

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: Haro 59

Event #: 3

Ship: Tully

UTC Date (dd/mm/yyyy): 11/2/2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	DIC	Oxy	Nut-fr	Sal	pH		Nd					
1	1	1	Bot-10	✓ 214	x	x	x		x							
2	4	2	200	✓ 201	xx	x	x		x							
3	5	3	175	✓ 175	x	x	x		xxx							
4	6	4	150	✓ 151	x	x	x		x							
5	8	5	125	✓ 125	x	xx	x		x							
6	9	6	100	✓ 99	x	x	x		x							
7	12	7	80	✓ 80	xx	x	xx		x							
8	14	8	60	✓ 60	x	x	x		x							
9	15	9	50	✓ 49	x	x	x		x							
10	17	10	40	✓ 40	x	x	x		x							
11	18	11	30	✓ 29	x	x	x		x							
12	19	12	20	✓ 20	x	x	x		x							
13	20	13	10	✓ 10	xx	x	x		xxx							
14	21	14	5	✓ 5	x	xx	x		x							
15	24	15	0	✓ 0.4	x	x	x		x							
16	2	16	Bot-10	✓ 214							x					
17	3	17	Bot-10	✓ 214							x					
18	7	18	150	✓ 151							x					
19	10	19	100	✓ 99							x					
20	11	20	100	✓ 99							x					
21	13	21	75	✓ 75							x					
22	16	22	50	✓ 49							x					
23	22	23	5	✓ 5							x					
24	23	24	5	✓ 5							x					

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

Bottom Depth: 225 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0519	2119
Bottom	0524	
End	0542	

Positional Information

Lat:	48° 36.80	N
Lon:	123° 14.62	W

Bottom

Lat:	48° 36.80	N
Lon:	123° 14.62	W

End

Lat:	48° 36.77	N
Lon:	123° 14.76	W

Extra comments:
Debby and Roger
OUT-OF-ORDER
1; 16-17; 24; 18; 8-6; 19-20; 7; 21
8-9; 22; 10-14; 23-24; 15

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: JF2 Event #: 5 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	DIC	Oxy	Nut-fr	Sal	pH	Chl	HPLC		Cr					
				✓	KS	mb/KS			GC									
1	1	25	Bot-10	✓	177	x	x	x	x				x					
2	2	26	150	✓	150	xx	x	x	x									
3	5	27	125	✓	125	x	x	x	xxx									
4	6	28	100	✓	100	x	x	x	x									
5	9	29	80	✓	80	x	xx	x	x									
6	10	30	60	✓	60	xx	x	x	x									
7	13	31	50	✓	50	x	x	xx	x									
8	14	32	40	✓	40	x	x	x	x									
9	17	33	30	✓	30	x	x	x	x	xx	xx							
10	18	34	20	✓	20	xx	x	x	x									
11	21	35	10	✓	10	x	x	x	xxx									
12	22	36	5	✓	5	x	x	x	x	xx	xx							
13	24	37	0	✓	0	x	x	x	x									
14	3	38	150	✓	150								x					
15	4	39	125	✓	125								x					
16	7	40	100	✓	100								x					
17	8	41	80	✓	80								x					
18	11	42	60	✓	60								x					
19	12	43	50	✓	50								x					
20	15	44	40	✓	40								x					
21	16	45	30	✓	30								x					
22	19	46	20	✓	20								x					
23	20	47	10	✓	10								x					
24	23	48	5	✓	5								x					

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

Watchkeeper(s): MB

Bottom Depth: 187 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1112	0312
Bottom	1116	
End	1132	

Positional Information

Start

Lat: 48 ° 18 01 N

Lon: 124 ° 00 14 W

Bottom

Lat: 48 ° 18 00 N

Lon: 124 ° 00 46 W

End

Lat: 48 ° 18 00 N

Lon: 124 ° 00 14 W

Extra comments:

Debby and Roger

1-2; 14-15; 3-4; 16-17; 5-6; 18-19

7-8; 20-21; 9-10; 22-23; 11-12;

24; 13

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P1 Event #: 10 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	Nut-F	Sal	Chl	HPLC	DIC	Oxy	pH	Bsi	Nd						
1	1	49	Bot-10	<input checked="" type="checkbox"/>	116	X				xx	xx	xxx							
2	2	50	30	<input checked="" type="checkbox"/>	29	X		xx	xx	x	x	x							
3	3	51	5	<input checked="" type="checkbox"/>	5	X	x	xx	xx	x	x	x							No water left (no idea why)
4																			-no Nut, 1/2 of 2nd HPLC from 5m Bottle
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23	4	-	5	<input checked="" type="checkbox"/>	5														no sample fire to check spigot
24																			

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): MB

Bottom Depth:	118	m
Transmissio Cleaned:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

Time	UTC	Local
Start	19:21	11:21
Bottom	19:24	
End	19:28	

Start	Lat:	48 ° 34 54	N
	Lon:	125 ° 30 13	W
Bottom	Lat:	48 ° 34 55	N
	Lon:	125 ° 30 14	W
End	Lat:	48 ° 34 58	N
	Lon:	125 ° 30 18	W

Extra comments:
Fire bottle 23 to test spigot/vent which may be leaky. -very slight leak

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

Cruise ID: 2015-01 Station: P2 Event #: 16 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH		Céline						
1	1	96	Bot-10	✓ 106	x x	x				x	x		x					
2	2	97	100	✓	x	x				x	x		x					
3	3	98	75	✓	x	x				x x	x							
4	4	99	75	✓	x	x				x	x							
5	5	100	50	✓	x	x				x	x x x		x					
6	6	101	25	✓	x	x x				x	x		x					
7	7	102	10	✓	x	x				x	x		x					
8	8	103	5	✓	x	x		x		x	x							
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 115 m
Transmisso Cleaned: 0 / N

Time	UTC	Local
Start	2320	1520
Bottom	2324	
End	2334	

Positional Information

Lat:	48° 26.01	N
Lon:	125° 59.97	W

Start

Bottom

End

Lat: 48° 36.00 N
Lon: 125° 59.95 W

Lat: 48° 36.01 N
Lon: 125° 59.97 W

Extra comments:
Deep cast + Céline

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P2 Event #: 12 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure			Nd								
1		52	Bot-10	✓	107			x							
2		53	Bot-10	✓				x							
3		54	Bot-10	✓				x							
4		55	Bot-10	✓				x							
5		56	100	✓	100			x							
6		57	100	✓				x							
7		58	100	✓				x							
8		59	100	✓				x							
9		60	75	✓	75			x							
10		61	75	✓				x							
11		62	75	✓				x							
12		63	75	✓				x							
13		64	50	✓	50			x							← Fired early
14		65	50	✓				x							
15		66	50	✓				x							
16		67	50	✓				x							
17		68	25	✓	26			x							
18		69	25	✓				x							
19		70	25	✓				x							
20		71	25	✓				x							
21		72	5	✓	5			x							
22		73	5	✓				x							
23		74	5	✓				x							
24		75	5	✓				x							

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): DY MS

Bottom Depth:	115	m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

Time	UTC	Local
Start	2138	1338
Bottom	2140	
End	2149	

Positional Information
Start
Lat: 48 ° 36.08 N
Lon: 125 ° 59.96 W

Start

Bottom

Lat: 48 ° 36.07 N
Lon: 126 ° 0.03 W

End

Lat: 48 ° 36.07 N
Lon: 126 ° 0.05 W

Extra comments:
Maureen's cast for Nd

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P2 Event #: 15 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC		Cr						
1		76	100	✓		x	x	x	x x	x								
2		77	75	✓		x			x	x								
3		78	50	✓		x			x	x								
4		79	40	✓		x			x	x								
5		80	30	✓		x			x	x								
6		81	25	✓		x			x	x x								
7		82	20	✓		x x	x x	x x	x	x								
8		83	15	✓		x			x	x								
9		84	10	✓		x			x	x								
10		85	5	✓		x	x	x	x	x								
11		86	0	✓		x	x	x	x	x								
12		87	30	✓					x x	x x								
13		88	15	✓					x x	x x								
14		89	5	✓					x x	x x								
15		90	Bot-10	✓	106							x						
16		91	100	✓								x						
17		92	75	✓								x						
18		93	50	✓								x						
19		94	25	✓								x						
20		95	5	✓								x						
21																		
22																		
23																		
24																		

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

Bottom Depth:	117	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	2228	1428
Bottom	2231	
End	2245	

Positional Information	
Start	Lat: 48° 36.05' N Lon: 125° 59.97' W

Bottom	Lat: 48° 36.05' N Lon: 125° 59.98' W
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End	Lat: 48° 36.04' N Lon: 126° 0.01' W
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Extra comments:
DMS + Kohen cast; out-of-order
15 - 16 - 1 - 2 - 17 - 18 - 3 - 4 - 5
12 - 6 - 19 - 7 - 8 - 13 - 9 - 10 - 14
20 - 11

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

Cruise ID: 2015-01 Station: P3 Event #: 18 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC		Nd								
1		104	Bot-10	✓	772						x							
2		105	Bot-10	✓	772						x							
3		106	625	✓	-626						x							
4		107	625	✓	-625						x							
5		108	525	✓	525						x							
6		109	525	✓	525						x							
7		110	425	✓	425						x							
8		111	425	✓	425						x							
9		112	375	✓	478						x							
10		113	375	✓	475						x							
11		114	300	✓	300						x							
12		115	300	✓	300						x							
13		116	225	✓	226						x							
14		117	225	✓	226						x							
15		118	175	✓	175						x							
16		119	175	✓	174						x							
17		120	100	✓	101						x							
18		121	100	✓	101						x							
19		122	50	✓	53						x							
20		123	50	✓	52						x							
21		124	5	✓	5						x							
22		125	5	✓	5						x							
23		126	30	✓	30	x		xx	xx									
24		127	5	✓	6	x	x	xx	xx									

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

Bottom Depth: 807 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0111	1711
Bottom	0130	
End	0201	

Positional Information

Lat:	48° 37.53	N
Lon:	126° 20.02	W

Bottom

Lat:	48° 37.67	N
Lon:	126° 20.23	W

End

Lat:	48° 37.69	N
Lon:	126° 20.09	W

Extra comments:
OUT-OF-ORDER
1 - 20; 23 - 24; 21 - 22

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P4 Event #: 20 Ship: Tully UTC Date (dd/mm/yyyy): 12/2/2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓ Pressure		Cs												
1		128	150	✓	152		x											
2		129	150	✓			x											
3		130	150	✓			x											
4		131	150	✓			x											
5		132	150	✓			x											
6		133	150	✓			x											
7		134	100	✓	102		x											
8		135	100	✓			x											
9		136	100	✓			x											
10		137	100	✓			x											
11		138	100	✓			x											
12		139	100	✓			x											
13		140	50	✓	51		x											
14		141	50	✓			x											
15		142	50	✓			x											
16		143	50	✓			x											
17		144	50	✓			x											
18		145	50	✓			x											
19		146	0	✓	2		x											
20		147	0	✓			x											
21		148	0	✓			x											
22		149	0	✓			x											
23		150	0	✓			x											
24		151	0	✓			x											

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): <u>2Y</u>

Bottom Depth:	<u>1310</u>	m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

Time	UTC	Local
Start	<u>0351</u>	<u>1951</u>
Bottom	<u>0354</u>	
End	<u>0403</u>	

Positional Information	
Start	
Lat: <u>48° 39.01</u>	N
Lon: <u>126° 39.97</u>	W

Bottom	
Lat: <u>48° 39.01</u>	N
Lon: <u>126° 39.96</u>	W

End	
Lat: <u>48° 39.01</u>	N
Lon: <u>126° 39.96</u>	W

Extra comments:
<u>Shallow Cesium cast</u>

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P4 Event #: 21 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure		UBC		Cs									
1		152	Bot-10	✓	1319		x										
2		153	Bot-10	✓													
3		154	Bot-10	✓													
4		155	Bot-10	✓													
5		156	1000	✓	1001		x										
6		157	1000	✓													
7		158	1000	✓													
8		159	1000	✓													
9		160	500	✓	501		x										
10		161	500	✓													
11		162	500	✓													
12		163	500	✓													
13		164	10	✓	10		x										
14		165	10	✓													
15		166	10	✓													
16		167	10	✓													
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 1310 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0437	2037
Bottom	0459	
End	0527	

Positional Information

Lat:	48 ° 39.01	N
Lon:	126 ° 39.99	W

Start

Bottom

Lat:	48 ° 39.01	N
Lon:	126 ° 39.99	W

End

Lat:	48 ° 39.01	N
Lon:	126 ° 40.00	W

Extra comments:

Sam

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P4 Event #: 22 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure											
					TM	TM									
					E.I	UN									KS D.Y
1		168		40	x	x									
2		169		90	x	x									
3		170		100	xx	xx									
4		171		5											
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? Pump
Watchkeeper(s): KS. D.Y.

Bottom Depth: 1312 m
Transmisso Cleaned: Y + N

Time	UTC	Local
Start	0612	22:04
Bottom		
End	0704	23:04

Positional Information
Start
Lat: 48 ° 39.01 N
Lon: 126 ° 39.99 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: 48 ° 39.01 N
Lon: 126 ° 39.99 W

Extra comments:
TM pumping

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P4 Event #: 25 Ship: Tully UTC Date (dd/mmm/yyyy): 12 FEB 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure		Plastics									
1	1	172	Bot-10	✓	1319		x								
2	2	173	1200	✓	1202		x								
3	3	174	1100	✓	1100		x								
4	4	175	1000	✓	1000		x								
5	5	176	900	✓	900		x								
6	6	177	800	✓	800		x								
7	7	178	700	✓	700		x								
8	8	179	600	✓	600		x								
9	9	180	500	✓	500		x								
10	10	181	450	✓	450		x								
11	11	182	400	✓	400		x								
12	12	183	350	✓	350		x								
13	13	184	300	✓	300		x								
14	14	185	250	✓	250		x								
15	15	186	200	✓	200		x								
16	16	187	175	✓	175		x								
17	17	188	150	✓	150		x								
18	18	189	125	✓	125		x								
19	19	190	100	✓	101		x								
20	20	191	75	✓	76		x								
21	21	192	50	✓	51		x								
22	22	193	25	✓	26		x								
23	23	194	10	✓	10		x								
24	24	195	5	✓	5		x								

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

Bottom Depth: 1319 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0905	0105
Bottom	0927	
End	1007	

Positional Information

Lat:	48 ° 39 02	N
Lon:	126 ° 39 99	W

Start

Lat:	48 ° 39 02	N
Lon:	126 ° 39 99	W

Bottom

Lat:	48 ° 39 02	N
Lon:	126 ° 40 00	W

End

Extra comments:
Plastics cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P4 Event #: 26 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure		C		Cr							
1	1	196	Bot-10	✓ 1319		x									
2	3	197	1250	✓ 1250		x		x							
3	4	198	1000	✓ 1000		x									
4	7	199	800	✓ 800		x									
5	8	200	600	✓ 600		x									
6	11	201	400	✓ 400		x									
7	12	202	300	✓ 300		x		x							
8	13	203	250	✓ 250		x		x							
9	14	204	200	✓ 200		x		x							
10	15	205	175	✓ 175		x		x							
11	16	206	150	✓ 150		x		x							
12	17	207	125	✓ 125		x		x							
13	18	208	100	✓ 100		x		x							
14	19	209	75	✓ 75		x		x							
15	20	210	50	✓ 50		x		x							
16	21	211	25	✓ 25		x		x							
17	22	212	10	✓ 10		x		x							
18	23	213	5	✓ 5		x		x							
19	2	214	Bot-10	✓ 1320				x							
20	5	215	1000	✓ 1000				x							
21	6	216	800	✓ 800				x							
22	9	217	600	✓ 600				x							
23	10	218	400	✓ 400				x							
24															

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

Bottom Depth: 1310 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	10:49	2:49
Bottom	11:10	
End	11:49	

Positional Information

Start	Lat: 48 ° 39 02 N
	Lon: 126 ° 40 00 W

Bottom

	Lat: 48 ° 39 02 N
	Lon: 126 ° 40 00 W

End

	Lat: 48 ° 39 02 N
	Lon: 126 ° 40 01 W

Extra comments:
Céline + Kohen
Bot 10 order!
1, 19, 2, 3, 20, 21, 4, 5, 22, 23,
6, 7 → 18

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P6 Event #: 28 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC							
1	1	280	2000	✓ 2007											Water for CW
2	2	281	250	✓ 249											NH4 water
3	3	282	30	✓	x		x x	x x							
4	4	283	5	/	x	x	x x	x x							
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 2540 m
 Transmisso Cleaned: (Y) / N

	UTC	Local
Time Start	1725	0925
Bottom	1757	
End	1834	

Positional Information
 Start
 Lat: 48° 44.66 N
 Lon: 127° 40 15 W

Bottom
 Lat: 48° 44.66 N
 Lon: 127° 40.15 W

End
 Lat: 48° 44.66 N
 Lon: 127° 40.15 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P7 Event #: 29 Ship: Tully UTC Date (dd|mmm|yyyy): 12|2|2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC							
1	1	284	30	✓ 30	x		x x	x x							
2	2	285	5	✓ 5	x	x	x x	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): 29

Bottom Depth: 2501 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2111	1311
Bottom	2144	
End	2216	

Positional Information
Start
Lat: 48° 46.61' N
Lon: 128° 10.05' W

Bottom
Lat: 48° 46.60' N
Lon: 128° 10.10' W

End
Lat: 48° 46.61' N
Lon: 128° 9.96' W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P8 Event #: 30 Ship: Tully UTC Date (dd/mmm/yyyy): 13/2/2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut Fr	Nut C	pH	Chl	HPLC		Céline						
1		286	2000	✓		x x	x x	x	x										
2		287	1500	✓		x	x	x	x					x					
3		288	1250	✓		x	x	x x	x x										
4		289	1000	✓	1001	x	x x	x	x					x					
5		290	800	✓		x	x	x	x										
6		291	600	✓		x		x	x					x					
7		292	400	✓		x		x	x										
8		293	300	✓		x		x											
9		294	250	✓		x x		x											DIDN'T CLOSE
10		295	200	✓	198	x		x						x					
11		296	175	✓		x		x											
12		297	150	✓		x		x x											
13		298	125	✓		x		x											
14		299	100	✓		x		x			x			x					
15		300	75	✓		x		x			x								
16		301	50	✓		x		x			x								
17		302	25	✓		x x		x			x								
18		303	10	✓		x		x			x								
19		304	5	✓		x	x	x			x								
20		305	50	✓							x x	x x							
21		306	20	✓							x x	x x							
22		307	5	✓							x x	x x							
23																			
24																			

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

Bottom Depth:	3362	m
Transmisso Cleaned:	Y / N	

Time	UTC	Local
Start	0035	1635
Bottom	0109	
End	0203	

Positional Information
Start
Lat: 48° 48.96 N
Lon: 128° 39.95 W

Bottom
Lat: 48° 48.95 N
Lon: 128° 39.95 W

End
Lat: 48° 48.98 N
Lon: 128° 40.07 W

Extra comments:
Firing out of order
1 - 16; 20; 17; 21; 18 - 19; 22

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P9

Event #: 34

Ship: Tully

UTC Date (dd|mmm|yyyy): 13 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓	Pressure	Nut-F	Sal	Chl	HPLC							
1	2	308	50	✓	50	x		x x	x x							
2	3	309	5	✓	5	x	x	x x	x x							
3																
4																
5																
6																
7																
8																
9	1	NA	2005	✓	2005	-----										← Test fired ⓐ 2005 m
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Profile type:
<input checked="" type="radio"/> ROS <input type="radio"/> TRM <input type="radio"/> X-Niskin <input type="radio"/> other?
Watchkeeper(s): DY

Bottom Depth:	2514	m
Transmisso Cleaned:	<input checked="" type="radio"/> Y <input type="radio"/> N	

Time	UTC	Local
Start	0620	2220
Bottom	0653	
End	0729	

Positional Information
Start
Lat: 48 ° 51.40 N
Lon: 129 ° 10.00 W

Bottom
Lat: 48 ° 51.38 N
Lon: 129 ° 9.98 W

End
Lat: 48 ° 51.34 N
Lon: 129 ° 10.03 W

Extra comments:
9-1-2

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P10

Event #: 36

Ship: Tully

UTC Date (dd|mmm|yyyy): 13 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC		Cs								
1	1	310	300	✓	200						x							
2	2	311	300	✓	↓						x							
3	3	312	300	✓	↓						x							
4	4	313	300	✓	↓						x							
5	5	314	300	✓	↓						x							
6	6	315	300	✓	↓						x							
7	7	316	150	✓	151						x							
8	8	317	150	✓	↓						x							
9	9	318	150	✓	↓						x							
10	10	319	150	✓	↓						x							
11	11	320	150	✓	↓						x							
12	12	321	150	✓	↓						x							
13	13	322	50	✓	51						x							
14	14	323	50	✓	↓						x							
15	15	324	50	✓	↓						x							
16	16	325	50	✓	↓						x							
17	17	326	50	✓	↓						x							
18	18	327	50	✓	↓	x		x x	x x		x							
19	19	328	5	✓	5						x							
20	20	329	5	✓	↓						x							
21	21	330	5	✓	↓						x							
22	22	331	5	✓	↓						x							
23	23	332	5	✓	↓						x							
24	24	333	5	✓	↓	x	x	x x	x x		x							

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): MB

Bottom Depth:	2640 m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N

Time	UTC	Local
Start	10:21	2:21
Bottom	10:54	
End	11:32	

Positional Information
Start
Lat: 48 ° 53 62 N
Lon: 129 ° 40 04 W

Bottom
Lat: 48 ° 53 62 N
Lon: 129 ° 40 08 W

End
Lat: 48 ° 53 63 N
Lon: 129 ° 40 07 W

Extra comments:
Cs Sampling + IOS Sampling

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P11 Event #: 37 Ship: Tully UTC Date (dd|mmm|yyyy): 13 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC								
1	1	334	50	✓ 50	x		x x	x x								
2	2	335	5	✓	x	x	x x	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): MB

Bottom Depth: 2752 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	14 11	06 11
Bottom	14 44	
End	15 16	

Positional Information

Start	Lat: 48 ° 56 01 N
	Lon: 130 ° 10 07 W

Bottom

	Lat: 48 ° 56 02 N
	Lon: 130 ° 10 04 W

End

	Lat: 48 ° 56 03 N
	Lon: 130 ° 10 06 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P12 Event #: 38 Ship: Tully UTC Date (dd|mmm|yyyy): 13 | 02 | 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	TM	TM									
					filt	un-filt									
1		336	40	<input checked="" type="checkbox"/>	x	x									
2		337	20	<input checked="" type="checkbox"/>	x	x									
3		338	10	<input checked="" type="checkbox"/>	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: TM PUMP
ROS TRM X-Niskin other?
Watchkeeper(s): K.S. M.B.

Bottom Depth: 3453 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<u>18:02</u>	<u>10:02</u>
Bottom	<u>18:05</u>	<u>10:05</u>
End	<u>18:53</u>	<u>10:53</u>

Positional Information
Start
Lat: 48° 58.1467 N
Lon: 130° 39.9127 W

Bottom
Lat: 48° 58.1470 N
Lon: 130° 39.9068 W

End
Lat: 48° 58.1467 N
Lon: 130° 39.9111 W

Extra comments:
TM pumping

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P12 Event #: 39 Ship: Tully UTC Date (dd|mmm|yyyy): 13|02|15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	TM	TM	Sal	Nut-Fr								
1		339	200	150	x	x	x	x								
2		340	150	125	x	x										
3		341	100	75	xx	xx										
4		342	75	50	x	x										
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Profile type:
ROS TRM ☒ X-Niskin other?
Watchkeeper(s): KS 14.13

Bottom Depth: 3753 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1905	
Bottom	1926	
End	2020	

Positional Information

Lat:	48 ° 58.15	N
Lon:	130 ° 39.91	W

Bottom

Lat:	48 ° 58.14	N
Lon:	130 ° 39.91	W

End

Lat:	48 ° 58.13	N
Lon:	130 ° 39.90	W

Extra comments:
TM Shallow Go-flos
Refine 125m
Winch = Broken

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P12 Event #: 40 Ship: Tully UTC Date (dd|mmm|yyyy): 13 FEB 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH					Sam UBC	Gases UBC		
					24	24	NR	NR	KS/MB	GLW								
1		343	Bot-10	✓	3271	x		x	x	x	x				x	XXXX		
2		344	3000	✓		x	xx	x	x	xx	x							
3		345	3000	✓		x	x	x	x	x	x				x	XXXX		
4		346	2500	✓		xx	xx	x	x	x	xxx							
5		347	2000	✓		x	x	xx	xx	x	x				x	XXXX		
6		348	1500	✓		x	x	x	x	x	x				x	XXXX		
7		349	1250	✓		x	x	x	x	x	x				x	XXXX		
8		350	1000	✓		xx	xx	x	x	x	x				x	XXXX		
9		351	800	✓		x		x	x	x	x				x	XXXX		
10		352	600	✓		x		x	x	x	x				x	XXXX		
11		353	400	✓		x		x	x	x	x				x	XXXX		
12		354	300	✓		x		x		x	x				x	XXXX		
13		355	250	✓		xx		x		x	x							
14		356	200	✓		x		x		x	x				x	XXXX		
15		357	175	✓		x		x		x	xxx							
16		358	150	✓		x		x		x	x				x	XXXX		
17		359	125	✓		x		x		x	x							
18		360	100	✓		x		xx		x	x				x	XXXX		
19		361	75	✓		xx		x		x	x							
20		362	50	✓		x		x		x	x				x	XXXX		
21		363	25	✓		x		x		x	x				x	XXXX		
22		364	10	✓		x		x		x	x				x	XXXX		
23		365	5	✓		x	x	x		x	x							
24																		

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

Bottom Depth: 3232 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2132	1332
Bottom	2226	
End	2338	

Positional Information
Start
Lat: 48 ° 58.18 N
Lon: 130 ° 39.86 W

Bottom
Lat: 48 ° 58.21 N
Lon: 130 ° 39.86 W

End
Lat: 48 ° 58.21 N
Lon: 130 ° 39.99 W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P12

Event #: 41

Ship: Tully

UTC Date (dd|mmm|yyyy): 14 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC		Céline		
					MR	IMA	d	MA	MR	MR	IF	MR			PAR ON
1		370	300	✓ 300	x			x							
2		371	200	✓	x	x	x	x							
3		372	175	✓	x	x	x	x							
4		373	100	✓	x	x	x	x		x					
5		374	75	✓	x			x		x					
6		375	50	✓	x			x		x x	x x				
7		376	40	✓	x			x		x					
8		377	30	✓	x			x		x					
9		378	25	✓	x			x		x					
10		379	20	✓		x x	x x	x x	x	x x	x x				
11		380	15	✓	x			x		x					
12		381	10	✓	x			x x		x					
13		382	5	✓	x	x	x	x		x x	x x				
14		383	0		x	x	x	x		x					
15		384	200	✓									x		
16		385	175	✓									x		
17		386	150	✓									x		
18		387	125	✓									x		
19		388	100	✓									x		
20		389	75	✓									x		
21		390	50	✓									x		
22		391	25	✓									x		
23		392	10	✓									x		
24		393	5	✓									x		

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

Bottom Depth: 3232 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0101	1701
Bottom	0107	
End	0125	

Positional Information

Lat:	48° 58.21	N
Lon:	130° 39.99	W

Start

Lat:	48° 58.21	N
Lon:	130° 39.99	W

Bottom

Lat:	48° 58.21	N
Lon:	130° 39.99	W

End

Lat:	48° 58.21	N
Lon:	130° 39.99	W

Extra comments:
DMS cast - OUT-OF-ORDER
1 - 2; 15 - 16; 3; 17 - 19; 4 - 5; 20-21;
6 - 9; 22; 10 - 12; 23 - 24; 13- 14

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P12

Event #: 42

Ship: Tully

UTC Date (dd|mmm|yyyy): 14 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure		TM filt	TM un-filt	Sal	Nut-Fr								
1		366	800			x	x	x	x					went very well			
2		367	800 400	600		x	x										
3		368	400 200	400		xx	xx										
4		369	200 200			x	x										
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:	ROS	TRM	<input checked="" type="checkbox"/> Niskin	other?
Watchkeeper(s):	K.S. R.N.			

Bottom Depth:	3233	m
Transmisso Cleaned:	Y	<input checked="" type="checkbox"/> N

Time	UTC	Local
Start	02:45	5:45
Bottom	02:10	6:10
End	02:42	6:42

Positional Information	
Start	Lat: 48 ° 58 20 N Lon: 130 ° 39 99 W
Bottom	Lat: 48 ° 58 . 20 N Lon: 130 ° 39 . 99 W
End	Lat: 48 ° 58 . 21 N Lon: 130 ° 39 . 99 W

Extra comments:
TM Deep Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P12 Event #: 46 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure		Sam		Céline							
1		394	Bot-10	✓	3273			x							
2		395	3000	✓	3000			x							
3		396	2500	✓	2501			x							
4		397	2000	✓				x							
5		398	1500	✓	1502			x							
6		399	1250	✓	1250			x							
7		400	1000	✓	1000			x							Bottom cap leaky
8		401	800	✓	800			x							
9		402	600	✓				x							
10		403	400	✓	400			x							
11		404	300	✓	300			x							
12		405	250	✓	249			x							
13		406	2000	✓			x								
14		407	2000	✓											
15		408	2000	✓											
16		409	1000	✓			x								
17		410	1000	✓											
18		411	1000	✓											
19		412	500	✓			x								
20		413	500	✓											
21		414	500	✓											
22		415	10	✓			x								
23		416	10	✓											
24		417	10	✓											

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): DY

Bottom Depth:	3234 m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N

Time	UTC	Local
Start	0445	2045
Bottom	0541	
End	0650	

Positional Information	
Start	Lat: 48 ° 58.21 N
	Lon: 130 ° 39.98 W

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

End	Lat: 48 ° 58.21 N
	Lon: 130 ° 39.99 W

Extra comments:
Sam + Céline
OUT-OF-ORDER
1 - 4; 13 - 15; 5 - 7; 16 - 18; 8 - 9;
19 - 21; 10 - 12; 22 - 24

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P13

Event #: 48

Ship: Tully

UTC Date (dd|mmm|yyyy): 11 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC									
1	1	418	50	✓	51	x		x x	x x								
2	2	419	5	✓	5	x	x	x x	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): MB

Bottom Depth:	3033	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	11 26	03:26
Bottom	11 59	
End	12 31	

Positional Information
Lat: 49 ° 2 60 N
Lon: 131 ° 39 92 W

Bottom
Lat: 49 ° 2 59 N
Lon: 131 ° 39 93 W

End
Lat: 49 ° 2 59 N
Lon: 131 ° 39 98 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P14 Event #: 49 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC		Nd								
				✓														
1	1	420	Bot-10	✓	3359						x							p:3358 S:3316 all 8
2	2	421	Bot-10	✓	3359						x							
3	3	422	3000	✓	3000						x							
4	4	423	3000	✓	3000						x							
5	5	424	2500	✓	2500						x							
6	6	425	2500	✓	2500						x							
7	7	426	2000	✓	2000						x							
8	8	427	2000	✓	2000						x							
9	9	428	1500	✓	1500						x							
10	10	429	1500	✓	1500						x							
11	11	430	1000	✓	1000						x							
12	12	431	1000	✓	1000						x							
13	13	432	800	✓	800						x							
14	14	433	800	✓	800						x							
15	15	434	600	✓	600						x							
16	16	435	600	✓	600						x							
17	17	436	400	✓	400						x							
18	18	437	400	✓	400						x							
19	19	438	200	✓	200						x							
20	20	439	200	✓	200						x							
21	21	440	50	✓	50						x							
22	22	441	50	✓	50						x							
23	23	442	50	✓	50	x		x x	x x									
24	24	443	5	✓	5	x	x	x x	x x									

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

Bottom Depth: 3317 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1713	
Bottom	1809	
End	1912	

Positional Information

Lat:	49 ° 7 40	N
Lon:	132 ° 39 94	W

Start

Lat:	49 ° 7 40	N
Lon:	132 ° 39 94	W

Bottom

Lat:	49 ° 7 40	N
Lon:	132 ° 39 94	W

End

Lat:	49 ° 7 40	N
Lon:	132 ° 39 94	W

Extra comments:
Cast + Maureen
+ IOS Sampling

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P15 Event #: 51 Ship: Tully UTC Date (dd|mmm|yyyy): 14 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC								
1	1	444	50	✓ 50	x		x x	x x								
2	2	445	5	✓	x	x	x x	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):

Bottom Depth: 3406 m
 Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2327	1527
Bottom	2359	
End	0036	

Positional Information

Lat:	49 ° 12.00	N
Lon:	133 ° 40.00	W

Start

Lat:	49 ° 12.01	N
Lon:	133 ° 40.07	W

Bottom

Lat:	49 ° 12.02	N
Lon:	133 ° 40.01	W

End

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P16

Event #: 52

Ship: Tully

UTC Date (dd|mmm|yyyy): 15 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed Pressure		Cs												
1		446	150	✓	149		x											
2		447	150	✓			x											
3		448	150	✓			x											
4		449	150	✓			x											
5		450	150	✓			x											
6		451	150	✓			x											
7		452	100	✓	100		x											
8		453	100	✓			x											
9		454	100	✓			x											
10		455	100	✓			x											
11		456	100	✓			x											
12		457	100	✓			x											
13		458	50	✓	50		x											
14		459	50	✓			x											
15		460	50	✓			x											
16		461	50	✓			x											
17		462	50	✓			x											
18		463	50	✓			x											
19		464	0	✓	2		x											
20		465	0	✓			x											
21		466	0	✓			x											
22		467	0	✓			x											
23		468	0	✓			x											
24		469	0	✓			x											

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): DY

Bottom Depth:	3200	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	0504	2104
Bottom	508	
End	0515	

Positional Information	
Start	Lat: 49° 17.00 N
	Lon: 134° 40.02 W

Bottom	Lat: 49° 17.00 N
	Lon: 134° 40.02 W

End	Lat: 49° 17.00 N
	Lon: 134° 40.02 W

Extra comments:
Shallow Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P16

Event #: 53

Ship: Tully

UTC Date (dd|mmm|yyyy): 15 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments					
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC							
					MR	t MA	d MA	Celine		Ludwig	Glen							
1		470	300	✓ 300	x			x										
2		471	200	✓ 201	x	x	x	x										
3		472	175	✓ 176	x	x	x	x										
4		473	100	✓ 100	x	x	x	x		x								
5		474	75	✓ 75	x			x		x								
6		475	50	✓ 50	x			x		xx	xx							
7		476	40	✓ 40	x			x		x								
8		477	30	✓ 30	x			x		x								
9		478	25	✓ 25	x			x		x								
10		479	20	✓ 21	xx	xx	xx	x		xx	xx							
11		480	15	✓ 14	x			x		x								
12		481	10	✓ 10	x			xx		x								
13		482	5	✓ 5	x	x	x	x		xx	xx							
14		483	0	✓ 1	x	x	x	x		x								
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3200 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0538	2138
Bottom	0544	
End	0602	

Positional Information
Start
Lat: 49° 17.01' N
Lon: 134° 40.01' W

Bottom
Lat: 49° 17.01' N
Lon: 134° 40.01' W

End
Lat: 49° 17.01' N
Lon: 134° 40.01' W

Extra comments:
DMS cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P16 Event #: 54 Ship: Tully UTC Date (dd|mmm|yyyy): 15 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH			Gases	UBC	Céline				
					MBK	K	MB	MB	KJ	CC									
1		484	Bot-10	✓	3683	x		x	x	x	x		xxxx	x					
2		485	3500	✓	3500	x	x	x	x	xx	x								
3		486	3500	✓	3500	x	x	x	x	x	xxx								
4		487	3000	✓	2999	x	xx	x	x	x	x		xxxx	x					
5		488	2500	✓	2499	xx	x	x	x	x	x								
6		489	2000	✓	2000	x	xx	x	x	x	x		xxxx	x					
7		490	1500	✓	1500	x	x	x	x	x	x		xxxx	x	x				
8		491	1250	✓	1250	x	xx	xx	xx	x	x		xxxx	x					
9		492	1000	✓	1000	x	x	x	x	x	x		xxxx	x	x				
10		493	800	✓	800	x		x	x	x	x		xxxx	x					
11		494	600	✓	600	x		x	x	x	x		xxxx	x	x				
12		495	400	✓	400	x		x	x	x	x		xxxx	x					
13		496	300	✓	300	xx		x		x	x		xxxx	x					
14		497	250	✓	250	x		x		x	xxx								
15		498	200	✓	200	x		x		x	x		xxxx	x	x				
16		499	175	✓	175	xx		x		x	x								
17		500	150	✓	150	x		x		x	x		xxxx	x					
18		501	125	✓	125	x		x		x	x								
19		502	100	✓	100	x		x		x	x		xxxx	x	x				
20		503	75	✓	75	xx		x		x	x								
21		504	50	✓	50	x		xx		x	x		xxxx	x					
22		505	25	✓	25	x		x		x	x		xxxx	x					
23		506	10	✓	10	x		x		x	x		xxxx	x					
24		507	5	✓	5	x	x	x		x	x								

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

Bottom Depth: 2320 3633 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0632	2232
Bottom	0733	
End	0853	

Positional Information

Lat:	49 ° 17.01	N
Lon:	134 ° 40.00	W

Start

Lat:	49 ° 17.01	N
Lon:	134 ° 40.01	W

Bottom

Lat:	49 ° 17.01	N
Lon:	134 ° 40.01	W

End

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P16 Event #: 56 Ship: Tully UTC Date (dd|mmm|yyyy): 15 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed <input checked="" type="checkbox"/>	Pressure	TM	TM											
1		508	40			x	x											
2		509	20			xx	xx											
3		510	10			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: TM Pump
ROS TRM X-Niskin (other?)
Watchkeeper(s): KS

Bottom Depth: 3633 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1014	
Bottom	1030	
End	1126	

Positional Information
Start
Lat: 49° 17.01 N
Lon: 134° 40.00 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: 49° 17.01 N
Lon: 134° 40.01 W

Extra comments:
TM pumping

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P16 Event #: 57 Ship: Tully UTC Date (dd mmm yyyy): 15 Oct 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed <input checked="" type="checkbox"/>	Pressure	TM filt	TM un-filt	Sal	Nut-Fr									
1		511	150			x	x	x	x									
2		512	125			xx	xx											
3		513	75			x	x											
4		514	50			x	x											
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3632 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	11:34	
Bottom		
End	12:05	

Positional Information
Start
Lat: 49 ° 17 . 01 N
Lon: 134 ° 40 . 01 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: 49 ° 17 . 01 N
Lon: 134 ° 40 . 01 W

Extra comments:
TM Shallow Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P16

Event #: 59

Ship: Tully

UTC Date (dd mmm yyyy): 15 02 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments								
			Target Pressure	Confirmed Pressure	TM	TM	Sal	Nut-Fr									
					filt	un-filt											
1		515	800		x	x	x	x									
2		516	600		xx	xx											
3		517	400		x	x											
4		518	200		x	x											
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:
ROS TRM <input checked="" type="checkbox"/> Niskin other?
Watchkeeper(s): K.S MB

Bottom Depth:	3633	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	13:19	0519
Bottom	13:50	
End	14:27	

Positional Information	
Start	Lat: 49 ° 17.01 N
	Lon: 134 ° 40.01 W

Bottom	Lat: 49 ° 17.01 N
	Lon: 134 ° 40.01 W

End	Lat: 49 ° 17.01 N
	Lon: 134 ° 40.01 W

Extra comments:
TM Deep Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P16

Event #: 60

Ship: Tully

UTC Date (dd|mmm|yyyy): 15 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed Pressure	Cs													
1		519	500	✓	500		x											
2		520	500	✓			x											
3		521	500	✓			x											
4		522	500	✓			x											
5		523	500	✓			x											
6		524	500	✓			x											
7		525	400	✓	400		x											
8		526	400	✓			x											
9		527	400	✓			x											
10		528	400	✓			x											
11		529	400	✓			x											
12		530	400	✓			x											
13		531	300	✓	300		x											
14		532	300	✓			x											
15		533	300	✓			x											
16		534	300	✓			x											
17		535	300	✓			x											
18		536	300	✓			x											
19		537	200	✓	200		x											
20		538	200	✓			x											
21		539	200	✓			x											
22		540	200	✓			x											
23		541	200	✓			x											
24		542	200	✓			x											

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

Bottom Depth:	3633	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	14:35	06:35
Bottom	14:43	
End	14:55	

Positional Information
Start
Lat: 49 ° 17 01 N
Lon: 134 ° 40 01 W

Bottom
Lat: 49 ° 17 01 N
Lon: 134 ° 40 01 W

End
Lat: 49 ° 17 01 N
Lon: 134 ° 40 01 W

Extra comments:
Deep Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P17

Event #: 63

Ship: Tully

UTC Date (dd|mmm|yyyy): 15 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC		Nd							
1	1	543	Bot-10	✓	3763						x						P = 3763 D = 3698 S = 3701 A = 9.5
2	2	544	Bot-10	✓	3763						x						
3	3	545	3000	✓	3000						x						paused @ 3125 steering trouble
4	4	546	3000	✓	3000						x						
5	5	547	2500	✓	2501						x						
6	6	548	2500	✓	2501						x						
7	7	549	2000	✓	2001						x						
8	8	550	2000	✓	2000						x						
9	9	551	1500	✓	1500						x						
10	10	552	1500	✓	1500						x						
11	11	553	1000	✓	1001						x						
12	12	554	1000	✓	1001						x						
13	13	555	800	✓	801						x						
14	14	556	800	✓	801						x						
15	15	557	600	✓	600						x						
16	16	558	600	✓	600						x						
17	17	559	400	✓	400						x						
18	18	560	400	✓	400						x						
19	19	561	200	✓	201						x						
20	20	562	200	✓	201						x						
21	21	563	50	✓	50						x						
22	22	564	50	✓	50						x						
23	23	565	50	✓	50	x		xx	xx								
24	24	566	5	✓	5	x	x	xx	xx								

Profile type:	<input checked="" type="checkbox"/> ROS	<input type="checkbox"/> TRM	<input type="checkbox"/> X-Niskin	<input type="checkbox"/> other?
Watchkeeper(s):	MR/DY			

Bottom Depth:	3657	m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

Time	UTC	Local
Start	18:59	10:59
Bottom	2003	
End	2124	

Positional Information	
Start	Lat: 49 ° 21 01 N Lon: 135 ° 40 13 W

Bottom	Lat: 49 ° 20.95 N
	Lon: 135 ° 40.17 W

End	Lat: 49 ° 20.95 N
	Lon: 135 ° 40.22 W

Extra comments:
Cast + Maureen

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P18 Event #: 64 Ship: Tully UTC Date (dd/mmm/yyyy): 16/2/2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	Nut-F	Sal	Chl	HPLC									
1	1	567	50	✓ 50	x		xx	xx									
2	2	568	5	✓ 6	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																	

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

Watchkeeper(s): DY

Bottom Depth: 3832 m

Transmisso Cleaned: Y / ☒ N

Time UTC Local

Start 0238 1838

Bottom 0313

End 0346

Positional Information

Start Lat: 49° 26.03' N

Lon: 136° 40.04' W

Bottom Lat: 49° 25.95' N

Lon: 136° 39.87' W

End Lat: 49° 25.07' N

Lon: 136° 39.82' W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P19 Event #: 65/66 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC								
24	1	569	50	✓ 50	x		x x	x x					Test line bottle 1 when computer crashed (~120m) not sure if it dated use bottles 2+3 for samples			
32	2	570	5	✓ ~5	x	x	x x	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): MB

Bottom Depth: 3928 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	10:11	02:11
Bottom	10:45	
End	11:39	

Positional Information

Lat:	49 ° 29 99	N
Lon:	137 ° 40 11	W

Start

Lat:	49 ° 29 95	N
Lon:	137 ° 40 16	W

Bottom

Lat:	49 ° 29 92	N
Lon:	137 ° 40 10	W

End

Extra comments:
used bottles 2+3

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P20

Event #: 67

Ship: Tully

UTC Date (dd|mmm|yyyy): 16 FEB 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments					
			Target Pressure	Confirmed Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH			Gases	UBC	Céline	Cr iso		
				✓	07/AS				MR/AN	62			51/16					
1		571	Bot-10	✓	4025	x		x	x	x			xx	x		x		p=4025 D=3930 S=3966 A=11.5
2		572	3500	✓	3500	x	x	x	xx	x			xx					
3		573	3500	✓	3500	x	x	x	x	xxx						x		
4		574	3000	✓	3000	x	xx	x	x	x			xx	x				
5		575	2500	✓	2501	xx	x	x	x	x			xx			x		
6		576	2000	✓	2001	x	xx	x	x	x			xx	x				
7		577	1500	✓	1500	x	x	x	x	x			xx	x	x	x		
8		578	1250	✓	1250	x	x	xx	xx	x	x		xx	x		x		
9		579	1000	✓	1000	x	xx	x	x	x			xx	x	x			
10		580	800	✓	800	x	x	x	x	x			xx	x		x		
11		581	600	✓	600	x	x	x	x	x			xx	x	x			
12		582	400	✓	401	x	x	x	x	x			xx	x		x		
13		583	300	✓	300	xx	x	x		x	x		xx	x				
14		584	250	✓	252	x	x	x		x	xxx					x		
15		585	200	✓	201	x	x	x		x	x		xx	x	x			
16		586	175	✓	175	x	x	x		x	x					x		
17		587	150	✓	150	xx	x	x		x	x		xx	x				
18		588	125	✓	125	x	x	x		x	x					x		
19		589	100	✓	100	x	x	x		x	x		xx	x	x			
20		590	75	✓	75	x	x	x		x	x					x		
21		591	50	✓	51	x	x	xx		x	x		xx	x				
22		592	25	✓	25	x	x	x		x	x		xx	x		x		
23		593	10	✓	10	xx	x	x		x	x		xx	x				
24		594	5	✓	5	x	x	x		x	x							

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

Bottom Depth: 3966 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	18 20	10 20
Bottom	19 26	
End	20 52	

Positional Information

Lat:	49 ° 34 06	N
Lon:	138 ° 40 07	W

Start

Bottom

Lat:	49 ° 34 06	N
Lon:	138 ° 40 07	W

End

Lat:	49 ° 34.06	N
Lon:	138 ° 40.07	W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P20

Event #: 68

Ship: Tully

UTC Date (dd|mmm|yyyy): 16 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	TM	TM											
1		595	40	<input checked="" type="checkbox"/>	x x	x x											
2		596	20	<input checked="" type="checkbox"/>	x	x											
3		597	10	<input checked="" type="checkbox"/>	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? ☒ Pump

Watchkeeper(s): K.S. D.V.

Bottom Depth: 3965 m

Transmisso Cleaned: Y I N

Time	UTC	Local
Start	2110	
Bottom	2245	
End	2245	

Positional Information

Start

Lat: 49 ° 35.0 N

Lon: 138 ° 40.0 W

Bottom

Lat: ° N

Lon: ° W

End

Lat: 49 ° 34.00 N

Lon: 138 ° 40.06 W

Extra comments:

TM pumping

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P20

Event #: 69

Ship: Tully

UTC Date (dd|mmm|yyyy): 16 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments									
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	TM filt	TM un-filt	Sal	Nut-Fr										
1		598	150	✓ 175	x x	x x	x	x										
2		599	125		x	x												
3		600	75	✓	x	x												
4		601	50	✓	x	x												
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:	ROS	TRM	<input checked="" type="checkbox"/> Niskin	other?
Watchkeeper(s):	KS. DY			

Bottom Depth:	3965	m
Transmisso Cleaned:	Y / N	

Time	UTC	Local
Start	2249	
Bottom	2259	1405
End	2310	

Positional Information		
Start	Lat: 49 ° 33.99	N
	Lon: 138 ° 40.06	W

Bottom	Lat: 49 ° 33.98	N
	Lon: 138 ° 40.06	W

End	Lat: 49 ° 33.99	N
	Lon: 138 ° 40.07	W

Extra comments:
TM Shallow Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P20

Event #: 70

Ship: Tully

UTC Date (dd|mmm|yyyy): 16 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC						
				✓			t	d									
1		602	300	✓	300	x			x								SPIGOT LEAKING - LOTS OF BUBBLES - NOT CLOSED
2		603	200	✓	200	x	x	x	x								
3		604	175	✓	177	x	x	x	x								
4		605	100	✓	100	x	x	x	x		x						
5		606	75	✓	75	x			x		x						
6		607	50	✓	50	x			x		xx	xx					
7		608	40	✓	38	x			x		x						
8		609	30	✓	31	x			x		x						
9		610	25	✓	24	x			x		x						
10		611	20	✓	19	xx	xx	xx	x		xx	xx					
11		612	15	✓	15	x			x		x						
12		613	10	✓	10	x			xx		x						
13		614	5	✓	5	x	x	x	x		xx	xx					
14		615	0	✓	1	x	x	x	x		x						NISKIN NOT CLOSED
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): DY

Bottom Depth: 3695 m

Transmisso Cleaned: Y / N

Time UTC Local

Start 2323 1523

Bottom 2328

End 2346

Positional Information

Lat: 48° 33.99 N

Lon: 138° 40.14 W

Lat: 48° 33.92 N

Lon: 138° 40.16 W

Lat: 48° 33.93 N

Lon: 138° 40.16 W

Extra comments:

DMS cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P20

Event #: 73

Ship: Tully

UTC Date (dd/mm/yyyy): 17 / 2 / 15

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	Pressure	TM	TM	Sal	Nut-Fr										
			Pressure	✓		Pressure	filt	un-filt											
1		616	800			x x	x x	x	x										
2		617	600			x	x												
3		618	400			x	x												
4		619	200			x	x												
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	3964	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	0130	5:54 PM
Bottom	0158	
End	0230	

Positional Information
Start
Lat: 49° 33.86 N
Lon: 138° 40.17 W

Bottom
Lat: 49° 33.88 N
Lon: 138° 40.18 W

End
Lat: 49° 33.88 N
Lon: 138° 40.18 W

Extra comments:
TM Deep Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P21

Event #: 76

Ship: Tully

UTC Date (dd|mmm|yyyy): 17 | 2 | 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC		Cs								
1	1	620	300	✓	300						x							
2	2	621	300	✓							x							
3	3	622	300	✓							x							
4	4	623	300	✓							x							
5	5	624	300	✓							x							
6	6	625	300	✓							x							
7	7	626	150	✓	150						x							
8	8	627	150	✓							x							
9	9	628	150	✓							x							
10	10	629	150	✓							x							
11	11	630	150	✓							x							
12	12	631	150	✓							x							
13	13	632	50	✓	50						x							
14	14	633	50	✓							x							
15	15	634	50	✓							x							
16	16	635	50	✓							x							
17	17	636	50	✓							x							
18	18	637	50	✓		x		xx	xx		x							
19	19	638	5	✓	5						x							
20	20	639	5	✓							x							
21	21	640	5	✓							x							
22	22	641	5	✓							x							
23	23	642	5	✓							x							
24	24	643	5	✓		x	x	xx	xx		x							

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

Bottom Depth: 3959 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0612	2212
Bottom	0646	
End	0723	

Positional Information

Lat:	49 ° 37.98	N
Lon:	139 ° 40.05	W

Start

Lat:	49 ° 38.00	N
Lon:	139 ° 39.96	W

Bottom

Lat:	49 ° 39.02	N
Lon:	139 ° 40.05	W

End

Extra comments:
Cast + Cesium

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P22 Event #: 78 Ship: Tully UTC Date (dd|mmm|yyyy): 17 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	Nut-C						
1	1	644	600	✓ 601	x				x						Nutrients water
2	2	645	50	✓ 49	x		x x	x x							
3	3	646	5	✓ 4	x	x	x x	x x							
4	4	647	5	✓ 4	x				x						Nutrients water
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): MR

Bottom Depth:	3893	m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

Time	UTC	Local
Start	1058	0258
Bottom	1131	
End	1207	

Positional Information		
Start	Lat: 49 ° 42 05 N	
	Lon: 140 ° 39 95 W	

Bottom	Lat: 49 ° 42 05 N
	Lon: 140 ° 39 94 W

End	Lat: 49 ° 42 05 N
	Lon: 140 ° 39 90 W

Extra comments:
Not Daily Cal water for 2015

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P23

Event #: 80

Ship: Tully

UTC Date (dd|mmm|yyyy): 17 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	DIC	pH								
				✓														
1	1	648	2005	✓		x			x x x	x x x								
2	2	649	2005	✓		x			x x x	x x x								
3	3	650	2005	✓		x			x x x	x x x								
4	4	651	2005	✓		x			x x x	x x x								
5	5	652	2005	✓		x			x x x	x x x								
6	6	653	2005	✓		x												
7	7	654	2005	✓		x												
8	8	655	2005	✓		x												
9	9	656	2005	✓		x												
10	10	657	2005	✓		x												
11	11	658	2005	✓		x												
12	12	659	2005	✓		x												
13	13	660	2005	✓		x												
14	14	661	2005	✓		x												
15	15	662	2005	✓		x												
16	16	663	2005	✓		x												
17	17	664	2005	✓		x												
18	18	665	2005	✓		x												
19	19	666	2005	✓		x												
20	20	667	2005	✓		x												
21	21	668	2005	✓		x												
22	22	669	2005	✓		x												
23	23	670	50	✓		x	x	x x	x x									
24	24	671	5	✓		x	x	x x	x x									

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

Bottom Depth: 4050 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1546	0746
Bottom	1619	
End	1652	

Positional Information

Lat:	49 ° 46 02	N
Lon:	141 ° 40 03	W

Bottom

Lat:	49 ° 45 98	N
Lon:	141 ° 39 99	W

End

Lat:	49 ° 46 01	N
Lon:	141 ° 39 83	W

Extra comments:
Calibration cast
plus water for Sarah Z

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P24

Event #: 81

Ship: Tully

UTC Date (dd|mmm|yyyy): 17 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments									
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	Nut-F	Sal	Chl	HPLC										
1	1	672	50	<input checked="" type="checkbox"/> 51	x		xx	xx										
2	2	673	5	<input checked="" type="checkbox"/> 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																		

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

Bottom Depth: 3987 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2038	1238
Bottom	2111	
End	2146	

Positional Information

Lat:	49 ° 50.27	N
Lon:	142 ° 40.09	W

▼

Lat:	49 ° 50.39	N
Lon:	142 ° 40.09	W

▼

Lat:	49 ° 50.36	N
Lon:	142 ° 40.24	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P25 Event #: 84 Ship: Tully UTC Date (dd|mmm|yyyy): 18|2|15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC								
1	1	674	50	✓ 50	x		x x	x x								
2	2	675	5	✓ 5	x	x	x x	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: 4148 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0155	1755
Bottom	0228	
End	0301	

Positional Information

Lat:	49 ° 59.97	N
Lon:	143 ° 36.30	W

Start

Lat:	50 ° 0.01	N
Lon:	143 ° 36.39	W

Bottom

Lat:	50 ° 0.03	N
Lon:	143 ° 36.57	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P35

Event #:

85

Ship: Tully

UTC Date (dd/mmm/yyyy): 18 / 2 / 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments							
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC												
1	1	676	50	✓ 50	x		xx	xx												
2	2	677	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																				

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): JY

Bottom Depth: 4.50 m

Transmisso Cleaned: ④ / N

Time UTC Local

Start 0612 2212

Bottom 0645

End 0719

Positional Information

Start Lat: 49° 59.88' N

Lon: 144° 18.26' W

Bottom Lat: 49° 59.84' N

Lon: 144° 18.27' W

End Lat: 49° 59.86' N

Lon: 144° 18.30' W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 86 Ship: Tully UTC Date (dd|mmm|yyyy): 18 FEB 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed ✓ Pressure				Plastics										
1	1	678	Bot-10	✓	4315				x									
2	2	679	4000	✓	4100				x									
3	3	680	3500	✓	3500				x									
4	4	681	3000	✓	3000				x									
5	5	682	2500	✓	2500				x									
6	6	683	2000	✓	2000				x									
7	7	684	1500	✓	1500				x									
8	8	685	1250	✓	1250				x									
9	9	686	1000	✓	1000				x									
10	10	687	800	✓	800				x									
11	11	688	600	✓	599				x									
12	12	689	400	✓	400				x									
13	13	690	300	✓	300				x									
14	14	691	250	✓	251				x									
15	15	692	200	✓	200				x									
16	16	693	175	✓	176				x									
17	17	694	150	✓	150				x									
18	18	695	125	✓	125				x									
19	19	696	100	✓	100				x									
20	20	697	75	✓	75				x									
21	21	698	50	✓	50				x									
22	22	699	25	✓	25				x									
23	23	700	10	✓	10				x									
24	24	701	5	✓	4				x									

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

Bottom Depth:	420	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	1019	0219
Bottom	1130	
End	1257	

Positional Information
Start
Lat: 49 ° 59 99 N
Lon: 144 ° 59 96 W

Bottom
Lat: 49 ° 59 99 N
Lon: 144 ° 59 98 W

End
Lat: 49 ° 59 99 N
Lon: 144 ° 59 98 W

Extra comments: - no one doing laundry.
Plastics cast
Note: Took a control sample; left a chemical sieve out while sampling, then washed into a scint. vial after using sprayer.

- Took another control with the spray water only.

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 87 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Cs										
1		702	500	✓ 500	x										
2		703	500	✓	x										
3		704	500	✓	x										
4		705	500	✓	x										
5		706	500	✓	x										
6		707	500	✓	x										
7		708	400	✓ 400	x										
8		709	400	✓	x										
9		710	400	✓	x										
10		711	400	✓	x										
11		712	400	✓	x										
12		713	400	✓	x										
13		714	300	✓ 299	x										
14		715	300	✓	x										
15		716	300	✓	x										
16		717	300	✓	x										
17		718	300	✓	x										
18		719	300	✓	x										
19		720	200	✓ 200	x										
20		721	200	✓	x										
21		722	200	✓	x										
22		723	200	✓	x										
23		724	200	✓	x										
24		725	200	✓	x										

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

Bottom Depth:	4251	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	1326	0526
Bottom	1334	
End	1347	

Positional Information
Start
Lat: 49 ° 59 99 N
Lon: 144 ° 59 99 W

Bottom
Lat: 49 ° 59 99 N
Lon: 144 ° 59 99 W

End
Lat: 49 ° 59 99 N
Lon: 144 ° 59 99 W

Extra comments:
Deep Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 88 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed <input type="checkbox"/>	Pressure			Cr											
1		726	1000					x											
2		727	750					x											
3		728	500					x											
4		729	150					x											
5		730	100					x											
6		731	50					x											
7		732	5					x											
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type: In-situ Pump
ROS TRM X-Niskin other?
Watchkeeper(s): MR / M

Bottom Depth: 4250 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1403	0603
Bottom	1444	0644
End	1730	0930

Positional Information

Lat:	45 ° 59 99	N
Lon:	144 ° 59 99	W

Start

Lat:	49 ° 59 99	N
Lon:	144 ° 59 99	W

Bottom

Lat:	49 ° 59 99	N
Lon:	144 ° 59 99	W

End

Lat:	49 ° 59 99	N
Lon:	144 ° 59 99	W

Extra comments:
UBC in-situ pumps to 1000 m

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 89 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nd	REE									
1		740	1000	✓ 1000	x	x									4.2
2		741	1000	✓ ↓	x	x									4.0 <i>rusty looking on 4.0</i>
3		742	800	✓ 800	x	x									4.2
4		743	800	✓ ↓	x	x									4.1
5		744	600	✓ 600	x	x									4.5
6		745	600	✓ ↓	x	x									4.5
7		746	400	✓ 400	x	x									4.7
8		747	400	✓ ↓	x	x									4.7
9		748	200	✓ 200	x	x									4.9
10		749	200	✓ ↓	x	x									4.9
11		750	50	✓ 51	x	x									7.7
12		751	50	✓ ↓	x	x									7.8
13		752	5	✓ 5	x	x									7.9
14		753	5	✓ ↓	x	x									7.9
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Profile type:
<input checked="" type="checkbox"/> ROS <input type="checkbox"/> TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): MB

Bottom Depth:	4251	m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	

Time	UTC	Local
Start	18:15	10:15
Bottom	18:37	
End	18:54	

Positional Information				
Lat:	49	°	59	99 N
Lon:	145	°	0	02 W

▼				
Lat:	49	°	59	98 N
Lon:	145	°	0	01 W

▼				
Lat:	49	°	59	99 N
Lon:	144	°	59	99 W

Extra comments:
Maureen's cast for Nd and REE

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P26

Event #: 98

Ship: Tully

UTC Date (dd|mmm|yyyy): 18 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	TM	TM											
1		733	40	✓	x x	x x											
2		734	20	✓	x	x											
3		735	10	✓	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? *TRM*
Watchkeeper(s): *K.S.*

Bottom Depth: 4250 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	19:05	11:08
Bottom		11:25
End	19:56	11:56

Positional Information

Start
Lat: 49 ° 59.99 N
Lon: 145 ° 00.00 W

Bottom
Lat: 49 ° 59.99 N
Lon: 145 ° 00.00 W

End
Lat: 49 ° 59.99 N
Lon: 145 ° 00.00 W

Extra comments:

TM pumping

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P26

Event #: 91

Ship: Tully

UTC Date (dd|mmm|yyyy): 18 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments					
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC	Phyto						
1		754	300	✓ 300	x			x										
2		755	200	✓ 200	x	x	x	x x										
3		756	175	✓ 175	x	x	x	x										
4		757	100	✓ 102	x	x	x	x		x								
5		758	75	✓ 75	x			x		x								
6		759	50	✓ 50	x			x		x x	x x							
7		760	40	✓ 40	x			x		x								
8		761	30	✓ 31	x			x		x								
9		762	25	✓ 25	x			x		x								
10		763	20	✓ 20	x x	x x	x x	x		x x	x x							
11		764	15	✓ 14	x			x		x								
12		765	10	✓ 10	x			x		x								
13		766	5	✓ 5	x	x	x	x		x x	x x	x x x						
14		767	0	✓ 2	x	x	x	x		x								
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 425.2 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2150	1350
Bottom	2155	
End	2213	

Positional Information

Start	Lat: 50 ° 0.01	N
	Lon: 144 ° 59.98	W

Bottom

Lat: 50 ° 0.00	N
Lon: 144 ° 59.98	W

End

Lat: 49 ° 59.99	N
Lon: 144 ° 59.99	W

Extra comments:
DMS cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 92 Ship: Tully UTC Date (dd|mmm|yyyy): 18|02|2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	TM	TM									
					filt	un-filt									
1		839	40	40											
2		839	UBC	25L	XXX										
3		839	UBC	10L	XXX										
4		839	UBC	250ml	XX										
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): KS

Bottom Depth: 4250 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	19:56	11:56
Bottom		
End	21:08	13:08

Positional Information

Lat:	49 ° 59.99	N
Lon:	145 ° 00.00	W

Start

Lat:	°	N
Lon:	°	W

Bottom

Lat:	°	N
Lon:	°	W

End

Lat:	49 ° 59.99	N
Lon:	145 ° 00.01	W

Extra comments:
TM pumping for UBC

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P26

Event #: 93

Ship: Tully

UTC Date (dd|mmm|yyyy): 18|2|2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										D.Y.				Comments
			Target	Confirmed	OXY	Sal	Nut-F	Nut-C	DIC	Alk	pH		Nut	Sam	Gases				
			Pressure	✓ Pressure	DY	LH	Cam	CM	MR/IN	KS/BJ	GC		250	Sam	LF/SK				
1	1	768	Bot-10	✓	4316	x		xx	x	x	x	x			x	xx			
2	2	769	4000	✓	3999	xx	xx	xx	x	x	x	x		x	x	xx			
3	3	770	3500	✓	3500	x	x	xx	x	xx	x	x		x		xx			
4	4	771	3000	✓	3001	x	x	xx	x	x	x	x		x	x	xx			
5	5	772	2500	✓	2501	x	x	xx	x	x	x	xxx		x		xx			
6	6	773	2000	✓	2001	x	xx	xx	x	x	x	x		x	x	xx			
7	7	774	1500	✓	1500	x	x	xx	x	x	x	x		x	x	xx			
8	8	775	1250	✓	1250	xx	x	xx	x	x	x	x		x	x	xx			
9	9	776	1000	✓	1000	x	x	xx	x	x	x	x		x	x	xx			
10	10	777	800	✓	801	x		xxxx	xx	x	x	x			x	xx			
11	11	778	600	✓	601	x		xx	x	x	x	x			x	xx			
12	12	779	400	✓	400	x		xx	x	x	x	x			x	xx			
13	13	780	300	✓	300	x		xx		x	x	x			x	xx			
14	14	781	250	✓	251	xx		xx		x	x	x							
15	15	782	200	✓	200	x		xx		x	x	x			x	xx			
16	16	783	175	✓	175	x		xxxx		x	x	x							
17	17	784	150	✓	150	x		xx		x	x	x			x	xx			
18	18	785	125	✓	125	xx		xx		x	x	x							
19	19	786	100	✓	100	x		xx		x	x	x			x	xx			
20	20	787	75	✓	76	x		xx		x	x	xxx							
21	21	788	50	✓	57	x		xx		x	x	x			x	xx			
22	22	789	25	✓	25	x		xx		x	x	x			x	xx			
23	23	790	10	✓	10	x		xx		x	x	x			x	xx			
24	24	791	5	✓	5	x	x	xx		x	x	x							

Profile type:
<input checked="" type="checkbox"/> ROS-TRM <input type="checkbox"/> X-Niskin <input type="checkbox"/> other?
Watchkeeper(s): DY

Bottom Depth:	4252 m
Transmisso Cleaned:	<input checked="" type="checkbox"/> Y / <input type="checkbox"/> N

Time	UTC	Local
Start	2248	1448
Bottom	0004	
End	0136	

Positional Information
Start
Lat: 49 ° 59.99 N
Lon: 144 ° 59.99 W

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

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

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 94 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	Cr														
			Pressure	√															Pressure
1		792	3500					x											
2		793	3000					x											
3		794	2750					x											
4		795	2500					x											
5		796	2000					x											
6		797	1750					x											
7		798	1500					x											
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type: In-situ pumps
ROS TRM X-Niskin other?
Watchkeeper(s):

Bottom Depth: 4252 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0145	
Bottom	0307	
End	0644	

Positional Information
Start
Lat: 49 ° 59.99 N
Lon: 145 ° 00.00 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: ° N
Lon: ° W

Extra comments:
UBC in-situ pumps to 3500 m

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 95 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed ✓ Pressure			Sam											
1		799	2000	✓	2000			x										
2		800	2000	✓				x										
3		801	2000	✓				x										
4		802	2000	✓				x										
5		803	1000	✓	1000			x										
6		804	1000	✓				x										
7		805	1000	✓				x										
8		806	1000	✓				x										
9		807	500	✓	500			x										
10		808	500	✓				x										
11		809	500	✓				x										
12		810	500	✓				x										
13		811	10	✓	10			x										
14		812	10	✓				x										
15		813	10	✓				x										
16		814	10	✓				x										
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	0654	2254
Bottom	0727	
End	0803	

Positional Information

Start Lat: 49 ° 59.99 N

Start Lon: 145 ° 0.00 W

Bottom Lat: 49 ° 59.99 N

Bottom Lon: 145 ° 0.00 W

End Lat: 49 ° 59.99 N

End Lon: 144 ° 59.99 W

Extra comments:

Sam's cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 98 Ship: Tully UTC Date (dd|mmm|yyyy): 19 Feb 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Céline	Cr Iso	Cr Sp								
1	1	815	Bot-10	✓ 415	x	x	x								
2	2	816	4000	✓ 4000	x	x	x								
3	3	817	3500	✓ 3500	x	x	x								
4	4	818	3000	✓ 3000	x	x	x								
5	5	819	2500	✓ 2500	x	x	x								
6	6	820	2000	✓ 2000	x	x	x								
7	7	821	1500	✓ 1500	x	x	x								
8	8	822	1250	✓ 1250	x	x	x								
9	9	823	1000	✓ 1000	x	x	x								
10	10	824	800	✓ 800	x	x	x								
11	11	825	600	✓ 600	x	x	x								
12	12	826	400	✓ 400	x	x	x								
13	13	827	300	✓ 300	x	x	x								
14	14	828	250	✓ 250	x	x	x								
15	15	829	200	✓ 200	x	x	x								
16	16	830	175	✓ 175	x	x	x								
17	17	831	150	✓ 150	x	x	x								
18	18	832	125	✓ 125	x	x	x								
19	19	833	100	✓ 100	x	x	x								
20	20	834	75	✓ 75	x	x	x								
21	21	835	50	✓ 50	x	x	x								
22	22	836	25	✓ 25	x	x	x								
23	23	837	10	✓ 10	x	x	x								
24	24	838	5	✓ 5	x	x	x								

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

Watchkeeper(s): MB

Bottom Depth: 4252 m

Transmissio Cleaned: (Y) / N

Time	UTC	Local
Start	1025	0225
Bottom	1136	
End	1306	

Positional Information

Start Lat: 49 ° 59 99 N

Start Lon: 144 ° 59 99 W

Bottom Lat: 49 ° 59 99 N

Bottom Lon: 144 ° 59 99 W

End Lat: 49 ° 59 99 N

End Lon: 144 ° 59 99 W

Extra comments:

Céline & Kohen's cast with cups

Cruise ID: 2015-01 Station: P26 Event #: 99 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure		TM	TM	Sal	Nut-Fr							
						filt	un-filt									
1		736	150		175	x x	x x	x	x							
2		737	125			x	x									
3		738	75			x	x									
4		739	50			x	x									
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 4250 m
Transmisso Cleaned: Y-+N-

Time	UTC	Local
Start	13:18	05:20
Bottom	13:48	05:50
End	13:57	05:57

49 59 .98
Positional Information

Start	Lat: 49 ° 59.99 N
	Lon: 125 ° 00.00 W
	144 ▼ 59.98
Bottom	Lat: 49 ° 59.99 N
	Lon: 125 ° 00.00 W
	▼
End	Lat: 49 ° 59.98 N
	Lon: 124 ° 59.99 W

Extra comments:
TM Shallow Go-flos

Cruise ID: 2015-01 Station: P20 P26 Event #: 100 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments									
			Target Pressure	Confirmed ✓ Pressure	TM	TM	Sal	Nut-Fr										
					filt	un-filt												
1		840	800	✓	x	x	x	x										
2		841	600	✓	x	x												
3		842	400	✓	x	x												
4		843	200	✓	x x	x x												
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
ROS TRM ☒ Niskin other?
Watchkeeper(s): K.S MB

Bottom Depth: 4250 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	14:30	6:30
Bottom	14:50	6:50
End	15:20	7:20

Positional Information

Start	Lat: 49 ° 59 98 N
	Lon: 144 ° 59 25 W

Bottom

Bottom	Lat: 49 ° 59 98 N
	Lon: 144 ° 59 98 W

End

End	Lat: 49 ° 59 98 N
	Lon: 144 ° 59 58 W

Extra comments:
TM Deep Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P26 Event #: 101 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | FEB | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓ Pressure		Cs												
1		844	150	✓	150		x											
2		845	150	✓			x											
3		846	150	✓			x											
4		847	150	✓			x											
5		848	150	✓			x											
6		849	150	✓			x											
7		850	100	✓	100		x											
8		851	100	✓			x											
9		852	100	✓			x											
10		853	100	✓			x											
11		854	100	✓			x											
12		855	100	✓			x											
13		856	50	✓	50		x											
14		857	50	✓			x											
15		858	50	✓			x											
16		859	50	✓			x											
17		860	50	✓			x											
18		861	50	✓			x											
19		862	05	✓	5		x											
20		863	05	✓			x											
21		864	05	✓			x											
22		865	05	✓			x											
23		866	05	✓			x											
24		867	05	✓			x											

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

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

Time	UTC	Local
Start	1533	0733
Bottom	1536	
End	1544	

Positional Information

Start	Lat: 49° 59.99	N
	Lon: 145° 00.00	W

Bottom

	Lat: 49° 59.99	N
	Lon: 145° 00.00	W

End

	Lat: 49° 59.99	N
	Lon: 145° 00.00	W

Extra comments:
Shallow Cesium cast

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P5 Event #: 115 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments					
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC										
1	1	868	30	✓ 30	x		x x	x x										
2	2	869	5	✓ 5	x	x	x x	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): MB			

Bottom Depth:	2079	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	1538	0738
Bottom	1611	
End	1645	

Positional Information			
Lat:	48	°	41 51 N
Lon:	127	°	9 77 W

Bottom	Lat:	48	°	41 51 N
	Lon:	127	°	9 58 W

End	Lat:	48	°	41 44 N
	Lon:	127	°	9 61 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P4 Event #: 118 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | Feb | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Cs										
1		219	500	✓	500	x									
2		220	500	✓		x									
3		221	500	✓		x									
4		222	500	✓		x									
5		223	500	✓		x									
6		224	500	✓		x									
7		225	400	✓	400	x									
8		226	400	✓		x									
9		227	400	✓		x									
10		228	400	✓		x									
11		229	400	✓		x									
12		230	400	✓		x									
13		231	300	✓	300	x									
14		232	300	✓		x									
15		233	300	✓		x									
16		234	300	✓		x									
17		235	300	✓		x									
18		236	300	✓		x									
19		237	200	✓	200	x									
20		238	200	✓		x									
21		239	200	✓		x									
22		240	200	✓		x									
23		241	200	✓		x									
24		242	200	✓		x									

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

Bottom Depth:	1308	m
Transmisso Cleaned:	Y/N	N

Time	UTC	Local
Start	1917	1117
Bottom	1925	
End	1937	

Positional Information
Lat: 48 ° 39 02 N
Lon: 126 ° 40 02 W

Start
Lat: 48 ° 39 02 N
Lon: 126 ° 40 01 W

Bottom
Lat: 48 ° 38 59 N
Lon: 126 ° 39 59 W

End
Extra comments:
Deep Cesium cast
PAR on

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01

Station: P4

Event #: 119

Ship: Tully

UTC Date (dd|mmm|yyyy): 22 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC	Phyto							
						t		d											
1		263	300	✓ 300	x			x											Vent loose slightly,
2		264	200	✓ 200	x	x	x	x											
3		265	175	✓ 175	x	x	x	x											
4		266	100	✓ 100	x	x	x	x		x									
5		267	75	✓ 74	x			x		x									
6		268	50	✓ 50	x			x		x									
7		269	40	✓ 40	x			x		x									
8		270	30	✓ 29	x			x		x									
9		271	25	✓ 25	x			x		x									
10		272	20	✓ 19	xx	xx	xx	x		xx									
11		273	15	✓ 15	x			x		x									
12		274	10	✓ 10	x			xx		x									
13		275	5	✓ 5	x	x	x	x		x									
14		276	0	✓ 1	x	x	x	x		x									
15		277	30	✓ 29						xx	xx								
16		278	15	✓ 15						xx	xx								
17		279	5	✓ 5						xx	xx	xxx							
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:
Transmisso Cleaned:

Time	UTC	Local
Start		
Bottom		
End		

Positional Information		
Lat:		
Lon:		

Lat:		
Lon:		

Lat:		
Lon:		

Extra comments:
DMS cast - OUT-OF-ORDER
1-8; 15; 9-11; 16; 12-13; 17; 14

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P4 Event #: 120 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | 02 | 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed ✓ Pressure	TM	TM	Sal	Nut-Fr								
					filt	un-filt										
1		871	175	✓	x	x	x	x								
2		872	125	✓	x	x										
3		873	75	✓	xx	xx										
4		874	50		x	x										
5																
6																
7																
8																
9																
10																
11																
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13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Profile type:
ROS TRM ☒ Niskin other?
Watchkeeper(s): K.S

Bottom Depth: 1315 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2115	1:15
Bottom	2129	1:29
End	2140	1:40

Positional Information

Start	Lat:	°	N
	Lon:	°	W

▼

Bottom	Lat:	48 ° 38.99	N
	Lon:	126 ° 39.96	W

▼

End	Lat:	48 ° 38.99	N
	Lon:	126 ° 40.50	W

Extra comments:
TM Shallow Go-flos

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P4 Event #: 121 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | 2 | 2015

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH	Sam	gases		Celine				
1		243	Bot-10	✓ 1321	x	x	x		x	x	x	x						
2		244	1250	✓ 1250	x	x	x	x	xx	x	x	x						
3		245	1250	✓ 1250	xx	x	x	xx	x	x								
4		246	1000	✓ 1000	x	x	x	xx	x	x	x	x		x				
5		247	800	✓ 800	x	x	x	x	x	x	x	x						
6		248	600	✓ 600	x	xx	xx		x	xxx	x	x		x				
7		249	400	✓ 400	x	x	x		x	x	x	x						
8		250	300	✓ 300	x	x			x	x	x	x						
9		251	250	✓ 250	x	x			x	x								
10		252	200	✓ 200	x	x			x	x	x	x						
11		253	175	✓ 175	x	x			x	x								
12		254	150	✓ 150	x	x			x	x	x	x						
13		255	125	✓ 125	x	xx			x	x			1					
14		256	100	✓ 100	x	x			x	x	x	x		x				
15		257	75	✓ 75	xx	x			x	x								
16		258	50	✓ 49	x	x			x	x	x	x						
17		259	25	✓ 24	x	x			x	xxx	x	x						
18		260	10	✓ 10	x	x			x	x	x	x		x				
19		261	5	✓ 5	x	x		x	x	x								
20		262	1250	✓ 1250										x				
21		870	1000	✓ 1000								x						
22																		
23																		
24																		

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

Watchkeeper(s): DY

Bottom Depth: 1315 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2149	1349
Bottom	2212	
End	2249	

Positional Information

Start

Lat: 48 ° 38.99 N

Lon: 126 ° 39.99 W

Bottom

Lat: 48 ° 38.99 N

Lon: 126 ° 39.99 W

End

Lat: 48 ° 39.01 N

Lon: 126 ° 40.02 W

Extra comments:

Deep cast - OUT-OF-ORDER

1 - 3; 20 - 21; 4 - 19

Cruise ID: 2015-01 Station: P4 Event #: 122 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | 02 | 15

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments				
			Target Pressure	Confirmed ✓ Pressure	TM filt	TM un-filt	Sal	Nut-Fr									
1		875	800		x	x	x	x					800m Did not fire				
2		876	600		x	x											
3		877	400		xx	xx											
4		878	200		x	x											
5																	
6																	
7																	
8																	
9																	
10																	
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16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 1315 m
Transmisso Cleaned: Y / N

Time 23:00 UTC 15:00 Local
Start ~~23:00~~
Bottom 2
End 13:54 15:54

Positional Information
Start Lat: 48 ° 38.95 N
Lon: 126 ° 38.85 W
Bottom Lat: ° N
Lon: ° W
End Lat: 48 ° 38.95 N
Lon: 126 ° 38.49 W

Extra comments:
TM Deep Go-flos
800m did not close

Water Properties Group

Sampling Log

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

Cruise ID: 2015-01 Station: P3 Event #: 123 Ship: Tully UTC Date (dd|mmm|yyyy): 23 | 02 | 2015

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed <input type="checkbox"/>	Pressure			Nd										
1		879	750					x										
2		880	625					x										
3		881	425					x										
4		882	300					x										
5		883	100					x										
6		884	50					x										
7		885	5					x										
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type: *In-situ pumps*
ROS TRM X-Niskin other?
Watchkeeper(s):

Bottom Depth: *808* m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<i>01:30</i>	<i>17:30</i>
Bottom	<i>02:00</i>	
End	<i>05:00</i>	

Positional Information
Start
Lat: *48* ° *37.51* N
Lon: *126* ° *20.01* W

Bottom
Lat: *48* ° *37.51* N
Lon: *126* ° *20.01* W

End
Lat: ° N
Lon: ° W

Extra comments:
UBC in-situ pumps to 750 m