

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: S103

Event #: 1

Ship: Tully

UTC Date (dd mmm yyyy): 06 SEP 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	UBC gases	UBC nuts											
1	1	1	200	✓ 200	xx	xx											
2	2	2	190	✓ 190	xx	xx											
3	3	3	180	✓ 180	xx	xx											
4	4	4	170	✓ 170	xx	xx											
5	5	5	160	✓ 160	xx	xx											
6	6	6	150	✓ 150	xx	xx											
7	7	7	140	✓ 140	xx	xx											
8	8	8	130	✓ 130	xx	xx											
9	9	9	120	✓ 120	xx	xx											
10	10	10	110	✓ 110	xx	xx											
11	11	11	100	✓ 100	xx	xx											
12	12	12	90	✓ 90	xx	xx											
13	13	13	80	✓ 80	xx	xx											
14	14	14	70	✓ 70	xx	xx											
15	15	15	60	✓ 60	xx	xx											
16	16	16	50	✓ 50	xx	xx											
17	17	17	40	✓ 40	xx	xx											
18	18	18	30	✓ 30	xx	xx											
19	19	19	20	✓ 20	xx	xx											
20	20	20	15	✓ 15	xx	xx											
21	21	21	10	✓ 10	xx	xx											
22	22	22	5	✓ 5	xx	xx											
23	23	23	05	✓ 5	xx	xx											
24	24	24	0		xx	xx											

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

Watchkeeper(s): MR

Bottom Depth: 225 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2107	1407
Bottom	2113	
End	2138	

Positional Information

Start Lat: 48 ° 35.68 N
Lon: 123 ° 30.09 W

Bottom Lat: 48 ° 35.70 N
Lon: 123 ° 30.08 W

End Lat: 48 ° 35.66 N
Lon: 123 ° 30.02 W

Extra comments:

UBC Saanich Inlet cast

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: S105

Event #: 2

Ship: Tully

UTC Date (dd mmm yyyy): 06 Sep 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	UBC gases	UBC nuts											
1	1	25	180	✓ 170	xx	xx											
2	2	26	170	✓ 170	xx	xx											
3	3	27	160	✓ 160	xx	xx											
4	4	28	150	✓ 150	xx	xx											
5	5	29	140	✓ 140	xx	xx											
6	6	30	130	✓ 130	xx	xx											
7	7	31	120	✓ 120	xx	xx											
8	8	32	110	✓ 110	xx	xx											
9	9	33	100	✓ 100	xx	xx											
10	10	34	90	✓ 90	xx	xx											
11	11	35	80	✓ 80	xx	xx											
12	12	36	70	✓ 70	xx	xx											
13	13	37	60	✓ 60	xx	xx											
14	14	38	50	✓ 50	xx	xx											
15	15	39	40	✓ 40	xx	xx											
16	16	40	30	✓ 30	xx	xx											
17	17	41	20	✓ 20	xx	xx											
18	18	42	15	✓ 15	xx	xx											
19	19	43	10	✓ 10	xx	xx											
20	20	44	5	✓ 5	xx	xx											
21	21	45	0	✓ 2.2	xx	xx											
22					xx	xx	} Closed @ surface but not needed.										
23					xx	xx											
24					xx	xx											

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

Bottom Depth: 179 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2252	1552
Bottom	2257	
End	2319	

Positional Information
 Start
 Lat: 48 ° 39.21 N
 Lon: 123 ° 30.03 W

Bottom
 Lat: 48 ° 39.22 N
 Lon: 123 ° 30.02 W

End
 Lat: 48 ° 39.26 N
 Lon: 123 ° 30.01 W

Extra comments:
 UBC Saanich Inlet cast

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: LB01

Event #: 004

Ship: Tully

UTC Date (dd-mm-yyyy): 7-9-13

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		46	Bot-10	✓ 26	x		x		xx		xx	x			
2		47	10	✓	x		x		xx		xx	xx			
3		48	5	✓	x		x		xx	xx	xx	x			Fluo: 1.42
4		49	Chl-Max	31					xx	xx					Fluo: 1.42
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Profile type: 2
 ROS TRM X-Niskin other?
 Watchkeeper(s):

Bottom Depth: 38 m
 Transmissometer Cleaned: (Y) / N

Time	UTC	Local
Start	10 08	03 08
Bottom	10 10	
End	10 13	

Positional Information
 Start
 Lat: 48 ° 40 38 N
 Lon: 124 ° 59 47 W

Bottom
 Lat: 48 ° 40 38 N
 Lon: 124 ° 59 46 W

End
 Lat: 48 ° 40 39 N
 Lon: 124 ° 59 43 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: LB02

Event #: 005

Ship: Tully

UTC Date (dd mmm yyyy): 7-9-13

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		50	Bot-10	✓	48	x		x					x x						
2		51	30	✓		x		x					x x						
3		52	20	✓		x x		x		x x		x x	x x x						
4		53	10	✓		x		x		x x		x x	x x						
5		54	5	✓		x		x x		x x	x x	x x	x x						
6		55	SURE Max	✓	2.1					x x	x x							Fluo: 1.41	
7																		Fluo: 1.30	
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 56 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1048	0348
Bottom	1050	
End	1056	

Positional Information
Start
Lat: 48 ° 38 99 N
Lon: 125 ° 02 38 W

Bottom
Lat: 48 ° 39.00 N
Lon: 125 ° 02.37 W

End
Lat: 48 ° 39.01 N
Lon: 125 ° 02.36 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: LB03

Event #: 6

Ship: Tully

UTC Date (dd mmm yyyy): 7-9-13

Niskin #	Firing #	Sample #	Roseite Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	UBC				
1		56	5														
2		57	Max					X		XX	XX						Fluo: 0.82
3								X		XX	XX						Fluo: 0.82
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 95 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1127	0427
Bottom	1129	
End	1132	

Positional Information

Start	Lat: 48 ° 37.31 N
	Lon: 125 ° 05.69 W

Bottom

Lat: 48 ° 37.30 N
Lon: 125 ° 05.66 W

End

Lat: 48 ° 37.30 N
Lon: 125 ° 05.66 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: LB04

Event #: 007

Ship: Tully

UTC Date (dd mmm/yyyy): 7 9 13

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		58	Bot-10	✓	103	x		x										
2		59	75	✓		xx		x										
3		60	50	✓		x		xx										
4		61	30	✓		x		x										
5		62	20	✓		x		x		xx		xx						
6		63	10	✓		x		x		xx		xx						
7		64	5			x		x		xx	xx	xx					Fluo:	
8		65	Chl Max	✓	10	10				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): H.1

Bottom Depth: 112 m
Transmisso Cleaned: (Y) / N

	UTC	Local
Start	1202	0502
Bottom	1204	
End	1212	

Positional Information

Lat:	48 ° 35 65	N
Lon:	125 ° 08 75	W

Bottom

Lat:	48 ° 35 67	N
Lon:	125 ° 08 75	W

End

Lat:	48 ° 35 72	N
Lon:	125 ° 08 79	W

Extra comments:

5, 6, 8, 7

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LB05

Event #: 10

Ship: Tully

UTC Date (dd/mm/yyyy): 7/9/13

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	POM UBC						
1		66	5				x			xx	xx								Fluo:
2		67	Max	10			x			xx	xx								Fluo:
3			Max	10												x			Lora
4			Max	10												x			Lora
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Watchkeeper(s): H.A.

Bottom Depth: 101 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1426	0720
Bottom	1428	
End	1433	

Positional Information

Start

Lat: 48 ° 34.02 N

Lon: 125 ° 12.02 W

Bottom

Lat: 48 ° 34.02 N

Lon: 125 ° 12.02 W

End

Lat: 48 ° 34.01 N

Lon: 125 ° 12.02 W

Extra comments:

2,3,4,1

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB06

Event #: 11

Ship: Tully

UTC Date (dd mmm yyyy): 7 9 13

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	POM	POM		
1		68	Bot-10	✓	104	x		x									
2		69	75	✓		xx		x									
3		70	50	✓		x		xx									
4		71	30	✓		x		x									
5		72	20	✓		x		x	xx		xx						
6		73	10	✓		x		x	xx		xx						
7		74	5	✓		x		x	xx	xx	xx						Fluo: 1.08
8		75	Chl Max	✓	23				xx	xx							Fluo: 1.08
9			Chl Max	✓	23												Lora
10			Chl Max	✓	23												Lora
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 11 m
Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Start	1501	0801
Bottom	1504	
End	1514	

Positional Information
Start
Lat: 48 ° 32.17 N
Lon: 125 ° 15.51 W

Bottom
Lat: 48 ° 32.16 N
Lon: 125 ° 15.47 W

End
Lat: 48 ° 32.18 N
Lon: 125 ° 15.50 W

Extra comments:
1, 2, 3, 4, 8, 9, 10, 5, 6, 7

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: LB07

Event #: 18

Ship: Tully

UTC Date (dd|mm|yyyy): 7 Sep 2013

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	76	5	✓			x		xx	xx							Fluo: 1.0
2		77	Max				x		xx	xx							Fluo: NOT USED
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: 157 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1914	1214
Bottom	1917	
End	1921	

Positional Information

Start

Lat: 48 ° 28.70 N

Lon: 125 ° 22.15 W

Bottom

Lat: 48 ° 28.71 N

Lon: 125 ° 22.18 W

End

Lat: 48 ° 28.71 N

Lon: 125 ° 22.22 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB08 Event #: 25 Ship: Tully UTC Date (dd mmm yyyy): 7 SEP 2013

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	78	Bot-56	✓	136	xx		x				xx			
2	2	79	Bot-10	✓	132	xx		x				xx			
3	3	80	Bot-15	✓	127	xx		x							
4	4	81	100	✓	100	x		xx				xx			
5	5	82	75	✓	75	x		x				xx			
6	6	83	50	✓	50	x		x				xxx			DIC C not pickled
7	7	84	30	✓	30	x		x				xx			
8	8	85	20	✓	20	x		x	xx		xx	xx			
9	9	86	10	✓	10	xx		x	xx		xx	xx			Fluo: 1.3
10	10	87	5	✓	5	x		x	xx	xx	xx	xxx			DIC C not pickled
11		88	Max		NOT USED				xx	xx					Fluo: 0.5
12					MAX ~10										
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Watchkeeper(s): MR

Bottom Depth: 142 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2336	1636
Bottom	2340	
End	2352	

Positional Information

Lat: 48 ° 25.30 N

Lon: 125 ° 28 61 W

Lat: 48 ° 25.31 N

Lon: 125 ° 28 61 W

Lat: 48 ° 25.33 N

Lon: 125 ° 28 58 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB09 Event #: 26 Ship: Tully UTC Date (dd|mmm|yyyy): 8 | Sep | 2013

Niskin #	Firing #	Sample #	Rosemount Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4							
						ml / ml						ml						
1		89	Bot-10	✓	141	x		x										
2		90	125	✓	125	x		xx										
3		91	100	✓	100	x		x										
4		92	75	✓	75	x		x										
5		93	50	✓	50	x		x										
6		94	30	✓	30	x		x										
7		95	20	✓	20	xx		x		xx		xx						
8		96	10	✓	10	x		x		xx	xx	xx					Fluo 1.56	
9		97	5	✓	9	x		x		xx	xx	xx					Fluo: 0.8	
10		98	Max		→ NOT	used				xx	xx						Fluo:	
11					Max @	10												
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: <u>150</u> m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0035	1735
Bottom	0039	
End	0050	

Positional Information		
Lat:	48 ° 22.03	N
Lon:	125 ° 34.73	W

▼		
Lat:	48 ° 22.01	N
Lon:	125 ° 34.72	W

▼		
Lat:	48 ° 22.01	N
Lon:	125 ° 34.73	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB10 Event #: 27 Ship: Tully UTC Date (dd/mmm/yyyy): 08/09/2013

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	2	99	5	✓			x		x x	x x								Fluo: 0.5?
2	1	100	Max	✓	14		x		x x	x x								Fluo: 1.7
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(MR)

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

Time	UTC	Local
Start	0135	1835
Bottom	0139	
End	0145	

Positional Information

Start	Lat: 48 ° 18.56	N
	Lon: 125 ° 41.26	W
Bottom	Lat: 48 ° 18.56	N
	Lon: 125 ° 41.26	W
End	Lat: 48 ° 18.57	N
	Lon: 125 ° 41.25	W

Extra comments:
out-of-order

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB11 Event #: 29 Ship: Tully UTC Date (dd|mmm|yyyy): 08 | SEP | 2013

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	101	Bot-10	✓ 199	x		x								
2	2	102	175	✓ 175	x		x								
3	3	103	150	✓ 150	x		x								
4	4	104	125	✓ 125	x		x								
5	5	105	100	✓ 100	xx		x								
6	6	106	75	✓ 75	x		xx								
7	7	107	50	✓ 50	x		x								
8	8	108	30	✓ 30	x		x								
9	9	109	20	✓ 20	x		x		xx		xx				2.2 Flu.
10	10	110	10	✓ 10	x		x		xx		xx				
11	11	111	5	✓	x		x		xx	xx	xx				Fluo: 0.3
12		112	Max						xx	xx					Fluo: MAX @ 20
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 203 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0255	1955
Bottom	0300	
End	0315	

Positional Information
Start
Lat: 48° 15.23 N
Lon: 125° 47.56 W

Bottom
Lat: 48° 15.23 N
Lon: 125° 47.56 W

End
Lat: 48° 15.25 N
Lon: 125° 47.57 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB12 Event #: 30 Ship: Tully UTC Date (dd mmm yyyy): 08 SEP 2013

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	POM					
					MR/MS		MR	MR	MSLP	MSLP	LP	UBC					
1	1	113	Bot-10	✓	501	x		x	x								
2	2	114	400	✓	400	x		x	x								
3	3	115	300	✓	299	x		x									
4	4	116	250	✓	250	xx		x									
5	5	117	200	✓	200	x		x									
6	6	118	175	✓	174	x		xx									
7	7	119	150	✓	150	x		x									
8	8	120	125	✓	125	x		x									
9	9	121	100	✓	100	x		x									
10	10	122	75	✓	75	x		x									
11	11	123	50	✓	50	x		x									
12	12	124	30	✓	30	x		x									
13	13	125	20	✓	20	x		x	xx		xx					Fluo 1.95	
14	17	126	10	✓	10	x		x	xx		xx						
15	18	127	5	✓	5	xx		x	xx	xx	xx					Fluo: ~0.4	
16	14	128	Max	✓	20				xx	xx	xx					Fluo:	
17	15	129	Max	✓	20							x				Lora	
18	16	130	Max	✓	20							x				Lora	
19	19	154	5	✓	5											Dave	
20	20	155	5	✓	5											Dave	
21																	
22																	
23																	
24																	

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

Bottom Depth: 510 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0352	2052
Bottom	0403	
End	0425	

Positional Information

Lat:	48° 12.89	N
Lon:	125° 51.92	W

▼

Lat:	48° 12.91	N
Lon:	125° 51.92	W

▼

Lat:	48° 12.94	N
Lon:	125° 51.90	W

Extra comments:
out-of-order ←
please include Niskins
19+20 in the file
even tho no S/W.

