

Lat: 48° 39. N
Lon: 126° 23. W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LD11

Event #: 67

Ship: Tully

UTC Date (dd:mmm:yyyy): 03 Sep 2012

			Rosette Operation		Samples Taken / Sampler's Initials													
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							Comments
				✓														
1	1	249	Bot-10	✓	1608	x		x	x									
2	2	250	1500	✓		x	xx	x	x									
3	3	251	1250	✓		xx	x	x	x									
4	4	252	1000	✓		x	x	x	x									
5	5	253	750	✓		x	x	xx	xx									
6	6	254	500	✓		x		x	x									
7	7	255	400	✓		x		x	x									
8	8	256	300	✓		x		x										
9	9	257	250	✓		x		x										
10	10	258	200	✓		x		x										
11	11	259	175	✓		x		x										
12	12	260	150	✓		x		x										
13	13	261	125	✓		xx		x										
14	14	262	100	✓		x		x										
15	15	263	75	✓		x		xx										
16	16	264	50	✓		x		x										
17	17	265	30	✓		x		x										
18	18	266	20	✓		x		x	xx		xx							
19	19	267	10	✓		x		x	xx		xx							
20	20	268	5	✓		x		x	xx	xx	xx							
21	X	269	Max	X					xx	xx								Fluo:
22																		Fluo: X
23																		
24																		

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

Bottom Depth:	1600	m
Transmisso Cleaned:	☒ Y / ☐ N	

Time	UTC	Local
Start	2229	1529
Bottom	2300	1600
End	2344	

Positional Information
Lat: 48° 28.93 N
Lon: 126° 42.86 W

Lat: 48° 28.91 N
Lon: 126° 42.92 W

Lat: 48° 28.93 N
Lon: 126° 42.99 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2012-59

Station:

LG09

Event #:

68

Ship:

Tully

UTC Date (dd/mm/yyyy): 04 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target	Confirmed	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	UVic			
			Pressure	✓ Pressure											
1	1	270	Max	✓	7							x			
2		271	Max	✓	7							x			
3		272	Max	✓	7							x			
4		273	Max	✓	7							x			
5		274	Max	✓	7							x			
6		275	Max	✓	7							x			
7		276	Max	✓	7				xx	xx					Fluo: 2.955
8	2	277	5	✓	5				xx	xx					Fluo: 2.891
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):
CHSD

Bottom Depth:	2060 m
Transmisso Cleaned:	☒ Y / ☐ N

Time	UTC	Local
Start	0410	2110
Bottom	0446	2146
End	0524	2224

Positional Information
Start
Lat: 48 ° 51.137 N
Lon: 127 ° 19.64 W

Bottom
Lat: 48 ° 51.134 N
Lon: 127 ° 19.687 W

End
Lat: 48 ° 51.137 N
Lon: 127 ° 19.83 W

Extra comments:
WINDS 28-35

Sampling Log

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

Cruise ID:

2012-59

Station:

LG06

Event #:

72

Ship:

Tully

UTC Date (dd mmm yyyy): 4 Sept 2012

[illegible]

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

Watchkeeper(s): SR

Bottom Depth: 940 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1035	0335
Bottom	1052	
End	1129	

Positional Information			
Lat:	49 ° 3.53	N	
Lon:	127 ° 1.06	W	

Bottom	Lat: 49 ° 3.57 N
	Lon: 127 ° 1.03 W

End	Lat:	49 ° 3.69	N
	Lon:	127 ° 0.99	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: G04 Event #: 74 Ship: Tully UTC Date (dd/mm/yyyy): 4 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							
1		295	Bot-10	✓	136	x		x										
2		296	125	✓		x		x										
3		297	100	✓		x x		x x										
4		298	75	✓		x		x										
5		299	50	✓		x		x										
6		300	30	✓		x		x										
7		301	20	✓	21.5	x		x		x x		x x						
8		302	10		11	x		x		x x		x x						
9		303	5			x		x		x x	x x	x x						Fluo: 0.8
10		304	Max			x		x		x x	x x							Fluo.
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: 145 m

Transmisso Cleaned: Y ☒ N

Time	UTC	Local
Start	1309	0609
Bottom	1312	
End	1324	

Positional Information

Start Lat: 49 ° 11.20 N

Start Lon: 126 ° 49.39 W

Bottom Lat: 49 ° 11.19 N

Bottom Lon: 126 ° 49.38 W

End Lat: 49 ° 11.22 N

End Lon: 126 ° 49.40 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LG02 Event #: 77 Ship: Tully UTC Date (dd/mm/yyyy): 4 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	Uvic					
1		305	Bot-10	✓	92	x		x				x x						
2		306	75	✓		x		x				x x x						
3		307	50	✓		x x		x x				x x						
4		308	30	✓		x		x				x x						
5		309	20			x		x	x x		x x	x x x						
6		310	10			x		x	x x		x x	x x						
7		311	5			x		x	x x	x x	x x	x x					Fluo: 0.3	
8		312	Max	✓					x x	x x							Fluo: 0.6	
9		313	Max										x					
10		314	Max										x					
11		315	Max										x					
12		316	Max										x					
13		317	Max										x					
14		318	Max										x					
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Watchkeeper(s): SR

Bottom Depth: 99 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1527	0827
Bottom	1530	
End	1539	

Positional Information

Start	Lat: 49 ° 18.68 N	Lon: 126 ° 38.29 W
Bottom	Lat: 49 ° 18.68 N	Lon: 126 ° 38.31 W
End	Lat: 49 ° 18.69 N	Lon: 126 ° 38.34 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LG01 Event #: 78 Ship: Tully UTC Date (dd mmm/yyyy): 4 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4						
1		319	Bot-10		50	x		x									
2		320	30			x		x									
3		321	20			x x		x x		x x		x x					
4		322	10			x		x		x x		x x					
5		323	5			x		x		x x	x x	x x					Fluo: 0.3
6		324	max							x x	x x						Fluo:
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): SR			

Bottom Depth:	60	m
Transmisso Cleaned:	☒ Y	☐ N

Time	UTC	Local
Start	1618	0918
Bottom	1620	
End	1625	

Positional Information		
Lat:	49 ° 20.28	N
Lon:	126 ° 35.01	W

Start

Bottom

End

Lat:	49 ° 20.26	N
Lon:	126 ° 35.05	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2012-59

Station:

1 RP8

Event #:

79

Ship:

Tully

UTC Date (dd|mmm|yyyy): 04|sep|2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	UVic			
1	1	325	Max	5								x			
2	2	326	Max									x			
3	3	327	Max									x			
4	4	328	Max									x			
5	5	329	Max									x			
6	6	330	Max									x			Fluo:
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 2075 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2311	1611
Bottom	2313	
End	2316	

Positional Information

Start	Lat: 49° 48' 61"	N
	Lon: 128° 16' 79"	W

Bottom

Lat: 49° 48' 60"	N
Lon: 128° 16' 78"	W

End

Lat: 49° 48' 61"	N
Lon: 128° 16' 80"	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LBP7

Event #:

83/84

Ship: Tully

UTC Date (dd mmm/yyyy): 05 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments									
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4													
1		331	2000	✓	2000	x	x	x	x															
2		332	1500	✓	1500	xx	xx	x	x															
3		333	1250	✓	1250	x	x	xx	xx															
4		334	1000	✓	1000	x	xx	x	x															
5		335	750	✓	750	x	x	x	x															
6		336	500	✓	500	x	x	x	x															
7		337	400	✓	400	x		x	x															
8		338	300	✓	300	xx		x																
9		339	250	✓	250	x		x																
10		340	200	✓	200	x		x																
11		341	175	✓	175	x		x																
12		342	150	✓	150	x		x																
13		343	125	✓	125	x		xx																
14		344	100	✓	100	x		x																
15		345	75	✓	75	x		x																
16		346	50	✓	50	x		x																
17		347	30	✓	30	xx		x																
18		348	20	✓	20	x		x		xx		xx												
19		349	10	✓	10	x		x		xx		xx		xx										
20		350	5	✓	5	x		x		xx	xx	xx												
21		351	Max	X																				
22																								
23																								
24																								

