

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 ☒ Pressure	Nut-F	Sal	Chl	HPLC	DIC	Oxy	pH	Bsi	Nd						
1	1	49	Bot-10	☒	116	X				xx	xx	xxx							
2	2	50	30	☒	29	X		xx	xx	x	x	x							
3	3	51	5	☒	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	☒	5													no sample fire to check spigot	
24																			

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

Watchkeeper(s): MB

Bottom Depth: 118 m

Transmissio Cleaned: ☒ Y / ☐ N

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

Positional Information

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

Water Properties Group

Sampling Log

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:	Q / N	

Time	UTC	Local
Start	2320	1520
Bottom	2324	
End	2334	

Positional Information
Start
Lat: 48° 26.01 N
Lon: 125° 59.97 W

Bottom
Lat: 48° 36.00 N
Lon: 125° 59.95 W

End
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:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): DY ms

Bottom Depth:	115	m
Transmisso Cleaned:	☒ Y ☐ 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

End	Lat: 48° 36.04	N
	Lon: 126° 0.01	W

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

Water Properties Group

Sampling Log

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

Bottom Depth: 1310 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0351	1951
Bottom	0354	
End	0403	

Positional Information

Lat:	48 ° 39.01	N
Lon:	126 ° 39.97	W

Start

Bottom

End

Lat: 48 ° 39.01 N
Lon: 126 ° 39.96 W

Lat: 48 ° 39.01 N
Lon: 126 ° 39.96 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: 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 E-I	TM VIN										
1		168			40		x	x									
2		169			20		x	x									
3		170			10		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? ☐
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): MBBottom 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 WBottom
Lat: 48 ° 39 02 N
Lon: 126 ° 40 00 WEnd
Lat: 48 ° 39 02 N
Lon: 126 ° 40 01 WExtra 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

Time	UTC	Local
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:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): DY

Bottom Depth:	2514	m
Transmisso Cleaned:	☒ Y ☐ 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		xx	xx		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	xx	xx		x						

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

Bottom Depth:	2640 m
Transmisso Cleaned:	☒ Y / ☐ 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 ☒ Pressure	TM	TM									
					filt	un-filt									
1		336	40	☒	x	x									
2		337	20	☒	x	x									
3		338	10	☒	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 | 07 | 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		339	200 150	✓ 150	x	x	x	x								
2		340	150 125	✓ 125	x	x										
3		341	100 75	✓ 75	xx	xx										
4		342	75 50	✓ 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
Transmissio Cleaned: Y / N

Time	UTC	Local
Start	1905	
Bottom	1926	
End	2020	

Positional Information

Start	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

Lat:	48 ° 58.18	N
Lon:	130 ° 39.86	W

Start

▼

Lat:	48 ° 58.21	N
Lon:	130 ° 39.86	W

Bottom

▼

Lat:	48 ° 58.21	N
Lon:	130 ° 39.99	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: 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	LF	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 ☒ Pressure		TM filt	TM un-filt	Sal	Nut-Fr								
1		366	800			x	x	x	x					went very well			
2		367	800 400			x	x										
3		368	400 200			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	☒ Niskin	other?
Watchkeeper(s):	KS R.N			

Bottom Depth:	3233	m
Transmisso Cleaned:	Y	☒ 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:	ROS	TRM	X-Niskin	other?
Watchkeeper(s):	DY			

Bottom Depth:	3234 m
Transmisso Cleaned:	(Y) / N

Time	UTC	Local
Start	0445	2045
Bottom	0541	
End	0650	

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

Lat:	48 ° 58.21	N
Lon:	130 ° 39.98	W

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																	
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19																	
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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
Start
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

Lat:	49 ° 7	40	N
Lon:	132 ° 39	94	W

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																			
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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:
☒ ROS ☐ TRM ☐ X-Niskin ☐ 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

Lat:	49° 17.01	N
Lon:	134° 40.01	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:

DMS cast