

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P35 Event #: 84 Ship: Tully UTC Date (dd mmm/yyyy): 12 6 17

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC			OPT				
1		519	5	✓ 5	x	x	xx	xx							
2		520	0	✓ 1.6						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/mB

Bottom Depth: 4.50 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0600	2300
Bottom	0632	
End	0704	

Positional Information

Start	Lat: 50 ° 0.03	N
	Lon: 144 ° 18.69	W
Bottom	Lat: 50 ° 0.00	N
	Lon: 144 ° 18.67	W
End	Lat: 50 ° 0.02	N
	Lon: 144 ° 18.75	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P26 Event #: 85 Ship: Tully UTC Date (dd mmm yyyy): 12 Jun 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials															Comments
			Target Pressure	Confirmed Pressure	OXY	Sal	Nut-F	Nut-C	DIC	Alk	pH		DOC	Gases	DNA	SAGs	OPT			
				✓		by/Am	Em	Jade	Jade	MP/TJ	MP/BJ	GC		Eric	R/L	CML	Don	Eric		
1	1	554	Bot-10	✓	4313	x		xx	x	x		x		x	xx	x	x	xx		
2	2	555	4000	✓	4000	x	x	xx	x	x	x	x		x	xx	x	x			
3	3	556	3500	✓	3500	x	xx	xxxx	xx	xx	x	x		x						
4	4	557	3000	✓	3000	x	x	xx	x	x	x	x		x	xx	x	x			
5	5	558	2500	✓	2500	xx	xx	xx	x	x	x	xxx		x						
6	6	559	2000	✓	2000	x	x	xx	x	x	x	x		x	xx	x	x			
7	7	560	1500	✓	1500	x	x	xx	x	x	x	x		x	xx	x	x			
8	8	561	1250	✓	1250	x	x	xx	x	x	x	x		x	xx	x	x			
9	9	562	1000	✓	1000	x	x	xx	x	x	x	x		x	xx	x	x			
10	10	563	800	✓	800	x		xx	x	x	x	x		x	xx	x	x			
11	11	564	600	✓	600	x		xx	x	x	x	x		x	xx	x	x			
12	12	565	400	✓	400	x		xx	x	x	x	x		x	xx	x	x			
13	13	566	300	✓	300	x		xx		x	x	x		x	xx	x	x			
14	14	567	250	✓	250	xx		xx		x	x	x		x						
15	15	568	200	✓	200	x		xx		x	x	x		x	xx	x	x			
16	16	569	175	✓	175	x		xxxx		x	x	x		x						
17	17	570	150	✓	150	x		xx		x	x	x		x	xx	x	x			
18	18	571	125	✓	125	x		xx		x	x	x		x						
19	19	572	100	✓	100	x		xx		x	x	x		x	xx	x	x			
20	20	573	75	✓	75	xx		xx		x	x	xxx		x						
21	21	574	50	✓	50	x		xx		x	x	x		x	xx	x	x			
22	22	575	25	✓	25	x		xx		x	x	x		x	xx	x	x			
23	23	576	10	✓	11	x		xx		x	x	x		x	xx	x	x			
24	24	577	5	✓	5	xx	x	xx		x	x	x		x						

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

Bottom Depth: 4751 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1709	1009
Bottom	1822	
End	1951	

Positional Information

Lat:	50 ° 0 00 N
Lon:	144 ° 59 91 W

Bottom

Lat:	50 ° 0.00 N
Lon:	144 ° 59.98 W

End

Lat:	50 ° 0.00 N
Lon:	144 ° 59.99 W

Extra comments:
 Deep cast
 Will also have loops for Sal x1,
 nut x1, gases x2 and OxyT x2

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P26 Event #: 860 Ship: Tully UTC Date (dd:mmm yyyy): 12 Jun 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments
			Target	Confirmed	Sal	Nut-fr	Fe	Fe					
			Pressure	✓ Pressure			filt	unfilt					
1		550	800 ✓		x	x	x x x x x	x x					
2		551	400 ✓				x x x x x	x x					
3		552	300 ✓				x x	x x					
4		553	200 ✓				x 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): Dy

Bottom Depth: 4252 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2035	1335
Bottom	2106	
End	2138	

Positional Information

Start	Lat: 49 ° 59.99	N
	Lon: 144 ° 59.93	W

Bottom

Lat: 50 ° 0.00	N
Lon: 144 ° 59.98	W

End

Lat: 50 ° 0.00	N
Lon: 144 ° 59.98	W

Extra comments:
Go-flo 800

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P26 Event #: 87 Ship: Tully UTC Date (dd mmm yyyy): 12 6 17

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC	DA			OPT	
1		578	300	✓ 300	x			x							
2		579	200	✓ 200	x	x	x	x							
3		580	150	✓ 150	x	x	x	x							
4		581	100	✓ 100	x			xx	x						
5		582	75	✓ 75	x			x	x						
6		583	60	✓ 60				x	xx	xx					Fluo
7		584	50	✓ 50	x			x	xx	xx					Fluo
8		585	40	✓ 40	x			x	xx	xx					Fluo
9		586	30	✓ 30	x	x	x	x	xx	xx					Fluo
10		587	25	✓ 25	x			x	x						
11		588	20	✓ 20	xx	xx	xx	x	x						
12		589	15	✓ 15	x			x	xx	xx					Fluo
13		590	10	✓ 10	x			x	x						
14		591	5	✓ 5	x	x	x	x	xx	xx	x				Fluo
15		592	0	✓ 2	x	x	x	x	x						
16		593	300	✓ 300									xx		
17		594	100	✓ 100									xx		
18		595	50	✓ 50									xx		
19		596	25	✓ 25									xx		
20		597	10	✓ 10									xx		
21		598	0	✓ 2									xx		
22															
23															
24															

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

Bottom Depth: 4257 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2157	1457
Bottom	2207	
End	2223	

Positional Information

Lat:	50 ° 0.00	N
Lon:	144 ° 59.99	W

Start

Lat: 50 ° 0.01 N
Lon: 144 ° 59.99 W

Bottom

Lat: 50 ° 0.00 N
Lon: 144 ° 59.99 W

End

Extra comments:
DMS cast - OUT-OF-ORDER
Plus loops for Chl x2
16; 1 - 4; 17; 5; 6; 7; 18; 8; 9; 10;
19; 11; 12; 13; 20; 14; 15; 21

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P26 Event #: 89 Ship: Tully UTC Date (dd mmm yyyy): 12 6 17

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments									
			Target Pressure	Confirmed ✓ Pressure	Sal	Nut-fr	Fe filt	Fe unfilt														
1		546	150		x	x	xxx	x														
2		547	100				xxx	x														
3		548	75				xxx	x														
4		549	50				xxx	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 ☐ X-Niskin ☐ other?
Watchkeeper(s): DY

Bottom Depth: 4255 m
Transmisso Cleaned: ☒ / N

Time	UTC	Local
Start	2305	1605
Bottom	2321	
End	2338	

Positional Information

Start	Lat: 50° 0.00	N
	Lon: 144° 59.98	W
Bottom	Lat: 50° 0.00	N
	Lon: 144° 59.98	W
End	Lat: 50° 0.01	N
	Lon: 144° 59.98	W

Extra comments:
Go-flo 150

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P26 Event #: 90 Ship: Tully UTC Date (dd:mmm:yyyy): 13 June 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓	Pressure	Sal	Nut-fr	Fe filt	Fe unfilt	Cu sp filt								
1		542	40			x	x	x	x	xxx								
2		543	25					x	x	xxx								
3		544	10					x	x	xxx								
4		545	5					x	x	xxx								
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: 4250 m

Transmisso Cleaned: Y / N *NA*

Time	UTC	Local
Start	0143	
Bottom	0154	
End	0205	

Positional Information

Start Lat: 50° 00.00 N

Start Lon: 144° 59.99 W

Bottom Lat: 50° 00.00 N

Bottom Lon: 144° 59.98 W

End Lat: 50° 00.00 N

End Lon: 144° 59.99 W

Extra comments:

Go-flo 40

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P26 Event #: 91 Ship: Tully UTC Date (dd mmm yyyy): 13 6 17

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed Pressure	UBC													
1		599	2000	✓	2000		x											
2		600	2000	✓														
3		601	2000	✓														
4		602	2000	✓														
5		603	1000	✓	1000		x											
6		604	1000	✓														
7		605	1000	✓														
8		606	1000	✓														
9		607	500	✓	500		x											
10		608	500	✓														
11		609	500	✓														
12		610	500	✓														
13		611	10	✓	10		x											
14		612	10	✓														
15		613	10	✓														
16		614	10	✓														
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 4289 m
Transmissio Cleaned: Y / N

Time	UTC	Local
Start	0219	1919
Bottom	0300	
End	0333	

Positional Information

Start	Lat: 50 ° 0.00	N
	Lon: 144 ° 59.99	W

Bottom

Lat: 50 ° 0.00	N
Lon: 144 ° 59.99	W

End

Lat: 50 ° 0.00	N
Lon: 144 ° 59.99	W

Extra comments:
UBC cast

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P26 Event #: 97 Ship: Tully UTC Date (dd mmm yyyy): 13 Jun 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments		
			Target Pressure	Confirmed ✓ Pressure	17O	ONAr	Oxy	NO3 ind	NH4 ind	CHL	Nut-Fr	NH4	Sal	C14	UVic	bugs		Phyto	
1	5	524	O2 max	✓ 50.4	xx		xx							x					
2	12	525	5 m	✓ 4.8	xx	xx	xx		x										
3																			
4	1	526	250	✓ 251												x			
5	2	527	150	✓ 150												x			
6	6	528	50	✓ 49.8												x			
7	8	529	20	✓ 20.0												x			
8	10	530	10	✓ 10												x			
9	13	531	5	✓ 5.1												x		x x x	
10																			
11	3	532	100	✓ 100													x		
12	7	533	50	✓ 50.2													x		
13	14	534	5	✓ 5.0													x		
14																			
15																			
16																			
17	17	535	100%	✓ 17.5 sl					xxxxx		x	x							
18	18	536	100%	✓ 17.5 sl						xxxxx			xx						
19	15	537	55%	✓ 2.6		xx	xx		x	x	x	x	xx	x					
20	11	538	30%	✓ 6.5					x	x	x	x	xxxx	x					
21	9	539	15%	✓ 14.5					x	x	x	x	xx	x					
22	4	540	1%	✓ 5.6					x	x	x	x	xx	x					
23	16	541	55%	✓ 2.5											x				
24																			

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

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

Time	UTC	Local
Start	11 35	04 35
Bottom	11 40	
End	11 59	

Positional Information

Start	Lat: 49 ° 59 99 N
Lon: 145 ° 0 21 W	

Start

Bottom

Lat: 49 ° 59 97 N
Lon: 145 ° 0 21 W

Bottom

End

Lat: 49 ° 59 94 N
Lon: 145 ° 0 16 W

End

Extra comments:
 Productivity cast
 4, 5, 11, 22, 16, 12, 7
 21, 8, 26, 24, 13, 19, 25, 17, 18

Water Properties Group

Sampling Log

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

Cruise ID:

2017-06

Station:

P26

Event #: 96

Ship: Tully

UTC Date (dd mmm yyyy): 13 Jun 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC	Gases	pH	OPT				
1	1	618	500	✓ 500						xxxx					
2	2	619	300	✓ 300						xxxx					
3	3	620	200	✓ 200						xxxx					
4	4	621	150	✓ 150						xxxx					
5	5	622	100	✓ 100						xxxx					
6	6	623	50	✓ 50						xxxx					
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: 4250 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	15 59	08 59
Bottom	16 07	
End	16 21	

Positional Information
Start
Lat: 50 ° 0 01 N
Lon: 145 ° 0 28 W

Bottom
Lat: 50 ° 0 03 N
Lon: 145 ° 0 30 W

End
Lat: 49 ° 59 96 N
Lon: 145 ° 0 31 W

Extra comments:
pH experiment

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: PA-011 Event #: 100 Ship: Tully UTC Date (dd mmm yyyy): 14 6 17

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	ONAS	Oxy									
					ONAS	UW									
1		521	10	✓ 10	ONAS	xx									
2		522	5	✓ 5	ONAS	xx									
3		523	0	✓ 1.5	ONAS	xx									
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 4220 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0141	1841
Bottom	0150	
End	0159	

Positional Information

Lat:	50 ° 8.05	N
Lon:	144 ° 49.87	W

▼

Lat:	50 ° 8.05	N
Lon:	144 ° 49.86	W

▼

Lat:	50 ° 8.05	N
Lon:	144 ° 49.86	W

Extra comments:
Calibration cast post-deployment
CTD to 500 m

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: PA-011 Event #: 103 Ship: Tully UTC Date (dd mmm yyyy): 15 6 17

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed ✓ Pressure	ONAr	Oxy										
					UW	UW										
1		521	10	✓ 10	x x	x x										
2		522	5	✓ 5	x x	x x										
3		523	0	✓ 2	x x	x x										
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 4220 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0204	1904
Bottom	0212	
End	0224	

Positional Information
Start
Lat: 50 ° 8.13 N
Lon: 144 ° 50.00 W

Bottom
Lat: 50 ° 8.12 N
Lon: 144 ° 50.02 W

End
Lat: 50 ° 8.06 N
Lon: 144 ° 49.96 W

Extra comments:
Calibration cast post-deployment
CTD to 500 m

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: PA-010 Event #: 104 Ship: Tully UTC Date (dd mmm/yyyy): 15 Jun 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	ONAr UW	Oxy UW									
1	1	615	10	✓ 10	xx	xx									
2	2	616	5	✓ 5	xx	xx									
3	3	617	0	✓ 0	xx	xx									
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 4220 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1234	0834
Bottom	1242	
End	1253	

Positional Information
Start
Lat: 50 ° 2 37 N
Lon: 144 ° 53 57 W

Bottom
Lat: 50 ° 2 37 N
Lon: 144 ° 53 59 W

End
Lat: 50 ° 2.34 N
Lon: 144 ° 53.64 W

Extra comments:
Calibration cast pre-recovery
CTD to 500 m

Niskins 4-24 closed at surface
just to close, no
sample taken

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: P4 Event #: 115 Ship: Tully UTC Date (dd mmm yyyy): 18 Jun 2017

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Sal	Nut-fr	Fe filt	Fe unfilt							
1		624	40		x	x	x	x							
2		625	25				x	x							
3		626	10				x	x							
4		627	5				x	x							
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 136 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1825	1125
Bottom	1837	
End	1846	

Positional Information

Lat:	48 ° 39 06	N
Lon:	126 ° 40 24	W

Bottom

Lat:	48 ° 39 01	N
Lon:	126 ° 40 24	W

End

Lat:	48 ° 39 04	N
Lon:	126 ° 40 23	W

Extra comments:
Go-flo 40

Water Properties Group

Sampling Log

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

Cruise ID: 2017-06 Station: JF2 Event #: 121 Ship: Tully UTC Date (dd mmm yyyy): 19 6 17

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	RF										
1		628	160	✓ 161	x										
2		629	160	✓	x										
3		630	160	✓	x										
4		631	160	✓	x										
5		632	160	✓	x										
6		633	160	✓	x										
7		634	160	✓	x										
8		635	160	✓	x										
9		636	160	✓	x										
10		637	160	✓	x										
11		638	160	✓	x										
12		639	160	✓	x										
13		640	20	✓ 20	x										
14		641	20	✓	x										
15		642	20	✓	x										
16		643	20	✓	x										
17		644	20	✓	x										
18		645	20	✓	x										
19		646	20	✓	x										
20		647	20	✓	x										Broken bungee
21		648	20	✓	x										
22		649	20	✓	x										
23		650	20	✓	x										
24		651	20	✓	x										

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

Bottom Depth: 174 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0550	2250
Bottom	0553	
End	0559	

Positional Information
Start
Lat: 48 ° 19.28 N
Lon: 123 ° 59.20 W

Bottom
Lat: 48 ° 19.30 N
Lon: 123 ° 59.22 W

End
Lat: 48 ° 19.31 N
Lon: 123 ° 59.13 W

Extra comments:
Water for Roger François