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

Bottom Depth:	2165	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0337	
Bottom	0413	
End	0518	

Positional Information		
Lat:	49 ° 52.38	N
Lon:	128 ° 11.19	W

Start

Bottom

End

Lat:	49 ° 52.346	N
Lon:	128 ° 11.288	W

Lat:	49 ° 52.328	N
Lon:	128 ° 11.372	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2012-59

Station:

LBP5

Event #:

86

Ship:

Tully

UTC Date (dd:mmm:yyyy): 5 Sept 2012

			Rosette Operation		Samples Taken / Sampler's Initials										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							
1		352	Bot-10	✓ 1283	x		x	x										
2		353	1250	✓	x	xx	x	x										
3		354	1000	✓	x	xx	x	x										
4		355	750	✓	xx	x	x	x										
5		356	500	✓	x	x	xx	xx										
6		357	400	✓	x		x	x										
7		358	300	✓	x		x											
8		359	250	✓	x		x											
9		360	200	✓	x		x											
10		361	175	✓	x		x											
11		362	150	✓	x		x											
12		363	125	✓	xx		x											
13		364	100	✓	x		xx											
14		365	75	✓	x		x											
15		366	50	✓	x		x											
16		367	30	✓	x		x											
17		368	20		x		x		xx		xx							
18		369	10		x		x		xx		xx							
19		370	5		xx		x		xx	xx	xx						Fluo: 0.7	
20		371	Max						xx	xx							Fluo:	
21																		
22																		
23																		
24																		

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

Bottom Depth:	<u>1290</u> m
Transmisso Cleaned:	☒ Y ☐ N

Time	UTC	Local
Start	<u>0719</u>	<u>0019</u>
Bottom	<u>0738</u>	
End	<u>0818</u>	

Positional Information	
Start	Lat: <u>49° 59.98</u> N
	Lon: <u>128° 0.22</u> W

Bottom	Lat: <u>49° 59.92</u> N
	Lon: <u>128° 0.23</u> W

End	Lat: <u>49° 59.92</u> N
	Lon: <u>128° 0.16</u> W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: LPP3

Event #: 89

Ship: Tully

UTC Date (dd/mm/yyyy): 5 Sept 2012

			Rosette Operation		Samples Taken / Sampler's Initials										Comments				
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases							
												UBC							
1		372	Bot-10	✓ 158	x		x					x x							
2		373	150	✓	x		x					x x x							
3		374	125	✓	x x		x					x x							
4		375	100	✓	x		x					x x							
5		376	75	✓	x		x					x x x							
6		377	50	✓	x		x					x x							
7		378	30	✓	x		x					x x							
8		379	20	✓	x		x x		x x		x x	x x x							
9		380	10		x		x		x x		x x	x x							
10		381	5		x		x		x x	x x	x x	x x					Fluo:		
11		382	Max						x x	x x							Fluo:		
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:	168	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	1010	0310
Bottom	1015	
End	1027	

Positional Information
Start
Lat: 50 ° 3.15 N
Lon: 127 ° 55.26 W

Bottom
Lat: 50 ° 3.18 N
Lon: 127 ° 55.31 W

End
Lat: 50 ° 3.24 N
Lon: 127 ° 55.30 W

Extra comments:

*CHL Samples found on counter in bright light, filtered ~ 6hrs after collection

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: LBP2 Event #: 91 Ship: Tully UTC Date (d-mmm-yyyy): 3 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	UVic			
1		383	Max									x			
2		384	Max									x			
3		385	Max									x			
4		386	Max									x			
5		387	Max									x			
6		388	Max									x			Fluo:
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): SR

Bottom Depth: 97 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1110	0410
Bottom	1111	
End	1114	

Positional Information

Start	Lat: 50 ° 4.11 N
	Lon: 127 ° 54.36 W

Bottom

	Lat: 50 ° 4.11 N
	Lon: 127 ° 54.36 W

End

	Lat: 50 ° 4.12 N
	Lon: 127 ° 54.36 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: CS⁰⁰ Event #: 102 Ship: Tully UTC Date (dd/mm/yyyy): 06 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							
1		389	2000	✓ 2000	x	x	x	x										
2		390	1500	✓ 1500	x	xx	x	x										
3		391	1250	✓ 1250	x	x	x	x										
4		392	1000	✓ 1000	x	x	x	x										
5		393	750	✓ 750	xx	x	x	x										
6		394	500	✓ 500	x	x	x	x										
7		395	400	✓ 400	x	x	xx	xx										
8		396	300	✓ 300	x	x	x											
9		397	250	✓ 250	x	x	x											
10		398	200	✓ 200	x	x	x											
11		399	175	✓ 175	x	x	x											
12		400	150	✓ 150	x	x	x											
13		401	125	✓ 125	xx	x	x											
14		402	100	✓ 100	x	x	x											
15		403	75	✓ 75	x	x	x											
16		404	50	✓ 50	x	x	xx											
17		405	30	✓ 30	x	x	x											
18		406	20	✓ 20	x	x	x		xx		xx							
19		407	10	✓ 10	xx	x	x		xx		xx							
20		408	5	✓ 5	x	x	x		xx	xx	xx							
21		409	Max						xx	xx								Fluo:
22																		Fluo:
23																		
24																		

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

Bottom Depth:	2177	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0355	
Bottom	0433	
End	0522	

Positional Information		
Start	Lat: 50 ° 27.62	N
	Lon: 129 ° 55.04	W

Bottom	Lat: 50 ° 27.61	N
	Lon: 129 ° 55.19	W

End	Lat: 50 ° 27.64	N
	Lon: 129 ° 55.290	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station:

CS02

Event #:

104

Ship:

Tully

UTC Date (dd mmm yyyy):

6 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							
1		410	Bot-10		1907	x		x	x									
2		411	1250			x	xx	xx	xx									
3		412	1000			x	x	x	x									
4		413	750			x	x	x	x									
5		414	500			xx	x	x	x									
6		415	400			x		x	x									
7		416	300			x		x										
8		417	250			x		x										
9		418	200			x		x										
10		419	175			x		xx										
11		420	150			x		x										
12		421	125			xx		x										
13		422	100			x		x										
14		423	75			x		x										
15		424	50			x		x										
16		425	30			x		x										
17		426	20			x		x		xx		xx						
18		427	10			x		x		xx		xx						
19		428	5			x		x		xx	xx	xx						Fluo: 1.8
20		429	Max	☒	1500					xx	xx							Fluo:
21																		
22																		
23																		
24																		

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

Bottom Depth:	1902 m
Transmisso Cleaned:	(Y) N

Time	UTC	Local
Start	1007	0307
Bottom	1036	
End	1127	

Positional Information	
Start	Lat: 50 ° 41.27 N
	Lon: 129 ° 27.93 W

Bottom	Lat: 50 ° 41.31 N
	Lon: 129 ° 27.96 W

End	Lat: 50 ° 41.33 N
	Lon: 129 ° 27.91 W

Extra comments:

CHC filtered @ 0845 !!!

Water Properties Group

Sampling Log

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

Cruise ID:

2012-59

Station:

CS04

Event #:

108

Ship:

Tully

UTC Date (dd/mm/yyyy): 6 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4				
1		430	Bot-10	☒	89	x		x							
2		431	75	☒		x		x							
3		432	50	☒		x		x							
4		433	30	☒		xx		x							
5		434	20	☒		x		x	xx		xx				
6		435	10	☒		x		x	xx		xx				
7		436	5	☒		x		xx	xx	xx	xx				Fluo: 0.6
8		437	Max						xx	xx					Fluo:
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): SP2

Bottom Depth: 94 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1432	0732
Bottom	1435	
End	1442	