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB13 Event #: 31 Ship: Tully UTC Date (dd|mmm|yyyy): 08 | SEP | 2013

Niskin #	Firing #	Sample #	Roseette Operation			Samples Taken / Sampler's initials															Comments
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	POM							
														UBC	UBC						
1	4	131	5	✓				x		x x	x x								Fluo: 0.4		
2	1	132	Max	✓	20			x		x x	x x								Fluo: 1.9		
3	2	133	Max	✓	20									x					Lora		
4	3	134	Max	✓	20									x					Lora		
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: 913 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0524	2224
Bottom	0540	
End	0558	

Positional Information
Start
Lat: 48° 10.61 N
Lon: 125° 56.12 W

Bottom
Lat: 48° 10.61 N
Lon: 125° 56.17 W

End
Lat: 48° 10.65 N
Lon: 125° 56.17 W

Extra comments:
out-of-order

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB14 Event #: 32 Ship: Tully UTC Date (dd/mmm/yyyy): 08 / SEP / 2013

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		135	Bot-10	✓	1181	x		x	x							
2		136	1000	✓		xx	xx	x	x							
3		137	750	✓		x	x	x	x							
4		138	500	✓		x	x	xx	xx							
5		139	400	✓		x		x	x							
6		140	300	✓		x		x								
7		141	250	✓		x		x								
8		142	200	✓		x		x								
9		143	175	✓		x		x								
10		144	150	✓		x		x								
11		145	125	✓		xx		x								
12		146	100	✓		x		x								
13		147	75	✓		x		x								
14		148	50	✓		x		x								
15		149	30	✓		x		xx								
16		150	20	✓		x		x	xx		xx					
17		151	10	✓		x		x	xx		xx					
18		152	5	✓		x		x	xx	xx	xx					
19		153	Max	✓	25			x	xx	xx						Fluo: 2.18
20																Fluo: 2.18
21																
22																
23																
24																

Profile type: ☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): MR / HMBottom Depth: 1171 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0640	2340
Bottom	0702	
End	0739	

Positional Information
Start
Lat: 48 ° 08.46 N
Lon: 125 ° 59.93 WBottom
Lat: 48 ° 08.53 N
Lon: 125 ° 59.98 WEnd
Lat: 48 ° 08.45 N
Lon: 126 ° 00.07 WExtra comments:
out-of-order
13, 14, 15, 19, 16, 17...

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LB15 Event #: 35 Ship: Tully UTC Date (dd|mmm|yyyy): 8 | 9 | 13

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		156	5	✓			x		x x	x x								Fluo:
2		157	Max	✓	26		x		x x	x x								Fluo:
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Watchkeeper(s): H.M.

Bottom Depth: 1547 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	10 07	0307
Bottom	10 34	
End	11 02	

Positional Information

Lat: 48 ° 04 . 35 N

Lon: 126 ° 08 . 44 W

Lat: 48 ° 04 . 36 N

Lon: 126 ° 08 . 45 W

Lat: 48 ° 04 . 37 N

Lon: 126 ° 08 . 39 W

Extra comments: OUT OF ORDER

2, 1

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

UTC Date (dd mmm yyyy): 8 | 9 | 13

Extra comments:
~~OUT OF ORDER~~
~~2, 1~~

[illegible]

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LC11 Event #: 39 681 Ship: Tully UTC Date (dd|mmm|yyyy): 8 | 9 | 13

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						
					none							UBC						
1	1	160	Bot-10	✓ 1468	x		x	x				x x						
2	2	161	1250	✓	x	x	x	x				x x						
3	3	162	1000	✓	x	x x	x x	xx				x x						
4	4	163	750	✓ 750	x	x	x	x				x x						
5	5	164	500	✓ 500	xx	x	x	x				x x						
6	6	165	400	✓ 399	x		x	x				x x						
7	7	166	300	✓ 300	x		x					x x						
8	8	167	250	✓ 250	x		x					x x						
9	9	168	200	✓ 200	x		xx					x x						
10	10	169	175	✓ 175	x		x					x x						
11	11	170	150	✓ 149	x		x					x x						
12	12	171	125	✓ 124	x x		x					x x						
13	13	172	100	✓ 100	x		x					x x						
14	14	173	75	✓ 75	x		x					x x						
15	15	174	50	✓ 50	x		x					xx						
16	19	175	30	✓ 30	x		xx					x x						
17	20	176	20	✓ 20	x		x		x x		x x	x x						
18	21	177	10	✓ 10	x		x		x x		x x	x x						
19	22	178	5	✓ 5	x		x		x x	x x	x x	x x						
20	16	179	Max	✓ 39			x		xx	xx	xx						Fluo: 1.1	
21	17	180	MAX	✓													LORA	
22	18	181	MAX	✓													LORA	
23																		
24																		

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

Bottom Depth: 1436 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1802	1102
Bottom	1829	
End	1914	

Positional Information
Start
Lat: 48 ° 18.98 N
Lon: 126 ° 26.74 W

Bottom
Lat: 48 ° 18.96 N
Lon: 126 ° 26.66 W

End
Lat: 48 ° 18.99 N
Lon: 126 ° 26.63 W

Extra comments:
2122
... 14, 15, 20, 16, 17...
OUT OF ORDER

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LC09

Event #:

42

Ship:

Tully

UTC Date (dd|mmm|yyyy): 08 | SEP | 2013

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	DIC	POM UBC				
1	1	182	Bot-10	✓	602	x		xx	xx			xx	x					
2	2	183	500	✓	501	x		x	x			xx	x					
3	3	184	400	✓	400	x		x	x			xx	x					
4	4	185	300	✓	300	x		x				xx	xx					
5	5	186	250	✓	250	xx		x				xx	x					
6	6	187	200	✓	200	x		x				xx	x					
7	7	188	175	✓	175	x		x				xx						
8	8	189	150	✓	150	x		x				xx						
9	9	190	125	✓	125	x		xx				xx						
10	10	191	100	✓	100	x		x				xx	x					Possible MISFIRE
11	11	192	75	✓	75	x		x				xx						
12	12	193	50	✓	50	xx		x				xx	x					
13	13	194	30	✓	30	x		x				xx	xx					
14	14	195	20	✓	20	x		x	xx		xx	xx						
15	19	196	10	✓	10	x		x	xx		xx	xx	x					
16	20	197	5	✓	5	x		x			xx	xx	x					Fluo: 0.4
17	21	198	5	✓	5				xx	xx								
18	22	199	0	✓	2							xx						Fluo: 2.2
19	15	200	Max	✓	20			x	xx	xx								Lora
20	16	201	Max	✓	20									x				Lora
21	17	202	Max	✓	20									x				LORA
22	18	203	MAX	✓	20													
23																		
24																		

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

Bottom Depth: 605 m
Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Start	2201	1501
Bottom	2214	
End	2243	

Positional Information
Start
Lat: 48° 25.93 N
Lon: 126° 13.66 W

Bottom
Lat: 48° 25.93 N
Lon: 126° 13.67 W

End
Lat: 48° 25.90 N
Lon: 126° 13.72 W

Extra comments:

out of order
1..12-13-19-20-21-22
14-15-16-17-18

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LC08 Event #: 46 Ship: Tully UTC Date (dd|mmm|yyyy): 09 SEP 2013

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	1	204	Bot-10	✓	190	x		x					x x	xx					
2	2	205	175	✓	174	x		x					x x						
3	3	206	150	✓	149	x		x					x x						
4	4	207	125	✓	124	x		x					x x						
5	5	208	100	✓	100	x		x					x x	x					
6	6	209	75	✓	74	x		x					x x						
7	7	210	50	✓	50	x		xx					x x	x					
8	8	211	30	✓	30	xx		x					x x	xx					
9	9	212	20	✓	20	x		x		x x		x x	x x	x					
10	10	213	10	✓	10	x		x		x x		x x	x x	x					
11	11	214	5	✓		x		x			xx	xx	x						
12	12	215	5	✓					xx	xx							Fluo : 18		
13	13	216	0	✓								x x							
14		217	Max		NOT USED			x		xx	xx						Fluo		
15					NO MAX														
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 199 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0133	1833
Bottom	0139	
End	0153	

Positional Information
Start
Lat: 48 ° 29.37 N
Lon: 126 ° 07.05 W

Bottom
Lat: 48 ° 29.36 N
Lon: 126 ° 07.01 W

End
Lat: 48 ° 29.32 N
Lon: 126 ° 06.95 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LC06 Event #: 49 Ship: Tully UTC Date (dd/mm/yyyy): 09 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	DC					
						MR	MR	MR		LP/MS	DC	MG	UBC	EP					
1	1	217	Bot-10	✓	82	x		x					x x						
2	2	218	75	✓	75	x		x					x x						
3	3	219	50	✓	51	x		x					x x						
4	4	220	30	✓	30	x		x					x x						
5	5	221	20	✓	20	x		x		x x		x x	x x						
6	6	222	10	✓	10	xx		xx		x x		x x	x x						
7	7	223	5	✓	5	x		x		x x	x x	x x	xx					Fluo: 0.53	
8	8	224	0										xx						
9			Max		NOT USED			✓		xx	xx							Fluo:	
10								NO MAX											
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: 92 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0347	2047
Bottom	0349	
End	0358	

Positional Information

Lat:	48 ° 36.47	N
Lon:	125 ° 54.07	W

▼

Lat:	48 ° 36.47	N
Lon:	125 ° 54.09	W

▼

Lat:	48 ° 36.47	N
Lon:	125 ° 54.09	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LC04 Event #: S2 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | SEP | 2013

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	225	Bot-10	✓	157	x		x					xx					
2	2	226	150	✓	150	x		x					xx					
3	3	227	125	✓	125	x		x					xx					
4	4	228	100	✓	99	xx		xx					xx					
5	5	229	75	✓	75	x		x					xx					
6	6	230	50	✓	50	x		x					xx					
7	7	231	30	✓	30	x		x					xx					
8	8	232	20	✓	20	x		x		xx		xx	xx					
9	9	233	10	✓	10	x		x		xx		xx	xx				Fluo: 2.0	
10	10	234	5	✓	5	x		x		xx	xx	xx	xx				Fluo: 2.0	
11	11	235	0	✓	2								xx					
12		236	Max		NOT USED			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): MR

Bottom Depth: 166 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0553	2253
Bottom	0556	
End	0609	

Positional Information
Start
Lat: 48° 43.43 N
Lon: 125° 40.88 W

Bottom
Lat: 48° 43.45 N
Lon: 125° 40.92 W

End
Lat: 48° 43.53 N
Lon: 125° 41.06 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LC02 Event #: 54 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | 9 | 13

Niskin #	Firing #	Sample #	Rosefi Operation		Samples Taken / Sampler's initials										Comments			
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases UBC	DIC				
1		237	Bot-10	✓	100	x		x					xx	xx				
2		238	75	✓		xx		x					xx	xx				
3		239	50	✓		x		x					xx	xxx			DIC C not pickled	
4		240	30	✓		x		x					xx	xx				
5		241	20	✓		x		xx		xx		xx	xx	xx				
6		242	10	✓		x		x		xx		xx	xx	xx				
7		243	5	✓		x		x				xx	xx	xxx			DIC C not pickled	
8		244	5	✓						xx	xx						Fluo: 2.41	
9		245	0	✓	2.1								xx					
10		246	Max	✓		7		x		xx	xx						Fluo: 2.57	
11		247	Max	✓		7											Lora	
12		248	Max	✓		7											Lora	
13		249	Max	✓		7											Lora	
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 110 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0739	0039
Bottom	0741	
End	0751	

Positional Information

Lat:	48 ° 48 . 69	N
Lon:	125 ° 30 . 93	W

Start

▼

Lat:	48 ° 48 71	N
Lon:	125 ° 30 93	W

Bottom

▼

Lat:	48 ° 48 69	N
Lon:	125 ° 30 94	W

End

Extra comments:
OUT OF ORDER
5, 6, 10, 11, 12, 13, 7, 8, 9

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LC01

Event #:

55

Ship:

Tully

UTC Date (dd:mmm/yyyy):

9 9 13

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		250	Bot-10	✓	88	x		x				xx							
2		251	75	✓		x		xx				xx							
3		252	50	✓		xx		x				xx							
4		253	30	✓		x		x				xx							
5		254	20	✓		x		x	xx		xx	xx							
6		255	10	✓		x		x	xx		xx	xx							
7		256	5	✓		x		x	xx	xx	xx	xx						Fluo: 2.4	
8		257	0	✓								xx							
9		258	Max	✓	2.5	8		x	xx	xx								Fluo: 2.7	
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): H.M.

Bottom Depth: 96 m

Transmisso Cleaned: Y / N

Time UTC Local

Start 0837 0137

Bottom 0839

End 0849

Positional Information

Start Lat: 48 ° 50 . 47 N

Lon: 125 ° 27 . 71 W

Bottom Lat: 48 ° 50 . 46 N

Lon: 125 ° 27 . 72 W

End Lat: 48 ° 50 . 46 N

Lon: 125 ° 27 . 69 W

Extra comments:

OUT OF ORDER
...5,6,9,78

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LD01

Event #:

56

Ship:

Tully

UTC Date (dd:mmm:yyyy): 1 9 13

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		259	Bot-10	✓	27	x		x											
2		260	20	✓		x		x		xx		xx							
3		261	10	✓		xx		x		xx		xx							
4		262	5	✓		x		xx		xx	xx	xx							
5		263	Chl Max	✓	8			x		xx	xx								LORA
6			MAX	✓	8														LORA
7			MAX	✓	8														
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): H, H

Bottom Depth: 37 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1048	0348
Bottom	1049	
End	1054	

Positional Information

Lat:	48° 00' .07	N
Lon:	125° 43' .80	W

Lat:	49° 00' .09	N
Lon:	125° 43' .80	W

Lat:	49° 00' .13	N
Lon:	125° 43' .79	W

Extra comments:

OUT OF ORDER

1, 2, 3, 5, 6, 7, 4

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LD02 Event #: 57 Ship: Tully UTC Date (dd mmm yyyy): 9 9 13

