

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: 59 Event #: 061 Ship: Tully UTC Date (dd mmm yyyy): 02 09 18

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	OXY	Nut-fr	Sal		CHL	HPLC	Phyto	DA						
1		1	Bot-5	✓		x	x											
2		2	200	✓		x	x											
3		3	100	✓		x	x											
4		4	75	✓		x	x											
5		5	50	✓		x	x x											
6		6	40	✓		x x	x											
7		7	30	✓		x	x		x									
8		8	20	✓		x	x x		x									
9		9	10	✓		x	x		x									
10		10	5	✓		x x	x		x x									
11		11	0	✓		x	x		x	x x						FLUO: 1.7		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 223 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	10 27	11 27
Bottom	10 31	
End	10 45	

Positional Information
Start
Lat: 48 ° 36 94 N
Lon: 123 ° 14 71 W

Bottom
Lat: 48 ° 36 96 N
Lon: 123 ° 14 70 W

End
Lat: 48 ° 37 01 N
Lon: 123 ° 14 65 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB01 Event #: 3 Ship: Tully UTC Date (dd mmm yyyy): 03 SEP 2018

Cruise ID: 2018-09-1			Station: 2018-09-1		Samples Taken / Sampler's Initials										Comments			
Niskin #	Firing #	Sample #	Rosette Operation		Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4	DIC						
			Target Pressure	Confirmed ☒ Pressure	☒	☒	☒		☒	☒	☒	☒						
1		22	Bot-10	☒	26	x		x		x			x					
2		23	20	☒	20	x		x		xx		xx	x					
3		24	10	☒	10	x		x		x		xx	x					DIC no overfill
4		25	5	☒	5	x	x	x					xx					
5		26	5	☒	5					xx	xx	xx						FLUO 30
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: 34 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0518	2218
Bottom	0519	
End	0523	

Positional Information

Start Lat: 48 ° 40 38 N

Start Lon: 124 ° 59 48 W

Bottom Lat: 48 ° 40 38 N

Bottom Lon: 124 ° 59 46 W

End Lat: 48 ° 40 38 N

End Lon: 124 ° 59 42 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB02 Event #: 4 Ship: Tully UTC Date (dd mmm yyyy): 03 SEP 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4	Phyto	DA	HAB			
1		27	Bot-10	✓ 46	x		x		x								
2		28	30	✓ 30	x		x		x x								
3		29	20	✓ 20	x x		x		x		x x						
4		30	10	✓ 10	x		x		x		x x						
5		31	5	✓ 5	x		x x		x	x x	x x	x x x	x	x			FLUO 2.5
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 50 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	<u>0548</u>	<u>2248</u>
Bottom	<u>0550</u>	
End	<u>0555</u>	

Positional Information

Lat:	<u>48° 39.04</u>	<u>N</u>
Lon:	<u>125° 02.41</u>	<u>W</u>

▼

Lat:	<u>48° 39.04</u>	<u>N</u>
Lon:	<u>125° 02.44</u>	<u>W</u>

▼

Lat:	<u>48° 39.05</u>	<u>N</u>
Lon:	<u>125° 02.51</u>	<u>W</u>

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB03 Event #: 5 Ship: Tully UTC Date (dd/mmm/yyyy): 03 Sep 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4			
1		32	5	✓	5			x		xx	xx				Fluo: 23
2															
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): MR

Bottom Depth: 92 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0622	2322
Bottom	0624	
End	0626	

Positional Information

Start	Lat: 48° 37.33	N
	Lon: 125° 05.85	W
Bottom	Lat: 48° 37.33	N
	Lon: 125° 05.90	W
End	Lat: 48° 37.33	N
	Lon: 125° 05.97	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB04 Event #: 6 Ship: Tully UTC Date (dd mmm yyyy): 03 SEP 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4							
1		33	Bot-10	✓	102	x		x										
2		34	75	✓		x x		x										
3		35	50	✓		x		x x		x								
4		36	30	✓		x		x		x								
5		37	20	✓		x		x		x		x x						
6		38	10	✓		x		x		x x		x x						
7		39	5	✓		x		x		x	x x	x x					Fluo: 2.2	
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 110 mTransmisso Cleaned: (Y) N

Time	UTC	Local
Start	0650	2350
Bottom	0653	2353
End	0701	

Positional Information

Start	Lat: 48 ° 35 68 N
	Lon: 125 ° 08 96 W
	▼
Bottom	Lat: 48 ° 35 68 N
	Lon: 125 ° 08 97 W
	▼
End	Lat: 48 ° 35 64 N
	Lon: 125 ° 09 19 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2016-34
2018-34

Station:

LB05

Event #:

9

Ship:

Laurier

UTC Date (dd mmm/yyyy): 03 09 18

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒	Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4			
1		40	5					x		xx	xx				Fluo: 2.7
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth:	100	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0855	
Bottom	0857	
End	0900	

Positional Information
Lat: 48 ° 34 N
Lon: 125 ° 11 W

Start
Lat: 48 ° 34 10 N
Lon: 125 ° 12.00 W

Bottom
Lat: 48 ° 34 10 N
Lon: 125 ° 12.07 W

End
Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB06

Event #: 10

Ship: Tully

UTC Date (dd mmm yyyy): 03 09 18

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4				
1		41	Bot-10	✓	105	x		x							
2		42	100	✓		x x		x							
3		43	75	✓		x		x x							
4		44	50	✓		x		x	x						
5		45	30	✓		x		x	x x						
6		46	20	✓		x		x	x		x x				
7		47	10	✓		x		x	x		x x				
8		48	5	✓		x		x	x	x x	x x				Fluo: 4.79
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 113 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0928	
Bottom	0931	
End	0940	

Positional Information

Lat:	48 ° 32 12 N
Lon:	125 ° 15 54 W

Start

Lat:	49 ° 32 14 N
Lon:	125 ° 15 59 W

Bottom

Lat:	40 ° 32 17 N
Lon:	125 ° 15 75 W

End

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2018-034

Station:

LB07

Event #:

17

Ship:

Tully

UTC Date (dd mmm yyyy): 03 SEP 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4					
1		49	5				X		XX	XX						Fluo: 4.70
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth:	155	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	1350	0658
Bottom	1401	
End	1405	

Start	Positional Information			
	Lat:	48	° 28 68	N
	Lon:	125	° 22 03	W

Bottom	Lat:	48	° 28 69	N
	Lon:	125	° 22 04	W

End	Lat:	49	° 28 68	N
	Lon:	125	° 22 05	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB08 Event #: 25 Ship: Tully UTC Date (dd mmm yyyy): 3 09 18

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials											Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4	DIC	UVic			
1		50	Bot-10	✓	131	x		x				x				
2		51	125	✓		x x		x								
3		52	100	✓							xx					NH4 blank water ^{not} needed
4		53	100	✓		x		x x				x	x			
5		54	75	✓		x		x				x x	x			
6		55	50	✓		x		x	x			x	x			
7		56	30	✓		x		x	x			x x				
8		57	20	✓		x		x	x		x x	x	x			
9		58	10	✓		x		x	x x		x x	x	x			
10		59	5	✓		x	x	x				x				
11		60	5	✓					x	x x	x x		x			FLUO 3.0
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 141 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1801	1101
Bottom	1804	1104
End	1817	1117

Positional Information

Lat:	48° 25.34	N
Lon:	125° 28.55	W

Start

Bottom

End

Lat:	48° 25.34	N
Lon:	125° 28.55	W

Lat:	48° 25.36	N
Lon:	125° 28.54	W

Extra comments:
No water drawn
from Bottle 3
(100 m) - not
needed

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB09 Event #: 26 Ship: Tully UTC Date (dd mmm yyyy): 03 SEP 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4							
			Pressure	✓ Pressure	HR/TV		JD		KG TV	KG	TR							
1		61	Bot-10	✓	141	x		x										
2		62	125	✓	125	x		xx										
3		63	100	✓	100	x		x										
4		64	75	✓	75	x		x										
5		65	50	✓	49	x		x		x								
6		66	30	✓	30	x		x		xx								
7		67	20	✓	19	xx		x		x		xx						
8		68	10	✓	10	x		x		x		xx						
9		69	5	✓	5	x		x		x	xx	xx					Fluo: 5.6	
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Watchkeeper(s): MR

Bottom Depth: 149 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1859	1159
Bottom	1903	
End	1912	

Positional Information

Start

Lat: 48° 22' 08" N

Lon: 125° 34' 68" W

Bottom

Lat: 48° 22' 08" N

Lon: 125° 34' 66" W

End

Lat: 48° 22' 10" N

Lon: 125° 34' 52" W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB10 Event #: 27 Ship: Tully UTC Date (dd/mmm/yyyy): 03 Sep 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4						
1		70	5	☒				x		xx	xx						Fluo: 10.2
2																	
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): MR

Bottom Depth: 151 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1957	1257
Bottom	2000	
End	2003	

Positional Information

Start Lat: 48° 18.55' N
Lon: 125° 41.32' W

Bottom Lat: 48° 18.55' N
Lon: 125° 41.32' W

End Lat: 48° 18.54' N
Lon: 125° 41.32' W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB11 Event #: 29 Ship: Tully UTC Date (dd mmm yyyy): 03 Sep 2018

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4				
						MR/N2		JD/MR		MG	MG	TD				
1		71	Bot-10	✓	196	x		x								
2		72	175	✓	175	x		x x								
3		73	150	✓	150	x		x								
4		74	125	✓	125	x		x								
5		75	100	✓	100	x		x								
6		76	75	✓	75	x		x								
7		77	50	✓	50	x x		x		x						
8		78	30	✓	30	x		x		x						
9		79	20	✓	20	x		x		x x		x x				
10		80	10	✓	10	x		x		x		x x				
11		81	5			x		x		x	x x	x x			Fluo: 5.8	
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: 203 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2113	1413
Bottom	2117	
End	2130	

Positional Information
Lat: 48° 15' 22 N
Lon: 125° 47' 73 W

Lat: 48° 15' 22 N
Lon: 125° 47' 72 W

Lat: 48° 15' 24 N
Lon: 125° 47' 74 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB12 Event #: 30 Ship: Tully UTC Date (dd mmm yyyy): 03 Sep 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy MR/pH	Sal	Nut-Fr MG	Nut-C MG	CHL TV	HPLC TV	NH4 TD	Phyto MG	DA MG	HAB MG			
1		82	Bot-10	✓ 500	x		x	x									
2		83	400	✓ 400	x		x x	x x									
3		84	300	✓ 300	x x		x										
4		85	250	✓ 250	x		x										
5		86	250	✓ 250													
6		87	200	✓ 200	x		x										
7		88	175	✓ 175	x		x										
8		89	150	✓ 150	x		x										
9		90	125	✓ 125	x		x										
10		91	100	✓ 100	x		x										
11		92	75	✓ 75	x		x										
12		93	50	✓ 50	x		x x		x								
13		94	30	✓ 30	x		x		x x								
14		95	20	✓ 20	x		x		x		x x						
15		96	10	✓ 10	x x		x		x		x x						
16		97	5	✓ 5	x		x		x	x x	x x	x x x	(x)	x			Fluo: ditched DA sample took 2.5 hrs to filter and still wasn't done
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 505 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2203	150
Bottom	2212	
End	2234	

Positional Information

Start	Lat: 48° 12' 90" N	Lon: 125° 51' 86" W
-------	--------------------	---------------------

Bottom

Lat: 48° 12' 91" N	Lon: 125° 51' 88" W
--------------------	---------------------

End

Lat: 48° 12' 91" N	Lon: 125° 51' 87" W
--------------------	---------------------

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034 Station: LB13 Event #: 31 Ship: Tully UTC Date (dd mmm yyyy): 03 009 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ☒ Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4						
1		98	5	✓ 4.7			x		x x	x x							Fluo: 1.9
2																	
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): MR/RIP

Bottom Depth: 905 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2309	1609
Bottom	2325	1626
End	2342	1642

Positional Information
Start
Lat: 48 ° 10.61 N
Lon: 125 ° 56.10 W

Bottom
Lat: 48 ° 10.65 N
Lon: 125 ° 56.07 W

End
Lat: 48 ° 10.68 N
Lon: 125 ° 56.04 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2018-034

Station: LB14

Event #: 32

Ship: Tully

UTC Date (dd mmm yyyy): 04 Sep 2018

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal	Nut-Fr	Nut-C	CHL	HPLC	NH4				
					MR/VT	JD	TV	TV	MG	MG	TD				
1		99	Bot-10	✓ 1177	x		x	x							
2		100	1000	✓ 1000	x x	x x	x	x							
3		101	750	✓ 751	x	x	x	x							
4		102	500	✓ 500	x	x	x x	x x							
5		103	400	✓ 400	x		x	x							
6		104	300	✓ 300	x		x								
7		105	250	✓ 249	x		x								
8		106	200	✓ 200	x		x								
9		107	175	✓ 175	x		x								
10		108	150	✓ 150	x		x								
11		109	125	✓ 125	x x		x								
12		110	100	✓ 100	x		x								
13		111	75	✓ 75	x		x								
14		112	50	✓ 50	x		x		x						
15		113	30	✓ 30	x		x x		x						
16		114	20	✓ 20	x		x		x		x x				
17		115	10	✓ 10	x		x		x x		x x				
18		116	5	✓ 5	x		x		x	x x	x x				Fluo: 17
19															
20															
21															
22															
23															
24															

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): MR/RIP

Bottom Depth: 1170 m

Transmisso Cleaned: Y / N

Time UTC Local

Start 0015 1715

Bottom 0037 1737

End 0114

Positional Information

Start Lat: 48° 08.53 N

Lon: 125° 59.91 W

Bottom Lat: 48° 08.53 N

Lon: 125° 59.89 W

End Lat: 48° 08.59 N

Lon: 125° 59.86 W

Extra comments: