

Water Properties Group

Sampling Log

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

Cruise ID:

2014-21

Station:

LB01

Event #: 001

Ship:

Tully

UTC Date (dd|mmm|yyyy): 20 | 05 | 14

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	Gases	DMSO	DMSP		
1	1	1	Bot-105	✓ 28.6	x		x		xx		xx	x					
2		2	10	✓	x		x		xx		xx	xx					
3		3	5	✓	x		x		xx	xx	xx	x					Fluo: 3.6
4		4	5	✓									xx	xx	xx		Fluo: 3.6
5		5	Chi-Max		NOT USED!												
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: 34 m

Transmisso Cleaned: ☒ Y ☐ N

Time UTC Local

Start 1459 0759

Bottom 1500

End 1504

Positional Information

Start Lat: 48 ° 40 36 N

Lon: 124 ° 59 52 W

Bottom Lat: 48 ° 40 36 N

Lon: 124 ° 59 60 W

End Lat: 48 ° 40 36 N

Lon: 124 ° 59 66 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LB02 Event #: 002 Ship: Tully UTC Date (dd/mmm/yyyy): 28 / 05 / 14

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	DMSO	DMSP			
1		6	Bot-10	✓ 47	x		x					xx					
2		7	30	✓	x		x					xx					
3		8	20	✓	xx		x		xx	XX	xx	xx					
4		9	10	✓	x		x		xx		xx	xx					
5		10	5	✓	x		xx		xx	xx	xx	xx	xx	xx			Fluo: 3.126
6		11	Max	✓													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): H.M.

Bottom Depth: 51 m
Transmisso Cleaned: (Y) / N

	Time	UTC	Local
Start		1544	0844
Bottom		1550	
End		1556	

Positional Information
Start
Lat: 48 ° 39 00 N
Lon: 125 ° 02 64 W

Bottom
Lat: 48 ° 39 00 N
Lon: 125 ° 02 64 W

End
Lat: 48 ° 38 99 N
Lon: 125 ° 02 64 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2014-21

Station:

LB03

Event #: 003

Ship: Tully

UTC Date (dd|mmm|yyyy): 28 | 05 | 14

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	12	5	☒	5			x			xx	xx						Fluo: ~1 mg/l
2		13	Max			NOT	USED											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: 89 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	16:45	9:45
Bottom	16:46	9:46
End	16:50	16:50

Positional Information

Start
Lat: 48 ° 37 31 N
Lon: 125 ° 5 55 W

Bottom
Lat: 48 ° 37 31 N
Lon: 125 ° 5 55 W

End
Lat: 48 ° 37 36 N
Lon: 125 ° 5 55 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LB04 Event #: 004 Ship: Tully

UTC Date (dd|mmm|yyyy): 28 | 05 | 2014

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	DMSO	DMSP			
1	1	14	Bot-10	✓ 104	x		x										
2	2	15	75	✓ 750	xx		x										
3	3	16	50	✓ 49.7	x		xx		xx	xx							
4	5	17	30	✓ 30.1	x		x		xx	xx							Fluo ~ 0.6
5	6	18	20	✓ 20.0	x		x		xx	xx	xx						
6	7	19	10	✓ 9.9	x		x		xx	xx	xx						Fluo: ~ 1.9
7	8	20	5	✓ 5.1	x		x		xx	xx	xx	xx	xx	xx			Fluo:
8	4	21	40	✓ 39.8			x		xx	xx							
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 109 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	17:19	10:19
Bottom	17:22	
End	17:32	

Positional Information

Lat:	48 ° 35 68	N
Lon:	125 ° 8 77	W

Start

Lat:	48 ° 35 69	N
Lon:	125 ° 8 74	W

Bottom

Lat:	48 ° 35 69	N
Lon:	125 ° 8 70	W

End

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

Water Properties Group

Rosette Log

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

Cruise ID: 2014-21 Station: E1 Event #: 6 Ship: TULLY UTC Date (dd|mmm|yyyy): 28 | MAY | 2014

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	HPLC			
1	999			CHL MAX	10				✓✓		✓✓			
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
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14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): HM

Bottom Depth: 116 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1124	1824
Bottom		1827
End		1830

Positional Information

Start Lat: 48° 31.66 N
Lon: 125° 03.66 W

Bottom Lat: 48° 31.68 N
Lon: 125° 03.66 W

End Lat: 48° 31.68 N
Lon: 125° 03.66 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: 2014-21 Station: LB05 Event #: 8 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | MAY | 2014

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	22	5	✓				x			xx	xx						Fluo: 0.88
2	1	23	Max	✓	25						xx	xx						Fluo: 4.4
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
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16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Time	UTC	Local
Start	1951	1251
Bottom	1953	
End	1958	

Positional Information
Start
Lat: 48 ° 33 99 N
Lon: 125 ° 11.94 WBottom
Lat: 48 ° 33 98 N
Lon: 125 ° 11.93 WEnd
Lat: 48 ° 33 97 N
Lon: 125 ° 11.95 W

Extra comments:

out-of-order!

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LB06 Event #: -9 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | MAY | 2014

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	DMSO	DMSP		
						KS/ML		MR				N ₂	gases	DC →			
1	1	24	Bot-10	✓	105	x		x									
2	2	25	75	✓	74	x x		x									
3	3	26	50	✓	50	x		x x									
4	4	27	30	✓	30	x		x									
5	5	28	20	✓	20	x		x		x x		x x					
6	6	29	10	✓	10	x		x		x x		x x					
7	7	30	5	✓	5	x		x		x x	x x	x x	x x	x x	x x		Fluo: 0.32
8		31	Chl Max					NOT	USED								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: 116 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2039	1339
Bottom	2042	
End	2050	

Positional Information

Start
Lat: 48 ° 32.19 N
Lon: 125 ° 15.42 WBottom
Lat: 48 ° 32.21 N
Lon: 125 ° 15.35 WEnd
Lat: 48 ° 32.14 N
Lon: 125 ° 15.13 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LB13 Event #: 29 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | 05 | 2014

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		89	5	☒ 5.1			x		xx	xx							Fluo:
2		90	Max				x		xx	xx							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): MB

Bottom Depth: 912 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	15:08	08:08
Bottom	15:23	08:
End	15:40	08:

Positional Information
Start
Lat: 48 ° 10 580 N
Lon: 125 ° 58 004 W

Bottom
Lat: 48 ° 10 58 N
Lon: 125 ° 55 98 W

End
Lat: 48 ° 10 58 N
Lon: 125 ° 55 92 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LB14 Event #: 30 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | 05 | 2014

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	DMSO	DMSP	PHYTO		
1		91	Bot-10	✓	1164	x		x	x								
2		92	1000	✓		xx	xx	x	x								
3		93	750	✓		x	x	x	x								
4		94	500	✓		x	x	xx	xx								
5		95	400	✓		x		x	x								
6		96	300	✓		x		x									
7		97	250	✓		x		x									
8		98	200	✓		x		x									
9		99	175	✓		x		x									
10		100	150	✓		x		x									
11		101	125	✓		xx		x									
12		102	100	✓		x		x									
13		103	75	✓		x		x									
14		104	50	✓		x		x									
15		105	30	✓		x		xx									
16		106	20	✓		x		x	xx		xx						
17		107	10	✓		x		x	xx		xx						
18		108	5	✓		x		x	xx	xx	xx				X		Fluo: 0.56
19		109	5	✓								xx	xx	xx	X		
20		110	250		Bot 7												Water for NH4
21		111	Max														Fluo:
22																	
23																	
24																	

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

Bottom Depth: 1179 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1616	0916
Bottom	1633	
End	1711	

Positional Information
Start
Lat: 48 ° 08 49 N
Lon: 125 ° 59 90 W

Bottom
Lat: 48 ° 08 49 N
Lon: 125 ° 59 91 W

End
Lat: 48 ° 08 45 N
Lon: 125 ° 59 98 W

Extra comments:
Out of Sequence:
1-7, 20, 8-19
20 not close in order

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LB16 Event #: 35 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | MAY | 2014

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	114	5	✓	5			x		xx	xx							Fluo:
2	1	115	250	✓	251													Water for NH4
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: 1780 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2028	1328
Bottom	2059	
End	2129	

Positional Information

Lat:	48 ° 00.57 "	N
Lon:	126 ° 17.01	W

▼

Lat:	48 ° 00.59	N
Lon:	126 ° 17.04	W

▼

Lat:	48 ° 00.58	N
Lon:	126 ° 17.02	W

Extra comments:
OUT OF ORDER!

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: EFF012 Event #: 41 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | MAY | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy												
1		134	Bot-10	✓	64	x											Oxy: 0.1
2		135	20	✓		x											
3		136	10	✓	10	x											
4		137	5	✓	5	x x											
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 69 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0231	1931
Bottom	0233	
End	0238	

Positional Information
Start
Lat: 49 ° 05 03 N
Lon: 125 ° 10 33 W

Bottom
Lat: 49 ° 05.03 N
Lon: 125 ° 10.34 W

End
Lat: 49 ° 05.03 N
Lon: 125 ° 10.33 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: EFF05 Event #: 44 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | May | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy												
1	1	123	Bot-10	✓	191	x											
2	2	124	175	✓	175	x											
3	3	125	150	✓	150	x											
4	4	126	125	✓	124	x											
5	5	127	100	✓	100	x											
6	6	128	75	✓	75	x											
7	7	129	50	✓	50.0	x											
8	8	130	30	✓	30.1	x											
9	9	131	20	✓	20.1	xx											
10	10	132	10	✓	9.7	x											
11	11	133	5	✓	5.2	x											
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Watchkeeper(s): MR

Bottom Depth: 205 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0333	2033
Bottom	0338	
End	0352	

Positional Information

Lat: 49 ° 02.55 N

Lon: 125 ° 09.15 W

Lat: 49 ° 02.55 N

Lon: 125 ° 09.15 W

Lat: 49 ° 02.55 N

Lon: 125 ° 09.14 W

Extra comments:

Cruise ID: 2014-21 Station: EFF12 Event #: 53 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | MAI | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy												
1	1	116	Bot-10	✓ 83.2	x												
2	2	117	75	✓ 75.5	x												
3	3	118	50	✓ 50.3	x x												
4	4	119	30	✓ 30.2	x												
5	5	120	20	✓ 20.6	x												
6	6	121	10	✓ 9.8	x												
7	7	122	5	✓ 5.4	x												
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 93 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0652	2352
Bottom	0657	
End	0704	

Positional Information
Start
Lat: 48 ° 58.03 N
Lon: 125 ° 10.52 W

Bottom
Lat: 48 ° 58 033 N
Lon: 125 ° 10 537 W

End
Lat: 48 ° 58 048 N
Lon: 125 ° 10 576 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LC01 Event #: 55 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | MAY | 2014

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	DMSO	DMSP			
1	1	138	Bot-10	✓ 87.6	x		x					x x					
2	2	139	75	✓ 75.8	x		x x					x x					
3	3	140	50	✓ 50.1	x x		x					x x					
4	4	141	30	✓ 29.8	x		x					x x					
5	5	142	20	✓ 20.5	x		x		x x		x x	x x					
6	6	143	10	✓ 9.9	x		x		x x		x x	x x					
7	7	144	5	✓ 4.5	x		x		x x	x x	x x						Fluo: ~1.0
8	8	145	5	✓ 4.7								x x	x x	x x			
9		146	Max														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): MB

Bottom Depth: 97 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	925	225
Bottom	928	228
End	936	236

Positional Information
Lat: 48 ° 50 447 N
Lon: 125 ° 27 755 W

Lat: 48 ° 50 443 N
Lon: 125 ° 27 759 W

Lat: 48 ° 50 447 N
Lon: 125 ° 27 726 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LC02 Event #: 56 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | 05 | 2014

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	Gases UBC	DMSO	DMSP		
1	1	147	Bot-10	✓ 101.9	x		x										
2	4	148	75	✓ 75.5	xx		x										
3	5	149	50	✓ 49.9	x		x		xx	xx							
4	7	150	40	✓ 40.4	x		x		xx	xx							~0.2
5	8	151	30	✓ 29.7	x		xx		xx	xx							~0.2
6	11	152	20	✓ 19.7	x		x		xx	xx	xx						~0.25
7	12	153	10	✓ 10.4	x		x		xx	xx	xx						~0.35
8	15	154	5	✓ 4.7	x		x		xx	xx	xx						~1.5
9	2	155	Bot-10	✓ 101.9								x	xx				
10	3	156	75	✓ 75.5								x	xx				
11	6	157	50	✓ 49.9								xx	xx				
12	9	158	30	✓ 29.7								x	xx				
13	10	159	20	✓ 19.7								x	xx				
14	13	160	10	✓ 10.4								xx	xx				
15	14	161	5	✓ 4.7								x	xx	xx	xx		
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 112 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1007	0807
Bottom	1010	0810
End	1020	0820

Positional Information
Lat: 48 ° 48 689 N
Lon: 125 ° 30 931 W

Lat: 48 ° 48 702 N
Lon: 125 ° 30 911 W

Lat: 48 ° 48 724 N
Lon: 125 ° 30 851 W

Extra comments:
OUT-OF-ORDER!
1-9-10-2-3-11-4-5-12
13-6-7-14-15-8

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LC04 Event #: 58 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | MAY | 2014

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	DMSO	DMSP	PHTE		
1	1	162	Bot-10	✓ 157.3	x		x					xx					
2	2	163	150	✓ 149.6	x		x					xx					
3	3	164	125	✓ 125.0	x		x					xx					
4	4	165	100	✓ 99.7	xx		xx					xx					
5	5	166	75	✓ 75.0	x		x					xx					
6	6	167	50	✓ 50.9	x		x					xx					
7	7	168	30	✓ 31.2	x		x					xx					
8	8	169	20	✓ 20.1	x		x		xx		xx	xx					
9	9	170	10	✓ 10.2	x		x		xx		xx	xx					
10	10	171	5	✓ 5.0	x		x		xx	xx	xx				X		Fluo:
11	11	172	5	✓ 5.0								xx	xx	xx			
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 167 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	12 03	5 03
Bottom	12 06	5 06
End	12 18	5 18

Positional Information
Start
Lat: 48 ° 43 496 N
Lon: 125 ° 40 690 W

Bottom
Lat: 48 ° 43 456 N
Lon: 125 ° 40 726 W

End
Lat: 48 ° 43 462 N
Lon: 125 ° 40 728 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LC06 Event #: 61 Ship: Tully UTC Date (dd|mmm|yyyy): 31|5|14

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	DMSO	DMSP			
1		173	Bot-10	✓ 81	x		x					x x					
2		174	75	✓	x		x x					x x					
3		175	50	✓	x		x		x x	x x		x x					
4		176	40	✓	x		x		x x	x x							
5		177	30	✓	x		x		x x	x x		x x					
6		178	20	✓	x x		x		x x	x x	x x	x x					FLUG 4.2
7		179	10	✓	x		x		x x	x x	x x	x x					Fluo:
8		180	5	✓	x		x		x x	x x	x x						
9		181	5	✓								x x	x x	x x			
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: 91 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1412	0712
Bottom	1414	
End	1424	

Positional Information

Lat:	48	°	36	47	N
Lon:	125	°	53	95	W

▼

Lat:	48	°	36	47	N
Lon:	125	°	53	94	W

▼

Lat:	48	°	36	46	N
Lon:	125	°	53	95	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LC08 Event #: 64 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | May | 2014

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	Gases UBC	DMSO	DMSP		
1	1	182	Bot-10	✓ 187.7	x		x					x	xx				
2	2	183	175	✓ 174.4	x		x						xx				
3	3	184	150	✓ 150.7	x		x						xx				
4	4	185	125	✓ 125.1	x		x						xx				
5	5	186	100	✓ 100.7	x		x					xx	xx				
6	6	187	75	✓ 75.0	x		x						xx				
7	7	188	50	✓ 51.0	x		xx					xx	xx				
8	8	189	30	✓ 30.0	xx		x					x	xx				
9	9	190	20	✓ 20.2	x		x		xx		xx	x	xx				
10	10	191	10	✓ 10.2	x		x		xx		xx	x	xx				
11	11	192	5	✓ 5.2	x		x		xx	xx	xx	x					
12	12	193	5	✓ 5.2									xx	xx	xx		Fluo :
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth:	198	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	16:26	9:26
Bottom	16:29	9:29
End	16:44	9:44

Positional Information			
Lat:	48 ° 29	443	N
Lon:	126 ° 7	086	W

▼			
Lat:	48 ° 29	443	N
Lon:	126 ° 7	069	W

▼			
Lat:	48 ° 29	533	N
Lon:	126 ° 7	917	W

Extra comments:

Water Properties Group

Rosette Log

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

Cruise ID: 2014-21 Station: A2 Event #: 66 Ship: TULLY UTC Date (dd|mmm|yyyy): 31 | MAY | 2014

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	HPLC					
1	908									xx		xx					
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s):
MB

Bottom Depth: 351 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1829	
Bottom	1836	
End	1844	

Positional Information
Start
Lat: 48 ° 22.72 N
Lon: 126 ° 03.74 W

Bottom
Lat: 48 ° 22.73 N
Lon: 126 ° 03.75 W

End
Lat: 48 ° 22.73 N
Lon: 126 ° 03.73 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: 2014-21

Station: ONC

Event #: 68

Ship: Tully

UTC Date (dd|mmm|yyyy): 31 | MAY | 2014

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	DMSO	DMSP		
						KS/MG			MG				UBC	M/R/F				
1	1	194	Bot-10	✓	411	x	1	x						x				
2	2	195	350	✓	350	x		x						x				
3	3	196	300	✓	300	x		x						x				
4	4	197	250	✓	250	x		xx						xx				
5	5	198	200	✓	200	xx		x						x				
6	6	199	175	✓	175	x		x						x				
7	7	200	150	✓	150	x		x						x				
8	8	201	125	✓	125	x		x						xx				
9	9	202	100	✓	100	x		x						x				
10	10	203	75	✓	75	x		x						x				
11	11	204	50	✓	50	x		x						x				
12	12	205	30	✓	30	x		x						x				
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22													Re		XX	XX		
23																		
24																		

Profile type:

ROS

 TRM X-Niskin other?