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		264	Bot-10	✓	35	x		x					x x						
2		265	30	✓		x		x					x x						
3		266	20	✓		x x		x		x x		x x	x x						
4		267	10	✓		x		x x		x x		x x	x x						
5		268	5	✓		x		x		x x	x x	x x					Fluo: 2.48		
6		269	5	✓									x x						
7		270	0		2.4								xx						
8		271	Max	✓	5			x		xx	xx						Fluo: 2.48		
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 44 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	11 23	64 23
Bottom	11 24	
End	11 30	

Positional Information
Start
Lat: 48 ° 58 . 40 N
Lon: 125 ° 46 . 99 W

Bottom
Lat: 48 ° 58 . 38 N
Lon: 125 ° 47 . 00 W

End
Lat: 48 ° 58 . 36 N
Lon: 125 ° 47 . 02 W

Extra comments:
OUT OF ORDER
... 3,4,5,6,8,7

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LD04

Event #:

66

Ship:

Tully

UTC Date (dd mmm yyyy):

9 9 13

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		272	Bot-10	✓ 54	x		x								
2		273	30	✓	x		x								
3		274	20	✓	xx		x		xx		xx				
4		275	10	✓	x		xx		xx		xx				Fluo: 3.5
5		276	5	✓	x		x		xx	xx	xx				Fluo:
6		277	Max	✓ 5			x		xx	xx					CHL Didn't get sample
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 63 m
 Transmisso Cleaned: Y / N

	UTC	Local
Start	13 20	06 20
Bottom	13 21	
End	13 26	

Positional Information

Lat:	48 ° 53.11	N
Lon:	125 ° 56.92	W

Start

Lat:	48 ° 53.15	N
Lon:	125 ° 56.80	W

Bottom

Lat:	48 ° 53.17	N
Lon:	125 ° 56.88	W

End

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LD06

Event #:

63

Ship:

Tully

UTC Date (dd|mmm|yyyy):

9 | 9 | 13

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		278	Bot-10	✓	126	x		x							
2		279	100	✓		x		x x							
3		280	75	✓		x		x							
4		281	50	✓		x		x							
5		282	30	✓		x		x							
6		283	20	✓		x		x	x x		x x				
7		284	10	✓		x x		x	x x		x x				Fluo:
8		285	5			x		x	x x	x x	x x				Fluo:
9		286	Max		14 (<1)			x	x x	x x			not used		
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Profile type:

☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): H.M.

Bottom Depth: 136 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1530	0830
Bottom	1533	
End	1543	

Positional Information

Start	Lat: 48 ° 46.22 N
	Lon: 126 ° 10.15 W

Bottom	Lat: 48 ° 46.21 N
	Lon: 126 ° 10.15 W

End	Lat: 48 ° 46.22 N
	Lon: 126 ° 10.13 W

Extra comments:

<http://www.pac.dfo-mpo.gc.ca/sci/osap/projects/waterproperties/>

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LD08

Event #:

65/66

Ship:

Tully

UTC Date (dd mmm yyyy):

9 9 13

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		287	Bot-10	✓	760	x		x	x						
2		288	750	✓		x	x	xx	xx						
3		289	500	✓		xx	x	x	x						
4		290	400	✓		x		x	x						
5		291	300	✓		x		x							
6		292	250	✓		x		x							
7		293	200	✓		x		x							
8		294	175	✓		x		x							
9		295	150	✓		x		x							
10		296	125	✓		x		x							
11		297	100	✓		x		x							
12		298	75	✓		x		xx							
13		299	50	✓		x		x							
14		300	30	✓		xx		x							
15		301	20	✓		x		x	xx		xx				
16		302	10	✓		x		x	xx		xx				
17		303	5			x		x	xx	xx	xx				
18		304	Max		14			x	xx	xx				not used	
19															
20															
21															
22															
23															
24															

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): H.M.

Bottom Depth: 768 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	17 38	10 38
Bottom	17 51	
End	18 33	

Positional Information

Lat:	48 ° 39.18	N
Lon:	126 ° 23.34	W

Lat:	48 ° 39.18	N
Lon:	126 ° 23.33	W

Lat:	48 ° 39.17	N
Lon:	126 ° 23.36	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LD11 Event #: 72 Ship: Tully UTC Date (dd mmm yyyy): 9 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		305	Bot-10	✓	1596	x		x	x							LIZZY DEEP WATER
2		306	1500	✓	1500	x	xx	x	x							
3		307	1250	✓	1250	xx	x	x	x							
4		308	1000	✓	1001	x	x	x	x							
5		309	750	✓	750	x	x	xx	xx							
6		310	500	✓	500	x		x	x							
7		311	400	✓	400	x		x	x							
8		312	300	✓	300	x		x								
9		313	250	✓	250	x		x								
10		314	200	✓	200	x		x								
11		315	175	✓	175	x		x								
12		316	150	✓	150	x		x								
13		317	125	✓	125	xx		x								
14		318	100	✓	100	x		x								
15	15	319	75	✓	75	x		xx								
16	16	320	50	✓	50	x		x								
17	17	321	30	✓	30	x		x								
18	22	322	20	✓	20	x		x		xx		xx				
19	23	323	10	✓	10	x		x		xx		xx				
20	24	324	5	✓	5	x		x		xx	xx	xx				Fluo: 0.26
21	18	325	Max	✓	30			x		xx	xx					Fluo: 1.58
22	19	326	MAX	✓	30											LORA
23	20	327	MAX	✓	30											LORA
24	21	328	MAX	✓	30											LORA

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

Bottom Depth: 1587 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2319	1619
Bottom	2348	
End	0038	

Positional Information

Lat:	48° 28.76	N
Lon:	126° 42.95	W

Start

Bottom

Lat:	48° 28.73	N
Lon:	126° 42.97	W

Bottom

End

Lat:	48° 28.74	N
Lon:	126° 42.96	W

End

Extra comments:
out-of-order

Sampling Log

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

Cruise ID: 2013-58 **Station:** LG09

Event #: 75

Ship: Tully

UTC Date (dd mmm yyyy): 10 9 13

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			329	Max	✓ 25													
2			330	Max	✓ 25													Lora
3																		Lora
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Version: 25 Nov 2011

Transmissometer to be cleaned before each cast.

Profile type: ROS TRM X-Niskin other?
Watchkeeper(s): H.7

Bottom Depth: 2057 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	08 10	01 10
Bottom	08 48	
End	09 26	

Positional Information	
Lat:	48 ° 51 . 18 N
Lon:	127 ° 19 . 42 W

Bottom	Lat:	48 ° 51 . 20	N
	Lon:	127 ° 19 . 38	W

End	Lat:	48 ° 51. 20	N
	Lon:	127 ° 19. 39	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LG06 Event #: 79 Ship: Tully UTC Date (dd/mm/yyyy): 10/9/13

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	Bot-10	✓	964	x		x	x							
2		332	750	✓		x		x x	x x							
3		333	500	✓		x x		x	x							
4		334	400	✓		x		x	x							
5		335	300	✓		x		x								
6		336	250	✓		x		x								
7		337	200	✓		x		x								
8		338	175	✓		x		x								
9		339	150	✓		x		x x								
10		340	125	✓		x		x								
11		341	100	✓		x		x								
12		342	75	✓		x		x								
13		343	50	✓		x		x								
14		344	30	✓		x x		x								
15		345	20	✓		x		x		x x		x x				
16		346	10	✓		x		x		x x		x x				
17		347	5			x		x		x x		x x				Fluo: 1.50
18		348	Max			x		x		x x		x x		not used		Fluo: 1.50
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 957 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1419	0719
Bottom	1437	
End	1510	

Positional Information

Lat:	49 ° 03 51	N
Lon:	127 ° 01 17	W

Start

Bottom

End

Lat: 49 ° 03 52 N
Lon: 127 ° 01 17 W

Lat: 49 ° 03 50 N
Lon: 127 ° 01 16 W

Extra comments:

Cruise ID: 2013-58 Station: LG04 Event #: 81 Ship: Tully UTC Date (dd mmm yyyy): 10 9 13

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		349	Bot-10	✓ 136	x		x								
2		350	125	✓	x		x								
3		351	100	✓	x x		x x								
4		352	75	✓	x		x								
5		353	50	✓	x		x								
6		354	30	✓	x		x								
7		355	20	✓	x		x		x x		x x				
8		356	10	✓	x		x		x x		x x				
9		357	5	✓	x		x		x x	x x	x x				Fluo: 3.5
10		358	Max	✓ 2	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): H.M.

Bottom Depth: 145 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1647	0947
Bottom	1649	
End	1706	

Positional Information
Start
Lat: 49 ° 11 . 30 N
Lon: 126 ° 49 . 37 W

Bottom
Lat: 49 ° 11 . 30 N
Lon: 126 ° 49 . 37 W

End
Lat: 49 ° 11 28 N
Lon: 126 ° 49 43 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LG02

Event #:

84

Ship:

Tully

UTC Date (dd|mmm|yyyy): 10 SEP 2013

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	Phyto		
1	1	359	Bot-10	✓ 90	x		x					xx			
2	2	360	75	✓ 75	x		x					xx			
3	3	361	50	✓ 50	xx		xx					xx			
4	4	362	30	✓ 30	x		x					xx			
5	8	363	20	✓ 20	x		x		xx		xx	xx			
6	9	364	10	✓ 10	x		x		xx		xx	xx			
7	10	365	5	✓ 5	x		x		xx	xx	xx	xxx			Fluo: -1.5
8	11	366	5	✓ 5								xx	xxx		
9		367	0	✓ 3								xx			
10	5	368	Max	✓ 30			x		xx	xx					Fluo: 1.4
11	6		MAX	✓ 30											LORA
12	7		MAX	✓ 30											LORA
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 100 m
 Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Start	1905	1205
Bottom	1908	
End	1922	

Positional Information

Lat:	49 ° 18.75	N
Lon:	126 ° 38.09	W

Start

Lat:	49 ° 18.75	N
Lon:	126 ° 38.09	W

Bottom

Lat:	49 ° 18.77	N
Lon:	126 ° 38.08	W

End

Extra comments:
 out-of-order

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LG01 Event #: 86 Ship: Tully UTC Date (dd|mmm|yyyy): 10|Sep|2013

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	369	Bot-10	✓ 42	x		x											
2	2	370	30	✓ 30	x		x											
3	3	371	20	✓ 20	xx		xx		xx		xx							
4	4	372	10	✓ 10	x		x		xx		xx							
5	5	373	5	✓ 5	x		x		xx	xx	xx					Fluo: ~ 3.0		
6		374	Max	✓ NOT	USED		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): MR

Bottom Depth: 53 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2008	1308
Bottom	2010	
End	2017	

Positional Information

Start Lat: 49° 20.53' N

Start Lon: 126° 35.05' W

Bottom Lat: 49° 20.52' N

Bottom Lon: 126° 35.07' W

End Lat: 49° 20.52' N

End Lon: 126° 35.13' W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

LBP7

Event #:

91

Ship:

Tully

UTC Date (dd|mmm|yyyy):

11 | 9 | 13

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		374	bot-10	✓	2214	x		x	x						
2		375	2000	✓		x x	x x	x	x						
3		376	1500	✓		x	x	x x	x x						
4		377	1250	✓		x	x x	x	x						
5		378	1000	✓		x	x	x	x						
6		379	750	✓		x	x	x	x						
7		380	500	✓		x		x	x						
8		381	400	✓		x x		x	x						
9		382	300	✓		x		x							
10		383	250	✓		x		x							
11		384	200	✓		x		x							
12		385	175	✓		x		x							
13		386	150	✓		x		x x							
14		387	125	✓		x		x							
15		388	100	✓		x		x							
16		389	75	✓		x		x							
17		390	50	✓		x x		x							
18		391	30 + 4	✓		x		x							
19		392	20	✓		x		x		x x		x x			
20		393	10	✓		x		x		x x		x x			
21		394	5	✓		x		x		x x	x x	x x			Fluo: 0.55
22		395	Max	✓	30			x		x x	x x				Fluo: 1.24
23			Max	✓	30								Lora		1.24
24			Max	✓	30								Lora		1.24

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

Bottom Depth: 2186 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0741	0041
Bottom	0821	
End	0917	

Positional Information

Lat:	49 ° 52.38	N
Lon:	128 ° 11.19	W

Bottom

Lat:	49 ° 52.38	N
Lon:	128 ° 11.22	W

End

Lat:	49 ° 52.42	N
Lon:	128 ° 11.18	W

Extra comments:
OUT OF ORDER
... 17, 18, 22, 23, 24, 19, 20...

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: LBP5 Event #: 94 Ship: Tully UTC Date (dd mmm/yyyy): 11 9 13

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		396	Bot-10	✓	1282	x		x	x						
2		397	1250	✓		x	xx	x	x						
3		398	1000	✓		x	xx	x	x						
4		399	750	✓		xx	x	x	x						
5		400	500	✓		x	x	xx	xx						
6		401	400	✓		x		x	x						
7		402	300	✓		x		x							
8		403	250	✓		x		x							
9		404	200	✓		x		x							
10		405	175	✓		x		x							
11		406	150	✓		x		x							
12		407	125	✓		xx		x							
13		408	100	✓		x		xx							
14		409	75	✓		x		x							
15		410	50	✓		x		x							
16		411	30	✓		x		x							
17		412	20	✓		x		x	xx		xx				
18		413	10	✓		x		x	xx		xx				
19		414	5	✓		xx		x	xx	xx	xx				Fluo: 0.60
20		415	Max					x	xx	xx					Fluo:
21															
22															
23															
24															

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

Bottom Depth: 1281 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1155	0455
Bottom	1217	
End	1255	

Positional Information

Lat:	49 ° 59.94	N
Lon:	128 ° 00.03	W

Bottom

Lat:	49 ° 59.97	N
Lon:	128 ° 00.00	W

End

Lat:	50 ° 00.00	N
Lon:	128 ° 00.03	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: LBP3

Event #: 97

Ship: Tully

UTC Date (dd mmm yyyy): 11 9 13

Niskin #	Firing #	Sample #	Roseette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases UBC					
1		416	Bot-10	✓ 157	x		x					x x					
2		417	150	✓	x		x					xx					
3		418	125	✓	x x		x					x x					
4		419	100	✓	x		x					x x					
5		420	75	✓	x		x					xx					
6		421	50	✓	x		x					x x					
7		422	30	✓	x		x					x x					
8		423	20	✓	x		x x		x x		x x	xx					
9		424	10	✓	x		x		x x		x x	x x					
10		425	5	✓	x		x		x x	x x	x x	x x					Fluo: 1.0
11		426	0	✓ 2.1								x x					
12		427	Max	✓			x		x x	x x							Fluo:
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth:	165	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	15 13	08 13
Bottom	15 16	
End	15 26	

Positional Information		
Lat:	50 ° 03.20	N
Lon:	127 ° 55.30	W

▼		
Lat:	50 ° 03.20	N
Lon:	127 ° 55.31	W

▼		
Lat:	50 ° 03.20	N
Lon:	127 ° 55.31	W

Extra comments:

Water Properties Group

Rosette Log

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

Cruise ID: 2013-58 Station: LBP2 Event #: 99 Ship: TULLY UTC Date (dd|mmm|yyyy): 11 | Sep | 2013

Niskin #	Sample #	Oxygen Titrations		Rosette Operation			Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒	Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	428			MAX	5												Lora
2	429			MAX	5												Lora
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): HM

Bottom Depth: 99 m
Transmisso Cleaned: (Y) / N

	Time	UTC	Local
Start		1608	
Bottom		1611	
End		1613	

Positional Information
Start
Lat: 50 ° 03 98 N
Lon: 127 ° 54 26 W

Bottom
Lat: 50 ° 03 96 N
Lon: 127 ° 54 26 W

End
Lat: 50 ° 03 96 N
Lon: 127 ° 54 26 W

Oxygen Info For This Cast
Blank Value: _____ mL • L⁻¹
Std Value: _____ mL • L⁻¹
*Date Run: ____ | ____ | ____
Analyst: _____

* Oxygen blanks and standards should be run daily, if possible

Water Properties Group

Rosette Log

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

Cruise ID: 2013-58 Station: CPE2 Event #: 103 Ship: TULLY UTC Date (dd|mmm|yyyy): 12 | SEP | 2013

Niskin #	Sample #	Oxygen Titrations		Rosette Operation			Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure		Oxy	Nut	Sal	Chl a	NH ₄						
1	430			MAX	15												Fluo 2.3
2	431			MAX	15												
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): MR

Bottom Depth: 127 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0049	1749
Bottom	0052	
End	0055	

Positional Information
Start
Lat: 50° 43.00 N
Lon: 128° 39.83 W

Bottom
Lat: 50° 42.99 N
Lon: 128° 39.85 W

End
Lat: 50° 42.98 N
Lon: 128° 39.86 W

Oxygen Info For This Cast
Blank Value: mL · L⁻¹
Std Value: mL · L⁻¹
*Date Run: | |
Analyst:
* Oxygen blanks and standards should be run daily, if possible

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: CS00 Event #: 109 Ship: Tully UTC Date (dd/mmm/yyyy): 12/9/13

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	432	2000	✓	2000	x	x	x	x									
2	2	433	1500	✓		x	xx	x	x									
3	3	434	1250	✓		x	x	x	x									
4	4	435	1000	✓		x	x	x	x									
5	5	436	750	✓		xx	x	x	x									
6	6	437	500	✓		x	x	x	x									
7	7	438	400	✓		x	x	xx	xx									
8	8	439	300	✓		x	x	x										
9	9	440	250	✓		x	x	x										
10	10	441	200	✓		x	x	x										
11	11	442	175	✓		x	x	x										
12	12	443	150	✓		x	x	x										
13	13	444	125	✓		xx	x	x										
14	14	445	100	✓		x	x	x										
15	15	446	75	✓		x	x	x										
16	16	447	50	✓		x	x	xx										
17	17	448	30	✓		x	x	x										
18	18	449	20	✓		x	x	x		xx		xx						
19	19	450	10	✓		xx	x	x		xx		xx						
20	20	451	5(74)	✓		x	x	x		xx	xx	xx					Fluo: 1.64	
21	21	452	Max	✓						xx	xx						Fluo: 1.64	
22	22	453	MAX	✓													LORA	
23	23	454	MAX	✓													LORA	
24																		

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

Bottom Depth: 2174 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0935	0235
Bottom	1010	
End	1103	

Positional Information
Start
Lat: 50 ° 27.65 N
Lon: 129 ° 55.10 W

Bottom
Lat: 50 ° 27.64 N
Lon: 129 ° 55.06 W

End
Lat: 50 ° 27.64 N
Lon: 129 ° 55.04 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: CS02 Event #: 113 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | SEP | 2013

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	455	Bot-10	✓	1884	x		x	x							
2		456	1250	✓		x	xx	xx	xx							
3		457	1000	✓		x	x	x	x							
4		458	750	✓		x	x	x	x							
5		459	500	✓		xx	x	x	x							
6		460	400	✓		x		x	x							
7		461	300	✓		x		x								
8		462	250	✓		x		x								
9		463	200	✓		x		x								
10		464	175	✓		x		xx								
11		465	150	✓		x		x								
12		466	125	✓		xx		x								
13		467	100	✓		x		x								
14		468	75	✓		x		x								
15		469	50	✓		x		x								
16		470	30	✓		x		x								
17		471	20	✓		x		x	xx	xy	xx					
18		472	10	✓		x		x	xx		xx					
19		473	5	✓		x		x	xx	xx	xx					Fluo:
20		474	Max						xx	xx						Fluo:
21		475														
22																
23																
24																

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

Bottom Depth: 1905 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	15:40	08:40
Bottom	16:12	
End	16:58	

Positional Information

Lat:	50 ° 41 25	N
Lon:	129 ° 27 00	W

Start

Lat:	50 ° 41 28	N
Lon:	129 ° 27 99	W

Bottom

Lat:	50 ° 41 29	N
Lon:	129 ° 28 02	W

End

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: CS04 Event #: 118 Ship: Tully UTC Date (dd|mmm|yyyy): 12 SEP 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target	Confirmed	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4					
			Pressure	✓ Pressure												
1	1	475	Bot-10	✓	92	x		x								
2	2	476	75	✓	75	x		x								
3	3	477	50	✓	50	x		x								
4	4	478	30	✓	30	x x		x								
5	5	479	20	✓	20	x		x	x x		x x					
6	6	480	10	✓	10	x		x	x x		x x					
7	7	481	5	✓	5	x		x x	x x	x x	x x				Fluo: 1.6	
8		482	Max		NOT USED				x x	x x					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): MR

Bottom Depth: 100 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2015	1315
Bottom	2018	1318
End	2027	1327

Positional Information
Start
Lat: 50° 49.15 N
Lon: 129° 12.95 W

Bottom
Lat: 50° 49.15 N
Lon: 129° 12.95 W

End
Lat: 50° 49.19 N
Lon: 129° 12.96 W

Extra comments:

Cruise ID: 2013-58 Station: ODAS Event #: 122 Vessel: TULGY UTC Date (dd|mmm|yyyy): 13 | SEP | 2013

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)													Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a										
1	1	483	MAX	✓ 20														LORA
2	2	484	MAX	✓ 20														LORA
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
Ros (default) | TrMetlRos | X-Niskin

Watchkeeper(s):

MR

Bottom Depth: 2138 m

Transmisso Cleaned: Y / N

Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	02:49	19:49
Bottom (BO)	03:26	:
End (EN)	04:02	:

Positional Information

Start

Lat: 50° 51.40 N

Lon: 129° 57.12 W

▼

Bottom

Lat: 50° 51.45 N

Lon: 129° 57.23 W

▼

Finish

Lat: 50° 51.55 N

Lon: 129° 57.23 W

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

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: CS06 Event #: 129 Ship: Tully UTC Date (dd/mm/yyyy): 13/09/13

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		485	Bot-10	✓ 56	x		xx								
2		486	50	✓	xx		x								
3		487	30	✓	x		x								
4		488	20	✓	x		x		xx		xx				
5		489	10	✓	x		x		xx		xx				
6		490	5	✓	x		x		xx	xx	xx				Fluo: 1.21
7		491	5						xx	xx					Fluo: 1.21
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 64 m
Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Time		
Start	1204	0504
Bottom	1205	
End	1211	

Positional Information
Start
Lat: 50 ° 59.96 N
Lon: 120 ° 51.75 W

Bottom
Lat: 50 ° 59.96 N
Lon: 120 ° 51.73 W

End
Lat: 50 ° 59.98 N
Lon: 120 ° 51.71 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: CS09

Event #: 135

Ship: Tully

UTC Date (dd mmm yyyy): 13 SEP 2013

Cruise ID: 2013-58			Station: CS09		Event #: 723		Ship: R/V		Party:		Comments							
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													
			Target Pressure	Confirmed Pressure	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	PH	TO					
1		492	Bot-10	✓	184	x		x										
2		493	175	✓		x		x										
3		494	150	✓		x		x										
4		495	125	✓		x		xx										
5		496	100	✓		x		x										
6		497	75	✓		x		x										
7		498	50	✓		xx		x										
8		499	30	✓		x		x										
9		500	20	✓		x		x	xx		xx							
10		501	10	✓		x		x	xx		xx							
11		502	5	✓		x		x	xx	xx	xx	xxx						Fluo: 1.2
12		503	Max						xx	xx								Fluo: 1.3
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

<http://www.pac>

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

Bottom Depth: 195 m
Transmisso Cleaned: Y / N

	UTC	Local
Start	15:18	8:18
Bottom	15:22	
End	15:33	

Positional Information

Lat:	51° 12' 49" N
Lon:	128° 27' 91" W

Bottom

Lat:	51° 12' 48" N
Lon:	128° 27' 87" W

End

Lat:	51° 12' 49" N
Lon:	128° 27' 90" W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: UBC7 Event #: 140 Ship: Tully UTC Date (dd|mmm|yyyy): 13 SEP 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-Fr	CHL	POM								
					UBC	UBC									
1	1	504	30	✓ 29.9	xx	x x									
2	2	505	5	✓ 5	xx	x x									
3		506	0	2.3	xx	x x									
4	3	507	Max	✓ 5			x								Fluo: 1.8
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: 158 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1951	1251
Bottom	1955	
End	2001	

Positional Information
Start
Lat: 51 ° 30.01 N
Lon: 127 ° 49.04 W

Bottom
Lat: 51 ° 30.02 N
Lon: 127 ° 49.05 W

End
Lat: 51 ° 30.01 N
Lon: 127 ° 49.05 W

Extra comments:
out of order
1-2-4-3

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: Ri 1 Event #: 142 Ship: Tully UTC Date (dd/mmm/yyyy): 13 SEP 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓	Pressure	Nut-Fr	CHL										
1	1	508	30	✓	30	xx	xx										
2	2	509	5	✓	5	xx	xx										
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: 306 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2126	1426
Bottom	2132	
End	2139	

Positional Information

Lat:	<u>51 ° 26.45</u>	<u>N</u>
Lon:	<u>127 ° 38.43</u>	<u>W</u>

▼

Lat:	<u>51 ° 26.45</u>	<u>N</u>
Lon:	<u>127 ° 38.47</u>	<u>W</u>

▼

Lat:	<u>51 ° 26.43</u>	<u>N</u>
Lon:	<u>127 ° 38.50</u>	<u>W</u>

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-58

Station:

Ri 2

Event #: 144

Ship: Tully

UTC Date (dd|mmm|yyyy): 13 | SEPT | 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓	Pressure	Nut-Fr	CHL	POM							
1	1	510	30	✓	30	xx	x x								
2	2	511	5	✓	5	xx	x x								
3	4	512	0		2.4		x x								
4	3	513	max 5	✓	5			x							
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Profile type:

☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): MR

Bottom Depth: 332 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	22 54	15 54
Bottom	23 01	
End	23 09	

Positional Information

Lat:	51 ° 31.28	N
Lon:	127 ° 33.59	W

Lat:	51 ° 31.27	N
Lon:	127 ° 33.56	W

Lat:	51 ° 31.26	N
Lon:	127 ° 33.57	W

Extra comments:

out-of-order
1243

Cruise ID: 2013-58 Station: Ri 3 Event #: 147 Ship: Tully UTC Date (dd mmm/yyyy): 14 SEP 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓	Pressure	Nut-Fr	CHL										
						UBC	UBC										
1		514	30	✓	30	xx	x x										
2		515	5	✓	5	xx	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):
MR

Bottom Depth: 328 m

Transmisso Cleaned:

Y

 / N

Time	UTC	Local
Start	0144	1844
Bottom	0151	
End	0159	

Positional Information

Start

Lat: 51 ° 35.89 N

Lon: 127 ° 32.09 W

Bottom

Lat: 51 ° 35.87 N

Lon: 127 ° 32.08 W

End

Lat: 51 ° 35.84 N

Lon: 127 ° 32.08 W

Extra comments:

Cruise ID: 2013-58 Station: Ri 4 Event #: 149 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | SEP | 2013

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments
			Target	Confirmed		Nut-Fr	CHL											
			Pressure	✓	Pressure	UBC	UBC											
1	1	516	30	✓	30	xx	x x											
2	2	517	5	✓	5	xx	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): MR

Bottom Depth: 300 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0317	2017
Bottom	0323	
End	0331	

Positional Information
Start
Lat: 51 ° 38.97 N
Lon: 127 ° 26.76 W

Bottom
Lat: 51 ° 38.97 N
Lon: 127 ° 26.77 W

End
Lat: 51 ° 38.97 N
Lon: 127 ° 26.77 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58 Station: Ri 5 Event #: 151 Ship: Tully UTC Date (dd|mmm|yyyy): 14 SEP 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓	Pressure	Nut-Fr	CHL								
						UBC	UBC								
1	1	518	30	✓	30	xx	x x								
2	2	519	5	✓	5	xx	x x								
3	4	520	0	✓	2.4		x x								
4	3	521	Max	✓	5										Fluo: 1.8
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: 202 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0435	2135
Bottom	0443	
End	0453	

Positional Information
Start
Lat: 51 ° 40.72 N
Lon: 127 ° 19.93 W

Bottom
Lat: 51 ° 40.74 N
Lon: 127 ° 19.97 W

End
Lat: 51 ° 40.71 N
Lon: 127 ° 20.00 W

Extra comments:
out-of-order
1-2-4-3

Water Properties Group

Sampling Log

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

Cruise ID: 2013-58

Station: Ri 6 / UBC6

Event #: 153

Ship: Tully

UTC Date (dd mmm yyyy): 14 SEP 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	Nut-Fr	CHL													
1	1	522	30	✓	30	xx	xx												
2	2	523	5	✓		xx	xx												
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: 145 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0541	
Bottom	0545	
End	0550	

Positional Information

Lat:	51 ° 40.49	N
Lon:	127 ° 17.06	W

▼

Lat:	51 ° 40.49	N
Lon:	127 ° 17.06	W

▼

Lat:	51 ° 40.49	N
Lon:	127 ° 17.06	W

Extra comments:
wrong depth in header.
out-of-order