Positional Information

Start	Lat: <u>50</u> ° <u>49.17</u> N
	Lon: <u>129</u> ° <u>12.96</u> W

Bottom

Lat: <u>50</u> ° <u>49.17</u> N
Lon: <u>129</u> ° <u>12.98</u> W

End

Lat: <u>50</u> ° <u>49.16</u> N
Lon: <u>129</u> ° <u>13.03</u> W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: CS3B Event #: 112 Ship: Tully UTC Date (dd|mmm|yyyy): 06 | Sep | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials											Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	UVic				
1	1	438	Max	15								x				
2	2	439	Max	15								x				
3	3	440	Max	15								x				
4	4	441	Max	15								x				
5	5	442	Max	15								x				
6	6	443	Max	15								x				Fluo: 0.8
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: 220 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2201	1501
Bottom	2205	
End	2212	

Positional Information
Start
Lat: 50° 59.97 N
Lon: 129° 26.99 W

Bottom
Lat: 50° 59.99 N
Lon: 129° 26.98 W

End
Lat: 50° 59.99 N
Lon: 129° 26.96 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: CS06 Event #: 119 Ship: Tully UTC Date (dd mmm/yyyy): 07 Sep 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4				
1		444	Bot-10	✓ 51	x		x x								
2		445	50	✓ 50	x x		x								
3		446	30	✓ 30	x		x								
4		447	20	✓ 20	x		x		x x		x x				
5		448	10	✓ 10	x		x		x x		x x				
6		449	5	✓ 5	x		x		x x	x x	x x				Fluo: 3.8
7		450	Max												Fluo:
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): AMT

Bottom Depth: 65 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	04 16	
Bottom	04 17	
End	04 23	

Positional Information
Start
Lat: 50° 51' 92" N
Lon: 128° 51' 93" W

Bottom
Lat: 50° 51' 91" N
Lon: 128° 51' 93" W

End
Lat: 50° 51' 90" N
Lon: 128° 51' 95" W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: CS09 Event #: 125 Ship: Tully UTC Date (dd|mmm|yyyy): 7 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4						
1		451	Bot-10	/	185	x		x									
2		452	175	/		x		x									
3		453	150	/	151	x		x									
4		454	125	/		x		x x									
5		455	100	/		x		x									
6		456	75	/		x		x									
7		457	50	/		x x		x									
8		458	30			x		x									
9		459	20			x		x		x x		x x					
10		460	10			x		x		x x		x x					
11		461	5			x		x		x x	x x	x x					
12		462	Max		7					x x	x x						Fluo: 7.4
13																	Fluo: 7.4
14																	Max is @ 5m
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth:	193	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0827	0127
Bottom	0831	
End	0847	

Positional Information		
Lat:	51 ° 12.58	N
Lon:	128 ° 28.18	W

Start

Bottom

End

Lat:	51 ° 12.58	N
Lon:	128 ° 28.21	W

Lat:	51 ° 12.75	N
Lon:	128 ° 28.35	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-50 Station: UBC7 Event #: 129 Ship: Tully UTC Date (dd|mmm|yyyy): 7 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-Fr	CHL											
1		463	30		x	x x											
2		464	5		x	x x											
3		465	0			x x											
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
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18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 152 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1344	0644
Bottom	1347	
End	1352	

Positional Information
Start Lat: 51 ° 29.81 N
Lon: 127 ° 49.01 W

Bottom Lat: 51 ° 29.80 N
Lon: 127 ° 49.01 W

End Lat: 51 ° 29.77 N
Lon: 127 ° 49.00 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: Ri 1 Event #: 131 Ship: Tully UTC Date (dd|mmm|yyyy): 7 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-Fr	CHL											
1		466	30		x	x x											
2		467	5		x	x x											
3		468	0			x x											
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
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16																	
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18																	
19																	
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24																	

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

Bottom Depth: 317 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1520	
Bottom		
End	1533	

Positional Information

Start	Lat: 51 ° 26.60 N
	Lon: 127 ° 37.98 W
Bottom	Lat: 51 ° 26.58 N
	Lon: 127 ° 37.98 W
End	Lat: 51 ° 26.59 N
	Lon: 127 ° 38.01 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: Ri 2

Event #: 133

Ship: Tully

UTC Date (dd/mm/yyyy): 7 Sept 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-Fr	CHL											
1		469	30		x	x x											
2		470	5		x	x x											Fluo: ≈ 1.8
3		471	0			x x											
4																	
5																	
6																	
7																	
8																	
9																	
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19																	
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22																	
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24																	

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

Bottom Depth:	<u>334</u>	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	1657	0957
Bottom	1702	
End	1709	

Positional Information
Start
Lat: <u>51</u> ° <u>31.27</u> N
Lon: <u>127</u> ° <u>33.53</u> W

Start

Bottom

End

Bottom
Lat: <u>51</u> ° <u>31.30</u> N
Lon: <u>127</u> ° <u>33.52</u> W

End
Lat: <u>51</u> ° <u>31.31</u> N
Lon: <u>127</u> ° <u>33.47</u> W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59

Station: Ri 3

Event #: 135

Ship: Tully

UTC Date (dd/mm/yyyy): 7 Sept 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-Fr	CHL									
1		472	30		x	x x									
2		473	5		x	x x									
3		474	0			x x									
4															
5															
6															
7															
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22															
23															
24															

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

Bottom Depth:	326	m
Transmisso Cleaned:	Y / N	

Time	UTC	Local
Start	1809	1109
Bottom	1815	
End	1823	

Start	Positional Information		
	Lat:	51 ° 35.91	N
	Lon:	127 ° 32.09	W

Bottom	Lat:	51 ° 35.92	N
	Lon:	127 ° 32.09	W

End	Lat:	51 ° 35.94	N
	Lon:	127 ° 32.12	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: Ri 4 Event #: 138 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | Sep | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-Fr	CHL											
1	1	475	30	✓	x	x x											
2	2	476	5	✓	x	x x											
3	3	477	0	✓		x x											
4																	
5																	
6																	
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19																	
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22																	
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24																	

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

Bottom Depth: 300 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2032	1332
Bottom	2037	
End	2045	

Positional Information
Start
Lat: 51° 38.86 N
Lon: 127° 26.85 W

Bottom
Lat: 51° 38.86 N
Lon: 127° 26.85 W

End
Lat: 51° 38.86 N
Lon: 127° 26.83 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: Ri 5 Event #: 140 Ship: Tully UTC Date (dd/mm/yyyy): 07 SEP 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Nut-Fr	CHL											
1	1	478	30	✓		x	x x										
2	2	479	5	✓		x	x x										
3	3	480	0	✓			x x										
4																	
5																	
6																	
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19																	
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21																	
22																	
23																	
24																	

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

Bottom Depth: 202 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2146	1446
Bottom	2150	
End	2157	

Positional Information
Start
Lat: 51° 40.70 N
Lon: 127° 19.92 W

Bottom
Lat: 51° 40.69 N
Lon: 127° 19.91 W

End
Lat: 51° 40.66 N
Lon: 127° 19.90 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-59 Station: Ri 6 Event #: 142 Ship: Tully UTC Date (dd/mm/yyyy): 07 SEP 2012

Niskin / Firing / Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
	Target	Confirmed	Nut	Er	CHI								

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

1		481	30	✓	30	x	xx										
2		482	5	✓	5	x	xx										
3		483	0	✓	0		xx										
4																	
5																	
6																	
7																	
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22																	
23																	
24																	

Bottom Depth: 144 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2235	
Bottom	2238	
End	2242	

Positional Information

Start Lat: 51 ° 40.46 N

Start Lon: 127 ° 16.93 W

Bottom Lat: 51 ° 40.46 N

Bottom Lon: 127 ° 16.94 W

End Lat: 51 ° 40.46 N

End Lon: 127 ° 16.95 W

Extra comments: