

Water Properties Group

Rosette Log

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

Cruise ID: 2012-12

Station: 513

Event #: 1

Ship: Tully

UTC Date (dd|mmm|yyyy): 23 | May | 2012

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	1			B-10	✓ 214	✓										
2	2			200	✓ 201	✓										
3	3			175	✓ 175	✓										
4	4			150	✓ 150	✓										
5	5			125	✓ 124	✓										
6	6			100	✓ 100	✓										
7	7			75	✓ 75	✓										
8	8			50	✓ 50	✓										
9	9			25	✓ 25	✓										
10	10			10	✓ 10	✓										
11	11			5	✓ 5	✓										
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): dy

Bottom Depth: 224 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2254	1554
Bottom	2258	1558
End	2313	1613

Positional Information

Start Lat: 48 ° 35.550 N

Lon: 123 ° 30.010 W

Start

Bottom Lat: 48 ° 35.580 N

Lon: 123 ° 30.010 W

Bottom

End Lat: 48 ° 35.550 N

Lon: 123 ° 30.930 W

End

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

Red case

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P1

Event #:

02

Ship:

Tully

UTC Date (dd|mm|yyyy):

24 | 05 | 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments									
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal										
1		12	Max	✓ 30	xx	xx	x											
2		13	5	✓	xx	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): H. J.

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

Time	UTC	Local
Start	1301	
Bottom	1304	
End	1309	

Positional Information
Start
Lat: 48 ° 34.54 N
Lon: 125 ° 30.05 W

Bottom
Lat: 48 ° 34.54 N
Lon: 125 ° 30.04 W

End
Lat: 48 ° 34.55 N
Lon: 125 ° 30.00 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P2 Event #: 03 Ship: Tully UTC Date (dd/mmm/yyyy): 4/05/12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sat St	Sal run	Nut	DIC	pH					
1		148 14	Bot-10	✓ 105	xx	x		x	x	x					
2		149 15	100	✓	x	x		x	x	xx					
3		150 16	75	✓	x	x		x	xx	x					
4		151 17	75	✓	x	x		x	x	x					
5		152 18	50	✓	x	x		x	x	xx					
6		153 19	25	✓	xx	x		x	x	x					
7		154 20	10	✓	x	x		xx	x	x					
8		155 21	5	✓	x	x	x	x	x	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): HM

Bottom Depth: 115 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1521	
Bottom	1526	
End	1540	

Positional Information

Lat: 48 ° 35.99 N

Lon: 125 ° 59.99 W

Lat: 48 ° 36.00 N

Lon: 126 ° 00.00 W

Lat: 48 ° 35.98 N

Lon: 126 ° 00.01 W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P2

Event #: 5

Ship: Tully

UTC Date (dd|mmm|yyyy): 24 | Apr | 2012

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials							Comments							
			Target Pressure	Confirmed ✓	Pressure	DMS	DSMP	Nut F	Nut C	Chl	HPLC									
						HR	HA	HM		IC	CS	HA	VS							
1	1	14	100	✓	100	X	X	X		X										
2	2	15	75	✓	75	X		X		X										
3	3	16	50	✓	50	X		XX		X										
4	4	17	40	✓	39	X		X		X										
5	5	18	30	✓	30	X		X		X										
6	7	19	25	✓	25	X		X		X										
7	8	20	20	✓	20	XX	XX	X		X										
8	9	21	15	✓	15	X		X		X										
9	11	22	10	✓	9	X		X		X										
10	12	23	5	✓	5	X	X	X		X										
11	14	24	0	✓		X	X	X		X										
12	6	25	Max+10	✓	30 30					XX	XX									
13	10	26	Max	✓	15 15					XX	XX									
14	13	27	5	✓	5					XX	XX									
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				

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

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

Time	UTC	Local
Start	1622	0922
Bottom	1625	
End	1637	0937

Positional Information
Lat: <u>48° 36.01</u> N
Lon: <u>126° 00.03</u> W

Start

Bottom

End

Lat: <u>48° 36.01</u> N
Lon: <u>126° 00.04</u> W

Lat: <u>48° 36.04</u> N
Lon: <u>126° 00.05</u> W

Extra comments:
DMS cast
<u>1-2-3-4-5-12-6-7-8-</u>
<u>13-9-10-14-11</u>

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P3 Event #: 06 Ship: Tully UTC Date (dd|mmm|yyyy): 24 | 05 | 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments				
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal									
1		28	Max	✓	40	xx	xx	x									chl max
2		29	5	✓		xx	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): AM/DY

Bottom Depth:	802	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	1821	1121
Bottom	1835	1135
End	1853	1153

Positional Information	
Start	Lat: 48 ° 37.53 N
	Lon: 176 ° 19.95 W

Bottom	Lat: 48 ° 37.54 N
	Lon: 126 ° 19.96 W

End	Lat: 48 ° 37.53 N
	Lon: 126 ° 19.97 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P4

Event #:

7

Ship:

Tully

UTC Date (dd|mmm|yyyy): 24 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut	Chl	HPLC	phyto	ONAr	UW Sal					
					MR	MA	MA	MR	MR	DY	MR	SB	SB					
1	1	30	300	✓ 300	x			x										
2	2	31	200	✓ 199	x	x	x	xx										
3	3	32	175	✓ 174	x	x	x	x										
4	4	33	100	✓ 100	x	x	x	x	x									
5	5	34	75	✓ 73	x			x	x									
6	6	35	50	✓ 49	x			x	x									
7	7	36	40	✓ 40	x			x	x									
8	9	37	30	✓ 30	x			x	x									
9	11	38	25	✓ 25	x			x	x									
10	12	39	20	✓ 21	xx	xx	xx	x	x									
11	13	40	15	✓ 14	x			x	x									
12	14	41	10	✓ 10	x			x	x									
13	15	42	5	✓ 5	x	x	x	xx	x									
14	18	43	0	✓ 2	x	x	x	x	x									
15	8	44	Max+10	✓ 40					xx	xx								
16	10	45	Max	✓ 30					xx	xx								
17	16	46	5	✓ 5					xx	xx	xxx							
18	17	47	5	✓ 5								x	x					
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	1315	m
Transmisso Cleaned:	☒ Y / ☐ N	

	UTC	Local
Time		
Start	2059	1359
Bottom	2107	1407
End	2128	1428

Positional Information
Start
Lat: 48 ° 38.96 N
Lon: 126 ° 39.97 W

Bottom
Lat: 48 ° 38.97 N
Lon: 126 ° 39.95 W

End
Lat: 48 ° 38.95 N
Lon: 126 ° 39.97 W

Extra comments:
1 DMS cast
000 (out of order)

1-7, 15, 8, 16, 9, 10, 11, 12, 13, 17, 18, 14

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P4 Event #: 9 Ship: Tully UTC Date (dd/mm/yyyy): 24 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	HPLO	CHL	Net	Gal	CS						
1		48	600	✓	600										
2		49	600	✓											
3		50	600	✓											
4		51	600	✓											
5		52	600	✓											
6		53	500	✓	500										
7		54	500	✓											
8		55	500	✓											
9		56	500	✓											
10		57	500	✓											
11		58	400	✓	399										
12		59	400	✓											
13		60	400	✓											
14		61	400	✓											
15		62	400	✓											
16		63	300	✓	299										
17		64	300	✓											
18		65	300	✓											
19		66	300	✓											
20		67	300	✓											
21		68	200	✓	199										
22		69	200	✓											
23		70	200	✓											
24															

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): 24

Bottom Depth:	1315	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	2246	1546
Bottom	2300	1600
End	2319	1619

Start	Positional Information	
	Lat: 48 ° 38.97	N
Bottom	Lon: 126 ° 39.99	W
	Lat: 48 ° 38.98	N
End	Lon: 126 ° 39.96	W
	Lat: 48 ° 38.95	N
	Lon: 126 ° 39.99	W

Extra comments:
Cs cast #1

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12

Station: P4

Event #: 12

Ship: Tully

UTC Date (dd/mmm/yyyy): 25 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal							
1		71	200	✓ 200											
2		72	200	✓ 200											
3		73	150	✓ 150											
4		74	150	✓											
5		75	150	✓											
6		76	150	✓											
7		77	150	✓											
8		78	100	✓ 100											
9		79	100	✓											
10		80	100	✓											
11		81	100	✓											
12		82	100	✓											
13		83	50	✓ 50											
14		84	50	✓											
15		85	50	✓											
16		86	50	✓											
17		87	50	✓											
18		88	0	✓ 2											
19		89	0	✓											
20		90	0	✓											
21		91	0	✓											
22		92	0	✓											
23															
24															

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

Bottom Depth:	1309 m
Transmisso Cleaned:	<u>Y</u> / N

Time	UTC	Local
Start	0047	1747
Bottom	0051	1751
End	0101	1801

Positional Information
Start
Lat: 48 ° 38.97 N
Lon: 126 ° 39.93 W

Bottom
Lat: 48 ° 38.98 N
Lon: 126 ° 39.91 W

End
Lat: 48 ° 38.96 N
Lon: 126 ° 39.93 W

Extra comments:
Cs cast #2

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P4 Event #: 14 Ship: Tully UTC Date (dd|mmm|yyyy): 25 | MAY | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Th	Po											
1	1	93	500	✓ 500		x											
2	2	94	500	✓ 500	x												
3	3	95	400	✓ 399		x											
4	4	96	300	✓ 300	x												
5	5	97	300	✓ 300		x											
6	6	98	200	✓ 200	x												
7	7	99	200	✓ 201		x											
8	8	100	150	✓ 150	x												
9	9	101	150	✓ 150		x											
10	11	102	100	✓ 99	x												
11	12	103	100	✓ 99		x											
12	13	104	75	✓ 75	x												
13	14	105	75	✓ 75		x											
14	15	106	50	✓ 50	x												
15	16	107	50	✓ 50		x											
16	18	108	30	✓ 30	x												
17	19	109	30	✓ 30		x											
18	20	110	20	✓ 20	x												
19	21	111	20	✓ 20		x											
20	22	112	10	✓ 10	x												
21	23	113	10	✓ 10		x											
22	24	114	0	✓	x												
23	10	115	Max 125	✓ 125		x											
24	17	116	Max 40	✓ 40	x												

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

Bottom Depth: 1315 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0322	2022
Bottom	0333	
End	0358	2058

Positional Information
Start
Lat: 48° 38.96 N
Lon: 126° 39.93 W

Bottom
Lat: 48° 38.98 N
Lon: 126° 39.92 W

End
Lat: 48° 38.99 N
Lon: 126° 39.99 W

Extra comments: out-of-order
Th+Po cast
... 9-23-10-11-...-14-
15-24-16-17-...

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P4

Event #:

15

Ship:

Tully

UTC Date (dd|mmm|yyyy):

25 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	OXY	Sal St	Sal R	Nut		DIC	pH			FCM	DNA	Gases	WGA	H2S	
1		117	Bot-10	✓	1315	x	x		x		x	x		x	x	xx	x	x	
2		118	1250	✓	1250	x	x	xx	x		xx	x							
3		119	1250	✓	1250	x	x		x		x	xx		x	x	xx	x	x	
4		120	1000	✓	1000	xx	x	xx	x		x	x		x	x	xx	x	x	
5		121	800	✓	801	x	x	x	x		x	x		x	x	xx	x	x	
6		122	600	✓	600	x	x		xx		x	x		x	x	xx	x	x	
7		123	400	✓	400	x	x		x		x	xx		x	x	xx	x	x	
8		124	300	✓	301	x	x		x		x	x		x	x	xx	x	x	
9		125	250	✓	250	x	x		x		x	x							
10		126	200	✓	199	x	x		x		x	x		x	x	xx	x	x	
11		127	175	✓	175	x	x		x		x	x							
12		128	150	✓	150	xx	x		x		x	x		x	x	xx	x	x	
13		129	125	✓	124	x	x		x		x	xx							
14		130	100	✓	99	x	x		xx		x	x		x	x	xx	x	x	
15		131	75	✓	74	x	x		x		x	x							
16		132	50	✓	51	x	x		x		x	x		x	x	xx	x	x	
17		133	25	✓	24	x	x		x		x	x		x	x	xx	x	x	
18		134	10	✓	10	x	x		x		x	x		x	x	xx	x	x	
19		135	5	✓	5	x	x	x	x		x	xx							
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	<u>1309</u> m
Transmisso Cleaned:	☒ Y ☐ N

Time	UTC	Local
Start	0442	2142
Bottom	0514	2214
End	0601	2301

Positional Information
Lat: <u>48 ° 38.978</u> N
Lon: <u>126 ° 39.892</u> W

Start

Bottom

End

Lat: <u>48 ° 38.990</u> N
Lon: <u>126 ° 39.980</u> W

Lat: <u>46 ° 39.001</u> N
Lon: <u>126 ° 39.886</u> W

Extra comments:
Deep cast

6

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P4

Event #: 16

Ship: Tully

UTC Date (dd|mmm|yyyy): 25 | 5 | 12

Cruise ID: 2012-12			Station: 14		Event: 1										Comments				
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														
			Target Pressure	Confirmed ✓ Pressure	FCM	WGA	Gases	RNA	H2S	Sal	Nut								
1	1	136	1300	✓		x	x	xx	x	x	x	x							
2	2	137	1300	✓															
3	3	138	1300	✓															
4	4	139	1000	✓		x	x	xx	x	x	x	x							
5	5	140	1000	✓															
6	6	141	1000	✓															
7	7	142	500	✓		x	x	xx	x	x	x	x							
8	8	143	500	✓															
9	9	144	500	✓															
10	10	145	10			x	x	xx	x	x	x	x							
11	11	146	10																
12	12	147	10																
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: 1319 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0721	0021
Bottom	0745	
End	0814	

Positional Information

Start
Lat: 48 ° 38.99 N
Lon: 126 ° 40.02 W

Bottom
Lat: 48 ° 38.99 N
Lon: 126 ° 39.98 W

End
Lat: 48 ° 38.99 N
Lon: 126 ° 39.98 W

Extra comments:

UBC cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P4 Event #: Ship: Tully UTC Date (dd|mmm|yyyy):

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Sal	Nut											
1		148	1200		x	x											
2		149	1000		x	x											
3		150	800		x	x											
4		151	600		x	x											
5		152	400			x											
6		153	200			x											
7		154	150			x											
8		155	100			x											
9		156	75			x											
10		157	50			x											
11		158	25			x											
12		159	10			x											
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start		
Bottom		
End		

Positional Information

Lat:	°	N
Lon:	°	W

Start

Lat:	°	N
Lon:	°	W

Bottom

Lat:	°	N
Lon:	°	W

End

Extra comments:
Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P4 Event #: 18 Ship: TULLY UTC Date (dd|mmm|yyyy): 25 | 5 | 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	µPlank	FCM	Chl	HPLC		POP	POC/N		Prod			Nina		
								Doug										
1	1	160	1%		103	x	x	x x x x	x x x x									
2	2	161	1%		103						xx	xx						
3	4	162	5%		71		x	x x	x x									
4	6	163	9%		31	x	x	x x x x	x x x x									
5	7	164	9%		31						xx	xx						
6	9	165	17%		25		x	x x	x x									
7	11	166	33%		18	x	x	x x x x	x x x x									
8	12	167	33%		18						xx	xx						
9	14	168	55%		13		x	x x	x x									
10	16	169	100%		2	x	x	x x x x	x x x x									
11	17	170	100%		2						xx	xx						
12	3	171	1%		103								x					
13	5	172	5%		71								x					
14	8	173	9%		31								x					
15	10	174	17%		25								x					
16	13	175	33%		18								x					
17	15	176	55%		13								x					
18	18	177	100%		2								x					
19	19	178	100%		2									x				
20	20	179	100%		12									x				
21																		
22																		
23																		
24																		

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

Bottom Depth: 1311 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1335	0635
Bottom	1338	
End	1401	0701

Positional Information

Lat:	48 ° 39.01	N
Lon:	126 ° 40.04	W

Start
Bottom
End

Lat: 48 ° 39.01 N
 Lon: 126 ° 39.99 W

Lat: 48 ° 38.99 N
 Lon: 126 ° 39.98 W

Extra comments: LIGHT CAST
 1, 2, 12, 3, 13, 4, 5, 14, 6, 15
 7, 8, 6, 9, 17, 10, 11, 18, 19, 20

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P5 Event #: 19 Ship: Tully UTC Date (dd|mmm|yyyy): 25 | 5 | 2012

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed		HPLC	CHL	Nut	Sal										
			Pressure	✓	Pressure														
1		180	Max	✓	30	xx	xx	x											
2		181	5	✓		xx	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): H.N.

Bottom Depth: 2061 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1636	0936
Bottom	1708	
End	1739	

Positional Information

Lat:	48°	41.50	N
Lon:	127°	09.98	W

▼

Lat:	48°	41.50	N
Lon:	127°	09.97	W

▼

Lat:	48°	41.48	N
Lon:	127°	09.99	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P6 Event #: 20 Ship: Tully UTC Date (dd|mmm|yyyy): 25 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal									
1		182	Max	✓ 42	xx	xx	x										chl nox
2		183	5	✓ 5	xx	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): DY

Bottom Depth: 2541 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2031	1331
Bottom	2115	1416
End	2159	1459

Positional Information

Start Lat: 48° 44.62 N

Start Lon: 127° 39.90 W

Start

Bottom

Bottom Lat: 48° 44.65 N

Bottom Lon: 127° 40.07 W

End

End Lat: 48° 44.63 N

End Lon: 127° 39.97 W

Extra comments:

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

UTC Date (dd mmm yyyy): 26 May 2012

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P8 Event #: 22 Ship: Tully UTC Date (dd:mmm/yyyy): 26 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments					
			Target	Confirmed	Oxy	Sal St	SalRun	Nut	pH	Chl	HPLC									
			Pressure	✓ Pressure																
1	1	186	2000	✓	2000	xx	x	xx	x	x										
2	2	187	1500	✓	1499	x	x		x	x										
3	3	188	1250	✓	1250	x	x	x	xx	xx										
4	4	189	1000	✓	1000	xx	x	xx	x	x										
5	5	190	800	✓	800	x	x	x	x	x										
6	6	191	600	✓	600	x	x		x	x										
7	7	192	400	✓	400	x	x		x	x										
8	8	193	300	✓	300	x	x		x	xx										
9	9	194	250	✓	250	x	x		x	x										
10	10	195	200	✓	200	x	x		x	x										
11	11	196	175	✓	174	x	x		x	x										
12	12	197	150	✓	149	x	x		x	x										
13	13	198	125	✓	126	x	x		xx	xx										
14	14	199	100	✓	100	x	x		x	x	x									
15	15	200	75	✓	74	xx	x		x	x	x									
16	16	201	50	✓	50	x	x		x	x	x									
17	18	202	25	✓	26	x	x		x	x	x									
18	20	203	10	✓	10	x	x		x	xx	x									
19	21	204	5	✓	6	x	x	x	x	x	x									
20	17	205	Max 10	✓	50						xx	xx								Mixed to ~70m
21	19	206	Max	✓	20						xx	xx								
22	22	207	5	✓	5						xx	xx								
23																				
24																				

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

Bottom Depth: 2516 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0452	2152
Bottom	0534	2234
End	0646	2346

Positional Information
Start
Lat: 48° 49.00 N
Lon: 128° 39.91 W

Bottom
Lat: 48° 49.01 N
Lon: 128° 40.04 W

End
Lat: 48° 49.05 N
Lon: 128° 40.17 W

Extra comments:
0.0.0.

1-16, 20, 17, 21, 18, 19, 22

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P9

Event #:

24

Ship:

Tully

UTC Date (dd|mmm|yyyy): 26 | MAY | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal					
1		208	Max	✓ 50	xx	xx	x						
2		209	5	✓	xx	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): H.M.

Bottom Depth: 250? m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1106	0406
Bottom	1144	
End	1217	

Positional Information
 Start
 Lat: 48 ° 51.35 N
 Lon: 129 ° 10.03 W

Bottom
 Lat: 48 ° 51.42 N
 Lon: 129 ° 09.99 W

End
 Lat: 48 ° 51.43 N
 Lon: 129 ° 10.06 W

Extra comments:

Sampling Log

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

25

Tully

UTC Date (dd mmm/yyyy): 26 5 12

Profile type: ROS TRM X-Niskin other?

Watchkeeper(s): H.M.

Transmisso Cleaned: Y / N

Positional Information			
Lat:	48	° 53.59	N
Lon:	129	° 39.90	W

Lat:	48	°	53.61	N
Lon:	129	°	40.00	W

<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:

2012-12

Station:

P11

Event #:

26

Ship:

Tully

UTC Date (dd|mmm|yyyy):

26 | 5 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments									
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal														
1		212	Max	✓ 60	xx	xx	x															
2		213	5	✓ 5	xx	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): 4 m

Bottom Depth: 2751 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1811	1111
Bottom	1846	1146
End	1923	1223

Positional Information

Start	Lat: 48 ° 56.00 N
	Lon: 130 ° 09.98 W

Bottom	Lat: 48 ° 56.00 N
	Lon: 130 ° 10.00 W

End	Lat: 48 ° 56.04 N
	Lon: 130 ° 9.84 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P12 Event #: 27 Ship: Tully UTC Date (dd:mmm/yyyy): 26 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	DMS	DMSP	DMSP	Nut	Chl	HPLC	phyto	ONAr	Sal						
					MR	MA	d MA	MR	MA SB AH BY	DY		SB	UW						
1	1	214	300	✓ 300	x			x											Leaking
2	2	215	200	✓ 200	x	x	x	x											
3	3	216	175	✓ 174	x	x	x	x											
4	4	217	100	✓ 99	x	x	x	x	x										
5	5	218	75	✓ 75	x			xx	x										
6	7	219	50	✓ 50	x			x	x										
7	9	220	40	✓ 39	x			x	x										
8	10	221	30	✓ 30	x			x	x										
9	11	222	25	✓ 24	x			x	x										
10	12	223	20	✓ 20	xx	xx	xx	x	x										
11	13	224	15	✓ 14	x			x	x										
12	14	225	10	✓ 10	x			x	x										
13	15	226	5	✓ 5	x	x	x	x	x										
14	18	227	0	✓ 1	x	x	x	x	x										
15	6	228	Max+10	✓ 60					xx	xx									
16	8	229	Max	✓ 50					xx	xx									
17	16	230	5	✓ 5					xx	xx									
18	17	231	5	✓ 5								x	x						UW sal (seth)
19																			
20																			
21																			
22																			
23																			
24																			

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

Watchkeeper(s): DY

Bottom Depth: 3231 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2142	1442
Bottom	2148	1448
End	2210	1510

Positional Information

Start Lat: 48 ° 58.23 N

Start Lon: 130 ° 40.00 W

Bottom Lat: 48 ° 58.25 N

Bottom Lon: 130 ° 40.00 W

End Lat: 48 ° 58.22 N

End Lon: 130 ° 39.77 W

Extra comments:

DMS cast

1-5, 15, 6, 16, 7-13, 17, 18, 14

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P12 Event #: 29 Ship: Tully UTC Date (dd|mmm|yyyy): 26 | May | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	OXY	Sal St	Sal R	Nut		DIC	pH			FCM	DNA	Gases	WGA	
1		232	Bot-10	✓ 3274	x	x		x		x	x			x	x	xx	x	
2		233	3000	✓ 3000	x	x	xx	x		xx	x							
3		234	3000	✓ 3000	xx	x		x		x	xx			x	x	xx	x	
4		235	2500	✓ 2500	x	x		x		x	x							
5		236	2000	✓ 1999	x	x	x	x		x	x			x	x	xx	x	
6		237	1500	✓ 1500	x	x		x		x	x			x	x	xx	x	
7		238	1250	✓ 1250	x	x		xx		x	xx			x	x	xx	x	
8		239	1000	✓ 1000	x	x	xx	x		x	x			x	x	xx	x	
9		240	800	✓ 801	x	x	x	x		x	x			x	x	xx	x	
10		241	600	✓ 599	x	x		x		x	x			x	x	xx	x	
11		242	400	✓ 400	x	x		x		x	x			x	x	xx	x	
12		243	300	✓ 300	xx	x		x		x	x			x	x	xx	x	
13		244	250	✓ 249	x	x		x		x	xx							
14		245	200	✓ 200	x	x		x		x	x			x	x	xx	x	
15		246	175	✓ 174	x	x		x		x	x							
16		247	150	✓ 150	x	x		x		x	x			x	x	xx	x	
17		248	125	✓ 125	x	x		xx		x	x							
18		249	100	✓ 100	x	x		x		x	x			x	x	xx	x	
19		250	75	✓ 74	xx	x		x		x	xx							
20		251	50	✓ 50	x	x		x		x	x			x	x	xx	x	
21		252	25	✓ 25	x	x		x		x	x			x	x	xx	x	
22		253	10	✓ 10	x	x		x		x	x			x	x	xx	x	
23		254	5	✓ 4	x	x	x	x		x	xx							
24																		

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): MK/04

Bottom Depth:	3234 m
Transmisso Cleaned:	☒ Y / ☐ N

Time	UTC	Local
Start	2302	1602
Bottom	2350	1650
End		

Positional Information
Lat: 48 ° 58.19 N
Lon: 130 ° 39.97 W

Start

Bottom

End

Lat: 48 ° 58.19 N
Lon: 130 ° 39.97 W

Lat: 48 ° 58.30 N
Lon: 130 ° 40.00 W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P12 Event #: 31 Ship: Tully UTC Date (dd/mmm/yyyy): 27 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Th	Po											
1	1	255	500	✓ 500		x											
2	2	256	500	✓ 500	x												
3	3	257	400	✓ 400		x											
4	4	258	300	✓ 300	x												
5	5	259	300	✓ 300		x											
6	6	260	200	✓ 200	x												
7	7	261	200	✓ 200		x											
8	8	262	150	✓ 150	x												
9	9	263	150	✓ 150		x											
10	10	264	100	✓ 100	x												
11	11	265	100	✓ 100		x											
12	12	266	75	✓ 75	x												
13	13	267	75	✓ 75		x											
14	16	268	50	✓ 49	x												
15	17	269	50	✓ 49		x											
16	18	270	30	✓ 29	x												
17	19	271	30	✓ 29		x											
18	20	272	20	✓ 19	x												
19	21	273	20	✓ 19		x											
20	22	274	10	✓ 10	x												
21	23	275	10	✓ 10		x											
22	24	276	0	✓ 1	x												
23	14	277	Max	✓ 60		x											
24	15	278	Max	✓ 60	x												

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

Bottom Depth:	3234 m
Transmisso Cleaned:	☒ Y ☐ N

Time	UTC	Local
Start	0540	2240
Bottom	0555	2255
End	0619	2319

Positional Information	
Start	Lat: 48° 58.21 N
	Lon: 130° 40.02 W

Bottom	Lat: 48° 58.21 N
	Lon: 130° 39.98 W

End	Lat: 48° 58.22 N
	Lon: 130° 40.02 W

Extra comments:
Th+Po cast
0.0.0.

1-13, 23, 24, 14-22

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P12

Event #: 34

Ship:

Tully

UTC Date (dd|mmm|yyyy):

27 | 5 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	FCM	WGA	Gases	RNA	H2S	Sal	Nut								
1	1	279	2000	✓		x	x	xx	x	x	x	x							
2	2	280	2000	✓															
3	3	281	2000	✓															
4	4	282	1000	✓		x	x	xx	x	x	x	x							
5	5	283	1000	✓															
6	6	284	1000	✓															
7	7	285	500	✓		x	x	xx	x	x	x	x							
8	8	286	500	✓															
9	9	287	500	✓															
10	10	288	10	✓		x	x	xx	x	x	x	x							
11	11	289	10	✓															
12	12	290	10	✓															
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:	3235	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	0752	0052
Bottom	0827	
End	0905	

Positional Information	
Start	Lat: 48 ° 58.22 N
	Lon: 130 ° 39.98 W

Start

Bottom

End

Bottom	Lat: 48 ° 58.22 N
	Lon: 130 ° 40.03 W

End	Lat: 48 ° 58.22 N
	Lon: 130 ° 39.95 W

Extra comments:

UBC cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P12 Event #: 36 Ship: Tully UTC Date (dd|mmm|yyyy): 27 | MAI | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Sal	Nut	TM	TM	unfilt	Zn	Fe(II)							
			Pressure	✓ Pressure														
1		291	1000		x	x	x	x	x	x	x							
2	1	292	800		x	x	x	x	x	x	x							
3	2	293	600		x	x	x	x	x	x	x							
4	3	294	500	400	x	x	x	x	x	x	x							
5	4	295	400	300	x	x	x	x	x	x	x							
5	5	296	200			x	x	x	x	x	x							
7		297	150			x	x	x	x	x	x							
8		298	100			x	x	x	x	x	x							
9		299	75			x	x	x	x	x	x							
10		300	50			x	x	x	x	x	x							
11		301	25			x	x	x	x	x	x							
12		302	10			x	x	x	x	x	x							
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3236 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1330	0630
Bottom	1439	0739
End	1625	0925

Positional Information
Start
Lat: 48° 58.19' N
Lon: 130° 39.98' W

Bottom
Lat: 48° 58.19' N
Lon: 130° 39.98' W

End
Lat: 48° 58.12' N
Lon: 130° 40.07' W

Extra comments:
Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P12 Event #: 37 Ship: Tully UTC Date (dd|mmm|yyyy): 27 | 5 | 12

			Rosette Operation			Samples Taken / Sampler's Initials										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ✓	Pressure	µPlank	FCM	Chl	HPLC		POP	POC/N		Prod		Nina			
									Doug										
1	1	303	1%		164	x	x	x x x x	x x x x										
2	2	304	1%		164						xx	xx							
3	4	305	5%		158		x	x x	x x										
4	6	306	9%		151	x	x	x x x x	x x x x										
5	7	307	9%		151						xx	xx							
6	9	308	17%		138		x	x x	x x										
7	11	309	33%		111	x	x	x x x x	x x x x										
8	12	310	33%		111						xx	xx							
9	14	311	55%		75		x	x x	x x										
10	16	312	100%		16	x	x	x x x x	x x x x										
11	17	313	100%		6						xx	xx							
12	3	314	1%		164									x					
13	5	315	5%		158									x					
14	8	316	9%		151									x					
15	10	317	17%		138									x					
16	13	318	33%		111									x					
17	15	319	55%		75									x					
18	18	320	100%		6									x					
19	19	321	100%		0											x			
20	20	322	100%		16											x			
21																			
22																			
23																			
24																			

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

Bottom Depth:	3236 m
Transmisso Cleaned:	Y / N

Time	UTC	Local
Start	1618	
Bottom	1640	
End	1653	

Positional Information		
Lat:	48 ° 58.13	N
Lon:	130 ° 40.08	W

Start

Bottom

End

Lat:	48 ° 58.25	N
Lon:	130 ° 39.98	W

Lat:	48 ° 58.22	N
Lon:	130 ° 39.98	W

Extra comments:
Light cast
1, 2, 12, 13, 14

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P13 Event #: 38 Ship: Tully UTC Date (dd/mm/yyyy): 27 May 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal							
1		323	2000	✓ 2000											Water for Nina
2		324	2000	✓ 1											Water for Nina
3		325	2000	✓											Water for Nina
4		326	Max	52	xx	xx	x								
5		327	5		xx	xx	x	x							
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 3142 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2120	1420
Bottom	2205	1505
End	2242	1542

Positional Information
 Start
 Lat: 49° 2.69 N
 Lon: 131° 39.94 W

Bottom
 Lat: 49° 2.62 N
 Lon: 131° 39.98 W

End
 Lat: 49° 2.63 N
 Lon: 131° 39.96 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P14 Event #: 39 Ship: Tully UTC Date (dd mmm yyyy): 28 May 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	HPLC	CHL	Nut	Sal							
1		328	Max	✓ 50	xx	xx	x								
2		329	5	✓	xx	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): DY

Bottom Depth: 3324 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0321	2021
Bottom	0407	2107
End	0453	2153

Positional Information
Start
Lat: 49° 7.414 N
Lon: 132° 39.925 W

Bottom
Lat: 49° 7.387 N
Lon: 132° 39.973 W

End
Lat: 49° 7.418 N
Lon: 132° 39.992 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P15 Event #: 40 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | 5 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal								
1		330	Max	✓ 50	xx	xx	x									
2		331	5		xx	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): H.m.

Bottom Depth: 3407 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0925	0225
Bottom	0958	
End	1028	

Positional Information
Start
Lat: 49 ° 12.02 N
Lon: 133 ° 40.00 W

Bottom
Lat: 49 ° 12.01 N
Lon: 133 ° 39.99 W

End
Lat: 49 ° 12.00 N
Lon: 133 ° 40.00 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P16 Event #: 42 Ship: Tully UTC Date (dd/mm/yyyy): 28 5 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	µPlank	FCM	CHI	HPLC		POP	POC/N		Prod			Nina		
								Doug										
1		332	1%	✓	66	x	x	x x x x	x x x x									
2		333	1%	✓	66						xx	xx						
3		334	5%	✓	43		x	x x	x x									
4		335	9%	✓	35	x	x	x x x x	x x x x									
5		336	9%	✓	35						xx	xx						
6		337	17%	✓	25		x	x x	x x									
7		338	33%	✓	16	x	x	x x x x	x x x x									
8		339	33%	✓	16						xx	xx						
9		340	55%	✓	9		x	x x	x x									
10		341	100%	✓	5	x	x	x x x x	x x x x									
11		342	100%	✓	5						xx	xx						
12		343	1% ¹⁰⁰	✓	5								x					
13		344	5% ¹⁰⁰	✓	5								x					
14		345	9% ¹⁰⁰	✓	5								x					
15		346	47%	✓	5								x					
16		347	33%	✓	5								x					
17		348	55%	✓	5								x					
18		349	100%	✓	5								x					
19		350	100%	✓	5										x			
20		351	100%	✓	5										x			
21																		
22																		
23																		
24																		

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

Watchkeeper(s): H M

Bottom Depth: 3635 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1546	0846
Bottom	1550	
End	1603	

Positional Information

Lat: 49 ° 17.04 N

Lon: 134 ° 39.97 W

Start

Bottom

End

Lat: 49 ° 16.99 N

Lon: 134 ° 39.94 W

Lat: 49 ° 16.99 N

Lon: 134 ° 39.96 W

Extra comments:

Light cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P16 Event #: 44 Ship: Tully UTC Date (dd mmm yyyy): 28 May 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	DMS	DMSP	DMSP	Nut	Chl	HPLC	phyto	ONAr	Sal	UW				
1	1	352	300	✓ 300	x			x										
2	2	353	200	✓ 200	x	x	x	x										
3	3	354	175	✓ 174	x	x	x	x										
4	4	355	100	✓ 101	x	x	x	x	x									
5	5	356	75	✓ 74	x			xx	x									
6	7	357	50	✓ 49	x			x	x									
7	9	358	40	✓ 40	x			x	x									
8	10	359	30	✓ 30	x			x	x									
9	11	360	25	✓ 24	x			x	x									
10	12	361	20	✓ 20	xx	xx	xx	x	x									
11	13	362	15	✓ 15	x			x	x									
12	14	363	10	✓ 10	x			x	x									
13	15	364	5	✓ 5	x	x	x	x	x									
14	18	365	0	✓ 1	x	x	x	x	x									
15	6	366	Max+10	✓ 60					xx	xx								
16	8	367	Max	✓ 50					xx	xx								
17	16	368	5	✓ 5					xx	xx								
18	17	369	5	✓ 5								x	x					
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3634 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2057	1357
Bottom	2105	1405
End	2127	1427

Positional Information
Start
Lat: 49 ° 17.04 N
Lon: 134 ° 40.04 W

Bottom
Lat: 49 ° 17.06 N
Lon: 134 ° 40.05 W

End
Lat: 49 ° 17.03 N
Lon: 134 ° 40.05 W

Extra comments:
DMS cast
0.0.0. sampling

1-5, 15, 6, 16, 7-13, 17, 18, 14

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P16 Event #: 46 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | MAY | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal St	Sal R	Nut		DIC	pH			FCM	DNA	Gases	WGA		
1		370	Bot-10	✓ 3685	x	x		x		x	x			x	x	xx	x		
2		371	3500	✓ 3501	x	x	x	x		xx	x								
3		372	3500	✓ 3500	xx	x		xx		x	xx								
4		373	3000	✓ 3000	x	x	xx	x		x	x			x	x	xx	x		
5		374	2500	✓ 2499	x	x		x		x	x								
6		375	2000	✓ 1999	x	x	x	x		x	x			x	x	xx	x		
7		376	1500	✓ 1500	x	x		x		x	xx			x	x	xx	x		
8		377	1250	✓ 1250	x	x		x		x	x			x	x	xx	x		
9		378	1000	✓ 1000	x	x	xx	x		x	x			x	x	xx	x		
10		379	800	✓ 801	xx	x	x	x		x	x			x	x	xx	x		
11		380	600	✓ 600	x	x		xx		x	x			x	x	xx	x		
12		381	400	✓ 402	x	x		x		x	x			x	x	xx	x		
13		382	300	✓ 300	x	x		x		x	x			x	x	xx	x		
14		383	250	✓ 250	x	x		x		x	xx								
15		384	200	✓ 200	x	x		x		x	x			x	x	xx	x		
16		385	175	✓ 175	x	x		x		x	x								
17		386	150	✓ 150	x	x		x		x	x			x	x	xx	x		
18		387	125	✓ 124	x	x		x		x	x								
19		388	100	✓ 100	x	x		x		x	x			x	x	xx	x		
20		389	75	✓ 75	x	x		xx		x	xx								
21		390	50	✓ 50	x	x		x		x	x			x	x	xx	x		
22		391	25	✓ 27	x	x		x		x	x			x	x	xx	x		
23		392	10	✓ 10	x	x		x		x	x			x	x	xx	x		
24		393	5	✓ 5	xx	x	x	x		x	xx								

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

Bottom Depth:	3635	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	0035	1735
Bottom	0207	1907
End	0350	2050

Positional Information
Lat: 49° 16.99 N
Lon: 134° 40.00 W

Start

Bottom

End

Lat: 49° 17.03 N
Lon: 134° 39.82 W

Lat: 49° 17.01 N
Lon: 134° 39.94 W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P16 Event #: 50 Ship: Tully UTC Date (dd|mmm|yyyy): 29 May 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Th	Po									
1	1	394	500	✓	501		x								
2	2	395	500	✓	501	x									
3	3	396	400	✓			x								
4	4	397	300	✓		x									
5	5	398	300	✓			x								
6	6	399	200	✓		x									
7	7	400	200	✓			x								
8	8	401	150	✓		x									
9	9	402	150	✓			x								
10	11	403	100	✓	75	x									
11	12	404	100	✓	100		x								
12	13	405	75	✓	100	x									
13	14	406	75	✓	75		x								
14	15	407	50	✓		x									
15	16	408	50	✓			x								
16	18	409	30	✓		x									
17	19	410	30	✓			x								
18	20	411	20	✓		x									
19	21	412	20	✓			x								
20	22	413	10	✓		x									
21	23	414	10	✓			x								
22	24	415	0			x									
23	10	416	Max	✓	125		x								
24	17	417	Max	✓	40	x									

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

Bottom Depth: 3635 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0640	2340
Bottom	0651	2351
End	0715	

Positional Information
Start
Lat: 49° 17.00 N
Lon: 134° 39.94 W

Bottom
Lat: 49° 18.98 N
Lon: 134° 40.03 W

End
Lat: 49° 16.82 N
Lon: 134° 39.84 W

Extra comments:
Th+Po cast
O.O.O. cast

1-9, 23, 10-15, 24, 16-22

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12

Station: P16

Event #: 51

Ship: Tully

UTC Date (dd|mmm|yyyy): 29 | 5 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments									
			Target Pressure	Confirmed ✓ Pressure	Sal	Nut		TM Uvic	TM IOS	unfilt	Zn	Fe(II)												
1	12	418	3000		x	x		x	x	x	xx	x												
2	1	419	2000		x	x		x	x	x	xx	x												
3	2	420	1700		x	x		x	x	x	xx	x												
4	3	421	1400		x	x		x	x	x	xx	x												
5	4	422	1200		x	x		x	x	x	xx	x												
6	5	423	1000		x	x		x	x	x	xx	x												
7	6	424	800			x		x	x	x	xx	x												
8	7	425	600			x		xx	x	x	xx	x												
9	8	426	400			x		x	x	x	xx	x												
10	11	427	200			x		x	x	x	xx	x												
11	9	428	150			x		x	x	x	xx	x												
12	10	429	100			x		x	x	x	xx	x												
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:	3634	m
Transmisso Cleaned:	Y / N	

Time	UTC	Local
Start	0726	0026
Bottom	0835	
End	1032	

Positional Information
Start
Lat: 49 ° 17.03 N
Lon: 134 ° 39.91 W

Start

Bottom

End

Lat: 49 ° 16.93 N
Lon: 134 ° 39.63 W

Lat: 49 ° 16.79 N
Lon: 134 ° 39.25 W

Extra comments:
Go-flos #1

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P16 Event #: 52 Ship: Tully UTC Date (dd/mmm/yyyy): 29/5/2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ☒	Pressure	Sal	Nut		TM Uvic	TM IOS	unfilt	Zn	Fe(II)					
1	10	430	75			x	x		x	x	x	xX	x					
2	7	431	50				x		x	x	x	xX	x					
3	6	432	25				x		xX	x	x	xX	x					
4	12	433	10				x		x	x	x	xX	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): H.7

Bottom Depth: 3635 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1044	0344
Bottom	1102	
End	1112	

Positional Information
Start
Lat: 49 ° 17.03 N
Lon: 134 ° 40.10 W

Bottom
Lat: 49 ° 17.00 N
Lon: 134 ° 39.94 W

End
Lat: 49 ° 16.94 N
Lon: 134 ° 39.83 W

Extra comments:
Go-flos #2

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P17 Event #: 53 Ship: Tully UTC Date (dd mmm/yyyy): 29 5 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal							
1		434	Max	✓ 50	xx	xx	x								
2		435	5	✓	xx	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): H.N

Bottom Depth: 3152 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1542	0842
Bottom	1622	
End	1653	

Positional Information

Lat:	49 ° 21.00	N
Lon:	135 ° 40.05	W

▼

Lat:	49 ° 21.03	N
Lon:	135 ° 40.03	W

▼

Lat:	49 ° 21.01	N
Lon:	135 ° 40.01	W

Extra comments:

Water Properties Group

Rosette Log

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

Cruise ID: 2012-12 Station: P18 Event #: 54 Ship: TULLY UTC Date (dd mmm/yyyy): 29 May 12

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	CHL	HPLC						Flask Serial #	Value mL · L ⁻¹	
1		436	MAX	☒ 50	100	x		xx	xx								
2		437	5	☒ 5		x	x	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): 24

Bottom Depth: 3834 m

Transmissio Cleaned: ☒ Y / N

	UTC	Local
Start	2130	1430
Bottom	2212	1512
End	2258	1558

Positional Information

Start
 Lat: 49° 26.02 N
 Lon: 136° 39.95 W

Bottom
 Lat: 49° 26.04 N
 Lon: 136° 39.97 W

End
 Lat: 49° 26.00 N
 Lon: 136° 39.99 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: 12 / 12 / 12

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: 2012-12

Station: P19

Event #: 55

Ship: TULLY

UTC Date (dd mmm yyyy): 29 May 12

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken			Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	CHL	HPLC	
1		438	50	✓ 50		x		xx	xx	
2		439	5	✓ 5		x	x	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): DY

Bottom Depth: 3922 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0333	2033
Bottom	0417	2117
End	0458	2158

Positional Information

Start Lat: 49° 30.06 N
Lon: 137° 39.92 W

Bottom Lat: 49° 30.02 N
Lon: 137° 39.91 W

End Lat: 49° 30.01 N
Lon: 137° 39.97 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:

2012-12

Station:

P20

Event #: 59

Ship: Tully

UTC Date (dd mmm yyyy): 30 5 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Th	Po											
1	1	440	500	✓		x											
2	2	441	500	✓		x											
3	3	442	400	✓		x											
4	4	443	300	✓		x											
5	5	444	300	✓		x											
6	6	445	200	✓		x											
7	7	446	200	✓		x											
8	8	447	150	✓		x											
9	9	448	150	✓		x											
10	10	449	100	✓		x											
11	11	450	100	✓		x											
12	12	451	75	✓		x											
13	13	452	75	✓		x											
14	14	453	50	✓		x											
15	15	454	50	✓		x											
16	18	455	30	✓		x											
17	19	456	30	✓		x											
18	20	457	20	✓		x											
19	21	458	20	✓		x											
20	22	459	10	✓		x											
21	23	460	10	✓		x											
22	24	461	0	✓		x											
23	16	462	Max	✓	44	x											
24	17	463	Max	✓	44	x											

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

Bottom Depth: 3966 m
 Transmisso Cleaned: Y/N

Time	UTC	Local
Start	1324	0624
Bottom		
End	1354	0654

Positional Information

Lat:	49° 33.99	N
Lon:	138° 39.97	W

Start

Lat:	°	N
Lon:	°	W

Bottom

Lat:	°	N
Lon:	°	W

End

Lat:	49° 34.00	N
Lon:	138° 40.02	W

Extra comments:
 Th+Po cast

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P20

Event #: 60

Ship: Tully

UTC Date (dd/mmm/yyyy): 30 / 5 / 2012

Cruise ID: 2012-12			Station: F20		Event #: 7		Ship: R/V		Comments										
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														
			Target Pressure	Confirmed ✓ Pressure	µPlank	FCM	Chl	HPLC		POP	POC/N		Prod		Nina				
								Doug											
1	1	464	1%	✓ 115	x	x	x x x x	x x x x											
2	2	465	1%	✓ 115						xx	xx								
3	4	466	5%	✓ 75		x	x x	x x											
4	6	467	9%	✓ 60	x	x	x x x x	x x x x											
5	7	468	9%	✓ 60						xx	xx								
6	9	469	17%	✓ 44		x	x x	x x											
7	11	470	33%	✓ 28	x	x	x x x x	x x x x											
8	12	471	33%	✓ 28						xx	xx								
9	14	472	55%	✓ 15		x	x x	x x											
10	16	473	100%	✓ 5	x	x	x x x x	x x x x											
11	17	474	100%	✓ 5						xx	xx								
12	3	475	1%	✓ 115									x						
13	5	476	5%	✓ 75									x						
14	8	477	9%	✓ 60									x						
15	10	478	17%	✓ 44									x						
16	13	479	33%	✓ 28									x						
17	15	480	55%	✓ 15									x						
18	18	481	100%	✓ 5									x						
19	19	482	100%	✓ 5											x				
20	20	483	100%	✓ 5											x				
21																			
22																			
23																			
24																			

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

Bottom Depth:	3966	m
Transmisso Cleaned:	(Y) I	N

Time	UTC	Local
Start	1530	0830
Bottom	1535	
End	1546	

Positional Information		
Lat:	49 ° 34.01	N
Lon:	138 ° 40.03	W

Start

Bottom

End

Lat:	49 ° 33.99	N
Lon:	138 ° 40.05	W

Lat:	49 ° 34.02	N
Lon:	138 ° 39.95	W

Extra comments:
Light cast

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P20

Event #:

61

Ship:

Tully

UTC Date (dd/mm/yyyy):

30/5/2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials					DIC	pH	FCM	DNA	Gases	WGA	Comments
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal St	Sal R	Nut								
					DY/SB	DY	SB	MR		MA/AR	KS					
1		484	Bot-10	✓	4023	x	x		x	x	x	x	x	x	x	
2		485	3500	✓		x	x	x	x	xx	x					
3		486	3500	✓		x	x		x	x	x					
4		487	3000	✓		x	x	xx	x	x	x	x	x	xx	x	
5		488	2500	✓		xx	x		x	xx	x					
6		489	2000	✓		x	x	x	x	x	x	x	x	xx	x	
7		490	1500	✓		x	x		xx	x	x	x	x	xx	x	
8		491	1250	✓		x	x		x	x	x	x	x	xx	x	
9		492	1000	✓		xx	x	xx	x	x	x	x	x	xx	x	
10		493	800	✓		x	x	x	x	x	xx	x	x	xx	x	
11		494	600	✓		x	x		x	x	xx	x	x	xx	x	
12		495	400	✓		x	x		x	x	x	x	x	xx	x	
13		496	300	✓		x	x		x	x	x					
14		497	250	✓		x	x		x	x	x	x	x	xx	x	
15		498	200	✓		x	x		x	x	x					
16		499	175	✓		x	x		xx	x	x	x	x	xx	x	
17		500	150	✓		x	x		x	x	x					
18		501	125	✓		xx	x		x	xx	x	x	x	xx	x	
19		502	100	✓		x	x		x	x	x					
20		503	75	✓		x	x		x	x	x	x	x	xx	x	
21		504	50	✓		x	x		x	x	x	x	x	xx	x	
22		505	25	✓		x	x		x	x	x	x	x	xx	x	
23		506	10	✓		x	x		x	x	x	x	x	xx	x	
24		507	5	✓		x	x	x	x	x	x					

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): H.M.Bottom Depth: 4025 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1626	0926
Bottom	1737	1037
End	1909	1209

Positional Information
Start
Lat: 49 ° 33.99 N
Lon: 138 ° 40.00 WBottom
Lat: 49 ° 33.99 N
Lon: 138 ° 40.00 WEnd
Lat: 49 ° 34.02 N
Lon: 138 ° 40.01 WExtra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P20 Event #: 62 Ship: Tully UTC Date (dd mmm yyyy): 130 May 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	DMS	DMSP	DMSP	Nut	Chl	HPLC	phyto	ONAr	Sal						
				✓		MR	MA	MA	MR	DY	CS			UW					
1	1	508	300	✓	300	x			x									Valve loose (slight)	
2	2	509	200	✓	200	x	x	x	x										
3	3	510	175	✓	174	x	x	x	x									Valve leak	
4	4	511	100	✓	100	x	x	x	x	x									
5	5	512	75	✓	74	x			xx	x									
6	8	513	50	✓	49	x			x	x									
7	9	514	40	✓	40	x			x	x									
8	10	515	30	✓	30	x			x	x									
9	11	516	25	✓	25	x			x	x									
10	12	517	20	✓	20	xx	xx	xx	x	x									
11	13	518	15	✓	15	x			x	x									
12	14	519	10	✓	10	x			x	x									
13	15	520	5	✓	5	x	x	x	x	x									
14	18	521	0	✓	1	x	x	x	x	x									
15	6	522	Max+10	✓	70					xx	xx								
16	7	523	Max	✓	60					xx	xx								
17	16	524	5	✓	5					xx	xx								
18	17	525	5	✓	5								x	x					
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	3967 m
Transmisso Cleaned:	☒ Y ☐ N

Time	UTC	Local
Start	2030	1300
Bottom	2037	1337
End	2057	1357

Positional Information
Start
Lat: 49 ° 34.05 N
Lon: 138 ° 39.97 W

Bottom
Lat: 49 ° 34.03 N
Lon: 138 ° 39.95 W

End
Lat: 49 ° 34.04 N
Lon: 138 ° 39.91 W

Extra comments:
DMS cast
0.0.0.

1 2 3 4 5 15 16 6 7 8 9 10 11 12 13 17 18 14

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P20 Event #: 65 Ship: Tully UTC Date (dd|mmm|yyyy): 31 05 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ☒ Pressure	Sal	Nut		TM Uvic	TM IOS	unfilt	Zn	Fe(II)						
1		526	3000		x	x		x	x	x	x	x			Go FLO			
2		527	2000		x	x		x	x	x	x	x						
3		528	1500		x	x		x	x	x	x	x						
4		529	1200		x	x		x	x	x	x	x						
5		530	1000		x	x		x	x	x	x	x						
6		531	800		x	x		x	x	x	x	x						
7		532	600		x	x		x	x	x	x	x						
8		533	400			x		x	x	x	x	x						
9		534	200			x		x	x	x	x	x						
10		535	150			x		x	x	x	x	x						
11		536	100			x		x	x	x	x	x						
12		537	75			x		x	x	x	x	x						
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	3968	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	0418	2118
Bottom	0618	2318
End	0800	0100

Positional Information
Start
Lat: 49 ° 34.03 N
Lon: 138 ° 39.98 W

Bottom
Lat: 49 ° 33.48 N
Lon: 138 ° 40.02 W

End
Lat: 49 ° 33.50 N
Lon: 138 ° 39.98 W

Extra comments:
Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P20 Event #: 66 Ship: Tully UTC Date (dd|mmm|yyyy): 31 | 03 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed √ Pressure	Sal	Nut		TM Uvic	TM IOS	unfilt	Zn	Fe(II)							
1		538	35 40			41	x		x	x	x	x x	x						RAN OUT OF TUBING
2		539	25				x		x	x	x	x √	x						
3		540	10				x		x	x	x	x x	x						
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 3968 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0825	0125
Bottom	0852	0152
End	0917	0217

Positional Information
Start
Lat: 49 ° 33.16 N
Lon: 138 ° 39.89 W

Bottom
Lat: 49 ° 33.12 N
Lon: 138 ° 39.87 W

End
Lat: 49 ° 33.06 N
Lon: 138 ° 39.80 W

Extra comments:
Pumping

Water Properties Group

Rosette Log

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

Cruise ID: 2012-12 Station: P21Event #: 67Ship: TULLYUTC Date (dd mmm yyyy): 31 5 2012

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	CHL	HPLC						Flask Serial #	Value mL · L ⁻¹	
1	1	541	MAX	✓	50		x		xx	xx							
2	2	542	5	✓			x	x	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): H.M.Bottom Depth: 3960 mTransmisso Cleaned: ☒ Y / N

	UTC	Local
Time		
Start	1406	0706
Bottom	1446	0746
End	1523	0823

Positional Information

Start
Lat: 49 ° 38.03 N
Lon: 139 ° 39.97 WBottom
Lat: 49 ° 37.98 N
Lon: 139 ° 39.97 WEnd
Lat: 49 ° 38.02 N
Lon: 139 ° 39.97 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: 2012-12 Station: P22Event #: 70Ship: TullyUTC Date (dd mmm yyyy): 31 May 2012

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken						Oxygen Titrations		Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	CHL	HPLC						Flask Serial #	Value mL · L ⁻¹
1		543	MAX	✓	50		x		xx	xx						
2		544	5	✓	5		x	x	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): DYBottom Depth: 3899 mTransmisso Cleaned: (Y) / N

	UTC	Local
Time		
Start	2002	1302
Bottom	2047	1347
End	2130	1430

Positional Information

Start
Lat: 49 ° 42.00 N
Lon: 140 ° 39.20 WBottom
Lat: 49 ° 42.05 N
Lon: 140 ° 39.99 WEnd
Lat: 49 ° 42.03 N
Lon: 140 ° 39.98 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹Std 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: 2012-12 Station: P23 Event #: 71 Ship: Tully UTC Date (dd/mm/yyyy): 1 June 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ☒ Pressure	HPLC	CHL	Nut	Sal	DIC	pH									
1		545	2000					x	xxx	xxx									
2		546	2000					x	xxx	xxx									
3		547	2000					x	xxx	xxx									
4		548	2000					x	xxx	xxx									
5		549	2000					x	xxx	xxx									
6		550	2000					x											
7		551	2000					x											
8		552	2000					x											
9		553	2000					x											
10		554	2000					x											
11		555	2000					x											
12		556	2000					x											
13		557	2000					x											
14		558	2000					x											
15		559	2000					x											
16		560	2000					x											
17		561	2000					x											
18		562	2000					x											
19		563	2000					x											
20		564	2000					x											
21		565	2000					x											
22		566	2000					x											
23		567	Max	☒	50	xx	xx	x	x										
24		568	5	☒	5	xx	xx	x	x										

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

Watchkeeper(s): DY

Bottom Depth: 4055 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0203	1904
Bottom	0251	1951
End	0331	2031

Positional Information

Start Lat: 49° 46.03 N

Start Lon: 141° 39.88 W

Bottom Lat: 49° 46.01 N

Bottom Lon: 141° 39.98 W

End Lat: 49° 46.00 N

End Lon: 141° 40.02 W

Extra comments:

Calibration cast

Water Properties Group

Rosette Log

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

Cruise ID: 2012-12 Station: P24 Event #: 72 Ship: Tully UTC Date (dd|mmm|yyyy): 1 | 6 | 2012

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken					Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	CHL	HALC	Flask Serial #	Value mL · L ⁻¹	
1		569	MAX	✓ 50		x		xx	xx			
2		570	5	✓		x	x	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): H.M

Bottom Depth: 3989 m

Transmisso Cleaned: (Y) / N

	UTC	Local
Start	<u>0805</u>	<u>0105</u>
Bottom	<u>0833</u>	
End	<u>0857</u>	

Positional Information

Start Lat: 49 ° 50.20 N
Lon: 142 ° 40.04 W

Bottom Lat: 49 ° 50.19 N
Lon: 142 ° 40.00 W

End Lat: 49 ° 50.21 N
Lon: 142 ° 39.98 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

Rosette Log

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

Cruise ID: 2012-12 Station: P25 Event #: 73 Ship: TULLY UTC Date (dd|mmm|yyyy): 1 | 6 | 2012

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	CHL	HPLC				Flask Serial #	Value mL · L ⁻¹	
1		571	2000	✓											} SAL CALIB WATER
2		572	2000	✓											
3		573	2000	✓											
4		574	MAX	50		X		XX	XX						
5		575	5	✓		X	X	XX	XX						
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): H.M.

Bottom Depth: 450 m

Transmisso Cleaned: (Y) / N

	UTC	Local
Time		
Start	1310	0610
Bottom	1347	
End	1423	

Positional Information

Start

Lat: 49 ° 59.99 N

Lon: 143 ° 36.28 W

Bottom

Lat: 50 ° 00.01 N

Lon: 143 ° 36.28 W

End

Lat: 50 ° 00.01 N

Lon: 143 ° 36.28 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: 2012-12 Station: P35Event #: 74Ship: TULLYUTC Date (dd mmm yyyy): 1 6 2012

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments		
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	CHL	HPLC					Flask Serial #		Value mL • L ⁻¹	
1	1	576	MAX	✓	50		x		xx	xx							} water for Nina
2	2	577	5	✓			x	x	xx	xx							
3	3	578	5	✓													
4	4	579	5	✓													
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): H.M.Bottom Depth: 4157 mTransmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1733	1033
Bottom	1809	
End	1845	

Positional Information

Lat:	49 ° 59.98	N
Lon:	144 ° 18.18	W

Start

Bottom

▼

Lat:	49 ° 59.94	N
Lon:	144 ° 18.22	W

End

▼

Lat:	50 ° 00.01	N
Lon:	144 ° 18.19	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: 2012-12 Station: ^{TRAPS-D} P26 Event #: 76 Ship: Tully UTC Date (dd/mm/yyyy): 1 June 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed Pressure	Th	Po										
1		580	500	✓ 501		x										
2		581	500	✓ 501	x											
3		582	400	✓ 401		x										
4		583	300	✓ 299	x											
5		584	300	✓ 299		x										
6		585	200	✓ 200	x											
7		586	200	✓ 200		x										
8		587	150	✓ 150	x											
9		588	150	✓ 150		x										
10		589	100	✓ 100	x											
11		590	100	✓ 100		x										
12		591	75	✓ 75	x											
13		592	75	✓ 75		x										
14		593	50	✓ 50	x											
15		594	50	✓ 50		x										
16		595	30	✓ 30	x											
17		596	30	✓ 30		x										
18		597	20	✓ 20	x											
19		598	20	✓ 20		x										
20		599	10	✓ 10	x											
21		600	10	✓ 10		x										
22		601	0	✓ 1	x											
23		602	Max	✓ 40		x										
24		603	Max	✓ 40	x											

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

Bottom Depth: 4214 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2223	1523
Bottom	2236	1536
End	2257	1557

Positional Information
Start
Lat: 49° 56.552 N
Lon: 144° 51.144 W

Bottom
Lat: 49° 56.540 N
Lon: 144° 51.116 W

End
Lat: 49° 56.55 N
Lon: 144° 51.11 W

Extra comments:
Th+Po cast
O.O.O.

1-15 23 24 16-22

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12

Station: P26

Event #: 78

Ship: Tully

UTC Date (dd mmm/yyyy): 2 June 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials															Comments
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal R	Nut Fr	Nut C	DIC	Alk	pH			FCM	DNA	Gases	WGA			
1		604	Bot-10	✓ 4316	x	x	x	x	x	x	x			x	x	xx	x			
2		605	4000	✓ 4000	x	xx	x	5	xx	x	x			x	x	xx	x			
3		606	3500	✓ 3501	x	x	x	x	x	x	x									
4		607	3000	✓ 3000	x	x	x	x	x	x	x			x	x	xx	x			
5		608	2500	✓ 2499	xx	x	xx	xx	x	x	xx									
6		609	2000	✓ 2002	x	x	x	x	x	x	x			x	x	xx	x			
7		610	1500	✓ 1498	x	x	x	x	x	x	x			x	x	xx	x		Still leaky	
8		611	1250	✓ 1249	x	x	x	x	x	x	x			x	x	xx	x			
9		612	1000	✓ 1000	xx	x	x	5	x	x	x			x	x	xx	x			
10		613	800	✓ 800	x	x	x	x	x	x	x			x	x	xx	x			
11		614	600	✓ 600	x	x	x	5	x	x	x			x	x	xx	x		} Kelly LNSW	
12		615	400	✓ 400	x	x	x	5	x	x	x			x	x	xx	x			
13		616	300	✓ 300	x	x	x	x	x	x	x			x	x	xx	x			
14		617	250	✓ 249	x	x	x	5	x	x	xx									
15		618	200	✓ 200	x	x	x	x	x	x	x			x	x	xx	x			
16		619	175	✓ 174	x	x	xx	xx	x	x	x									
17		620	150	✓ 150	x	x	x	x	x	x	x			x	x	xx	x			
18		621	125	✓ 124	xx	x	x	x	x	x	xx									
19		622	100	✓ 100	x	x	x	x	x	x	x			x	x	xx	x			
20		623	75	✓ 74	x	x	x	x	x	x	x									
21		624	50	✓ 50	x	x	x	x	x	x	x			x	x	xx	x			
22		625	25	✓ 24	x	x	x	x	x	x	x			x	x	xx	x		Top valve leak	
23		626	10	✓ 10	x	x	x	5	x	x	x			x	x	xx	x			
24		627	5	✓ 5	x	x	x	x	x	x	xx								Top valve leak	

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

Bottom Depth:	4253	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	0018	1718
Bottom	0152	1852
End	0350	2050

Positional Information
Lat: 50° 0.01 N
Lon: 144° 59.90 W

Start
Bottom
End

Lat: 50° 0.00 N
Lon: 145° 0.00 W

Lat: 50° 0.01 N
Lon: 144° 59.95 W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P26

Event #:

81

Ship:

Tully

UTC Date (dd|mmm|yyyy):

2 | 6 | 2012

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed	Pressure	FCM	WGA	Gases	RNA	H2S	Sal	Nut	Sal	Oxy	ONAr	Noble	ONAr		Noble
				✓										UW	UW	UW	UW		Uvic
1	1	628	2000	✓		x	x	xx	x	x	x	x							
2	2	629	2000	✓															
3	3	630	2000	✓															
4	8	631	1000	✓		x	x	xx	x	x	x	x							
5	9	632	1000	✓															
6	10	633	1000	✓															
7	11	634	500	✓		x	x	xx	x	x	x	x							
8	12	635	500	✓															
9	13	636	500	✓															
10	15	637	10	✓		x	x	xx	x	x	x	x							
11	16	638	10	✓															
12	17	639	10	✓															
13																			
14																			
15	4	640	2000	✓									x	xx	xx			xx	
16	5	641	1400	✓									x	xx	xx			xx	
17	6	642	1000	✓									x	xx	xx		xx		
18	7	643	1000	✓									x			xx		xx	
19	14	644	500	✓									x	xx	xx			xx	
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	4253	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	0830	0130
Bottom	0901	
End	0938	

Positional Information		
Start	Lat: 50 ° 00.03	N
	Lon: 144 ° 59.96	W

Bottom	Lat: 49 ° 59.96	N
	Lon: 144 ° 59.98	W

End	Lat: 49 ° 59.96	N
	Lon: 144 ° 59.97	W

Extra comments:

UBC cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: Argo Event #: 83 Ship: Tully UTC Date (dd|mmm|yyyy): 2 | 6 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	µPlank	FCM	Chl	HPLC	POP	POC/N	Prod	Nina	Sal	Oxy	ONAr	ONAr		
								Doug					UW	UW	UW	UVic		
1	2	645	1%	✓ 160	x	x	x x x x	x x x x										
2	4	646	1%	✓ 160					xx	xx								
3	7	647	5%	✓ 39		x	x x	x x										
4	8	648	9%	✓ 32	x	x	x x x x	x x x x										
5	9	649	9%	✓ 32					xx	xx								
6	12	650	17%	✓ 23		x	x x	x x										
7	13	651	33%	✓ 15	x	x	x x x x	x x x x										
8	14	652	33%	✓ 15					xx	xx								
9	17	653	55%	✓ 8		x	x x	x x										
10	20	654	100%	✓ 5	x	x	x x x x	x x x x										
11	21	655	100%	✓ 5					xx	xx								
12	5	656	1%	✓ 60							x							
13	6	657	5%	✓ 39							x							
14	10	658	9%	✓ 32							x							
15	11	659	17%	✓ 23							x							
16	15	660	33%	✓ 15							x							
17	18	661	55%	✓ 8							x							
18	22	662	100%	✓ 5							x							
19	23	663	100%	✓ 5								x						
20	24	664	100%	✓ 5								x						
21	1	665	200 15	✓ 200									x	x x				
22	16	666	10	✓ 10									x	x x				
23	19	667	5	✓ 5									x	x x	x x	x x		
24	3	645		✓ 60														

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

Bottom Depth: 4210 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1458	
Bottom	1533	0833
End	1548	

Positional Information

Lat:	49 ° 58.89	N
Lon:	144 ° 47.68	W

Start

Bottom

End

Lat: 49 ° 59.96 N
Lon: 144 ° 47.68 W

Lat: 49 ° 58.91 N
Lon: 144 ° 47.69 W

Extra comments:
Light cast + Float calibration 1

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

~~PA-006~~ PA-006

Event #:

86

Ship:

Tully

UTC Date (dd:mmm:yyyy):

2 June 12

Cruise ID: 2012-12 Station: 124			Rosette Operation		Samples Taken / Sampler's Initials										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ✓ Pressure	DMS	DMSP t	DMSP d	Nut	Chl	HPLC	phyto							
1	1	680	300	✓ 301	x			x										
2	2	681	200	✓ 200	x	x	x	x										
3	3	682	175	✓ 175	x	x	x	x										
4	4	683	100	✓ 100	x	x	x	x	x									
5	5	684	75	✓ 75	x			x	x									
6	6	685	50	✓ 50	x			x	x									
7	8	686	40	✓ 40	x			x	x									
8	10	687	30	✓ 30	x			xx	x									
9	11	688	25	✓ 25	x			x	x									
10	12	689	20	✓ 20	xx	xx	xx	x	x									
11	13	690	15	✓ 15	x			x	x									
12	14	691	10	✓ 10	x			x	x									
13	15	692	5	✓ 5	x	x	x	x	x									
14	17	693	0	✓ 1	x	x	x	x	x									
15	7	694	Max+10	✓ 50					xx	xx								
16	9	695	Max	✓ 40					xx	xx								
17	16	696	5	✓ 5					xx	xx	xxx							
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 4235 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2257	1557
Bottom	2303	1603
End	2324	1624

Positional Information

Lat:	50° 4.62	N
Lon:	144° 54.47	W

Bottom

Lat:	50° 4.60	N
Lon:	144° 54.48	W

End

Lat:	50° 4.65	N
Lon:	144° 54.48	W

Extra comments:
 DMS cast

1-6 15 7 16 8-13 17 14

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

PA-006

Event #: 87

Ship: Tully

UTC Date (dd mmm yyyy): 23 June 12

			Rosette Operation		Samples Taken / Sampler's Initials							Comments							
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ✓ Pressure	Oxy UW	ONAr UW	Sal UW	Alk/DIC UW	DOC UW	O ¹⁷ UW									
1		668	250	✓ 250	xx		x		xx										
2		669	200	✓ 200	xx		x		xx	xx									
3		670	150	✓ 151	xx		x		xx	xx									
4		671	125	✓ 125	xx		x		xx										
5		672	100	✓ 100	xx		x		xx	xx									
6		673	75	✓ 75	xx		x	x	xx										
7		674	50	✓ 50	xx		x	x	xx										
8		675	30	✓ 30	xx		x	x	xx										
9		676	20	✓ 20	xx		x	x	xx										
10		677	10	✓ 10	xx		x	xx	xx										
11		678	5	✓ 5	xx	xx	x	x	xx										
12		679	1	✓ 1	xx	xx	x	x	xx										
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	3423 m
Transmisso Cleaned:	Y / N

Time	UTC	Local
Start	2359	1659
Bottom	0010	1710
End	0031	1731

Positional Information		
Start	Lat: 50 ° 3.56	N
	Lon: 144 ° 54.06	W

Bottom	Lat: 50 ° 3.57	N
	Lon: 144 ° 54.09	W

End	Lat: 50 ° 3.57	N
	Lon: 144 ° 54.08	W

Extra comments:
PA-006 calib cast.

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: Argo Event #: 88 Ship: Tully UTC Date (dd mmm/yyyy): 3 June 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	Sal	Oxy	O ¹⁷										
1		697	1000	✓	1000	x	x x										
2		698	10	✓	10	x	x x										
3		699	5	✓	5	x	x x	x x									
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 4197 m
Transmisso Cleaned: 1 N

Time	UTC	Local
Start	0223	1923
Bottom	0245	1945
End	0306	2006

Positional Information

Lat:	49 ° 58.73	N
Lon:	144 ° 47.60	W

Start

Lat:	49 ° 58.78	N
Lon:	144 ° 47.61	W

Bottom

Lat:	49 ° 58.85	N
Lon:	144 ° 47.73	W

End

Extra comments:
Float calibration 2

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P26

Event #:

89

Ship:

Tully

UTC Date (dd|mmm|yyyy): 3 June 2012

Cruise ID: 2012-12			Station: P26		Event #: 01		Ship: R/V		Comments											
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials															
			Target Pressure	Confirmed ✓ Pressure	Sal UW	Oxy UW	ONAr UW	Noble UW	ONAr Uvic	Noble Uvic										
1		700	3400	✓ 3400	x	xx	xx			xx										
2		701	2700	✓ 2700	x	xx	xx			xx										
3		702	2400	✓ 2400	x	xx	xx		xx											
4		703	2400	✓ 2400	x			xx		xx										
5		704	1700	✓ 1700	x	xx	xx			xx										
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				

http://www.pa

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

Bottom Depth: 4252 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0915	2115
Bottom	0533	2233
End	0647	2347

Positional Information
 Start
 Lat: 50 ° 0.03 N
 Lon: 144 ° 59.95 W

Bottom
 Lat: 50 ° 0.00 N
 Lon: 144 ° 59.98 W

End
 Lat: 49 ° 59.99 N
 Lon: 145 ° 0.00 W

Extra comments:
 ONAr-2 cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P26 Event #: 90 Ship: Tully UTC Date (dd|mmm|yyyy): 3 | 6 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ☒	Pressure	Sal	Nut		TM Uvic	TM IOS	unfilt	Zn	Fe(II)					
1		705	4000			x	x		x	x	x	xx	W					
2		706	3500			x	x		x	x	x	xx	W					
3		707	3000			x	x		x	x	x	xx	W					
4		708	2500			x	x		x	x	x	xx	W					
5		709	2000			x	x		x	x	x	xx	W					
6		710	1900			x	x		x	x	x	xx	W					
7		711	1800				x		x	x	x	xx	W					
8		712	1700				x		xx	x	x	xx	W					
9		713	1600				x		x	x	x	xx	W					
10		714	1500				x		x	x	x	xx	W					
11		715	1400				x		x	x	x	xx	W					
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type: Go FLOS
ROS TRM X-Niskin other?
Watchkeeper(s): CS / HS

Bottom Depth: 4253 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0700	0000
Bottom	0820	
End	1115	

Positional Information

Lat:	49 ° 59.94	N
Lon:	145 ° 00.08	W

▼

Lat:	49 ° 59.99	N
Lon:	145 ° 00.14	W

▼

Lat:	49 ° 59.99	N
Lon:	144 ° 59.99	W

Extra comments:
Go-flos cast 1

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: Argo Event #: 93 Ship: Tully UTC Date (dd|mmm|yyyy): 3 JUN 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target	Confirmed	Sal	Oxy	O ¹⁷									
			Pressure	✓ Pressure	UW	UW	UW									
1		716	10		x	xx										
2		717	5		x	xx										
3		718	5		x	xx	xx									
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): HM

Bottom Depth: 4253 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1246	0546
Bottom	1247	
End	1248	

Positional Information
Start
Lat: 49° 59.74 N
Lon: 144° 51.61 W

Bottom
Lat: 49° 59.74 N
Lon: 144° 51.60 W

End
Lat: 49° 59.75 N
Lon: 144° 51.60 W

Extra comments:
Float calibration 3

Water Properties Group

Rosette Log

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

Cruise ID: 2012-12 Station: PA 005 Event #: 94 Ship: TULLY UTC Date (dd mmm yyyy): 3 6 2012

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy UW	Nut	Sal	Chl a	NH ₄	OMAR	UW SAL	ALK/DIC	O ₁₇		
1	719			5	☒	XX					XX	Y	XX	Y		
2	720			2	☒	XX					XX	X	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): H.A.Bottom Depth: 4210 mTransmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1346	0646
Bottom	1351	
End	1357	

Positional Information

Start
Lat: 50 ° 07.25 N
Lon: 144 ° 47.31 WBottom
Lat: 50 ° 07.21 N
Lon: 144 ° 47.30 WEnd
Lat: 50 ° 07.22 N
Lon: 144 ° 47.30 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹Std 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: 2012-12

Station: P26

Event #: 96

Ship: Tully

UTC Date (dd/mm/yyyy): 03 JUN 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	Sal	Nut		TM Uvic	TM IOS	unfilt	Zn	Fe(II)							
1		721	1200		x	x		x	x	x	xx	x							
2		722	1000		x	x		x	x	x	xx	x							
3		723	800		x	x		x	x	x	xx	x							
4		724	600		x	x		x	x	x	xx	x							
5		725	500		x	x		xx	x	x	xx	x							
6		726	400		x	x		x	xx	xx	xx	x							
7		727	300			x		x	xx	xx	xx	x							
8		728	200			x		x	xx	xx	xx	x							
9		729	150			x		x	xx	xx	xx	x							
10		730	100			x		x	xx	xx	xx	x							
11		731	75			x		xx	xx	xx	xx	x							
12		732	50			x		x	xx	xx	xx	x							
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 4215 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<u>22:19</u>	<u>15:14</u>
Bottom	<u>23:03</u>	<u>16:03</u>
End	<u>00:05</u>	<u>17:05</u>

Positional Information

Start	Lat: <u>50° 00.00'</u>	<u>N</u>
	Lon: <u>144° 59.99'</u>	<u>W</u>

Bottom

	Lat: <u>49° 59.95'</u>	<u>N</u>
	Lon: <u>145° 00.08'</u>	<u>W</u>

End

	Lat: <u>°</u>	<u>N</u>
	Lon: <u>°</u>	<u>W</u>

Extra comments: BOTTLE 3 SENT
MESSENGER@SURFACE. RESTART
Go-flos cast 2 CAST FOR 4-12
2ND MESSENGER 00:26
50° 00.00' ~
149° 59.99' ~

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P26 Event #: 97 Ship: Tully UTC Date (dd|mmm|yyyy): 4 | 6 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments					
			Target Pressure	Confirmed ✓ Pressure	Sal	Nut		TM	TM	unfilt	Zn	Fe(II)								
								Uvic	IOS											
1		733	40 35			---		x	x	✓	x	✓	x x	x						
2		734	25 20			---		x	x	✓	x	✓	x x	x						
3		735	10			---		x	x	✓	x	✓	x x	x						
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
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16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				

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

Bottom Depth: 4220 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0204	19:04
Bottom	0320	20:20
End		

Positional Information

Lat:	50	°	00.00	N
Lon:	144	°	59.88	W

▼

Lat:	°	N
Lon:	°	W

▼

Lat:	49	°	59.99	N
Lon:	149	°	59.94	W

Extra comments:
Pumping

Water Properties Group

Sampling Log 98 Institute of Ocean Sciences, Ocean Sciences Division, Sidney, BC

Cruise ID: 2012-12 Station: P26 Event #: 97 Ship: Tully UTC Date (dd|mmm|yyyy): 4 June 12

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials							Comments						
			Target	Confirmed	Sal	Oxy	ONAr	Noble	ONAr	Noble								
			Pressure	✓ Pressure	UW	UW	UW	UW	Uvic	Uvic								
1		736	Bot-10	✓ 4317	x	xx	xx		xx									
2		737	Bot-10	✓ 4317	x			xx		xx								
3		738	4000	✓ 4000	x	xx	xx			xx								
4		739	3700	✓ 3700	x	xx	xx			xx								
5		740	3000	✓ 3001	x	xx	xx			xx								
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): Dy

Bottom Depth: 4252 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0334	2034
Bottom	0507	2207
End	0643	2343

Positional Information

Lat:	49° 59.98	N
Lon:	144° 59.97	W

▼

Lat:	50° 0.00	N
Lon:	144° 59.98	W

▼

Lat:	50° 0.01	N
Lon:	145° 0.01	W

Extra comments:
ONAr-3 cast

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P26

Event #:

99

Ship:

Tully

UTC Date (dd|mmm|yyyy): 4 | 6 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ☒ Pressure															
1		741	600	☒															
2		742	600	☒															
3		743	600	☒															
4		744	600	☒															
5		745	600	☒															
6		746	500	☒															
7		747	500	☒															
8		748	500	☒															
9		749	500	☒															
10		750	500	☒															
11		751	400	☒															
12		752	400	☒															
13		753	400	☒															
14		754	400	☒															
15		755	400	☒															
16		756	300	☒															
17		757	300	☒															
18		758	300	☒															
19		759	300	☒															
20		760	300	☒															
21		761	200	☒															
22		762	200	☒															
23		763	200	☒															
24																			

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): H. ABottom Depth: 4253 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	11 34	04 34
Bottom	11 40	
End	12 01	

Positional Information
Start
Lat: 49 ° 59.99 N
Lon: 144 ° 59.97 WBottom
Lat: 49 ° 59.99 N
Lon: 145 ° 00.00 WEnd
Lat: 49 ° 59.99 N
Lon: 144 ° 59.99 WExtra comments:
Cs cast #1<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: 2012-12 Station: P26 Event #: 106 Ship: Tully UTC Date (dd|mmm|yyyy): 4 | 6 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	HPLC	CHL	Nut	Sal									
1		764	200	✓													
2		765	200	✓													
3		766	150	✓													
4		767	150	✓													
5		768	150	✓													
6		769	150	✓													
7		770	150	✓													
8		771	100	✓													
9		772	100	✓													
10		773	100	✓													
11		774	100	✓													
12		775	100	✓													
13		776	50	✓													
14		777	50	✓													
15		778	50	✓													
16		779	50	✓													
17		780	50	✓													
18		781	0	✓													
19		782	0	✓													
20		783	0	✓													
21		784	0	✓													
22		785	0	✓													
23																	
24																	

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): H.m

Bottom Depth: 4253 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1240	0540
Bottom	1245	
End	1253	

Positional Information

Start

Lat: 50 ° 00.02 N

Lon: 145 ° 00.03 W

Bottom

Lat: 50 ° 00.02 N

Lon: 145 ° 00.00 W

End

Lat: 50 ° 00.06 N

Lon: 144 ° 59.95 W

Extra comments:

Cs cast #2

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: Argo Event #: 101 Ship: Tully UTC Date (dd|mmm|yyyy): 4 | 6 | 2012

			Rosette Operation			Samples Taken / Sampler's Initials												Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed ✓	Pressure	Sal UW	Oxy UW											
1		786	201000	✓	20	x	x x											
2		787	1510	✓	15	x	x x											
3		788	1015		10	x	x x											
4		810	5		5													
5		811	0		0													
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.7

Bottom Depth: 4215 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1524	0824
Bottom	1525	
End	1529	

Positional Information
 Start
 Lat: 49 ° 57.75 N
 Lon: 144 ° 46.07 W

Bottom
 Lat: 49 ° 57.75 N
 Lon: 144 ° 46.07 W

End
 Lat: 49 ° 57.73 N
 Lon: 144 ° 46.05 W

Extra comments:
 Float calibration 4

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

Traps-R

Event #:

102

Ship:

Tully

UTC Date (dd|mmm|yyyy):

4 | 6 | 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Th	Cs									
1		789	600	☒		x									
2		790	500	☒		x									
3		791	500	☒			x								
4		792	400	☒			x								
5		793	300	☒		x									
6		794	300	☒			x								
7		795	200	☒		x									
8		796	200	☒			x								
9		797	150	☒		x									
10		798	150	☒			x								
11		799	100	☒		x									
12		800	100	☒			x								
13		801	75	☒		x									
14		802	50	☒		x									
15		803	50	☒			x								
16		804	30	☒		x									
17		805	20	☒		x									
18		806	10	☒		x									
19		807	0	☒		x									
20		808	0	☒			x								
21		809	Max	☒	40	x									
22															
23															
24															

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

Bottom Depth:	4134 m
Transmisso Cleaned:	(Y) N

Time	UTC	Local
Start	1633	0933
Bottom	1643	
End	1706	

Positional Information	
Start	Lat: 49 ° 55.16 N
	Lon: 144 ° 34.19 W

Bottom	Lat: 49 ° 55.25 N
	Lon: 144 ° 34.17 W

End	Lat: 49 ° 55.39 N
	Lon: 144 ° 34.05 W

Extra comments:
Th+Cs cast

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P4 Event #: 107 Ship: Tully UTC Date (dd mmm/yyyy): 7 6 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	OXY	Sal	Nut C	Nut Fr	Chl	HPLC							
1		812	Bot-10	✓	1322	x	x	x	x								
2		813	1250	✓		x	xx	x	x								
3		814	1250	✓		x	x	x	x								
4		815	1000	✓		xx	xx	x	x								
5		816	800	✓		x	x	x	x								
6		817	600	✓		x	x	xx	xx								
7		818	400	✓		x	x	x	x								
8		819	300	✓		x	x		x								
9		820	250	✓		x	x		x								
10		821	200	✓		x	x		x								
11		822	175	✓		x	x		x								
12		823	150	✓		xx	x		x								
13		824	125	✓		x	x		x								
14		825	100	✓		x	x		xx								
15		826	75	✓		x	x		x								
16		827	50	✓		x	x		x								
17		828	25	✓		x	x		x								
18		829	10	✓		xx	x		x								
19		830	5	✓		x	x		x								
20		831	Max+10	✓	25					xx	xx						
21		832	Max	✓	13					xx	xx						
22		833	5	✓						xx	xx						
23																	
24																	

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): H.A.

Bottom Depth: 1314 m

Transmisso Cleaned: (Y) 1 N

Time

UTC

Local

Start 15 56 0856

Bottom 16 21

End 17 00

Positional Information

Start

Lat: 48 ° 38.94 N

Lon: 126 ° 39.93 W

Bottom

Lat: 48 ° 38.95 N

Lon: 126 ° 40.03 W

End

Lat: 48 ° 38.94 N

Lon: 126 ° 39.97 W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID:

2012-12

Station:

P4

Event #:

108

Ship:

Tully

UTC Date (dd/mmm/yyyy): 7 05 2012

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments									
			Target Pressure	Confirmed ☒ Pressure	Sal R	Nut Fr	Nut C	TM UVic	TM IOS	unfilt	Zn	Fe (II)												
1		834	1200		x	x	x	x	x	x	xx	x												
2		835	1000		x	x	x	x	x	x	xx	x												
3		836	800		x	x	x	x	x	x	xx	x												
4		837	600		x	x	x	x	x	x	xx	x												
5		838	400			x	x	x	x	x	xx	x												
6		839	200			x		x	x	x	xx	x												
7		840	150			x		x	x	x	xx	x												
8		841	100			x		x	x	x	xx	x												
9		842	75			x		x	x	x	xx	x												
10		843	50			x		x	x	x	xx	x												
11																								
12																								
13																								
14																								
15																								
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								

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

Bottom Depth: 1313 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1705	1005
Bottom	1755	
End		

Positional Information

Lat:	48 ° 38.94	N
Lon:	126 ° 39.97	W

▼

Lat:	48 ° 38.95	N
Lon:	126 ° 39.89	W

▼

Lat:	°	N
Lon:	°	W

Extra comments:
 Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2012-12 Station: P4 Event #: 110 Ship: Tully UTC Date (dd mmm yyyy): 7 05 2012

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ☒	Pressure	Sal R	Nut Fr	Nut C	TM UVic	TM IOS	unfilt	Zn	Fe (II)						
1		844	40						x	x	x	xx	x						
2		845	25						x	x	x	xx	x						
3		846	10						x	x	x	xx	x						
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 used for depth

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

Bottom Depth: 1313 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1836	1136
Bottom		
End		

Positional Information

Lat:	°	N
Lon:	°	W

▼

Lat:	48 ° 38.95 N
Lon:	126 ° 39.89 W

▼

Lat:	°	N
Lon:	°	W

Extra comments:
Pump