Watchkeeper(s): MR

Bottom Depth: 420 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2015	1315
Bottom	2023	
End	2041	

Positional Information

Lat: 48 ° 26.00 N

Lon: 126 ° 10.69 W

Lat: 48 ° 26.01 N

Lon: 126 ° 10.69 W

Lat: 48 ° 26.01 N

Lon: 126 ° 10.64 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LC09 Event #: 69 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | MAY | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										DU/RF				Comments			
			Target	Confirmed	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DIC	DMSO	DMSP							
			Pressure	✓ Pressure	45		45/10	45	RF/x	N ²		UBC	MR									
1	1	206	Bot-10	✓	601	x		xx	xx				xx	x								
2	2	207	500	✓	501	x		x	x				xx	x								
3	3	208	400	✓	399	x		x	x				xx	x								
4	4	209	300	✓	300	x		x					xx	xx								
5	5	210	250	✓	250	xx		x					xx	x								
6	6	211	200	✓	200	x		x					xx	x								
7	7	212	175	✓	175	x		x					xx									
8	8	213	150	✓	149	x		x					xx									
9	9	214	125	✓	125	x		xx					xx									
10	10	215	100	✓	100	x		x					xx	xx								
11	11	216	75	✓	75	x		x					xx									
12	12	217	50	✓	50	xx		x		xx	xx			x								
13	14	218	40	✓	40	x		x		xx	xx											
14	15	219	30	✓	30	x		x		xx	xx			x								
15	18	220	20	✓	20	x		x		xx	xx	xx										
16	19	221	10	✓	10	x		x		xx	xx	xx		x								
17	22	222	5	✓	5	x		x		xx	xx	xx		x				Fluo: 0.57				
18	13	223	50	✓	50								xx									
19	16	224	30	✓	30								xx									
20	17	225	20	✓	20								xx									
21	20	226	10	✓	10								xx									
22	21	227	5	✓	5								xx		xx	xx						
23																						
24																						

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

Bottom Depth: 605 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2116	1416
Bottom	2128	
End	2155	

Positional Information

Lat:	48 ° 25.95	N
Lon:	126 ° 13.67	W

▼

Lat:	48 ° 25.94	N
Lon:	126 ° 13.70	W

▼

Lat:	48 ° 25.93	N
Lon:	126 ° 13.68	W

Extra comments:
OUT-OF-ORDER!
1 - 12; 18; 13-14; 19-20; 15-16
21-22; 17

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LC11 Event #: 72 Ship: Tully UTC Date (dd|mmm|yyyy): 1 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy KS/MR	Sal-R KS	Nut-Fr MG	Nut-C MG	CHL MG	HPLC MG	NH4 MG	Gases UBC	DMSO DK	DMSP DK			
1	1	228	Bot-10	✓ 1476	x		x	x				xx					
2	2	229	1250	✓ 1251	x	x	xx	xx				xx					
3	3	230	1000	✓ 1000	x	xx	x	x				xx					
4	4	231	750	✓ 750	x	x	x	x				xx					
5	5	232	500	✓ 500	xx	x	x	x				xx					
6	6	233	400	✓ 400	x		x	x				xx					
7	7	234	300	✓ 300	x		x					xx					
8	8	235	250	✓ 249	x		x					xx					
9	9	236	200	✓ 199	x		x					xx					
10	10	237	175	✓ 175	x		x					xx					
11	11	238	150	✓ 151	x		x					xx					
12	12	239	125	✓ 124	xx		x					xx					
13	13	240	100	✓ 100	x		x					xx					
14	14	241	75	✓ 74	x		x					xx					
15	15	242	50	✓ 50	x		x					xx					
16	16	243	30	✓ 30	x		xx					xx					
17	17	244	20	✓ 21	x		x		xx		xx	xx					
18	18	245	10	✓ 10	x		x		xx		xx	xx					
19	19	246	5	✓	x		x		xx	xx	xx						
20	20	247	5	✓								xx	xx	xx			
21																	
22																	
23																	
24																	

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

Bottom Depth: 1443 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0049	1749
Bottom	0112	
End	0155	

Positional Information

Lat:	48 ° 18.95	N
Lon:	126 ° 26.67	W

▼

Lat:	48 ° 18.90	N
Lon:	126 ° 26.72	W

▼

Lat:	48 ° 19.03	N
Lon:	126 ° 26.69	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LD11 Event #: 75 Ship: Tully UTC Date (dd|mmm|yyyy): 01 | 6 | 14

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	DMSO	DMSP			
1		248	Bot-10	✓ 1623	x		x	x									
2		249	1500	✓	x	xx	x	x									
3		250	1250	✓	xx	x	x	x									
4		251	1000	✓	x	x	x	x									
5		252	750	✓	x	x	xx	xx									
6		253	500	✓	x		x	x									
7		254	400	✓	x		x	x									
8		255	300	✓	x		x										
9		256	250	✓	x		x										
10		257	200	✓	x		x										
11		258	175	✓	x		x										
12		259	150	✓	x		x										
13		260	125	✓	xx		x										
14		261	100	✓	x		x										
15		262	75	✓	x		xx										
16		263	50	✓	x		x										
17		264	30	✓	x		x										
18		265	20	✓	x		x		xx		xx						
19		266	10	✓	x		x		xx		xx						
20		267	5	✓	x		x		xx	xx	xx						Fluo:
21		268	5	✓								xx	xx	xx			
22																	
23																	
24																	

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

Bottom Depth: 1633 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0736	1236
Bottom	0804	
End	0856	

Positional Information
Start
Lat: 48 ° 28 69 N
Lon: 126 ° 43 02 W

Bottom
Lat: 48 ° 28 61 N
Lon: 126 ° 43 27 W

End
Lat: 48 ° 28 36 N
Lon: 126 ° 43 69 W

Extra comments:

Water Properties Group

Rosette Log

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

Cruise ID: 2014-21 Station: LD09 Event #: 77 Ship: TULLY UTC Date (dd|mmm|yyyy): 1 | JUNE | 2014

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	HPLC					
1	909			20	✓	?				XX		XX					Bottles for nit2
2	910			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																	

Watchkeeper(s): MB

Bottom Depth: 1052 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	12:45	5:45
Bottom	13:04	6:04
End	13:24	6:24

Positional Information			
Start	Lat:	48 ° 35 70	N
	Lon:	126 ° 29 97	W
Bottom	Lat:	48 ° 35 70	N
	Lon:	126 ° 29 97	W
End	Lat:	48 ° 35 72	N
	Lon:	126 ° 29 98	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: 2014-21 Station: LD08 Event #: 79 Ship: Tully UTC Date (dd|mmm|yyyy): 1 | 6 | 14

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	DMSO	DMSP			
1	1	269	Bot-10	✓ 762	x		x	x									
2	2	270	750	✓	x	x	xx	xx									
3	3	271	500	✓	xx	x	x	x									
4	4	272	400	✓	x		x	x									
5	5	273	300	✓	x		x										
6	6	274	250	✓	x		x										
7	7	275	200	✓	x		x										
8	8	276	175	✓	x		x										
9	9	277	150	✓	x		x										
10	10	278	125	✓	x		x										
11	11	279	100	✓	x		x										
12	12	280	75	✓	x		xx										
13	13	281	50	✓ ↵	x		x		xx	xx							
14	15	282	30	✓	xx		x		xx	xx							
15	16	283	20	✓	x		x		xx	xx	xx						
16	17	284	10	✓	x		x		xx	xx	xx						
17	18	285	5	✓	x		x		xx	xx	xx						Fluo: 1.026
18	19	286	5	✓								xx	xx	xx			
19	14	287	40	✓ ↵			x		xx	xx							
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 770 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1446	0746
Bottom	1500	
End	1530	

Positional Information

Lat:	48 ° 39 16	N
Lon:	126 ° 23 35	W

Start

▼

Lat:	48 ° 39 16	N
Lon:	126 ° 23 36	W

Bottom

▼

Lat:	48 ° 39 17	N
Lon:	126 ° 23 30	W

End

Extra comments:
OUT-OF-ORDER
1 - 13 ; 19 ; 14 - 18

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LD06 Event #: 81 Ship: Tully UTC Date (dd|mmm|yyyy): 01 | June | 2014

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	DMSO	DMSP			
1	1	288	Bot-10	✓ 126.5	x		x										
2	2	289	100	✓ 99.7	x		xx										
3	3	290	75	✓ 75.3	x		x										
4	4	291	50	✓ 50.2	x		x		xx	xx							
5	6	292	30	✓ 30.2	x		x		xx	xx							
6	7	293	20	✓ 20.2	x		x		xx	xx	xx						
7	8	294	10	✓ 10.2	xx		x		xx	xx	xx						
8	9	295	5	✓ 4.9	x		x		xx	xx	xx						Fluo:
9	10	296	5	✓ 4.9								xx	xx	xx			
10	5	297	40	✓ 40.1			x		xx	xx							
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 136 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	17:18	10:18
Bottom	17:20	
End	17:31	

Positional Information
Start
Lat: 48 ° 46 21 N
Lon: 126 ° 10 26 W

Bottom
Lat: 48 ° 46 22 N
Lon: 126 ° 10 25 W

End
Lat: 48 ° 46 23 N
Lon: 126 ° 10 27 W

Extra comments:
OUT-OF-ORDER!!
1 - 4 ; 10 ; 5 - 9

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LD04 Event #: 83 Ship: Tully UTC Date (dd|mmm|yyyy): 1 JUN 2014

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	DMSO	DMSP			
					NR		DL		RF	PR	PR	RF/OL	DL	DL			
1	1	298	Bot-10	✓	52	x		x									
2	2	299	30	✓	30	x		x									
3	3	300	20	✓	20	xx		x	xx		xx						
4	4	301	10	✓	10	x		xx	xx		xx						
5	5	302	5	✓	5	x		x	xx	xx	xx						Fluo: 0.57
6	6	303	5	✓	5							xx	xx	xx			
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: 62 m
Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Start	1901	1201
Bottom	1903	
End	1909	

Positional Information

Lat:	48 ° 53.22	N
Lon:	125 ° 56.91	W

▼

Lat:	48 ° 53.24	N
Lon:	125 ° 56.90	W

▼

Lat:	48 ° 53.29	N
Lon:	125 ° 56.90	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LD02 Event #: 86 Ship: Tully UTC Date (dd|mmm|yyyy): 01 | JUN | 2014

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	DMSO	DMSP					
						45/40							UBC							
1	1	304	Bot-10	✓	38	x		x		xx	xx									
2	4	305	30	✓	30	x		x		xx	xx									
3	5	306	20	✓	20	xx		x		xx	xx	xx								
4	8	307	10	✓	9	x		xx		xx	xx	xx								
5	9	308	5	✓	5	x		x		xx	xx	xx							Fluo:	
6	2	309	Bot-10	✓	38								xx							
7	3	310	30	✓	30								xx							
8	6	311	20	✓	20								xx							
9	7	312	10	✓	9								xx							
10	10	313	5	✓	5								xx	xx	xx					
11			15																	
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: 44 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2028	1328
Bottom	2030	
End	2037	

Positional Information
Lat: 48° 58.41 N
Lon: 125° 47.03 W

Lat: 48° 58.44 N
Lon: 125° 47.03 W

Lat: 48° 58.54 N
Lon: 125° 47.00 W

Extra comments:
OUT-OF-ORDER!!
1-6-7-2-3-8-9-4-5-10

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LD01 Event #: 88 Ship: Tully UTC Date (dd|mmm|yyyy): 01 | JUN | 2014

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	DMSO	DMSP			
						45	ML	DL		RF	PG	MG	RF/OL	DL	DL			
1	1	314	Bot-10 ⁷	✓ 30		x		x										
2	2	315	20	✓ 20		x		x		xx		xx						
3	3	316	10	✓ 10		xx		x		xx		xx						
4	4	317	5	✓ 5		x		xx		xx	xx	xx						Fluo:
5	5	318	5	✓ 5									xx	xx	xx			
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: 38 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2115	1415
Bottom	2116	
End	2120	

Positional Information
Start
Lat: 49 ° 00.18 N
Lon: 125 ° 44.13 W

Bottom
Lat: 49 ° 00.18 N
Lon: 125 ° 44.13 W

End
Lat: 49 ° 00.17 N
Lon: 125 ° 44.11 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LG01 Event #: 89 / 90 Ship: Tully UTC Date (dd|mmm|yyyy): 02 | JUN | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments	
			Target Pressure	Confirmed		Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DMSO	DMSP					
				✓	Pressure															
						NS	ML		NL		RF	MG	NL	RF	DL	DL				
1	1	319	Bot-10	✓	43	x		x												
2	2	320	30	✓	30	x		x												
3	3	321	20	✓	20	xx		xx		xx		xx								
4	4	322	10	✓	10	x		x		xx		xx								
5	5	323	5	✓	4	x		x		xx	xx	xx								Fluo: ~6.
6	6	324	5	✓	4								xx	xx	xx					
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: 54 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0153	1853
Bottom	0155	
End	0201	

Positional Information

Lat: 49 ° 20.60 N

Lon: 126 ° 35 35 W

Lat: 49 ° 20.61 N

Lon: 126 ° 35.40 W

Lat: 49 ° 20.64 N

Lon: 126 ° 35.52 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LG02 Event #: 90 Ship: Tully UTC Date (dd|mmm|yyyy): 02 | JUN | 2014

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	DMSO	DMSP			
1	1	325	Bot-10	✓	91	x		x									
2	4	326	75	✓	75	x		x									
3	5	327	50	✓	50	xx		xx	xx	xx							
4	8	328	30	✓	30	x		x	xx	xx							
5	11	329	20	✓	20	x		x	xx	xx	xx						
6	12	330	10	✓	10	x		x	xx	xx	xx						
7	15	331	5	✓	5	x		x	xx	xx	xx						Fluo:
8	7	332	40	✓	40			x	xx	xx							
9	2	333	Bot-10	✓	91						xx						
10	3	334	75	✓	75						xx						
11	6	335	50	✓	50						xx						
12	9	336	30	✓	30						xx						
13	10	337	20	✓	20						xx						
14	13	338	10	✓	10						xx						
15	14	339	5	✓	5						xx	xx	xx				
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	0232	1932
Bottom	0235	
End	0244	

Positional Information

Lat: 49 ° 18.70 N

Lon: 126 ° 38.40 W

Lat: 49 ° 18.70 N

Lon: 126 ° 38.48 W

Lat: 49 ° 18.67 N

Lon: 126 ° 38.63 W

Extra comments:

OUT-OF-ORDER

1-9-10-2-3-11-8-4-12-13-5-6-14-15-7

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LG04 Event #: 93 Ship: Tully UTC Date (dd|mmm|yyyy): 02 | JUN | 2014

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	DMSO	DMSP			
1	1	340	Bot-10	✓	137	x		x									
2	2	341	125	✓	124	x		x									
3	3	342	100	✓	101	x		x									
4	4	343	75	✓	76	xx		xx									
5	5	344	+ 50	✓	50	x		x	xx	xx							
6	7	345	30	✓	30	x		x	xx	xx							
7	8	346	20	✓	20	x		x	xx	xx	xx						
8	9	347	10	✓	10	x		x	xx	xx	xx						
9	10	348	5	✓	5	x		x	xx	xx	xx						Fluo:
10	11	349	5	✓	5							xx	xx	xx			
11	6	350	40	✓	40			x	xx	xx							
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:

☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): NR

Bottom Depth: 146 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0451	2151
Bottom	0455	
End	0508	

Positional Information

Lat: 49° 11.23 N

Lon: 126° 49.37 W

▼

Lat: 49° 11.21 N

Lon: 126° 49.38 W

▼

Lat: 49° 11.19 N

Lon: 126° 49.43 W

Extra comments:

OUT-OF-ORDER

1 - 2 - 3 - 4 - 5 - 11 - 6 - 7 - 8

9 - 10 -

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LG06 Event #: 96 Ship: Tully UTC Date (dd|mmm|yyyy): 02 | Jun | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	Oxy	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DMSO	DMSP				
			Pressure	✓ Pressure														
1	1	351	Bot-10	✓	1002	x		x	x									
2	2	352	750	✓	749.8	x		xx	xx									
3	3	353	500	✓	503.5	xx		x	x									
4	4	354	400	✓	399.7	x		x	x									
5	5	355	300	✓	298.4	x		x										
6	6	356	250	✓	251.3	x		x										
7	7	357	200	✓	200.1	x		x										
8	8	358	175	✓	173.8	x		x										
9	9	359	150	✓	150.3	x		xx										
10	10	360	125	✓	126.1	x		x										
11	11	361	100	✓	99.6	x		x										
12	12	362	75	✓	75.0	x		x										
13	13	363	50	✓	50.3	x		x		xx	xx							Fluo: ~0.2
14	15	364	30	✓	30.7	xx		x		xx	xx							Fluo: ~0.5
15	16	365	20	✓	20.9	x		x		xx	xx	xx						Fluo: ~2.1
16	17	366	10	✓	10.4	x		x		xx	xx	xx						Fluo: ~2.3
17	18	367	5	✓	5.1	x		x		xx	xx	xx						Fluo: ~2.3
18	19	368	5	✓	5.1								xx	xx	xx			
19	14	369	40	✓	41.3			x		xx	xx							Fluo: ~0.3
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 981 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	07:48	00:48
Bottom	08:06	00:06
End	08:40	00:40

Positional Information

Lat:	49 ° 3 43	N
Lon:	127 ° 1 29	W

Start
Bottom
End

Lat: 49 ° 3 39 N
Lon: 127 ° 1 38 W

Lat: 49 ° 3 19 N
Lon: 127 ° 1 50 W

Extra comments:
OUT-OF-ORDER!
1 to 13; 19; 14 to 18

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LBP7 Event #: 105 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | Jun | 2014

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	DMSO	DMSP			
1	1	370	2005 2000	✓ 2004.0	x		x	x									
2	2	371	1500	✓ 1502.6	xx	xx	x	x									
3	3	372	1250	✓ 1250.3	x	x	xx	xx									
4	4	373	1000	✓ 1000.8	x	x	x	x									
5	5	374	750	✓ 752.4	x	x	x	x									
6	6	375	500	✓ 500.8	x	x	x	x									
7	7	376	400	✓ 399.0	x		x	x									
8	8	377	300	✓ 300.7	xx		x	x									
9	9	378	250	✓ 250.4	x		x										
10	10	379	200	✓ 202.8	x		x										
11	11	380	175	✓ 176.7	x		x										
12	12	381	150	✓ 150.5	x		x										
13	13	382	125	✓ 125.7	x		xx										
14	14	383	100	✓ 100.0	x		x										
15	15	384	75	✓ 75.9	x		x										
16	16	385	50	✓ 49.5	x		x		xx	xx							
17	17	386	40	✓ 40.6	xx		x		xx	xx							
18	18	387	30	✓ 30.5	x		x		xx	xx							
19	19	388	20	✓ 20.2	x		x		xx	xx	xx						
20	20	389	10	✓ 10.6	x		x		xx	xx	xx						
21	21	390	5	✓ 5.2	x		x		xx	xx	xx						Fluo:
22	22	391	5	✓ 5.2								xx	xx	xx			
23																	
24																	

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

Watchkeeper(s): MB

Bottom Depth: 280 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	15:09	8:09
Bottom	15:37	8:37
End	16:27	9:27

Positional Information

Lat: 49 ° 52 32 N

Lon: 128 ° 11 23 W

Lat: 49 ° 52 35 N

Lon: 128 ° 11 27 W

Lat: 49 ° 52 33 N

Lon: 128 ° 11 43 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: LBP5 Event #: 107 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | Jun | 2014

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	DMSO	DMSP			
1	1	392	Bot-10	✓ 1218	x		x	x									
2	2	393	1250	✓ 1218	x	xx	x	x									
3	3	394	1000	✓ 998	x	x	x	x									
4	4	395	750	✓ 749	xx	x	x	x									
5	5	396	500	✓ 500	x	x	xx	xx									
6	6	397	400	✓ 400	x		x	x									
7	7	398	300	✓ 300	x		x										
8	8	399	250	✓ 250	x		x										
9	9	400	200	✓ 199	x		x										
10	10	401	175	✓ 174	x		x										
11	11	402	150	✓ 150	x		x										
12	12	403	125	✓ 125	xx		x										
13	13	404	100	✓ 100	x		xx										
14	14	405	75	✓ 75	x		x										
15	15	406	50	✓ 50	x		x		xx	xx							
16	16	407	40	✓ 40	x		x		xx	xx							
17	17	408	30	✓ 29	x		x		xx	xx							
18	18	409	20	✓ 20	x		x		xx	xx	xx						
19	19	410	10	✓ 10	xx		x		xx	xx	xx						Fluo:
20	20	411	5	✓ 5	x		x		xx	xx	xx						Fluo:
21	21	412	5	✓ 5								xx	xx	xx			
22																	
23																	
24																	

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

Bottom Depth: 1281 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1942	1242
Bottom	2001	
End	2038	

Positional Information
Lat: 49° 59.87 N
Lon: 128° 00.02 W

Lat: 49° 59.83 N
Lon: 128° 01.13 W

Lat: 49° 59.83 N
Lon: 128° 01.18 W

Extra comments:

Cruise ID: 2014-21 Station: LBP3 Event #: 110 Ship: Tully UTC Date (dd|mmm|yyyy): 03 | JUN | 2014

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	DMSO	DMSP			
1	1	413	Bot-10	✓	158	x		x									
2	4	414	150	✓	150	x		x									
3	5	415	125	✓	125	xx		x									
4	8	416	100	✓	100	x		x									
5	9	417	75	✓	75	x		x									
6	12	418	50	✓	50	x		x	xx	xx							
7	13	419	40	✓	40	x		x	xx	xx							
8	14	420	30	✓	30	x		xx	xx	xx							
9	17	421	20	✓	20	x		x	xx	xx	xx						
10	18	422	10	✓	10	x		x	xx	xx	xx						
11	21	423	5	✓	5	x		x	xx	xx	xx						
12	2	424	Bot-10	✓	157							xx					
13	3	425	150	✓	150							xx					
14	6	426	125	✓	125							xx					
15	7	427	100	✓	100							xx					
16	10	428	75	✓	75							xx					
17	11	429	50	✓	50							xx					
18	15	430	30	✓	30							xx					
19	16	431	20	✓	20							xx					
20	19	432	10	✓	10							xx					
21	20	433	5	✓	5							xx	xx	xx			
22																	
23																	
24																	

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):
MR

Bottom Depth: 168 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2259	1559
Bottom	2303	
End	2317	

Positional Information

Lat: 50 ° 03.20 N

Lon: 127 ° 55.32 W

Lat: 50 ° 03.21 N

Lon: 127 ° 55.31 W

Lat: 50 ° 03.23 N

Lon: 127 ° 55.30 W

Extra comments:

OUT OF ORDER

1-12-13-2-3-14

5-4-5-16-17-6-7-8

18-19-9-10-20-21-11

Water Properties Group

Rosette Log

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

Cruise ID: 2014-21

Station: LOB 1

Event #: 114

Ship: TULLY

UTC Date (dd|mmm|yyyy): ^{04?}03 | 06 | 14

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	HPIC					
1	434				☒	5m		x		xx		xx					NOT SAMPLED
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

NOT NEEDED

Watchkeeper(s): MR

Bottom Depth: 52 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	00 27	17 27
Bottom	00 28	
End	00 30	

Positional Information

Start Lat: 50 ° 04.80 N
Lon: 127 ° 52.80 W

Bottom Lat: 50 ° 04.80 N
Lon: 127 ° 52.80 W

End Lat: 50 ° 04.79 N
Lon: 127 ° 52.79 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

Cruise ID: 2014-21 Station: CS00 Event #: 123 Ship: Tully UTC Date (dd|mmm|yyyy): 4 | 6 | 14

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	DMSO	D MSP			
					NO3	N2											P476
1		434	2005 2000	✓ 2005	x	x	x	x									
2		435	1500	✓	x	xx	x	x									
3		436	1250	✓	x	x	x	x									
4		437	1000	✓	x	x	x	x									
5		438	750	✓	xx		x	x									
6		439	500	✓	x		x	x									
7		440	400	✓	x		xx	xx									
8		441	300	✓	x		x										
9		442	250	✓	x		x										
10		443	200	✓	x		x										
11		444	175	✓	x		x										
12		445	150	✓	x		x										
13		446	125	✓	xx		x										
14		447	100	✓	x		x										
15		448	75	✓	x		x										
16		449	50	✓	x		xx										
17		450	30	✓	x		x										
18		451	20	✓	x		x		xx		xx						
19		452	10	✓	xx		x		xx		xx						
20		453	5	✓	x		x		xx	xx	xx				x		
21		454	5	✓								xx	xx	xx			
22																	
23																	
24																	

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

Bottom Depth: 2176 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1616	0916
Bottom	1656	
End	1741	

Positional Information

Lat:	50 ° 27 76	N
Lon:	129 ° 54 09	W

Start

Lat:	50 ° 27 75	N
Lon:	129 ° 54 79	W

Bottom

Lat:	50 ° 27 67	N
Lon:	129 ° 54 83	W

End

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: CS02 Event #: 130 Ship: Tully UTC Date (dd|mmm|yyyy): 05 | JUN | 2014

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	DMSO	DMSP					
						RS/MS	RS/MS	RF	RF	DC		RF	RF/DC	DC	DC					
1	1	455	Bot-10	✓	1910	x		x	x											
2	2	456	1500	✓	1500	x	xx	xx	xx											
3		457	1250	✓	1250	x	x	x	x											
4	1	458	1000	✓	1000	x	x	x	x											
5	1	459	750	✓	750	xx		x	x											
6		460	500	✓	500	x		x	x											
7		461	400	✓	399	x		x	x											
8		462	300	✓	300	x		x												
9		463	250	✓	250	x		x												
10		464	200	✓	200	x		xx												
11		465	175	✓	175	x		x												
12		466	150	✓	150	xx		x												
13		467	125	✓	125	x		x												
14		468	100	✓	100	x		x												
15		469	75	✓	75	x		x												
16		470	50	✓	50	x		x												
17		471	30	✓	30	x		x												
18		472	20	✓	20	x		x		xx		xx								
19		473	10	✓	10	x		x		xx		xx								
20	20	474	5	✓	5	x		x		xx		xx								
21	21	475	5	✓	5								xx	xx	xx					
22	22	475	5	✓	5								xx	xx	xx					
23																				
24																				

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

Bottom Depth: 1901 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0104	1804
Bottom	0139	1939
End	0231	2031

Positional Information
Start
Lat: 50 ° 41.27 N
Lon: 129 ° 27.98 W

Bottom
Lat: 50 ° 41.27 N
Lon: 129 ° 27.97 W

End
Lat: 50 ° 41.30 N
Lon: 129 ° 27.99 W

Extra comments:
Bottle 21 not used.
22

Cruise ID: 2014-21 Station: CS04 Event #: 134 Ship: Tully UTC Date (dd|mmm|yyyy): 05 | JUN | 2014

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	DMSO	DMSP						
						N ₂	AP		DU		HL		N ₂	DU	DU	DU					
1	1	476	Bot-10	✓	90	x		x													
2	2	477	75	✓	75	x		x													
3	3	478	50	✓	50	x		x													
4	4	479	30	✓	30	x x		x													
5	5	480	20	✓	20	x		x		x x		x x									
6	6	481	10	✓	10	x		x		x x		x x									
7	7	482	5	✓	5	x		x x		x x		x x									
8	8	483	5	✓	5								x x	x x	x x						
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

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

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

Time	UTC	Local
Start	0503	2203
Bottom	0505	
End	0513	

Positional Information
Lat: 50 ° 49.15 N
Lon: 129 ° 13 10 W

Lat: 50 ° 49.13 N
Lon: 129 ° 13.14 W

Lat: 50 ° 49.10 N
Lon: 129 ° 13.24 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21

Station: CS06

Event #: 144

Ship: Tully

UTC Date (dd|mmm|yyyy): 5 | 6 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy MB/KS	Sal-R	Nut-Fr	Nut-C	CHL	HPLC	NH4	Gases	DMSO	DMSP			
1		484	Bot-10	✓ 54	x		x x										
2		485	50	✓	x x		x			x x							
3		486	30	✓	x		x			x x							
4		487	20	✓	x		x		x x	x x	x x						
5		488	10	✓	x		x		x x		x x						
6		489	5		x		x		x x	x x	x x						
7		490	5									x x	x x	x x			
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Watchkeeper(s): H. A

Bottom Depth: 64 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1722	1022
Bottom	1723	
End	1731	

Positional Information

Lat: 51° 00' 04" N

Lon: 128° 51' 03" W

Lat: 51° 00' 04" N

Lon: 128° 51' 04" W

Lat: 51° 00' 08" N

Lon: 128° 51' 07" W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-21 Station: CS09 Event #: 164 Ship: Tully UTC Date (dd|mmm|yyyy): 06|JUN|2014

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	DMSO	DMSP			
1		491	Bot-10	✓ 186	x		x										
2		492	175	✓ 175	x		x										
3		493	150	✓ 150	x		x										
4		494	125	✓ 125	x		xx										
5		495	100	✓ 100	x		x										
6		496	75	✓ 75	x		x										
7		497	50	✓ 50	xx		x		xx	xx							
8		498	30	✓ 30	x		x			xx							
9		499	20	✓ 20	x		x		xx	xx	xx						
10		500	10	✓ 10	x		x		xx	xx	xx						
11		501	5	✓ 5	x		x		xx	xx	xx						
12		502	5	✓ 5								xx	xx	xx			
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 195 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0418	2118
Bottom	0423	
End	0437	

Positional Information
Lat: 51 ° 12.52 N
Lon: 128 ° 27.90 W

Lat: 51 ° 12.46 N
Lon: 128 ° 27.94 W

Lat: 51 ° 12.48 N
Lon: 128 ° 28.00 W

Extra comments:

Water Properties Group

Rosette Log

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

Cruise ID: 2014-21

Station: CPE1

Event #: 170

Ship: TULLY

UTC Date (dd|mmm|yyyy): 06 | JUN | 2014

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	Gases	DMSO	DMSP			
1	503			5							✓✓	✓✓	✓✓			
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
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20																
21																
22																
23																
24																

Watchkeeper(s):
MB

Bottom Depth: 156 m

Transmisso Cleaned: Y / N

	Time	UTC	Local
Start		<u>12:19</u>	<u>05:19</u>
Bottom		<u>12:22</u>	<u>05:22</u>
End		<u>12:25</u>	<u>05:25</u>

Positional Information

Start
Lat: 50 ° 59 94 N
Lon: 127 ° 49 97 W

Bottom
Lat: 50 ° 59 94 N
Lon: 127 ° 49 90 W

End
Lat: 50 ° 59 94 N
Lon: 127 ° 49 88 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