

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: Haro 59 Event #: 3 Ship: Tully UTC Date (dd mmm/yyyy): 20 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments						
			Target Pressure	Confirmed ✓ Pressure	DIC	Oxy	Nut-fr	Sal	pH		UBC	DIC									
1		1	Bot-10	✓	225	x	x	x		x											
2		2	200	✓		x x	x	x		x		x									
3		3	175	✓	176	x	x	x		x x x		x									
4		4	150	✓		x	x	x		x		x									
5		5	125	✓		x	x x	x		x		x									
6		6	100	✓		x	x	x		x		x									
7		7	80	✓		x x	x	x x		x		x									
8		8	60	✓		x	x	x		x		x									
9		9	50	✓		x	x	x		x											
10		10	40	✓		x	x	x		x											
11		11	30	✓		x	x	x		x											
12		12	20	✓		x	x	x		x											
13		13	10	✓		x x	x	x		x x x											
14		14	5	✓		x	x x	x		x											
15		15	0	✓		x	x	x		x											
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

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

Bottom Depth: 235 m
Transmisso Cleaned: Y/N

Time	UTC	Local
Start	1658	0958
Bottom	1703	
End	1732	

Positional Information
Start
Lat: 48 ° 36.78 N
Lon: 123 ° 14.83 W

Bottom
Lat: 48 ° 36.75 N
Lon: 123 ° 14.82 W

End
Lat: 48 ° 36.92 N
Lon: 123 ° 14.73 W

Extra comments:
Debby

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: JF2 Event #: 7 Ship: Tully UTC Date (dd|mmm|yyyy): 20|Aug|2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	DIC	Oxy	Nut-fr	Sal	pH		HPLC	CHL						
				✓	PA/KS	MB/MB	MB/MB		KS		MB/MB	MB						
1	1	16	Bot-10	✓	175.9	x	x	x	x									
2	2	17	150	✓	150.2	xx	x	x	x									
3	3	18	125	✓	126.0	x	x	x	xxx									
4	4	19	100	✓	100.8	x	x	x	x									
5	5	20	80	✓	80.6	x	xx	x	x									
6	6	21	60	✓	60.7	xx	x	x	x									
7	7	22	50	✓	50.4	x	x	xx	x									
8	8	23	40	✓	40.0	x	x	x	x									
9	9	24	30	✓	29.6	x	x	x	x		xx	xx						
10	10	25	20	✓	19.9	x	x	x	x									
11	11	26	10	✓	10.3	x	x	x	xxx									
12	12	27	5	✓	4.6	xx	x	x	x		xx	xx						
13	13	28	0	✓	1.7	x	x	x	x									
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 187 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2352	1652
Bottom	2357	1657
End	0011	1711

Positional Information
Start
Lat: 48 ° 17 97 N
Lon: 124 ° 0 00 W

Bottom
Lat: 48 ° 17 98 N
Lon: 124 ° 0 01 W

End
Lat: 48 ° 17 96 N
Lon: 124 ° 0 11 W

Extra comments:
Debby
Labels printed with
2014-18 not 2014-19

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P1 Event #: 10 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	HPLC	Chl	DIC	pH		Bsi					
1		29	Bot-10	✓	109	x x		x			x x	x x x						
2		30	30 / Max	✓	30	x		x	x x	x x	x	x						
3		31	5			x	x	x	x x	x x	x	x						
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

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

Time	UTC	Local
Start	0653	2353
Bottom	0655	
End	0702	

Positional Information
Start
Lat: 48 ° 34.53 N
Lon: 125 ° 29.98 W

Bottom
Lat: 48 ° 34.53 N
Lon: 125 ° 29.97 W

End
Lat: 48 ° 34.53 N
Lon: 125 ° 29.94 W

Extra comments:

1; 4 - 11; 2; 12 - 13 - 3 - 14 - 15

Cruise ID: 2014-19 Station: P2 Event #: 12 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓	Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH	Amanda							
1	1	32	Bot-10	✓	108	x x	x			x	x								
2	2	33	100	✓		x	x			x	x								
3	3	34	75	✓		x	x			x x	x								
4	4	35	75	✓		x	x			x	x								
5	5	36	50	✓		x	x			x	x x x								
6	6	37	25	✓		x	x x			x	x								
67	7	38	10	✓		x	x			x	x								
98	8	39	5	✓		x	x		x	x	x								
109	9	40	5	✓									x						
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

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

Time	UTC	Local
Start	0925	0225
Bottom	0928	
End	0939	

Positional Information

Lat:	48 ° 35.95	N
Lon:	126 ° 0.05	W

▼

Lat:	48 ° 35.96	N
Lon:	126 ° 0.06	W

▼

Lat:	48 ° 35.97	N
Lon:	126 ° 0.04	W

Extra comments:
Deep cast
bot 7 was tripped
at 17m by accident
then discarded

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P2 Event #: 15 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC									
						<i>t</i>		<i>d</i>											
1		41	100	✓		x	x	x	x x	x									
2		42	75	✓		x			x	x									
3		43	50	✓		x			x	x									
4		44	40	✓		x			x	x									
5		45	30	✓		x			x	x									
6		46	25	✓		x			x	x x									
7		47	20	✓		x x	x x	x x	x	x									
8		48	15	✓		x			x	x									
9		49	10	✓		x			x	x									
10		50	5	✓		x	x	x	x	x									
11		51	0	✓		x	x	x	x	x									
12		52	30 / M*10	✓	20					x x	x x								
13		53	15 / Max	✓	10					x x	x x								
14		54	5	✓						x x	x x								
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): SR

Bottom Depth: 117 m

Transmisso Cleaned: (Y) 1 N

Time	UTC	Local
Start	1015	0315
Bottom	1018	
End	1034	

Positional Information

Start

Lat: 48 ° 35.91 N

Lon: 126 ° 0.04 W

Bottom

Lat: 48 ° 35.92 N

Lon: 126 ° 0.04 W

End

Lat: 48 ° 35.91 N

Lon: 126 ° 59.96 W

Extra comments:

DMS cast; out-of-order

Bot 10's vent was open, not just loose.

Cruise ID: 2014-19 Station: P3 Event #: 16 Ship: Tully UTC Date (dd|mmm|yyyy): 21 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC							
1		55	30 / Max	☒ 18	x		x x	x x							
2		56	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): SR

Bottom Depth: 808 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1209	0509
Bottom	1224	
End	1240	

Positional Information
Start
Lat: 48 ° 37.54 N
Lon: 126 ° 19.92 W

Bottom
Lat: 48 ° 37.58 N
Lon: 126 ° 19.84 W

End
Lat: 48 ° 37.55 N
Lon: 126 ° 19.85 W

Extra comments:

Cruise ID: 2014-19 Station: P4 Event #: 18 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed		Cesium													
				✓	Pressure														
1	1	57	150	✓			x												
2	2	58	150	✓			x												
3	3	59	150	✓			x												
4	4	60	150	✓			x												
5	5	61	150	✓			x												
6	6	62	150	✓			x												
7	7	63	100	✓			x												
8	8	64	100	✓			x												
9	9	65	100	✓			x												
10	10	66	100	✓			x												
11	11	67	100	✓			x												
12	12	68	100	✓			x												
13	13	69	50	✓			x												
14	14	70	50	✓			x												
15	15	71	50	✓			x												
16	16	72	50	✓			x												
17	17	73	50	✓			x												
18	18	74	50	✓			x												
19	19	75	0	✓			x												
20	20	76	0	✓			x												
21	21	77	0	✓			x												
22	22	78	0	✓			x												
23	23	79	0	✓			x												
24	24	80	0	✓			x												

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

Bottom Depth: 1325 m
Transmisso Cleaned: Y / ☒ N

Time	UTC	Local
Start	1442	0742
Bottom	1445	
End	1455	

Positional Information

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

Bottom

Lat: 48 ° 38.95 N
Lon: 126 ° 39.94 W

End

Lat: 48 ° 38.94 N
Lon: 126 ° 39.98 W

Extra comments:
Cesium #1

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P4 Event #: 19 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | 08 | 14

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	TM Uvic	TM-ios Filt	TM-ios un-Filt	Dave Cd	Fe Isot	Nut-Fr	Nut-C	Sal	L1224	L1225				
1	1	81	Bot-10		1300m	x	x	x	x	x	x	x						
2	2	82	1150		1149m	x	x	x	x	x	x	x						
3	3	83	1000		1000m	x	xx	xx	x	x	x	x						
4	4	84	800		799m	x	x	x	x	x	x							
5	5	85	600		599m	x	x	x	x	x	x							
6	6	86	400		400m	x	x	x	x	x	x							
7	7	87	200		199m	x	x	x	x	x								
8	8	88	150		100m	x	x	x	x	x								
9	9	89	75		76m	x	x	x	x	x								
10	10	90	50		49m	x	x	x	xx	x								
11	11	91	25		25m	x	x	x	xx	x								
12	12	92	10		10m	x	x	x	xx	x								
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 1322 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	15:41	0:41
Bottom	15:57	8:57
End	16:30	09:30

Positional Information

Start	Lat: 48 ° 38.95	N
	Lon: 126 ° 39.96	W

Bottom

Lat: 48 ° 38.95	N
Lon: 126 ° 39.96	W

End

Lat: 48 ° 38.95	N
Lon: 126 ° 38.95	W

Extra comments:
 TMR BOTTLE 400
 TRIPPED AT SURFACE
 BOTTLE 7 LEAKING
 SPIGOT

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|mmm|yyyy): 21|Aug|2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC	Phyto	ONAr					
				✓		t	d											
1		93	300	✓	300	x			x									
2		94	200	✓		x	x	x	x									
3		95	175	✓		x	x	x	x									
4		96	100	✓		x	x	x	x	x								
5		97	75	✓		x			x	x								
6		98	50	✓		x			x	xx								
7		99	40	✓		x			x	x								
8		100	30	✓		x			x	x								
9		101	25	✓		x			x	x								
10		102	20	✓		xx	xx	xx	x	x								
11		103	15	✓		x			x	x								
12		104	10	✓		x			xx	x								
13		105	5	✓		x	x	x	x	x								
14		106	0	✓		x	x	x	x	x								
15		107	30	✓						xx	xx							
16		108	15/Max	✓	15					xx	xx							
17		109	5	✓						xx	xx	xxx						
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 1325 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1715	1015
Bottom	1721	
End	1741	

Positional Information
Start
Lat: 48 ° 38.97 N
Lon: 126 ° 40.02 W

Bottom
Lat: 48 ° 38.97 N
Lon: 126 ° 40.07 W

End
Lat: 48 ° 38.98 N
Lon: 126 ° 40.09 W

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: 2014-19 Station: P4 Event #: 24 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure													
1		110	400m														
2		111	300m														
3		112	150m														
4		113	75m														
5		114	25m														
6		115															
7																	
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): NR/OS

Bottom Depth: 1313 m
Transmisso Cleaned: Y / ☒ N

Time	UTC	Local
Start	2125	1425
Bottom	2201	
End	BE 0045	
	EN 0106	

Positional Information

Start	Lat: 48 ° 39 03 N
	Lon: 126 ° 39 92 W

Bottom	Lat: 48 ° 38 92 N
	Lon: 126 ° 39 90 W
	BE 48 1220 ▼ 38 35
End	Lat: 48 ° 38 95 N
	Lon: 126 ° 39 97 W

Extra comments:
Shallow in-situ pumps

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P4 Event #: 25 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials								Comments						
			Target	Confirmed	Pressure	Oxy	Nut-F	Nut-C	Sal	DIC	pH	UBC								
			Pressure	✓		Pressure	MP/Hg	PM	AM	AM	AP/AT	KS	ALC							
1		116	Bot-10	✓	1325	x	x	x		x	x	x								
2		117	1250	✓	1251	x	x	x	x	xx	x	x								
3		118	1250	✓	1252	xx	x	x	xx	x	x									
4		119	1000	✓	1000	x	x	x	xx	x	x	x								
5		120	800	✓	800	x	x	x	x	x	x	x								
6		121	600	✓	600	x	xx	xx		x	xxx	x								
7		122	400	✓	400	x	x	x		x	x	x								
8		123	300	✓	300	x	x			x	x	x								
9		124	250	✓	250	x	x			x	x									
10		125	200	✓	200	x	x			x	x	x								
11		126	175	✓	175	x	x			x	x									
12		127	150	✓	150	x	x			x	x	x								
13		128	125	✓	125	x	xx			x	x									
14		129	100	✓	100	x	x			x	x	x								
15		130	75	✓	75	xx	x			x	x									
16		131	50	✓	50	x	x			x	x	x								
17		132	25	✓	25	x	x			x	xxx	x								
18		133	10	✓	10	x	x			x	x	x								
19		134	5	✓	5	x	x		x	x	x									
20																				
21																				
22																				
23																				
24																				

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

Bottom Depth: 1324 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0116	1816
Bottom	0140	
End	0223	

Positional Information:
Lat: 48 ° 38.98 N
Lon: 126 ° 39.96 W

▼
Lat: 48 ° 38.93 N
Lon: 126 ° 39.93 W

▼
Lat: 48 ° 38.97 N
Lon: 126 ° 40.00 W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P4 Event #: 26 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓ Pressure	Cesium													
1	1	181	500	✓	499		x											
2	2	182	500	✓			x											
3	3	183	500	✓			x											
4	4	184	500	✓			x											
5	5	185	500	✓			x											
6	6	186	500	✓			x											
7	7	187	400	✓	401		x											
8	8	188	400	✓			x											
9	9	189	400	✓			x											
10	10	190	400	✓			x											
11	11	191	400	✓			x											
12	12	192	400	✓			x											
13	13	193	300	✓	300		x											
14	14	194	300	✓			x											
15	15	195	300	✓			x											
16	16	196	300	✓			x											
17	17	197	300	✓			x											
18	18	198	300	✓			x											
19	19	199	200	✓	200		x											
20	20	200	200	✓			x											
21	21	201	200	✓			x											
22	22	202	200	✓			x											
23	23	203	200	✓			x											
24	24	204	200	✓			x											

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

Bottom Depth: 1319 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0343	214629
Bottom	0351	
End	0404	*

Positional Information

Lat:	48 ° 38 99	N
Lon:	126 ° 40 06	W

Start

Lat:	48 ° 38 97	N
Lon:	126 ° 40 05	W

Bottom

Lat:	48 ° 38 99	N
Lon:	126 ° 40 07	W

End

Extra comments:
Cesium 2

Cruise ID: 2014-19 Station: P4 Event #: 27 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure													
1		135	1250m														
2		136	1000m														
3		137	800m														*NO FILTRATION SUP
4		138	600m														
5		139	500m														
6																	
7																	
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): MB/DJ

Bottom Depth: 1321 m
Transmisso Cleaned: Y / ☒ N

Time	UTC	Local
Start	0420	2120
Bottom	0534	
End	0936	

Positional Information
Start
Lat: 48 ° 38 99 N
Lon: 126 ° 39 91 W

Bottom
Lat: 48 ° 39 03 N
Lon: 126 ° 39 72 W

End
Lat: 48 ° 38.96 N
Lon: 126 ° 39 84 W

Extra comments:
Deep in-situ pumps

Cruise ID: 2014-19 Station: P4 Event #: 28 Ship: Tully UTC Date (dd|mmm|yyyy): 22|Aug|2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	UBC												
1	1	141	Bot-10	✓	x												
2	2	142	Bot-10	✓	x												
3	3	143	Bot-10	✓	x												
4	4	144	Bot-10	✓	x												
5	5	145	1000	✓	x												
6	6	146	1000	✓	x												
7	7	147	1000	✓	x												
8	8	148	1000	✓	x												
9	9	149	500	✓	x												
10	10	150	500	✓	x												
11	11	151	500	✓	x												
12	12	152	500	✓	x												
13	13	153	10	✓	x												
14	14	154	10	✓	x												
15	15	155	10	✓	x												
16	16	156	10	✓	x												
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 1319 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0950	0250
Bottom	1015	
End	1040	

Positional Information
Start
Lat: 48 ° 38.99 N
Lon: 126 ° 39.92 W

Bottom
Lat: 48 ° 38.91 N
Lon: 126 ° 39.93 W

End
Lat: 48 ° 38.85 N
Lon: 126 ° 39.94 W

Extra comments:
UBC - Andreas

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P4 Event #: 30 Ship: Tully UTC Date (dd|mmm|yyyy): 22 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments	
			Target Pressure	Confirmed ✓ Pressure	Plastics														
1	1	157	Bot-10	✓	1321		x												
2	2	158	1200	✓			x												
3	3	159	1100	✓			x												
4	4	160	1000	✓			x												
5	5	161	900	✓			x												
6	6	162	800	✓			x												
7	7	163	700	✓			x												
8	8	164	600	✓			x												
9	9	165	500	✓			x												
10	10	166	450	✓			x												
11	11	167	400	✓			x												
12	12	168	350	✓			x												
13	13	169	300	✓			x												
14	14	170	250	✓			x												
15	15	171	200	✓			x												
16	16	172	175	✓			x												
17	17	173	150	✓			x												
18	18	174	125	✓			x												
19	19	175	100	✓			x												
20	20	176	75	✓			x												
21	21	177	50	✓			x												
22	22	178	25				x												
23	23	179	10				x												
24	24	180	5				x												

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

Bottom Depth: 1330 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1122	0422
Bottom	1145	
End	1232	

Positional Information
Start
Lat: 48 ° 38.83 N
Lon: 126 ° 40.11 W

Bottom
Lat: 48 ° 38.86 N
Lon: 126 ° 40.07 W

End
Lat: 48 ° 38.96 N
Lon: 126 ° 39.99 W

Extra comments:
Plastics cast

Cruise ID: 2014-19 Station: P4 Event #: 31 Ship: Tully UTC Date (dd|mmm|yyyy): 22 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy Uvic	ONAr Uvic	NH4/ HCO3	NO3/ HCO3	CHL	NH4	Nut-fr IOS	Sal IOS							
1	1	205	1%	25			x	xx	x	xx	x	X							
2	2	206	10%	13			x	xx	x	xx	x	X							
3	4	207	30%	6			x	xx	x	xx	x	X							
4	5	208	55%	3			x	xx	x	xx	x	X							
5	6	209	100%	2.5	xx	xx	xxx	xx	x	xx	x	x							
6	3	210	10 m	10	xx	xx						x							
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): ER

Bottom Depth: 1321 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1308	0608
Bottom	1311	
End	1321	

Positional Information

Start

Lat: 48 ° 38.94 N

Lon: 126 ° 39.93 W

Bottom

Lat: 48 ° 38.95 N

Lon: 126 ° 39.94 W

End

Lat: 48 ° 38.95 N

Lon: 126 ° 39.98 W

Extra comments:

Amanda's cast,
OUT OF ORDER!!
1 - 2 - 6 - 3 - 4 - 5

Cruise ID: 2014-19 Station: P5 Event #: 32 Ship: Tully UTC Date (dd|mmm|yyyy): 22 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ☒ Pressure		Nut-F	Sal	Chl	HPLC	NH4								
1		211	250	☒						x								NH4 water JUGS IN WALKER CONER
2		212	30 / Max	☒	26	x	x	xx	xx									
3		213	5	☒		x	x	xx	xx									
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 2088 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1548	0848
Bottom	1623	
End	1700	

Positional Information
Start
Lat: 48 ° 41.48 N
Lon: 127 ° 9.78 W

Bottom
Lat: 48 ° 41.53 N
Lon: 127 ° 9.76 W

End
Lat: 48 ° 41.50 N
Lon: 127 ° 9.77 W

Extra comments:
CHL max @ 26m

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P6 Event #: 33 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target	Confirmed	Pressure	Nut-F	Sal	Chl	HPLC										
				✓															
1	1	214	30 / Max	✓	34	x		x x	x x										
2	2	215	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): ML

Bottom Depth: 2550 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1937	1237
Bottom	2013	
End	2051	

Positional Information
Start
Lat: 48 ° 44.60 N
Lon: 127 ° 39.91 W

Bottom
Lat: 48 ° 44.58 N
Lon: 127 ° 40.00 W

End
Lat: 48 ° 44.60 N
Lon: 127 ° 39.96 W

Extra comments:

Cruise ID: 2014-19 Station: P7 Event #: 35 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC							
1		216	30 / Max	✓	34	x		x x	x x						
2		217	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): KR

Bottom Depth: 2585 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2328	1628
Bottom	0003	
End	0037	

Positional Information

Start

Lat: 48 ° 46.61 N

Lon: 128 ° 09.72 W

Bottom

Lat: 48 ° 46.53 N

Lon: 128 ° 09.91 W

End

Lat: 48 ° 46.58 N

Lon: 128 ° 09.98 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P8 Event #: 39 Ship: Tully UTC Date (dd|mmm|yyyy): 23 | Aug | 2014

Rosette Operation		Samples Taken / Sampler's Initials										Comments	
Target Pressure	Confirmed Pressure	Oxy	Sal	Nut Fr	Nut C	pH	Chl	HPLC					

3	1	3	218	2000	✓ 2000	x x	x x	x	x										
4	2	4	219	1500	✓ 1500	x	x	x	x										
5	3	5	220	1250	✓ 1250	x	x	x x	x x										
6	4	6	221	1000	✓ 1000	x	x x	x	x										
7	5	7	222	800	✓ 800	x	x	x	x										
8	6	8	223	600	✓ 600	x		x	x										
9	7	9	224	400	✓ 399	x		x	x										
10	8	10	225	300	✓ 300	x		x											
11	9	11	226	250	✓ 250	x x		x											
12	10	12	227	200	✓ 200	x		x											
13	11	13	228	175	✓ 175	x		x											
14	12	14	229	150	✓ 150	x		x x											
15	13	15	230	125	✓ 125	x		x											
16	14	16	231	100	✓ 100	x		x		x									
17	15	17	232	75	✓ 75	x		x		x									
18	16	19	233	50	✓ 50	x		x		x									
19	17	21	234	25	✓ 25	x x		x		x									
20	18	22	235	10	✓ 10	x		x		x									
21	19	23	236	5	✓ 5	x	x	x		x									
22	20	18	237	50/M*10	✓ 55					x x	x x								
23	21	20	238	20/Max	✓ 45					x x	x x								
24	22	24	239	5	✓ 5					x x	x x								
	23																		
	24																		

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

Watchkeeper(s): MB

Bottom Depth: 2520 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0501	1001
Bottom	0531	
End	0625	

Positional Information

Start Lat: 48 ° 48 99 N

Start Lon: 128 ° 39 99 W

Bottom Lat: 48 ° 48 99 N

Bottom Lon: 128 ° 40 08 W

End Lat: 48 ° 48 99 N

End Lon: 128 ° 40 05 W

Extra comments:

Firing out of order

1+2 misfires @ surface

3-17, 22, 18, 23, 19, 20

21, 24

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P9 Event #: 41 Ship: Tully UTC Date (dd/mmm/yyyy): 23 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	Pressure	Nut-F	Sal	Chl	HPLC										
			Pressure	✓															Pressure
1		240	50 / Max	✓	38	x		x x	x x										
2		241	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): SR2

Bottom Depth: 2342 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0912	0212
Bottom	0946	
End	1020	

Positional Information
Start Lat: 48 ° 51.42 N
Lon: 129 ° 9.90 W

Bottom Lat: 48 ° 51.40 N
Lon: 129 ° 9.90 W

End Lat: 48 ° 51.41 N
Lon: 129 ° 9.89 W

Extra comments:
CHL max @ 38m

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P10 Event #: 42 Ship: Tully UTC Date (dd|mmm|yyyy): 23 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed √	Pressure	Nut-F	Sal	Chl	HPLC		Cesium					
1		242	200								x					
2		243	51			x		xx	xx							
3		244	200								x					
4		245	200								x					
5		246	200								x					
6		247	200								x					
7		248	200								x					
8		249	200								x					
9		250	200								x					
10		251	200								x					
11		252	200								x					
12		253	150								x					
13		254	150								x					
14		255	150								x					
15		256	150								x					
16		257	150								x					
17		258	150								x					
18		259	50								x					
19		260	50								x					
20		261	50								x					
21		262	50								x					
22		263	50								x					
23		264	50								x					
24		265	5			x	x	xx	xx							

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

Bottom Depth: 2660 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1253	0553
Bottom	1331	
End	1416	

Positional Information
Start
Lat: 48 ° 53.64 N
Lon: 129 ° 39.86 W

Bottom
Lat: 48 ° 53.62 N
Lon: 129 ° 39.89 W

End
Lat: 48 ° 53.62 N
Lon: 129 ° 39.88 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P11 Event #: 44 Ship: Tully UTC Date (dd|mmm|yyyy): 23 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC									
1		266	50 / Max	☒ 53	x		x x	x x									
2		267	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): SR

Bottom Depth: 2750m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1649	0949
Bottom	1722	
End	1805	

Positional Information
Start
Lat: 48 ° 55.99 N
Lon: 130 ° 10.02 W

Bottom
Lat: 48 ° 56.00 N
Lon: 130 ° 9.94 W

End
Lat: 48 ° 56.08 N
Lon: 130 ° 9.89 W

Extra comments:
53?

Water Properties Group

Sampling Log

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

Cruise ID:

2014-19

Station:

P12

Event #:

46

Ship:

Tully

UTC Date (dd|mmm|yyyy): 23 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														Comments
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chi	HPLC	Phyto	ONAr						
				✓			t	d											
1	1	268	300	✓	300	x			x										
2	2	269	200	✓	200	x	x	x	x										
3	3	270	175	✓	175	x	x	x	x										
4	4	271	100	✓	100	x	x	x	x		x								
5	5	272	75	✓	75	x			xx		xx	xx							10 m below chi Max
6	6	273	50	✓	51	x			x		x								
7	7	274	40	✓	40	x			x		xx								
8	9	275	30	✓	30	x			x		x								
9	10	276	25	✓	25	x			x		x								
10	11	277	20	✓	20	xx	xx	xx	x		x								
11	13	278	15	✓	15	x			x		x								
12	14	279	10	✓	11	x			x		x								
13	15	280	5	✓	5	x	x	x	x		x								
14	17	281	0	✓	1	x	x	x	x		x								
15	8	282	50/M*10	✓	51						xx	xx							
16	12	283	20/Max	✓	20						xx	xx							
17	16	284	5	✓	5						xx	xx							
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	3230	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	2032	1332
Bottom	2038	
End	2058	

Positional Information
Lat: 48 ° 58 23 N
Lon: 130 ° 39 90 W

Start

Lat: 48 ° 58 27 N
Lon: 130 ° 39 89 W

Bottom

Lat: 48 ° 58 19 N
Lon: 130 ° 40 05 W

End

Extra comments:
DMS cast; out-of-order.
1-5, 6, 7, 15, 8, 9, 10, 16, 11, 12, 13, 17

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P12 Event #: 49 Ship: Tully UTC Date (dd|mmm|yyyy): 23 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH					UBC				
1	1	285	Bot-10	✓	3274	x		x	x	x	x				x				
2	2	286	3000	✓	3000	x	xx	x	x	xx	x								
3	3	287	3000	✓	3000	x	x	x	x	x	x				x				
4	4	288	2500	✓	2500	xx	x	x	x	x	xxx								
5	5	289	2000	✓	2001	x	xx	xx	xx	x	x				x				
6	6	290	1500	✓	1500	x	x	x	x	x	x				x				
7	7	291	1250	✓	1250	x	x	x	x	x	x				x				
8	8	292	1000	✓	1001	xx	xx	x	x	x	x				x				
9	9	293	800	✓	800	x		x	x	x	x				x				
10	10	294	600	✓	600	x		x	x	x	x				x				
11	11	295	400	✓	401	x		x	x	x	x				x				
12	12	296	300	✓	301	x		x		x	x				x				
13	13	297	250	✓	250	xx		x		x	x								
14	14	298	200	✓	200	x		x		x	x				x				
15	15	299	175	✓	176	x		x		x	xxx								
16	16	300	150	✓	151	x		x		x	x				x				
17	17	301	125	✓	125	x		x		x	x								
18	18	302	100	✓	100	x		xx		x	x				x				
19	19	303	75	✓	75	xx		x		x	x								
20	20	304	50	✓	50	x		x		x	x				x				
21	21	305	25	✓	24	x		x		x	x				x				
22	22	306	10	✓	10	x		x		x	x				x				
23	23	307	5	✓	5	x	x	x		x	x								
24																			

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

Watchkeeper(s): MR/mb

Bottom Depth: 3230 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2132	1432
Bottom	2226	
End	2339	

Positional Information

Lat: 48 ° 58 26 N

Lon: 130 ° 39 94 W

Lat: 48 ° 58 23 N

Lon: 130 ° 39 99 W

Lat: 48 ° 58 24 N

Lon: 130 ° 39 97 W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P12 Event #: 51 Ship: Tully UTC Date (dd|mmm|yyyy): 24 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	TM Uvic	TM-ios Filt	TM-ios un-Filt	Dave Cd	Fe Isot	Nut-Fr	Nut-C	Sal	Ligands					
1	1	308	1500	✓ 1499m	x	x	x		x	x	x	x						
2	2	309	1250	✓ 1249m	x	x	x		x	x	x	x						
3	3	310	1000	✓ 1000m	x	x	x		x	x	x	x						
4	4	311	800	✓ 800m	x	x	x		x	x	x							DID NOT FIRE
5	5	312	600	✓ 600m	x	x	x		x	x	x							
6	6	313	400	✓ 399m	x	x	x		x	x	x							
7	7	314	200	✓ 199m	x	xx	xx		x	x								
8	8	315	100	✓ 100m	x	x	x		x	x								
9	9	316	75	✓ 74.7m	x	x	x		x	x								
10	10	317	50	✓ 49.7m	x	x	x	xx	xx	x			xy					
11	11	318	25	✓ 24.8m	x	x	x	xx	xx	x								
12	12	319	10	✓ 9.9m	x	x	x	xx	xx	x								
13																		
14																		
15																		BOTTLE 4 DID NOT FIRE
16																		BOTTLE 3 VENT CAP NOT FULLY CLOSED
17																		BOTTLE 9 OR 10 ? LEAKING AT BOTTOM SLOWLY
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3228 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0158	1858
Bottom	02:24	19:24
End	0256	

Positional Information

Lat:	48 ° 58.22	N
Lon:	130 ° 40.03	W

Start

Bottom

Lat:	48 ° 58.24	N
Lon:	130 ° 40.00	W

Bottom

End

Lat:	48 ° 58.23	N
Lon:	130 ° 39.98	W

End

Extra comments: CO3071)
TMR BOTTLE 4 → Pos 7
SPACE
BOTTLE 02981 → Pos 4
BOTTLE 02984, OLD Pos 7
OUT

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P12 Event #: 52/53(Repeat) Ship: Tully UTC Date (dd|mmm|yyyy): 24 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed ✓	Pressure		UBC												
1	1	320	2000	✓	✓	2000		x											
2	2	321	2000	✓	✓	2000		x											
3	3	322	2000	✓	✓	2000		x											
4	4	323	2000	✓	✓	2000		x											
5	5	324	1000	✓	✓	1001		x											
6	6	325	1000	✓	✓	1001		x											
7	7	326	1000	✓	✓	1001		x											
8	8	327	1000	✓	✓	1001		x											
9	9	328	500	✓	✓	500		x											
10	10	329	500	✓	✓	500		x											
11	11	330	500	✓	✓	500		x											
12	12	331	500	✓	✓	500		x											
13	13	332	10	✓	✓	10		x											
14	14	333	10	✓	✓	10		x											
15	15	334	10	✓	✓	10		x											
16	16	335	10	✓	✓	10		x											
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 3225 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0430	2130
Bottom	0503	
End	0542	

Positional Information

Lat:	48 ° 58 25	N
Lon:	130 ° 39 96	W

Start

Lat:	48 ° 58 25	N
Lon:	130 ° 40 02	W

Bottom

Lat:	48 ° 58 19	N
Lon:	130 ° 41 00	W

End

Extra comments:
UBC - Andreas

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P12 Event #: 54/55 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | Apr | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target	Confirmed	Oxy	ONAr	NH4/	NO3/	CHL	NH4	Nut-fr	Sal							
			Pressure	✓ Pressure	Uvic	Uvic	HCO3	HCO3			IOS	IOS							
1	1	336	1%	✓ 6.8 m			x x	x x	x	x x	x	x							
2	2	337	10%	✓ 36.5 m			x x	x x	x	x x	x	x							
3	3	338	30%	✓ 13.5 m			x x	x x	x	x x	x	x							
4	5	339	55%	✓ 4.5 m			x x	x x	x	x x	x	x							
5	6	340	100%	✓ 2.5 m	x x	x x	x x x	x x x	x	x x	x	x							
6	4	341	10 m	✓ 10 m	x x	x x						x							
7	7	342	100%	✓ 2.5 m															
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: 3229 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0623	
Bottom	0626	
End	0636	

Positional Information

Lat:	48 ° 58 21	N
Lon:	130 ° 39 97	W

Start

Lat:	48 ° 58 21	N
Lon:	130 ° 39 98	W

Bottom

Lat:	48 ° 58 22	N
Lon:	130 ° 39 96	W

End

Extra comments: Return
Amanda's cast, CAST DID NOT
Go to 150m
OUT OF ORDER!! ON STATION
1-2-3-6-4-5-7

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P13 Event #: 56 Ship: Tully UTC Date (dd|mmm|yyyy): 24 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC									
1		343	50 / Max		x		x x	x x									
2		344	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): SR

Bottom Depth: 3750 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1133	0933
Bottom	1207	
End	1240	

Positional Information
Start
Lat: 49 ° 2.62 N
Lon: 131 ° 39.93 W

Bottom
Lat: 49 ° 2.63 N
Lon: 131 ° 39.93 W

End
Lat: 49 ° 2.63 N
Lon: 131 ° 40.03 W

Extra comments:
no max (chl)

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P14 Event #: 57 Ship: Tully UTC Date (dd|mmm|yyyy): 24 | Aug | 2014

			Rosette Operation			Samples Taken / Sampler's Initials												Comments
Niskin #	Firing #	Sample #	Target	Confirmed		Nut-F	Sal	Chl	HPLC									
			Pressure	✓	Pressure													
1	1	345	50 / Max	✓	50	x		x x	x x									
2	2	346	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): SR

Bottom Depth: 3310 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1743	1043
Bottom	1816	
End	1853	

Positional Information

Lat:	49 ° 7.38	N
Lon:	132 ° 39.90	W

▼

Lat:	49 ° 7.40	N
Lon:	132 ° 39.91	W

▼

Lat:	49 ° 7.45	N
Lon:	132 ° 39.93	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P15 Event #: 61 Ship: Tully UTC Date (dd|mmm|yyyy): 26 | Nov | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed		Nut-F	Sal	Chl	HPLC										
			Pressure	✓	Pressure														
1	1	347	38 50 / Max	✓	38	x		x x	x x										
2	2	348	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: 2005 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	23:53	16:53
Bottom	00:25	
End	01:00	

Positional Information

Lat:	49 ° 12 38	N
Lon:	133 ° 39 94	W

Bottom

Lat:	49 ° 11 99	N
Lon:	133 ° 39 99	W

End

Lat:	49 ° 12 00	N
Lon:	133 ° 39 98	W

Extra comments:
PAR OFF

Cruise ID: 2014-19 Station: P16 Event #: 607 Ship: Tully UTC Date (dd|mmm|yyyy): 25 | 106 | 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓ Pressure		Cesium												
1	1	349	150	/	151		x											
2	2	350	150	/			x											
3	3	351	150	/			x											
4	4	352	150	/			x											
5	5	353	150	/			x											
6	6	354	150	/			x											
7	7	355	100	/	100		x											
8	8	356	100	/			x											
9	9	357	100	/			x											
10	10	358	100	/			x											
11	11	359	100	/			x											
12	12	360	100	/			x											
13	13	361	50	/	50		x											
14	14	362	50	/			x											
15	15	363	50	/			x											
16	16	364	50	/			x											
17	17	365	50	/			x											
18	18	366	50	/			x											
19	19	367	0	/	2.3		x											
20	20	368	0	/			x											
21	21	369	0	/			x											
22	22	370	0	/			x											
23	23	371	0	/			x											
24	24	372	0	/			x											

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

Watchkeeper(s): MB

Bottom Depth: 3623 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0538	2238
Bottom	0541	
End	0547	

Positional Information

Start

Lat: 49 ° 17 06 N

Lon: 134 ° 39 93 W

Bottom

Lat: 49 ° 17 03 N

Lon: 134 ° 39 95 W

End

Lat: 49 ° 17 03 N

Lon: 134 ° 39 93 W

Extra comments:

Cesium #1

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P16 Event #: 603 Ship: Tully UTC Date (dd|mmm|yyyy): 25 | Apr | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments						
			Target Pressure	Confirmed	Pressure	TM	TM-ios	TM-ios	Dave	Fe Isot	Nut-Fr	Nut-C	Sal	Ligands								
				✓		Uvic	Filt	un-Filt	Cd													
1	1	373	1500	✓	1499m	x	x	x		x	x	x	x									
2	2	374	1250	✓	1249m	x	x	x		x	x	x	x									
3	3	375	1000	✓	1000m	x	x	x		x	x	x	x									
4	4	376	800	✓	800m	x	x	x		x	x	x										
5	5	377	600	✓	600m	x	x	x		x	x	x										
6	6	378	400	✓	399m	x	x	x		x	x	x										
7	7	379	200	✓	201m	x X	x	x		x	x											
8	8	380	100	✓	100m	x	x	x		x	x											
9	9	381	75	✓	75m	x	x x	x x		x	x											
10	10	382	50	✓	50m	x	x	x	x x	x X	x		xx									
11	11	383	25	✓	25m	x	x	x	x x	x X	x											
12	12	384	10	✓	9.7m	x	x	x	x x	x x	x								LEAKY 10L SWAPPED IN			
13																						
14																						
15																						
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						

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

Bottom Depth: 3623 m
Transmisso Cleaned: NA Y / N

Time	UTC	Local
Start	0615	2315
Bottom	0640	2340
End	0720	0020

Positional Information

Lat:	49 ° 16.99	N
Lon:	134 ° 39.99	W

▼

Lat:	49 ° 17.02	N
Lon:	134 ° 40.06	W

▼

Lat:	49 ° 17.00	N
Lon:	134 ° 40.12	W

Extra comments:
TMR BOTTLE 02974 pgs 12
OUT (BROKEN FIRING
LINES, REPLACED w/
BOTTLE 02984 MADE
NEW VENT

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P16 Event #: 64 Ship: Tully UTC Date (dd|mmm|yyyy): 25 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH					UBC			
					SR+AM	SR+AM		AR	KS						AM+SR			
1		385	Bot-10	✓ 3688	x		x	x	x	x					x			
2		386	3500	✓	x	x	x	x	xx	x								
3		387	3500	✓	x	x	x	x	x	x								
4		388	3000	✓	x	xx	x	x	x	x					x			
5		389	2500	✓	x	x	x	x	x	xxx								
6		390	2000	✓	xx	xx	x	x	x	x					x			
7		391	1500	✓	x	x	x	x	x	x					x			
8		392	1250	✓	x	x	xx	xx	x	x					x			
9		393	1000	✓	x	xx	x	x	x	x					x			
10		394	800	✓	x		x	x	x	x					x			
11		395	600	✓	x		x	x	x	x					x			
12		396	400	✓	x		x	x	x	x					x			
13		397	300	✓	xx		x		x	x					x			
14		398	250	✓	x		x		x	xxx								
15		399	200	✓	x		x		x	x					x			
16		400	175	✓	xx		x		x	x								
17		401	150	✓	x		x		x	x					x			
18		402	125	✓	x		x		x	x								
19		403	100	✓	x		x		x	x					x			
20		404	75	✓	xx		x		x	x								
21		405	50	✓	x		xx		x	x					x			
22		406	25	✓	x		x		x	x					x			
23		407	10	✓	x		x		x	x					x			
24		408	5	✓	x	x	x		x	x								

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

Watchkeeper(s): SR

Bottom Depth: 3625 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0734	0034
Bottom	0834	
End	0959	

Positional Information

Lat: 49 ° 16.99 N

Lon: 134 ° 40.03 W

Lat: 49 ° 17.02 N

Lon: 134 ° 40.13 W

Lat: 49 ° 16.99 N

Lon: 134 ° 40.35 W

40.16

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID:

2014-19

Station:

P16

Event #: 66

Ship: Tully

UTC Date (dd|mmm|yyyy): 25 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Oxy	ONAr	NH4/	NO3/	CHL	NH4	Nut-fr	Sal						
			Pressure	✓	Pressure	Uvic	Uvic	HCO3	HCO3		IOS	IOS						
1		409	1%		71.5.2			xx	xx	x	xx	x	x					
2		410	10%		24			xx	xx	x	xx	x	x					
3		411	30%		3			xx	xx	x	xx	x	x					
4		412	55%		2.5			xx	xx	x	xx	x	x					
5		413	100%		2.5	xx	xx	xx	xx	x	xx	x	x					
6		414	100%		2.5							x						
7		415	10		10m	xx	xx					x						
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	3625	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	1133	0443
Bottom	1137	
End	1148	

Positional Information
Start
Lat: 49 ° 17.01 N
Lon: 134 ° 40.27 W

Bottom
Lat: 49 ° 17.03 N
Lon: 134 ° 40.23 W

End
Lat: 49 ° 17.02 N
Lon: 134 ° 40.35 W

Extra comments:
Amanda's cast,
OUT OF ORDER!!
bot 8 fired by accident
bot 9 was another attempt

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P16 Event #: 68 Ship: Tully UTC Date (dd|mmm|yyyy): 25 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments	
			Target	Confirmed			Cesium													
			Pressure	✓	Pressure															
1	1	416	500	✓			x													
2	2	417	500	✓			x													
3	3	418	500	✓			x													
4	4	419	500	✓			x													
5	5	420	500	✓			x													
6	6	421	500	✓			x													
7	7	422	400	✓			x													
8	8	423	400	✓			x													
9	9	424	400	✓			x													
10	10	425	400	✓			x													
11	11	426	400	✓			x													
12	12	427	400	✓			x													
13	13	428	300	✓			x													
14	14	429	300	✓			x													
15	15	430	300	✓			x													
16	16	431	300	✓			x													
17	17	432	300	✓			x													
18	18	433	300	✓			x													
19	19	434	200	✓			x													
20	20	435	200	✓			x													
21	21	436	200	✓			x													
22	22	437	200	✓			x													
23	23	438	200	✓			x													
24	24	439	200	✓			x													

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

Bottom Depth: 3621 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1257	0557
Bottom	1305	
End	1319	

Positional Information
Start
Lat: 49 ° 16 98 N
Lon: 134 ° 40.24 W

Bottom
Lat: 49 ° 17.03 N
Lon: 134 ° 40.28 W

End
Lat: 49 ° 17.02 N
Lon: 134 ° 40.36 W

Extra comments:
Cesium 2

Water Properties Group

Sampling Log

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

Cruise ID:

2014-19

Station:

P16

Event #:

69170

Ship:

Tully

UTC Date (dd|mmm|yyyy):

25 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC	Phyto	ONAr					
					MR	MA	dMA	SR		MR	LA							
1		440	300	✓		x			x									
2		441	200	✓		x	x	x	xx									
3		442	175	✓		x	x	x	x									
4		443	100	✓		x	x	x	x	x								
5		444	75	✓		x			x	x								
6		445	50	✓		x			x	xx								
7		446	40	✓		x			x	x								
8		447	30	✓		x			x	x								
9		448	25	✓		x			x	x								
10		449	20	✓		xx	xx	xx	x	x								
11		450	15	✓		x			x	x								
12		451	10	✓		x			x	x								
13		452	5	✓		x	x	x	x	x								
14		453	0	✓		x	x	x	x	x								
15		454	50/M*10	✓ 46						xx	xx							
16		455	20/Max	✓ 36						xx	xx							
17		456	5	✓						xx	xx							
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): SR

Bottom Depth: 3621 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1433	0733
Bottom	1441	
End	1504	

Positional Information

Lat:	49° 16.98	N
Lon:	134° 39.98	W

Lat:	49° 17.03	N
Lon:	134° 40.03	W

Lat:	49° 17.03	N
Lon:	134° 40.03	W

Extra comments:

DMS cast; out-of-order.
Spike of CHL @ 39m
on down cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P17 Event #: 71 72 Ship: Tully UTC Date (dd|mmm|yyyy): 25 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target	Confirmed	Nut-F	Sal	Chl	HPLC											
			Pressure	✓ Pressure															
1	1	457	20 ~50 / Max	✓	30	x		x x	x x										
2	2	458	5	✓	5	x	x	x x	x x										
3																			
4																			
5																			
6																			
7																			
8																			
9																			
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18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 3642 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2005	1305
Bottom	2038	
End	2112	

Positional Information
Start
Lat: 49 ° 20 97 N
Lon: 135 ° 39 96 W

Bottom
Lat: 49 ° 20 97 N
Lon: 135 ° 40 01 W

End
Lat: 49 ° 20 98 N
Lon: 135 ° 40 01 W

Extra comments:
PAR OFF

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P18 Event #: 73 Ship: Tully UTC Date (dd|mmm|yyyy): 26 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC							
1	1	459	30 / Max	☒ 33	x		x x	x x							
2	2	460	5	☒ 5	x	x	x x	x x							
3															
4															
5															
6															
7															
8															
9															
10															
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12															
13															
14															
15															
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17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 3819 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0200	1900
Bottom	0234	
End	0309	

Positional Information
Start
Lat: 49 ° 26 03 N
Lon: 136 ° 40 00 W

Bottom
Lat: 49 ° 26 02 N
Lon: 136 ° 40 07 W

End
Lat: 49 ° 26 02 N
Lon: 136 ° 40 14 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P19 Event #: 75 Ship: Tully UTC Date (dd|mmm|yyyy): 26 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	Pressure	Nut-F	Sal	Chl	HPLC										
			Pressure	✓															
1		461	50 / Max	✓	28	x		x x	x x										
2		462	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	5																		
21																			
22																			
23																			
24																			

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

Bottom Depth: 3910 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0749	0049
Bottom	0821	
End	0857	

Positional Information
Start
Lat: 49 ° 29.98 N
Lon: 137 ° 39.94 W

Bottom
Lat: 49 ° 29.99 N
Lon: 137 ° 39.98 W

End
Lat: 49 ° 29.99 N
Lon: 137 ° 40.03 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P20

Event #: 77

Ship: Tully

UTC Date (dd|mmm|yyyy): 26 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ☒ Pressure	Oxy Uvic	ONAr Uvic	NH4/ HCO3	NO3/ HCO3	CHL	NH4	Nut-fr IOS	Sal IOS							
1	1	463	1%	44m			xx	xx	x	xx	x	x							
2	2	464	10%	19.5m			xx	xx	x	xx	x	x							
3	4	465	30%	6m			xx	xx	x	xx	x	x							
4	5	466	55%	2.5m			xx	xx	x	xx	x	x							
5	6	467	100%	2.5m	xx	xx	xx	xx	x	xx	x	x							
6	7	468	100%	2.5m								x							
7	3	469	10	10m	xx	xx						x							
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 3946 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1319	0619
Bottom	1322	
End	1330	

Positional Information

Lat:	49 ° 33.92 N
Lon:	138 ° 40 04 W

Start

Bottom

Lat:	49 ° 33.92 N
Lon:	138 ° 40.05 W

End

Lat:	49 ° 33.92 N
Lon:	138 ° 40.07 W

Extra comments:
Amanda's cast,
OUT OF ORDER!!
1, 2, 7, 3, 4, 5, 6

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P20 Event #: 79 Ship: Tully UTC Date (dd|mmm|yyyy): 26 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target	Confirmed	Pressure	OXY	Sal	Nut-F	Nut-C	DIC	pH				UBC				
				✓															
1	1	470	Bot-10	✓	4027	x		x	x	x	x				x				
2	2	471	3500	✓		x	x	x	x	xx	x								
3	3	472	3500	✓		xx	x	x	x	x	xxx								
4	4	473	3000	✓		x	xx	x	x	x	x				x				
5	5	474	2500	✓	2498	x	x	x	x	x	x								
6	6	475	2000	✓		x	xx	x	x	x	x				x				
7	7	476	1500	✓		x	x	x	x	x	x				x				
8	8	477	1250	✓		xx	x	x	x	x	x				x				
9	9	478	1000	✓		x	xx	x	x	x	x				x				
10	10	479	800	✓		x	x	x	x	x	x				x				
11	11	480	600	✓		x	x	xx	xx	x	x				x				
12	12	481	400	✓		x	x	x	x	x	x				x				
13	13	482	300	✓		xx	x	x		x	x				x				
14	14	483	250	✓		x	x	x		x	x								
15	15	484	200	✓		x	x	x		x	x				x				
16	16	485	175	✓		x	x	x		x	x								
17	17	486	150	✓		x	x	xx		x	x				x				
18	18	487	125	✓		x	x	x		x	xxx								
19	19	488	100	✓		x	x	x		x	x				x				
20	20	489	75	✓		xx	x	x		x	x								
21		490	50	✓		x	x	x		x	x				x				
22		491	25			x	x	x		x	x				x				
23		492	10			x	x	x		x	x				x				
24		493	5			x	x	x		x	x								

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

Bottom Depth: 3945 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1537	0837
Bottom	1645	
End	1836	

Positional Information

Lat:	49 ° 33.96	N
Lon:	138 ° 39.99	W

Start

Lat:	49 ° 33.99	N
Lon:	138 ° 40.01	W

Bottom

Lat:	49 ° 34.00	N
Lon:	138 ° 40.00	W

End

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID:

2014-19

Station:

P20

Event #: 82

Ship: Tully

UTC Date (dd|mmm|yyyy): 26 | aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	TM	TM-ios	TM-ios	Dave	Fe Isot	Nut-Fr	Nut-C	Sal	Ligands					
			Pressure	✓ Pressure	Uvic	Filt	un-Filt	Cd										
1	1	494	1500	✓	1501m	x	x	x		x	x	x	x					
2	2	495	1250	✓	1250m	x	x	x		x	x	x	x					
3	3	496	1000	✓	1000m	x	x	x		x	x	x	x					
4	4	497	800	✓	799m	x	x	x		x	x	x						
5	5	498	600	✓	599m	x	x	x		x	x	x						
6	6	499	400	✓	399m	x	x	x		x	x	x						
7	7	500	200	✓	199m	x	x	x		x	x							
8	8	501	100	✓	99m	x	x	x		x	x							
9	9	502	75	✓	74.9m	x	xx	xx		x	x							
10	10	503	50	✓	50m	x	x	x	xx	xy	x							
11	11	504	25	✓	24.9m	x	x	x	xx	xy	x							
12	12	505	10	✓	10m	x	x	x	xx	xy	x							
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 1505 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	19:50	12:50
Bottom	20:11	1:11
End	20:37	1:37

Positional Information

Lat:	49 ° 33.9333 N
Lon:	138 ° 39.8974 W

Start

▼

Lat:	49 ° 33 85 N
Lon:	138 ° 39 91 W

Bottom

▼

Lat:	49 ° 33.84 N
Lon:	138 ° 39.98 W

End

Extra comments:
 TMR

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P20 Event #: 83 Ship: Tully UTC Date (dd|mmm|yyyy): 26 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP t	DMSP d	Nut-F		Chl	HPLC	Phyto	ONAr					
1	1	506	300	✓ 301	x			x										
2	2	507	200	✓ 201	x	x	x	x										
3	3	508	175	✓ 175	x	x	x	x										
4	4	509	100	✓ 100	x	x	x	xx		x								
5	5	510	75	✓ 75	x			x		x								
6	6	511	50	✓ 49	x			x		x								
7	7	512	40	✓ 40	x			x		x								
8	9	513	30	✓ 30	x			x		xx								
9	10	514	25	✓ 25	x			x		x								
10	12	515	20	✓ 20	xx	xx	xx	x		x								
11	13	516	15	✓ 15	x			x		x								
12	14	517	10	✓ 10	x			x		x								
13	15	518	5	✓ 5	x	x	x	x		x								
14	17	519	0	✓ 1.0	x	x	x	x		x								
15	8	520	35/M*10	✓ 35						xx	xx							
16	11	521	25/Max	✓ 25						xx	xx							
17	16	522	5	✓ 5						xx	xx							
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): MBBottom Depth: 3948 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2051	1351
Bottom	2056	
End	2114	

Positional Information
Start
Lat: 49 ° 33 92 N
Lon: 138 ° 39 90 WBottom
Lat: 49 ° 33 93 N
Lon: 138 ° 40 00 WEnd
Lat: 49 ° 33 94 N
Lon: 138 ° 40 02 WExtra comments:
DMS cast; out-of-order.
1-7, 15, 8, 9, 16, 10, 11
12, 13, 17, 14

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P21 Event #: 85 Ship: Tully UTC Date (dd|mmm|yyyy): 27 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC		Cesium						
1	1	524	200	✓ 200						x						
2	2	525	200	✓						x						
3	3	526	200	✓						x						
4	4	527	200	✓						x						
5	5	528	200	✓						x						
6	6	529	150	✓ 150						x						
7	7	530	150	✓						x						
8	8	531	150	✓						x						
9	9	532	150	✓						x						
10	10	533	150	✓						x						
11	11	534	100	✓ 100						x						
12	12	535	100	✓						x						
13	13	536	100	✓						x						
14	14	537	100	✓						x						
15	15	538	100	✓						x						
16	16	539	100	✓						x						
17	17	540	50	✓ 50						x						
18	18	541	50	✓						x						
19	19	542	50	✓						x						
20	20	543	50	✓						x						
21	21	544	50	✓						x						
22	22	545	50	✓						x						
23	23	546	30 / Max	✓ 30	x		x x	x x								287 307
24	24	547	5	✓ 5	x	x	x x	x x								

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

Bottom Depth: 3940 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0130	1830
Bottom	0204	
End	0245	

Positional Information
Start
Lat: 49 ° 38 07 N
Lon: 139 ° 39 83 W

Bottom
Lat: 49 ° 37 98 N
Lon: 139 ° 40 04 W

End
Lat: 49 ° 37 99 N
Lon: 139 ° 40 05 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P22 Event #: 87 Ship: Tully UTC Date (dd|mmm|yyyy): 27|aug|2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC									
1		548	50 / Max	✓ 15	x		x x	x x									
2		549	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): 8R

Bottom Depth: 3877 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0713	0013
Bottom	0745	
End	0820	

Positional Information
Start
Lat: 49 ° 42.03 N
Lon: 140 ° 39.79 W

Bottom
Lat: 49 ° 42.00 N
Lon: 140 ° 39.79 W

End
Lat: 49 ° 41.97 N
Lon: 140 ° 39.81 W

Extra comments:

Cruise ID: 2014-19 Station: P23 Event #: 586 Ship: Tully UTC Date (dd/mm/yyyy): 27 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ☒	Pressure	Nut-F	Sal	Chl	HPLC							
1		550	50 / Max			x		x x	x x							
2		551	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): SR

Bottom Depth: 4029 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1252	0552
Bottom	1326	
End	1400	

Positional Information
Start
Lat: 49 ° 46.14 N
Lon: 141 ° 39.79 W

Bottom
Lat: 49 ° 46.16 N
Lon: 141 ° 39.74 W

End
Lat: 49 ° 46.04 N
Lon: 141 ° 39.81 W

Extra comments:

Cruise ID: 2014-19 Station: P24 Event #: 90 Ship: Tully UTC Date (dd|mmm|yyyy): 27 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments					
			Target	Confirmed	Pressure	Nut-F	Sal	Chl	HPLC	DIC	pH										
			Pressure	✓																Pressure	
1	1	552	2005	✓	2006			x				x x x	x x x								
2	2	553	2005	✓				x				x x x	x x x								
3	3	554	2005	✓				x				x x x	x x x								
4	4	555	2005	✓				x				x x x	x x x								
5	5	556	2005	✓				x				x x x	x x x								VENT OPEN
6	6	557	2005	✓				x													
7	7	558	2005	✓				x													
8	8	559	2005	✓				x													
9	9	560	2005	✓				x													
10	10	561	2005	✓				x													
11	11	562	2005	✓				x													
12	12	563	2005	✓				x													
13	13	564	2005	✓				x													
14	14	565	2005	✓				x													
15	15	566	2005	✓				x													
16	16	567	2005	✓				x													
17	17	568	2005	✓				x													
18	18	569	2005	✓				x													
19	19	570	2005	✓				x													
20	20	571	2005	✓				x													
21	21	572	2005	✓				x													
22	22	573	2005	✓				x													
23	23	574	50 / Max	✓	50		x			x x	x x										no max > 2x background
24	24	575	5	✓	5		x	x		x x	x x										

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

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

Time	UTC	Local
Start	1840	1140
Bottom	1912	
End	1944	

Positional Information
Start
Lat: 49 ° 50.17 N
Lon: 142 ° 39.91 W

Bottom
Lat: 49 ° 50.18 N
Lon: 142 ° 39.88 W

End
Lat: 49 ° 50.24 N
Lon: 142 ° 39.77 W

Extra comments:
Calibration cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P25 Event #: 94 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed		Nut-F	Sal	Chl	HPLC										
			Pressure	✓	Pressure														
1	1	576	50 (Max)	✓	15	x		x x	x x										NIS ?
2	2	577	5	✓	5	x	x	x x	x x										
3																			
4																			
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): MB

Bottom Depth: 4127 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0022	1722
Bottom	0055	
End	0127	

Positional Information

Start

Lat: 50°00.03 N

Lon: 143°36.27 W

Bottom

Lat: 49°59.99 N

Lon: 143°36.27 W

End

Lat: 50°00.01 N

Lon: 143°36.28 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P35 Event #: 96 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC							
1	1	578	50 / Max	✓ 50	x		x x	x x							No more
2	2	579	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: 4126 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0441	2141
Bottom	0514	
End	0549	

Positional Information
Start
Lat: 49 ° 59 94 N
Lon: 144 ° 18 09 W

Bottom
Lat: 49 ° 59 94 N
Lon: 144 ° 18 11 W

End
Lat: 49 ° 59 93 N
Lon: 144 ° 18 12 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 97 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | 8 | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	TM Uvic	TM-ios Filt	TM-ios un-Filt	Dave Cd	Fe Isot	Nut-Fr	Nut-C	Sal	Ligands	CAR	BOYS	Ligand		
1		580	35-40		x	x	x										10 min P/H Rinse.	
2		581	25		x	1/2 x	2/3 x	1/2									10 min 20s + Uvic	
3		582	10		x	x	x	1/2	1/2								10 min 20s + Uvic	
4																		
5																		
6		5813	25m	Start									xx	xx		x	1x 20L = 15 min	
7		5813	25m	Finish												x	1x 20L = 13 min	
8																	2x 20L carb. 30 min	
9																	(1x 10L Carb. 10 min)	
10																	All Carb. 10 min	
11																	took	
12																	(68 min)	
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 4226 m
Transmisso Cleaned: YTN

Time	UTC	Local
Start	9:14	2:14
Bottom		2:40
End	11:30	4:30

Positional Information

Start	Lat: 50 ° 00 00 N
	Lon: 144 ° 59.95 W

Bottom

Lat: ° N
Lon: ° W

End

Lat: 49 ° 59.93 N
Lon: 144 ° 59.99 W

Extra comments:
TM pumping in the chains

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 98 Ship: Tully UTC Date (dd|mmm|yyyy): 28 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments	
			Target	Confirmed		Cesium														
			Pressure	√	Pressure															
1	1	584	150				x													
2	2	585	150				x													
3	3	586	150				x													
4	4	587	150				x													
5	5	588	150				x													
6	6	589	150				x													
7	7	590	100				x													
8	8	591	100				x													
9	9	592	100				x													
10	10	593	100				x													
11	11	594	100				x													
12	12	595	100				x													
13	13	596	50				x													
14	14	597	50				x													
15	15	598	50				x													
16	16	599	50				x													
17	17	600	50				x													
18	18	601	50				x													
19	19	602	0				x													
20	20	603	0				x													
21	21	604	0				x													
22	22	605	0				x													
23	23	606	0				x													
24	24	607	0				x													

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

Bottom Depth: 4226 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1149	0449
Bottom	1154	
End	1201	

Positional Information
Start
Lat: 49 ° 59.93 N
Lon: 144 ° 59.98 W

Bottom
Lat: 49 ° 59.91 N
Lon: 144 ° 59.98 W

End
Lat: 49 ° 59.92 N
Lon: 144 ° 59.99 W

Extra comments:
Cesium #1

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 100 Ship: Tully UTC Date (dd|mmm|yyyy): 28 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target	Confirmed	Oxy	ONAr	NH4/	NO3/	CHL	NH4	Nut-fr	Sal							
			Pressure	√ Pressure	Uvic	Uvic	HCO3	HCO3			IOS	IOS							
1	1	608	1%	58.5			xx	xx	x	xx	x	x							
2	2	609	10%	12.5			xx	xx	x	xx	x	x							Snapped @ 12.5
3	4	610	30%	2.5			xx	xx	x	xx	x	x							
4	5	611	55%	2.5			xx	xx	x	xx	x	x							
5	6	612	100%	2.5	xx	xx	xx	xx	x	xx	x	x							
6	7	613	100%	2.5								x							
7	3	614	10	10m	xx	xx						x							
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Watchkeeper(s): SR

Bottom Depth: 4226 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1243	0543
Bottom	1249	
End	1259	

Positional Information

Start Lat: 49 ° 59.96 N

Start Lon: 145 ° 0.12 W

Bottom Lat: 49 ° 59.98 N

Bottom Lon: 145 ° 0.13 W

End Lat: 49 ° 59.96 N

End Lon: 145 ° 0.15 W

Extra comments:

Amanda's cast,

OUT OF ORDER!!

1, 2, 7, 3, 4, 5, 6

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 102 Ship: Tully UTC Date (dd|mmm|yyyy): 28 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed	✓	Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC	Phyto				
							MR	t	MA	d	MA	AT		LA	LA	SR	MR	
1		616	300	/			x			x								
2		617	200	/			x	x	x	xx								
3		618	175	/			x	x	x	x								
4		619	100	/			x	x	x	x		x						
5		620	75	/	76.6		x			x		x						
6		621	50	/			x			x		x						
7		622	40	/			x			x		xx						
8		623	30	/			x			x		x						
9		624	25	/			x			x		x						
10		625	20	/			xx	xx	xx	x		x						
11		626	15	/			x			x		x						
12		627	10	/	11		x			x		x						
13		628	5	/			x	x	x	x		x						
14		629	0	/			x	x	x	x		x						
15		630	50/M*10	/								xx	xx					
16		631	20/Max	/								xx	xx					
17		632	5	/								xx	xx	xxx				
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 4226 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1633	0933
Bottom	1639	
End	1659	0959

Positional Information
Start
Lat: 50° 0.13 N
Lon: 145° 0.03 W

Bottom
Lat: 50° 0.13 N
Lon: 145° 0.03 W

End
Lat: 50° 0.13 N
Lon: 145° 0.13 W

Extra comments:
DMS cast; out-of-order.
1-6,15,7,8,9,10,16,11
12,13,17,14

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 103 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	TM	TM-ios	TM-ios	Dave	Fe Isot	Nut-Fr	Nut-C	Sal	Ligands					
1	1	633	1500	✓ 1500m	xx	x	x		x	x	x	x						
2	2	634	1250	✓ 1248m	xx	x	x		x	x	x	x						
3	3	635	1000	✓ 1000m	xx	x	x		x	x	x	x						
4	4	636	800	✓ 797m	xx	x	x		x	x	x							
5	5	637	600	✓ 600m	xx	x	x		x	x	x							
6	6	638	400	✓ 401m	xx	x	x		x	x	x							
7	7	639	200	✓ 200m	xx	x	x		x	x								
8	8	640	100	✓ 100m	xx	x	x		x	x								
9	9	641	75	✓ 74m	xx	xx	xx		x	x								
10	10	642	50	✓ 50m	xx	x	x		xx	x								
11	11	643	25	✓ 25m	xx	x	x		xx	x			xx					
12	12	644	10	✓ 10m	xx	x	x		xx	x								
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 4224 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start		
Bottom	17:44	10:44
End	1844	

Positional Information

Lat:	50 ° 0.12	N
Lon:	145 ° 0.02	W

Bottom

Lat:	50 ° 00.12	N
Lon:	145 ° 00.02	W

End

Lat:	50 ° 0.04	N
Lon:	144 ° 59.92	W

Extra comments:
 TMR Rosette damaged on retrieval. Four Go-Flo bottles broken, TMR Frame bent, and one post missing.

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 103 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	TM	TM-ios	TM-ios	Dave	Fe Isot	Nut-Fr	Nut-C	Sal	Ligands		
					Uvic	Filt	un-Filt	Cd							
1	1	633	1500	✓	1500m	xx	x	x		x	x	x	x		BROKEN, STILL SAMPLED
2	2	634	1250	✓	1248m	xx	x	x		x	x	x	x		
3	3	635	1000	✓	1000m	xx	x	x		x	x	x	x		SHATTERED NO SAMPLE
4	4	636	800	✓	797m	xx	x	x		x	x	x			BROKEN, NO SAMPLE
5	5	637	600	✓	600m	xx	x	x		x	x	x			
6	6	638	400	✓	401m	xx	x	x		x	x	x			
7	7	639	200	✓	200m	xx	x	x		x	x				
8	8	640	100	✓	100m	xx	x	x		x	x				
9	9	641	75	✓	74m	xx	xx	xx		x	x				
10	10	642	50	✓	50m	xx	x	x		xx	x				
11	11	643	25	✓	25m	xx	x	x		xx	x		xx		
12	12	644	10	✓	10m	xx	x	x		xx	x				STOPCLOCK SHEARED OFF, NO SAMPLE
13															
14						* ROSETTE SMASHED INTO SIDE OF SHIP MULTIPLE TIMES ON RETRIEVAL									
15						• POS 1: TOP BROKEN UPON RETRIEVAL, STILL WATER									
16						INSIDE, SAMPLED BUT MAY BE CONTAMINATED									
17						• POS 3: BOTTLE SHATTERED									
18						• POS 4: STOPCLOCK SHEARED OFF + BOTTLE BROKEN									
19						NO SAMPLE									
20						• POS 12: STOPCLOCK SHEARED OFF + WITH THE ROD									
21						BROKEN, BOTTLE ITSELF SEEMS INTACT - MAY BE									
22						SALVAGEABLE. NO SAMPLE									
23															
24															

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

Bottom Depth: 4224 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start		
Bottom	17:44	10:44
End	18:44	

Positional Information
Start
Lat: 50 ° 0.12 N
Lon: 145 ° 0.02 W

Bottom
Lat: 50 ° 00.12 N
Lon: 145 ° 00.02 W

End
Lat: 50 ° 0.04 N
Lon: 144 ° 59.92 W

Extra comments:
TMR Rosette damaged on retrieval. Four Go-Flu bottles broken, TMR frame bent, and one post missing.

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 104 Ship: Tully UTC Date (dd|mmm|yyyy): 28 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal	Nut-F	Nut-C	DIC	Alk	pH		Nut 250m	UBC				
					MB/AM	AM	MB	MB	AR/ME	AR/ME	KS			AM				
1	1	645	Bot-10	✓ 4317	x		xx	x	x	x	x			x				
2	2	646	4000	✓ 4000	xx	xx	xx	x	xx	x	x		x	x				
3	3	647	3500	✓ 3500	x	x	xx	x	✗x	x	x		x					
4	4	648	3000	✓ 3000	x	x	xx	x	x	x	x		x	x				
5	5	649	2500	✓ 2500	x	x	xx	x	x	x	xxx		x					
6	6	650	2000	✓ 2000	x	xx	xx	x	x	x	x		x	x				
7	7	651	1500	✓ 1502	x	x	xx	x	x	x	x		x	x				
8	8	652	1250	✓ 1250	xx	x	xx	x	x	x	x		x	x				
9	9	653	1000	✓ 1001	x	x	xx	x	x	x	x		x	x				
10	10	654	800	✓ 801	x		xxx	xx	x	x	x			x				
11	11	655	600	✓ 603	x		xx	x	x	x	x			x				
12	12	656	400	✓ 401	x		xx	x	x	x	x			x				
13	13	657	300	✓ 300	x		xx		x	x	x			x				
14	14	658	250	✓ 250	xx		xx		x	x	x							
15	15	659	200	✓ 200	x		xx		x	x	x			x				
16	16	660	175	✓ 177	x		xxx		x	x	x							
17	17	661	150	✓ 151	x		xx		x	x	x			x				
18	18	662	125	✓ 125	xx		xx		x	x	x							
19	19	663	100	✓ 100	x		xx		x	x	x			x				
20	20	664	75	✓ 75	x		xx		x	x	xxx							
21	21	665	50	✓ 50	x		xx		x	x	x			x				
22	22	666	25	✓ 25	x		xx		x	x	x			x				
23	23	667	10	✓ 10	x		xx		x	x	x			x				
24	24	668	5	✓ 5	x	x	xx		x	x	x							

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

Bottom Depth:	4224	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	1955	12:55
Bottom	2102	
End	2243	

Positional Information
Start
Lat: 50 ° 0 64 N
Lon: 144 ° 59 92 W

Bottom
Lat: 50 ° 0 01 N
Lon: 144 ° 59 97 W

End
Lat: 50 ° 0 01 N
Lon: 144 ° 59 97 W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 105 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Cesium												
1	1	669	500	✓ 500	x												
2	2	670	500	✓	x												
3	3	671	500	✓	x												
4	4	672	500	✓	x												
5	5	673	500	✓	x												
6	6	674	500	✓	x												
7	7	675	400	✓ 400	x												
8	8	676	400	✓	x												
9	9	677	400	✓	x												
10	10	678	400	✓	x												
11	11	679	400	✓	x												
12	12	680	400	✓	x												
13	13	681	300	✓ 300	x												
14	14	682	300	✓	x												
15	15	683	300	✓	x												
16	16	684	300	✓	x												
17	17	685	300	✓	x												
18	18	686	300	✓	x												
19	19	687	200	✓ 200	x												
20	20	688	200	✓	x												
21	21	689	200	✓	x												
22	22	690	200	✓	x												
23	23	691	200	✓	x												
24	24	692	200	✓	x												

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

Bottom Depth: 4225 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0034	1734
Bottom	0042	
End	0055	

Positional Information

Lat:	49 ° 59 99	N
Lon:	145 ° 0 00	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:
Cesium 2

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 106 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | AUG | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure													
1	1	693	700	☒													
2	2	694	600	☒													
3	3	695	500	☒													
4	4	696	400	☒													
5	5	697	300	☒													
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type: PUMPINT

ROS TRM X-Niskin other?

Watchkeeper(s): MB/DJ

Bottom Depth: 4226 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0129	0729
Bottom	0212	18
End	0646	

Positional Information

Start

Lat: 49 ° 59 96 N

Lon: 144 ° 59 91 W

Bottom

Lat: 49 ° 59 97 N

Lon: 144 ° 59 97 W

End

Lat: 49 ° 59 99 N

Lon: 144 ° 59 98 W

Extra comments:

in-situ pumps to 700

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 109/110 Ship: Tully UTC Date (dd|mmm|yyyy): 29 Aug 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓	Pressure				Plastics									
1	1	698	Bot-10	✓	4323				x									
2	2	699	4000	✓					x									
3	3	700	3500	✓					x									
4	4	701	3000	✓					x									
5	5	702	2500	✓					x									
6	6	703	2000	✓					x									
7	7	704	1500	✓					x									
8	8	705	1250	✓					x									
9	9	706	1000	✓					x									
10	10	707	800	✓					x									
11	11	708	600	✓					x									
12	12	709	400	✓					x									
13	13	710	300	✓					x									
14	14	711	250	✓					x									
15	15	712	200	✓					x									File 110 ↓
16	16	713	175	✓					x									175-5 ↓
17	17	714	150	✓					x									
18	18	715	125	✓					x									
19	19	716	100	✓					x									
20	20	717	75	✓					x									
21	21	718	50	✓					x									
22	22	719	25	✓					x									
23	23	720	10	✓					x									
24	24	721	5	✓					x									

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

Bottom Depth: 4329 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1136	0436
Bottom	1247	
End	1437	

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

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

End
Lat: 50° 00.00 N
Lon: 144° 59.98 W

Extra comments:
Plastics cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 111 Ship: Tully UTC Date (dd|mmm|yyyy) 2014 | 08 | 29

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure													
1	1	722	1500	/													
2	2	723	1250	/													
3	3	724	1000	/													CAME OFF BOTTOM BRACKET
4	4	725	800	/													CAME OFF BOTTOM BRACKET, TAPE SLID
5	5	726	500	/													CAUGHT ON BOTTOM BRACKET TOP CAME OFF - TAPE SLID
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): SK

Bottom Depth: 4226 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1517	0817
Bottom	1615	
End	2132	

Positional Information

Start

Lat: 49 ° 59.87 N

Lon: 144 ° 59.85 W

Bottom

Lat: 49 ° 59.87 N

Lon: 144 ° 59.85 W

End

Lat: 49 ° 59.89 N

Lon: 144 ° 59.87 W

Extra comments:

in-situ pumps to 1500

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 112 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | Oct | 2014

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed		DMS	DMSP	DMSP	Nut-F	Chl	HPLC		UBC		Oxy				
				✓	Pressure		t	d							UVic	Uvic			
1	1	727	2000	✓	2000								x						
2	2	728	2000	✓									x						
3	3	729	2000	✓									x						
4	4	730	2000	✓									x						
5	5	731	2000	✓									x						
6	6	732	1000	✓	1000								x						
7	7	733	1000	✓									x						
8	8	734	1000	✓									x						
9	9	735	1000	✓									x						
10	10	736	1000	✓									x						
11	11	737	500	✓	500								x						
12	12	738	500	✓									x						
13	13	739	500	✓									x						
14	14	740	500	✓									x						
15	19	741	10	✓	10								x						
16	20	742	10	✓									x						
17	21	743	10	✓									x						
18	22	744	10	✓									x						
19	17	745	MDL-15	✓	45	xx	xx	xx	x	xx	xx						45m		
20	18	746	MLD+10	✓	21	xx	xx	xx	x	xx	xx						20m		
21	23	747	5	✓	5	xx	xx	xx	x	xx	xx								
22	15	748	200	✓	200									xx	xx				
23	16	749	150	✓	149									xx	xx				
24																			

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

Bottom Depth: 4226 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2135	1435
Bottom	2206	
End	2246	

Positional Information
Start
Lat: 49 ° 59 89 N
Lon: 144 ° 59 88 W

Bottom
Lat: 49 ° 59 89 N
Lon: 144 ° 59 88 W

End
Lat: 49 ° 59 89 N
Lon: 144 ° 59 88 W

Extra comments:
Andreas' cast + DMS + O¹⁷
OUT-OF-ORDER
✓✓✓✓✓
1-14; 22; 23; 19; 20; 15-18; 21

MDL - where temp drops suddenly & salinity increases suddenly

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 113 Ship: Tully UTC Date (dd|mmm|yyyy): 29 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure		Oxy	¹⁷ O										
1	1	750	100	☒ 100		x x	x x										
2	2	751	50	☒ 50		x x	x x										
3	3	752	20	☒ 20		x x	x x										
4	4	753	5	☒ 5		x x	x x										
5																	
6																	
7																	
8																	
9																	
10																	
11																	
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17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 4226 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	<u>23 35</u>	<u>16 35</u>
Bottom	<u>23 38</u>	
End	<u>23 45</u>	

Positional Information

Lat:	<u>49</u> ° <u>59 92</u> N
Lon:	<u>144</u> ° <u>59 98</u> W

▼

Lat:	<u>49</u> ° <u>59 92</u> N
Lon:	<u>144</u> ° <u>59 97</u> W

▼

Lat:	<u>49</u> ° <u>59 94</u> N
Lon:	<u>144</u> ° <u>59 96</u> W

Extra comments:
O¹⁷ cast

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: PA-008 Event #: 115 Ship: Tully UTC Date (dd|mmm|yyyy): 30 | Aug | 2014

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure		Oxy	ONAr	Sal									
1	1	754	10	✓ 10		x x	x x	x									
2	2	755	5	✓ 5		x x	x x	x									
3	3	756	2	✓ 2		x x	x x	x									
4																	
5																	
6																	
7																	
8																	
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16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Watchkeeper(s): MB

Bottom Depth: 4198 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0328	2028
Bottom	0336	
End	0347	

Positional Information

Start Lat: 50 ° 02 04 N

Start Lon: 144 ° 51 85 W

Bottom Lat: 50 ° 02 00 N

Bottom Lon: 144 ° 51 87 W

End Lat: 50 ° 01 96 N

End Lon: 144 ° 51 91 W

Extra comments:

ONAr cast

CTD to 500 dbar!

closed remaining bottles @ surface 4-24

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P26 Event #: 118 Ship: Tully UTC Date (dd|mmm|yyyy): 30 | Aug | 2011

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments		
			Target	Confirmed																	
			Pressure	✓	Pressure																
1	1	757	200	✓																	
2	2	758	150	✓																	
3	3	759	100	✓																	
4	4	760	50	✓																	
5	5	761																		Clamp failed and not put on line.	
6																					
7																					
8																					
9																					
10																					
11																					
12																					
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14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

Profile type: Pump

ROS TRM X-Niskin other?

Watchkeeper(s): MB

Bottom Depth: 4217 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0433	2133
Bottom	0514	
End	0740	

Positional Information

Start

Lat: 50 ° 00 06 N

Lon: 144 ° 59 85 W

Bottom

Lat: 49 ° 59 95 N

Lon: 144 ° 59 99 W

End

Lat: 50 ° 00 00 N

Lon: 145 ° 00 18 W

Extra comments:

in-situ pumps to 150