

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: SI03 Event #: 0001 Ship: Tully UTC Date (dd mmm yyyy): 14 08 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments						
			Target Pressure	Confirmed ✓ Pressure		Oxy	Nut-Fr	Gases	Sul	DNA	Prot	SAGS							
						HG	MA	PKS	JS	CP	MA	RN	JS	CP					
1		1	200	✓	200		x	x	xx	x	x	x	x						
2		2	185	✓	185		x	x	xx	x	x		x						
3		3	165	✓	165		x	xx	xx	x	x		x						
4		4	150	✓	150		xx	x	xx	x	x	x	x						
5		5	135	✓	135		x	x	xx	x	x	x	x						
6		6	120	✓	120		x	x	xx	x	x	x	x						
7		7	110	✓	110		x	x	xx	x	x		x						
8		8	100	✓	100		x	x	xx	x	x	x	x						
9		9	97	✓	97		x	x	xx	x	x		x						
10		10	90	✓	90		x	x	xx	x	x		x						
11		11	85	✓	85		x	x	xx	x	x		x						
12		12	75	✓	75		xx	x	xx	x	x		x						
13		13	60	✓	60		x	x	xx	x	x		x						
14		14	40	✓	40		x	xx	xx	x	x		x						
15		15	20	✓	20		x	x	xx	x	x		x						
16		16	10	✓	10		xx	x	xx	x	x	x	x						
17		17	0	✓	1.9		x	x	xx	x	x		x						
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	224	m
Transmisso Cleaned:	Y	N

Time	UTC	Local
Start	2104	1404
Bottom	2109	
End	2131	

Positional Information		
Start	Lat: 48 ° 35.513	N
	Lon: 123 ° 30.29	W

Bottom	Lat: 48 ° 35.51	N
	Lon: 123 ° 30.29	W

End	Lat: 48 ° 35.51	N
	Lon: 123 ° 30.29	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: 59 Event #: 2 Ship: Tully UTC Date (dd mmm yyyy): 15 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Sal	Nut-F	Chl	HPLC	DIC								
1		18	Bot-5	✓ 223	x		x			x								
2		19	200	✓ 200	x		x			xx								
3		20	150	✓ 150	xx		x			x								
4		21	100	✓ 100	x		x			x								
5		22	80	✓ 82	x		x			x								
6		23	60	✓ 61	x		x			x								
7		24	50	✓ 50	x		xx	x		x								
8		25	40	✓ 40	x		x	x		x								
9		26	30	✓ 30	x		x	x		xx								
10		27	20	✓ 20	x		x	x		x								
11		28	10	✓ 10	xx		x	xx		x								
12		29	5	✓ 5	x		x	x		x								
13		30	0	✓ 20	x		x	x	xx	x					Fluo: 0.98			
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 227 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0017	1717
Bottom	0022	
End	0037	

Positional Information
Start
Lat: 48 ° 34.96 N
Lon: 123 ° 14.65 W

Bottom
Lat: 48 ° 34.97 N
Lon: 123 ° 14.64 W

End
Lat: 48 ° 34.93 N
Lon: 123 ° 14.53 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2019-008

Station:

P1

Event #:

8

Ship:

Tully

UTC Date (dd mmm yyyy):

15 8 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal	Nut-Fr	Chl	HPLC	DIC					
1		31	Bot-10	✓ 127	x		x			x x					
2		32	30	✓	x		x	x		x					
3		33	5	✓	x x		x			x					
4		34	5				x	x x	x x						FL = 6.52 + 000
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):

Hm

Bottom Depth:

135 m

Transmisso Cleaned: 72 (Y) / N

Time

UTC

Local

Start

1244

0544

Bottom

1247

End

1253

Positional Information

Lat: 48 ° 34 46 N

Lon: 125 ° 30 09 W

Lat: 48 ° 34 47 N

Lon: 125 ° 30 12 W

Lat: 48 ° 34 49 N

Lon: 125 ° 30 17 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P2 Event #: 10 Ship: Tully UTC Date (dd mmm yyyy): 15 8 19

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓	Pressure	DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC	Phyto							
1		35	100	✓		x	x	x	x	x									
2		36	75	✓		x			x	x									
3		37	50	✓		x			x	x x									
4		38	40	✓		x			x x	x									
5		39	30	✓		x			x	x	x x							Fluo 2.78	
6		40	25	✓		x			x	x	x x							Fluo 1.14	
7		41	20	✓		x x	x x	x x	x	x	x x							Fluo ? 0.79	
8		42	15	✓		x			x	x	x x							Fluo ? 0.74	
9		43	10	✓		x			x	x	x x							Fluo 2.79 x -001	
10		44	5	✓		x	x	x	x	x	x x	x						Fluo 0.3	
11		45	0	✓		x	x	x	x	x x									
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22	←							←							←				
23																			
24																			

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

Bottom Depth:	116	m
Transmisso Cleaned:	x2	① N

Time	UTC	Local
Start	1521	0821
Bottom	1522	
End	1537	

Positional Information	
Start	Lat: 48 ° 35 99 N
	Lon: 125 ° 59 83 W

Bottom	Lat: 48 ° 35 99 N
	Lon: 125 ° 59 83 W

End	Lat: 48 ° 35 94 N
	Lon: 125 ° 59 88 W

Extra comments:
DMS
Phyto: Lugol only

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008

Station: P2

Event #: 12

Ship: Tully

UTC Date (dd mmm yyyy): 15 Aug 2019

Cruise ID: 2019-008			Station: P2		Event #: 1		Ship: R/V		Comments									
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	Oxy	Nut-F	DIC	DOC	DOC	TOC	TOC	Gels	CDOM					
				✓		HN/ML	R T	RN/MP	SJ	DH	SJ	DH		SJ				
1		46	Bot-10	✓	105	x x	x	x										
2		47	Bot-10	✓					x	x	x	x	x	x x				
3		48	100	✓		x	x	x x										
4		49	100	✓						x		x	x					
5		50	75	✓		x	x	x										
6		51	75	✓						x		x	x					
7		52	50	✓		x x	x	x										
8		53	50	✓					x	x	x	x	x	x				
9		54	25	✓		x	x	x										
10		55	25	✓						x		x	x					
11		56	10	✓		x	x	x										
12		57	10	✓						x		x	x					
13		58	5			x	x x	x										
14		59	5							x		x	x					
15		60	0						x x		x			x				
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:

☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s):

MR/AM

Bottom Depth: 115 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1612	0912
Bottom	1615	
End	1625	

Positional Information

Start
Lat: 48 ° 36 10 N
Lon: 125 ° 59 91 W

Bottom
Lat: 48 ° 36 03 N
Lon: 125 ° 59 08 W

End
Lat: 48 ° 36 05 N
Lon: 125 ° 59 72 W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P3 Event #: 13 Ship: Tully UTC Date (dd mmm yyyy): 15 8 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments	
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC						
1		61	5	✓ 5.6	x		xx	xx					CHL MAX ~ 40 M @ 3 µg	
2													Stop @ 307 DUE TO WIRE L° N/HW	
3														
4														
5														
6														
7													CHL FILTERED @ ~ 1510 LOCAL	
8													3+ HOURS AFTER SAMPLING	
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

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

Watchkeeper(s):

Bottom Depth: 816 m

Transmisso Cleaned: YZ(Y)1 N

Time	UTC	Local
Start	18 26	11 26
Bottom	18 39	
End	18 56	

Positional Information

Start Lat: 48 ° 37 47 N

Start Lon: 126 ° 19 94 W

Bottom Lat: 48 ° 37 48 N

Bottom Lon: 126 ° 19 89 W

End Lat: 48 ° 37.47 N

End Lon: 126 ° 19.92 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P4 Event #: 14 Ship: Tully UTC Date (dd mmm yyyy): 15 08 2019

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			
1		62	300	✓ 300	x			x							
2		63	200	✓ 201	x	x	x	x							
3		64	150	✓ 151	x	x	x	x							
4		65	100	✓ 100	x			x		x					
5		66	75	✓ 75	x			x		x					
6		67	60	✓ 60				x		x	xx				2L 1.47
7		68	50	✓ 50	x			x		x	xx				1L 2.00
8		69	40	✓ 40	x			x		x	xx				1L 2.50
9		70	30	✓ 30	x	x	x	x		x	xx				2L 1.46
10		71	25	✓ 25	x			x		xx					
11		72	20	✓ 20	xx	xx	xx	x		x					
12		73	15	✓ 15	x			x		x	xx				0.33
13		74	10	✓ 10	x			xx		x					
14		75	5	✓ 5.3	x	x	x	x							
15		76	5	✓ 5.6				x		xx	xx	xxx			0.28
16		77	0	✓ 3	x	x	x	x		x					
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 1322 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2108	1408
Bottom	2114	
End	2137	

Positional Information

Lat:	48 ° 38.97	N
Lon:	126 ° 39.90	W

Start

Lat:	48 ° 38.97	N
Lon:	126 ° 39.90	W

Bottom

Lat:	48 ° 38.97	N
Lon:	126 ° 39.90	W

End

Extra comments:
DMS cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008

Station: P4

Event #: 16

Ship: Tully

UTC Date (dd mmm/yyyy): 15 08 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials						Comments								
			Target Pressure	Confirmed Pressure	Nut-C	Nut-F	Sal	TM F	TM UF										
1		78	1200	1200	x	x	x	x	x										
2		79	1100	1100	x	x	x	x	x										
3		80	1000	1000	x	x	x	x	x										
4		81	800	799	xx	xx	x	x	x										
5		82	600	599	x	x	x	x	x										
6		83	400	399	x	x	x	x	x										
7		84	200	201		x		xx	xx										
8		85	100	100		x		x	x										
9		86	75	75		x		x	x										
10		87	50	50		x		x	x										
11		88	25	24		x		x	x										
12		89	10	10		x		x	x										
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Version: 25 Nov 2011

Transmissometer to be cleaned before each cast. do not use Ammonia product

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

Watchkeeper(s): P-TAGS

Bottom Depth: 1318 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2308	14:08
Bottom	2336	
End	16 0007	

Positional Information

Start Lat: 48 ° 38.96 N

Start Lon: 126 ° 39.90 W

Bottom Lat: 48 ° 38.97 N

Bottom Lon: 126 ° 39.89 W

End Lat: 48 ° 38.96 N

End Lon: 126 ° 39.89 W

Extra comments:

TMR

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P4 Event #: 17 Ship: Tully UTC Date (dd mmm yyyy): 16 08 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Oxy	Sal	Nut-F	Nut-C	DIC	TOC	DOC	DNA	SAGs	Gels				
			Pressure	✓ Pressure	MG/JS	MG	R	R	MR/RN	DH	DH	JS	JS	JS				
1		90	Bot-10	✓	1319	x		x	x	x	x	x		x	x			
2		91	1250	✓	1250	x	x	x	xx			x		x				
3		92	1250	✓	1250	x	x	x	x	x	x			x				
4		93	1000	✓	1000	x	xx	x	x	x	x	x		x	x			
5		94	800	✓	801	xx	x	x	x	x	x	x		x	x			
6		95	600	✓	600	x		xx	xx	x	x	x		x	x			BLIP IN CHL + TRANS
7		96	400	✓	400	x		x	x	x	x	x		x	x			O ₂ WENT OFF TRACK 684
8		97	300	✓	300	x		x		x	x	x		x	x			BACK ON AFTER BOT TRIP
9		98	250	✓	250	xx		x		x	x				x			
10		99	200	✓	200	x		x		x	x	x		x	x			
11		100	175	✓	175	x		x		x	x				x			
12		101	150	✓	150	x		x		x	x	x		x	x			
13		102	125	✓	125	x		xx		x	x	x			x			
14		103	100	✓	100	x		x		x	x	x		x	x			
15		104	75	✓	75	x		x		x	x				x			
16		105	50	✓	50	x		x		x	x	x		x	x			
17		106	25	✓	25	xx		x		x	x	x		x	x			
18		107	10	✓	10	x		x		x	x	x		x	x			
19		108	5	✓	5	x		x		x	x	x			x			
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 1322 m
Transmisso Cleaned: Y N

Time	UTC	Local
Start	0027	1727
Bottom	0051	
End	0136	

Positional Information

Lat:	48 ° 38.97	N
Lon:	126 ° 39.90	W

Start

Bottom

Lat:	48 ° 38.97	N
Lon:	126 ° 39.90	W

End

Lat:	48 ° 38.97	N
Lon:	126 ° 39.90	W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008

Station: P4

Event #: 19

Ship: Tully

UTC Date (dd mmm/yyyy): 16 08 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure			Cs								
1		109	500	✓	500			x							
2		110	500	✓				x							
3		111	500	✓				x							
4		112	500	✓				x							
5		113	500	✓				x							
6		114	500	✓				x							
7		115	400	✓	400			x							
8		116	400	✓	401			x							
9		117	400	✓	400			x							
10		118	400	✓	400			x							
11		119	400	✓	401			x							
12		120	400	✓	400			x							
13		121	300	✓	300			x							
14		122	300	✓	300			x							
15		123	300	✓	300			x							
16		124	300	✓	300			x							
17		125	300	✓	301			x							
18		126	300	✓	300			x							
19		127	200	✓	200			x							
20		128	200	✓	200			x							
21		129	200	✓	200			x							
22		130	200	✓	200			x							
23		131	200	✓	200			x							
24		132	200	✓	201			x							

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

Bottom Depth: 1324 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0416	2117
Bottom	0425	
End	0440	

Positional Information

Lat:	48 ° 38.93	N
Lon:	126 ° 39.91	W

Start

Bottom

Lat: 48 ° 38.94 N
Lon: 126 ° 39.91 W

End

Lat: 48 ° 38.93 N
Lon: 126 ° 39.91 W

Extra comments:
Cesium 500m cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P4 Event #: 21 Ship: Tully UTC Date (dd mmm yyyy): 16 08 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments		
			Target Pressure	Confirmed ✓ Pressure			Cs												
1		133	150	✓	150			x											
2		134	150	✓	↓			x											
3		135	150	✓				x											
4		136	150	✓				x											
5		137	150	✓				x											
6		138	150	✓				x											
7		139	100	✓	100			x											
8		140	100	✓	↓			x											
9		141	100	✓				x											
10		142	100	✓				x											
11		143	100	✓				x											
12		144	100	✓				x											
13		145	50	✓	51			x											
14		146	50	✓	↓			x											
15		147	50	✓				x											
16		148	50	✓				x											
17		149	50	✓				x											
18		150	50	✓				x											
19		151	5	✓	5			x											
20		152	5	✓	↓			x											
21		153	5	✓				x											
22		154	5	✓				x											
23		155	5	✓				x											
24		156	5	✓				x											

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

Bottom Depth: 1324 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0513	2213
Bottom	0517	
End	0527	

Positional Information
Start
Lat: 48 ° 38.93 N
Lon: 126 ° 39.91 W

Bottom
Lat: 48 ° 38.94 N
Lon: 126 ° 39.91 W

End
Lat: 48 ° 38.94 N
Lon: 126 ° 39.91 W

Extra comments:
Cesium 150m cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P4 Event #: 22 Ship: Tully UTC Date (dd mmm yyyy): 16 08 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓ Pressure		UBC												
1		157	Bot-10	✓	1324		x											
2		158	Bot-10	✓	1324													
3		159	Bot-10	✓	1323													
4		160	Bot-10	✓	1323													
5		161	1000	✓	1001		x											
6		162	1000	✓	1001													
7		163	1000	✓	1001													
8		164	1000	✓	1001													
9		165	500	✓	506		x											
10		166	500	✓	501													
11		167	500	✓	500													
12		168	500	✓	501													
13		169	10	✓	10.5		x											
14		170	10	✓	11													
15		171	10	✓	10.5													
16		172	10	✓	10.6													
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:
☒ ROS ☐ TRM ☐ X-Niskin ☐ other?
 Watchkeeper(s): MG/4.4

Bottom Depth: 1323 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0605	2305
Bottom	0629	
End	0656	

Positional Information

Lat:	48 ° 38.94	N
Lon:	126 ° 39.91	W

▼

Lat:	48 ° 38.94	N
Lon:	126 ° 39.91	W

▼

Lat:	48 ° 38.94	N
Lon:	126 ° 39.91	W

Extra comments:
 UBC cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P4 Event #: 23 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | 08 | 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Var												
1		173	Chl Max	39	x												
2		174	Chl Max	39	x												
3		175	Chl Max	39	x												
4		176	Chl Max	39	x												
5		177	5	5.1	x												
6		178	5	5.1	x												
7		179	5	5.1	x												
8		180	5	5.1	x												
9		181	5	5.1	x												
10		182	5	5.1	x												
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: 1326 m
Transmisso Cleaned: Y2(Y)1 N

Time	UTC	Local
Start	0717	0017
Bottom	0720	
End	0725	

Positional Information

Lat:	48 ° 38 96	N
Lon:	126 ° 39 97	W

▼

Lat:	48 ° 38 96	N
Lon:	126 ° 39 96	W

▼

Lat:	48 ° 38 96	N
Lon:	126 ° 39 97	W

Extra comments:
Productivity cast
CTD to 150 m!

Cruise ID: 2019-008 Station: P5 Event #: 24 Ship: Tully UTC Date (dd/mmm/yyyy): 16/08/19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F		Chl	HPLC							
1		183	5		x		x x	x x							
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: 2094 m
Transmisso Cleaned: X Z ☒ Y ☐ N

Time	UTC	Local
Start	10 32	0332
Bottom	11 05	0405
End	11 39	

Positional Information
Start
Lat: 48 ° 41 43 N
Lon: 127 ° 09 90 W

Bottom
Lat: 48 ° 41 44 N
Lon: 127 ° 09 90 W

End
Lat: 48 ° 41 44 N
Lon: 127 ° 09 99 W

Extra comments:
Loops: 1xNut, 1xSal, 2xChl

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P6 Event #: 25 Ship: Tully UTC Date (dd/mmm/yyyy): 16/08/19

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed √	Pressure	Nut-F		Chl	HPLC										
1		184	5			x		x x	x x										
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: 2575 m
Transmisso Cleaned: x2 (Y) 1 N

Time	UTC	Local
Start	1433	0733
Bottom	1507	0807
End	1542	

Positional Information
Start Lat: 48 ° 44 56 N
Lon: 127 ° 39 03 W

Bottom Lat: 48 ° 44 61 N
Lon: 127 ° 39 68 W

End Lat: 48 ° 44 63 N
Lon: 127 ° 39 66 W

Extra comments:
+ LOOPS
2x CHL 1x NUT
1x SAL

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 **Station:** P7

Event #: 27

Ship: Tully

UTC Date (dd mmm yyyy): 16 8 19

[illegible]

Profile type: ROS TRM X-Niskin other?

Watchkeeper(s): U.M.

Bottom Depth: _____ m

Transmisso Cleaned: ~~Y~~ **Y** / N

<i>Time</i>	<i>UTC</i>	<i>Local</i>
Start	1812	1112
Bottom	1846	
End	1920	

Positional Information				
Start	Lat:	48	° 46	56 N
	Lon:	128	° 09	93 W

Bottom	Lat: 48 ° 46.67	N
	Lon: 128 ° 09.96	W

End	Lat: 48 ° 46.78 N
	Lon: 128 ° 10.16 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P8 Event #: 28 Ship: Tully UTC Date (dd mmm/yyyy): 16 08 2019

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓	Pressure	Oxy	Sal	Nut Fr	Nut C	Chl	HPLC		TOC DH	DOC DH	Gels					
1		186	2000	✓	2001	x x	x x	x	x				x	x	x					
2		187	1500	✓	1500	x	x	x x	x x				x	x	x					
3		188	1250	✓	1250	x	x x	x	x				x	x	x					
4		189	1000	✓	1000	x	x	x	x				x	x	x					
5		190	800	✓	799	x	x	x	x				x	x	x					
6		191	600	✓	600	x		x	x				x	x	x					
7		192	400	✓	400	x		x	x				x	x	x					
8		193	300	✓	300	x		x					x	x	x					
9		194	250	✓	249	x		x					x	x	x					
10		195	200	✓	200	x x		x					x	x	x					
11		196	175	✓	175	x		x					x	x	x					
12		197	150	✓	150	x		x					x	x	x					
13		198	100	✓	100	x		x		x			x	x	x					
14		199	75	✓	75	x		x		x x			x	x	x					
15		200	60	✓	60	x x		x		x	x x								Fluo: 1.42	
16		201	50	✓	50	x		x		x	x x		x	x	x				2.25	
17		202	40	✓	40	x		x		x	x x								1.94	
18		203	30	✓	30	x		x		x	x x								0.86	
19		204	25	✓	25	x		x		x			x	x	x					
20		205	20	✓	21	x x		x		x x										
21		206	15	✓	15	x		x x		x	x x								0.40	
22		207	10	✓	10	x		x		x			x	x	x					
23		208	5	✓	6	x		x					x	x	x					
24		209	5	✓	5			x		x	x x								0.29	

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

Bottom Depth:	2573	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	2149	1452
Bottom	2223	
End	2321	

Positional Information
Lat: 48 ° 49.00 N
Lon: 128 ° 39.92 W

Start
Bottom
End
Lat: 48 ° 48.99 N
Lon: 128 ° 39.95 W

Lat: 48 ° 49.02 N
Lon: 128 ° 39.96 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P9 Event #: 30 Ship: Tully UTC Date (dd|mmm|yyyy): 17|08|2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F		Chl	HPLC									
1		210	5	✓ 5	x		x x	x x									
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): MG

Bottom Depth: 2576 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0218	1921 (16)
Bottom	0252	
End	0323	

Positional Information
Start
Lat: 48 ° 51.44 N
Lon: 129 ° 09.90 W

Bottom
Lat: 48 ° 51.46 N
Lon: 129 ° 09.88 W

End
Lat: 48 ° 51.49 N
Lon: 129 ° 09.81 W

Extra comments:
Loops for 1xSal, 1xNut, 2xChl

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P10 Event #: 32 Ship: Tully UTC Date (dd|mmm|yyyy): 17|08|2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure			Cs								
1		211	200	/	200			x							
2		212	200	/				x							
3		213	200	/				x							
4		214	200	/				x							
5		215	200	/				x							
6		216	200	/				x							
7		217	150	✓	150			x							
8		218	150	✓				x							
9		219	150	✓				x							
10		220	150	✓				x							
11		221	150	✓				x							
12		222	150	✓				x							
13		223	100	✓	100			x							
14		224	100	✓				x							
15		225	100	✓				x							
16		226	100	✓				x							
17		227	100	✓				x							
18		228	100	✓				x							
19		229	50	✓	51			x							
20		230	50	✓				x							
21		231	50	✓				x							
22		232	50	✓				x							
23		233	50	✓				x							
24		234	50	✓				x							

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): MG

Bottom Depth: 2645 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0554	2259(16)
Bottom	0558	
End	0610	

Positional Information

Start

Lat: 48 ° 53.58 N

Lon: 129 ° 39.85 W

Bottom

Lat: 48 ° 53.59 N

Lon: 129 ° 39.82 W

End

Lat: 48 ° 53.62 N

Lon: 129 ° 39.80 W

Extra comments:

Cesium 200m cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P10 Event #: 33 Ship: Tully UTC Date (dd mmm yyyy): 17 08 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F		Chi	HPLC		Cs					
1		235	400	400						x					
2		236	400	"						x					
3		237	400	"						x					
4		238	400	"						x					
5		239	400	"						x					
6		240	400	"						x					
7		241	300	300						x					
8		242	300	"						x					
9		243	300	"						x					
10		244	300	"						x					
11		245	300	"						x					
12		246	300	"						x					
13		247	5	5						x					
14		248	5	"						x					
15		249	5	"						x					
16		250	5	"						x					
17		251	5	"						x					
18		252	5	"						x					
19		253	5	"	x		x x	x x							
20															
21															
22															
23															
24															

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

Bottom Depth: 2576 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0643	2344
Bottom	0716	0016
End	0751	0051

Positional Information

Lat:	48 ° 53.70	N
Lon:	129 ° 39.70	W

▼

Lat:	48 ° 53 84	N
Lon:	129 ° 39 58	W

▼

Lat:	48 ° 53 75	N
Lon:	129 ° 39 81	W

Extra comments:
Cesium + IOS cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P11 Event #: 35 Ship: Tully UTC Date (dd mmm yyyy): 17 08 19

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓	Pressure	Nut-F		Chl	HPLC									
1		254	5			x		x x	x x									
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: 2755 m
Transmisso Cleaned: Y 2 Y 1 N

Time	UTC	Local
Start	10 23	03 23
Bottom	10 50	
End	11 30	04 30

Positional Information
Start Lat: 48 ° 55 12 N
Lon: 130 ° 09 40 W

Bottom Lat: 48 ° 55 10 N
Lon: 130 ° 10 40 W

End Lat: 48 ° 56 18 N
Lon: 13 ° 10 15 W

Extra comments:
Loops for 1xSal, 1xNut, 2xChl

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P12 Event #: 37 Ship: Tully UTC Date (dd/mm/yyyy): 17/08/19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed Pressure	Var												
1		255	Chl Max	✓ 39	x												
2		256	Chl Max	✓ "	x												
3		257	Chl Max	✓ "	x												
4		258	Chl Max	✓ "	x												
5		259	5		x												
6		260	5		x												
7		261	5		x												
8		262	5		x												
9		263	5		x												
10		264	5		x												
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: _____ m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1357	657
Bottom	1400	
End	1407	

Positional Information
Start
Lat: 48 ° 58 19 N
Lon: 130 ° 40 00 W

Bottom
Lat: 48 ° 58 20 N
Lon: 130 ° 40 00 W

End
Lat: 48 ° 58 20 N
Lon: 130 ° 40 00 W

Extra comments:
Productivity cast
CTD to 150 m!

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P12 Event #: 38 Ship: Tully UTC Date (dd mmm yyyy): 17 08 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-C	Nut-F	Sal	TM F	TM UF						
1		265	300	300		x	x	x	x						
2		266	200	202		x	x	xx	xx						
3		267	150	149		x	x	x	x						
4		268	100	100		x	x	x	x						
5		269	75	74		x	x	x	x						
6		270	50	50		x	x	x	x						
7		271	40	40		x		x	x						
8		272	20	20		xx		x	x						
9		273	10	10		x		x	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): RT

Bottom Depth: 3229 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1438	0738
Bottom	1445	
End	1457	

Positional Information
Start Lat: 48 ° 58.20 N
Lon: 130 ° 40.00 W

Bottom Lat: 48 ° 58.20 N
Lon: 130 ° 40.00 W

End Lat: 48 ° 58.20 N
Lon: 130 ° 40.00 W

Extra comments:
Shallow TMR
Bottle 7 & 9 did not trip. No nuts.

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P12 Event #: 39 Ship: Tully UTC Date (dd|mmm|yyyy): 17 | 08 | 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure	OXY	Sal	Nut-F	Nut-C	DIC	TOC DH	DOC DH	TOC SJ	Gels	SAGs UBC	DNA UBC		DOC SJ	CDOM	
✓ 1	2	274	Bot-10	✓ 3275	x		x	x	x	x	x		x	x	x				
✓ 2	3	275	3000	✓	x	x x	x	x	x x										
✓ 3	4	276	3000	✓	x	x	x	x	x	x	x		x	x	x				
✓ 4	5	277	2500	✓	x	x	x	x	x	x	x		x						
✓ 5	6	278	2000	✓	x x	x x	x	x	x	x	x		x	x	x				
✓ 6	7	279	1500	✓	x	x	x	x	x	x	x		x	x	x				
✓ 7	8	280	1250	✓	x	x	x x	x x	x	x	x		x	x	x				
✓ 8	9	281	1000	✓	x	x	x	x	x	x	x		x	x	x				
✓ 9	10	282	800	✓	x		x	x	x	x	x		x	x	x				
✓ 10	11	283	600	✓	x		x	x	x	x	x		x	x	x				
✓ 11	12	284	400	✓	x x		x	x	x	x	x		x	x	x				
✓ 12	13	285	300	✓	x		x		x	x	x		x	x	x				
✓ 13	14	286	250	✓	x		x		x	x	x		x						
✓ 14	15	287	200	✓	x		x		x	x	x		x	x	x				
✓ 15	16	288	175	✓	x		x		x	x	x		x						
✓ 16	17	289	150	✓	x x		x		x	x	x		x	x	x				
✓ 17	18	290	125	✓	x		x x		x	x	x		x						
✓ 18	19	291	100	✓	x		x		x	x	x		x	x	x				
✓ 19	20	292	75	✓	x		x		x	x	x		x						
✓ 20	21	293	50	✓	x		x		x	x	x		x	x	x				
✓ 21	22	294	25	✓	x x		x		x	x	x		x	x	x				
✓ 22	23	295	15	✓	x		x		x	x	x		x	x	x				
✓ 23	24	296	5	✓	x		x		x	x	x		x						
✓ 24	1	297	Bot-10	✓ 3275								x x					x	x	

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

Bottom Depth: 3229 m
Transmisso Cleaned: ~~X~~ Z (Y) / N

Time	UTC	Local
Start	1517	0817
Bottom	1612	0912
End	1724	

Positional Information

Lat:	48 ° 58 20	N
Lon:	130 ° 40 01	W

▼

Lat:	48 ° 58 20	N
Lon:	130 ° 40 00	W

▼

Lat:	48 ° 58 20	N
Lon:	130 ° 40 00	W

Extra comments:
Deep cast - OUT-OF-ORDER!

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P12 Event #: 40 Ship: Tully UTC Date (dd mmm yyyy): 17 08 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-C	Nut-F	Sal	TM F	TM UF						
1		298	2000	2000	x	x	x	x	x						
2		299	1800	1800	x	x	x	x	x						
3		300	1600	1600	x	x	x	x	x						
4		301	1400	1400	x	x	x	x	x						
5		302	1200	1200	x	x	x	xx	xx						
6		303	1100	1099	xx	xx	x	x	x						
7		304	1000	1000	x	x		x	x						
8		305	800	799	x	x		x	x						
9		306	600	600	x	x		x	x						
10		307	400	399	x	x		x	x						
11		308	250	249		x		x	x						
12		309	100	9		x		x	x						
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 3229 2000 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1733	1033
Bottom	1804	
End	1855	

Positional Information
Start
Lat: 48 ° 58.20 N
Lon: 130 ° 40.00 W

Bottom
Lat: 48 ° 58.20 N
Lon: 130 ° 40.00 W

End
Lat: 48 ° 58.19 N
Lon: 130 ° 39.99 W

Extra comments:
Deep TMR
Bottle 12 depth changed to 10m.

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P12 Event #: 42 Ship: Tully UTC Date (dd mmm/yyyy): 17 08 2019

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials														Comments
			Target	Confirmed		DMS	DMSP	DMSP	Nut-F		Chl	HPLC		TOC	DOC	CDOM				
			Pressure	✓	Pressure	H1A/H1B		d	CP		CTRW	RN		SJ	SJ	SJ				
1		310	300	✓	300	x			x											
2		311	200	✓	200	x	x	x	x											
3		312	150	✓	150	x	x	x	xx											
4		313	100	✓	100	x			x	x										
5		314	75	✓	75	x			x	x										
6		315	60	✓	59				x	x	xx							Fluo: 1.18		
7		316	50	✓	50	x			x	xx	xx							2.08		
8		317	50	✓	50								x	x	x					
9		318	40	✓	40	x			x	x	xx							3.09		
10		319	30	✓	30	x	x	x	x	x	xx							2.32		
11		320	25	✓	25	x			x	xx										
12		321	20	✓	20	xx	xx	xx	x	x										
13		322	15	✓	15	x			x	x	xx							0.31		
14		323	10	✓	10	x			x	x										
15		324	5	✓	5	x	x	x	x	x	xx							0.23		
16		325	0	✓	0	x	x	x	x	x										
17		326	0	✓	0								x	xx	xx					
18																				
19																				
20																				
21																				
22																				
23																				
24																				

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

Watchkeeper(s): MG

Bottom Depth: 3229 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1914	1214
Bottom	1920	
End	1940	

Positional Information

Start

Lat: 48 ° 58.20 N

Lon: 130 ° 40.00 W

Bottom

Lat: 48 ° 58.20 N

Lon: 130 ° 40.00 W

End

Lat: 48 ° 58.20 N

Lon: 130 ° 40.00 W

Extra comments:

DMS cast + TOC/DOC/CDOM

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P12 Event #: 45 Ship: Tully UTC Date (dd mmm/yyyy): 17 08 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	UBC										
1		327	2000	✓ 2000	x										
2		328	2000	✓ 2000											
3		329	2000	✓ 2000											
4		330	2000	✓ 2000											
5		331	1000	✓ 1000	x										
6		332	1000	✓ 1000											
7		333	1000	✓ 1000											
8		334	1000	✓ 1000											
9		335	500	✓ 500	x										
10		336	500	✓ 500											
11		337	500	✓ 500											
12		338	500	✓ 500											
13		339	10	✓ 10	x										
14		340	10	✓ 10											
15		341	10	✓ 10											
16		342	10	✓ 10											
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 3230 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2217	1517
Bottom	2252	
End	2328	

Positional Information
Start
Lat: 48 ° 58.18 N
Lon: 130 ° 40.03 W

Bottom
Lat: 48 ° 58.18 N
Lon: 130 ° 40.03 W

End
Lat: 48 ° 58.18 N
Lon: 130 ° 40.03 W

Extra comments:
UBC cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P13 Event #: 47 Ship: Tully UTC Date (dd mmm yyyy): 18 08 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F		Chl	HPLC							
1		343	5	✓ 5	x		x x	x x							
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): MG

Bottom Depth: 3140 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0444	0144 (+)
Bottom	0519	
End	0551	

Positional Information
 Start
 Lat: 49 ° 02.60 N
 Lon: 131 ° 39.86 W

Bottom
 Lat: 49 ° 02.65 N
 Lon: 131 ° 39.90 W

End
 Lat: 49 ° 02.64 N
 Lon: 131 ° 39.87 W

Extra comments:
 Loops for 1xSal, 1xNut, 2xChl

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P14 Event #: 48 Ship: Tully UTC Date (dd mmm yyyy): 18 8 19

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	CHL	HPLC	Nut	Sal		TOC	DOC	Gels					
1		344	Bot-10	✓	3361			x		x	x	x					
2		345	3000	✓				x x		x	x	x					
3		346	2500	✗	Missed			x		x	x	x					
4		347	2250	✓				x		x	x	x					
5		348	2000	✓	Twice			x x		x	x	x					
6		349	1750	✓				x		x	x	x					
7		350	1500	✓				x		x	x	x					
8		351	1250	✓				x		x	x	x					
9		352	1000	✓				x		x	x	x					
10		353	800	✓				x		x	x	x					
11		354	600	✓				x		x	x	x					
12		355	400	✓				x		x	x	x					
13		356	300	✓				x		x	x	x					
14		357	250	✓				x		x	x	x					
15		358	200	✓				x		x	x	x					
16		359	175	✓				x		x	x	x					
17		360	150	✓				x		x	x	x					
18		361	125	✓				x		x	x	x					
19		362	100	✓				x		x	x	x					
20		363	75	✓				x		x	x	x					
21		364	50	✓				x		x	x	x					
22		365	25	✓				x		x	x	x					
23		366	10	✓				x		x	x	x					
24		367	5	✓				x x	x x	x	x	x					

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

Bottom Depth: 3321 m
Transmisso Cleaned: ☒ 2 ☒ (Y) 1 N

Time	UTC	Local
Start	1103	0403
Bottom	1200	0500
End	1316	0616

Positional Information

Lat:	49 ° 07 40	N
Lon:	132 ° 39 95	W

Start

Lat:	49 ° 07 38	N
Lon:	132 ° 39 92	W

Bottom

Lat:	49 ° 07 36	N
Lon:	132 ° 39 85	W

End

Extra comments:
TOC & Gels cast

Water Properties Group

Sampling Log

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

Cruise ID: 2019-008 Station: P15 Event #: 50 Ship: Tully UTC Date (dd mmm yyyy): 18 0 19

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed ✓	Pressure	Nut-F		Chl	HPLC										
1		368	5	✓	6	x		x x	x x										
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 / MG

Bottom Depth: 3414 m

Transmisso Cleaned: Y2 (Y) / N

Time	UTC	Local
Start	1828	1128
Bottom	1900	
End	1931	

Positional Information

Start

Lat: 49 ° 12 06 N

Lon: 133 ° 39 94 W

▼

Bottom

Lat: 49 ° 12.11 N

Lon: 133 ° 40.04 W

▼

End

Lat: 49 ° 12.16 N

Lon: 133 ° 40.10 W

Extra comments: