

Water Properties Group

Sampling/Rosette Log

Institute of Ocean Sciences, Ocean Sciences Division

Cruise ID: 2019-069 Station: A1-58 Event #: 5 Vessel: TULLY UTC Date (dd|mmm|yyyy): 31 | Aug | 2019

Bottles & Samples			Rosette Operation		Samples Taken (↓ write samplers' initials under each sample type)												Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a									
1			250	✓					SPC								bottles for N my blank SPC
2			100	✓													
3		001	100	✓					✓✓✓								
4									✓✓✓								
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:
Ros (default) | TrMetlRos | X-Niskin
Watchkeeper(s):
SR

Bottom Depth: _____ m
Transmisso Cleaned: Y N
Fluorometer Cleaned: Y / N

Time	UTC	Local
Start (BE)	16 : 34	09 : 43
Bottom (BO)	16 : 43	:
End (EN)	16 : 55	:

Positional Information

Lat:	48 ° 32 . 340	N
Lon:	126 ° 11 . 690	W

Start

Lat:	48 ° 32 . 340	N
Lon:	126 ° 11 . 690	W

Bottom

Lat:	48 ° 32 . 340	N
Lon:	126 ° 11 . 690	W

Finish

Lat:	48 ° 32 . 340	N
Lon:	126 ° 11 . 690	W

Extra comments: (e.g., DMS cast, PAR on, Heavy Rain, Niskins out of order, etc)

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: EFF03

Event #: 11

Ship: Vector

UTC Date (dd mmm yyyy): 01 Aug 2019

			Rosette Operation		Samples Taken / Sampler's Initials										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	HPLC	PHYTO	DA	HAB						
1		2	b-5	✓ 114	x													
2		3	100	✓	x													
3		4	75	✓	x													
4		5	50	✓	x													
5		6	30	✓	xx													
6		7	20	✓	x													
7		8	10	✓	x													
8		9	0	✓	x													
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 119 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1645	0745
Bottom	1648	
End	1657	

Positional Information

Lat:	49 ° 4.270	N
Lon:	125 ° 9.420	W

Start

Bottom

Lat:	49 ° 4.260	N
Lon:	125 ° 9.410	W

End

Lat:	49 ° 4.260	N
Lon:	125 ° 9.400	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: EFF05

Event #: 13

Ship: Vector

UTC Date (dd mmm yyyy): 01 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	HPLC	PHYTO	DA	HAB			
1		10	b-5	✓ 198	xx										
2		11	150	✓	x										
3		12	100		x										
4		13	75		xx										
5		14	50		x										
6		15	30		x										
7		16	20		x										
8		17	10		x										
9		18	0		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: _____ m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1750	1050
Bottom	1754	
End	1807	

Positional Information

Start

Lat: 49 ° 2.530 N

Lon: 125 ° 9.200 W

Bottom

Lat: 49 ° 2.540 N

Lon: 125 ° 9.200 W

End

Lat: 49 ° 2.530 N

Lon: 125 ° 9.180 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: EFF07

Event #: 15

Ship: Vector

UTC Date (dd mmm yyyy): 01 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	HPLC	PHYTO	DA	HAB			
1		19	b-5	✓ 119	x										
2		20	100		x										
3		21	75		xx										
4		22	50		x										
5		23	30		x										
6		24	20		xx										
7		25	10		x										
8		26	0		x										
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 123 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1906	1206
Bottom	1909	
End	1918	

Positional Information

Start	Lat: 49 ° 1.300 N
	Lon: 125 ° 9.400 W
Bottom	Lat: 49 ° 1.310 N
	Lon: 125 ° 9.400 W
End	Lat: 49 ° 1.300 N
	Lon: 125 ° 9.400 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: EFF09 Event #: 17 Ship: Vector UTC Date (dd mmm yyyy): 01 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	HPLC	PHYTO	DA	HAB					
1		27	b-5	57	x												
2		28	30		x												
3		29	20		xx												
4		30	10		x												
5		31	0		x												
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: 62 m

Transmisso Cleaned: Y N

Time	UTC	Local
Start	2004	0304
Bottom	2006	
End	2012	

Positional Information

Start

Lat: 49 ° 0.130 N

Lon: 125 ° 10 820 W

Bottom

Lat: 49 ° 0.130 N

Lon: 125 ° 10 820 W

End

Lat: 49 ° 0.130 N

Lon: 125 ° 10.810 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: EFF011 Event #: 19 Ship: Vector UTC Date (dd mmm yyyy): 01 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials											Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	HPLC	PHYTO	DA	HAB				
1		32	b-5	✓	x											
2		33	50	✓	xx											
3		34	30	✓	x											
4		35	20	✓	x											
5		36	10	✓	x											
6		37	0	✓	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): SR

Bottom Depth: 85 m
 Transmisso Cleaned: Y/N

Time	UTC	Local
Start	2056	1356
Bottom	2059	
End	2106	

Positional Information

Start
 Lat: 48° 59.120 N
 Lon: 125° 11.050 W

Start

Bottom

Lat: 48° 59.110 N
 Lon: 125° 11.050 W

End

Lat: 48° 59.090 N
 Lon: 125° 11.020 W

Extra comments:

Water Properties Group

Sampling Log

check ± bridge ± depth (from our sounder)
location needs to be > 1500m

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

Cruise ID: 2019-069 Station: CI08

Event #: 30

Ship: Vector Tully

UTC Date (dd mmm yyyy): 03 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Smp. Vector			UTC Date (dd m yy)
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	PHYTO	DIC	TOC	DOC	CDOM	180	SPC		Comments	
1		38	b-5	✓	20.24	X	X											
2		39	b-5	✓				X										
3		40	1500	✓		X	X					X	X	X	X			
4		41	1250	✓		X	X											
5		42	1000	✓		X	X											
6		43	750	✓		XX	X											
7		44	500	✓		X	XX											
8		45	400	✓		X	X											
9		46	300	✓		X	X											
10		47	250	✓		X	X											
11		48	200	✓		X	X											
12		49	150	✓		XX	X											
13		50	100	✓		X	X											
14		51	75		25	X	XX											
15		52	50		50	X	X											
16		53	50		50.1			X				X	X	X	X			
17		54	30		30.2	X	X											
18		55	20		20.1	X	X		X									
19		56	10		10.2	X	X		XX									
20		57	0			X	X		X									
21		58	0					X				XX	XX	XX	XX	XX		
22		59	0															
23																		
24																		

58 A

DOC

CI08

2019-069

Bot 21

sample not taken

↓

Version: 25 Nov 2011

Transmissometer to be used 11-1

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

Bottom Depth: 2018 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0722	
Bottom	0802	
End	0853	

Positional Information

Start	Lat: 50° 53.080 N
	Lon: 129° 49.860 W

Bottom

Lat: 50° 53.220 N
Lon: 129° 49.910 W

End

Lat: 50° 53.290 N
Lon: 129° 50.040 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: Scotts2

Event #: 35

Ship: Tully

UTC Date (dd mmm yyyy): 03 AUG 2019

			Rosette Operation		Samples Taken / Sampler's Initials													Comments
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	PHYTO	DIC	TOC	DOC	CDOM	180	SPC			
				✓														
1		60	b-5	✓ 284.5			x				x	x	x	x				
2		61	b-5	✓ 284.5		x	x											
3		62	250	✓ 250		x	x											
4		63	200	✓ 200		x	x											
5		64	150	✓ 150		x	xx											
6		65	100	✓ 100		xx	x											
7		66	75	✓ 75		x	x											
8		67	50	✓ 50							x	x	x	x				omitted.
9		68	50	✓ 50		x	x											
10		69	30	✓ 30		x	x											
11		70	20	✓ 20		x	x		x									
12		71	10	✓ 10		xx	x		x									
13		72	0	✓ 2.4		x	xx		xx									
14		73	0	✓ 2.4				x	x		x	x	x	x				
15		74	0	✓ 2.4											xxx			
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth:	287	m
Transmisso Cleaned:	(Y) / N	

Time	UTC	Local
Start	1536	0836
Bottom	1542	0842
End	1557	0857

Positional Information
Start
Lat: 51 ° 7.680 N
Lon: 129 ° 28.490 W

Start

Bottom

Bottom
Lat: 51 ° 7.680 N
Lon: 129 ° 28.490 W

End

End
Lat: 51 ° 7.680 N
Lon: 129 ° 28.490 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: HAK1

Event #: 38

Ship: Tully

UTC Date (dd mmm yyyy): 03 AUG 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	PHYTO	DIC	TOC	DOC	CDOM	180	SPC		
1		75	b-5	✓ 142			x				x	x	x	x			
2		76	b-5	✓ 142	x	x											
3		77	100	✓ 100	X	X											
4		78	75	✓ 75	X	X											
5		79	50	✓ 50	X	X			XX								
6		80	50	✓ 50			X				X	X	X	X			
7		81	40	✓ 40					XX								
8		82	30	✓ 30	XX	X			XX								
9		83	20	✓ 20	X	XX		XX									
10		84	10	✓ 10	X	X		X									
11		85	0	✓ 2.5			X	X			XX	XX	XX	X			
12		86	0	✓ 2.5	X	X			X								
13		87	0	✓ 2.5										xxx			
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 145 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	23:24	16:24
Bottom	23:26	16:26
End	23:36	16:36

Positional Information

Lat:	51° 42' 700 N
Lon:	128° 14' 120 W

Start

Bottom

End

Lat:	51° 42' 700 N
Lon:	128° 14' 110 W

Lat:	51° 42' 700 N
Lon:	128° 14' 120 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: MS1

Event #: 41

Ship: Tully

UTC Date (dd mmm yyyy): 04 Aug 2019

Cruise ID: 2019-069			Station: M31		Event #: 1											Ship: R/V		Comments	
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18				SPC
1		88	b-5	210			X					X	X	X	X				
2		89	b-5	210	X	X													
3		90	150		X	X													
4		91	100		X	X													
5		92	75		XX	X													
6		93	50		X	X													
7		94	50				X					X	X	X	X				
8		95	30		X	XX													
9		96	20		X	X		X											
10		97	10		X	X		XX											
11		98	0				X					XX	XX	XX	X				
12		99	0		X	X		X		X									
13		100	0													XXX			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 213 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0607	2307
Bottom	0613	
End	0624	

Positional Information

Lat:	52 ° 7.990	N
Lon:	128 ° 50.340	W

Start

Bottom

Lat:	52 ° 7.990	N
Lon:	128 ° 50.350	W

End

Lat:	52 ° 7.990	N
Lon:	128 ° 50.360	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2019-069

Station:

MS4

Event #:

46

Ship:

Tully

UTC Date (dd mmm yyyy):

04 Aug

			Rosette Operation		Samples Taken / Sampler's Initials											Comments	
Niskin #	Firing #	Sample #	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC	
1		101	b-5	✓ 357			X					X	X	X	X		
2		102	b-5	✓ 357	X	X											
3		103	300	✓	X	X											
4		104	250	✓	X	X											
5		105	200	✓	X	XX											
6		106	150	✓ 150	XX	X											
7		107	100	✓ 100	X	X											
8		108	75	✓ 75	XX	X											
9		109	50	✓ 50			X					X	X	X	X		
10		110	50	✓ 50	XX	X											
11		111	30	✓ 50	X	X											Fired extra
12		112	20	✓ 20	X	XX		X									50m into
13		113	10	✓ 10	X	X		X									bottle 12 by
14		114	0	✓ 2.5	X	X		XX									error
15		115	0	✓			X					XX	XX	XX	X		30m in bot 1
16		116	0	✓												XXX	
17		111	30	✓ 30	X	X											
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

812

Bottom Depth:

359

m

Transmisso Cleaned:

Y / N

Time

UTC

Local

Start

13 28

0628

Bottom

13 35

0635

End

13 53

0653

Positional Information

Start

Lat: 51 ° 41.360

N

Lon: 129 ° 57.630

W

Bottom

Lat: 51 ° 41.370

N

Lon: 129 ° 57.640

W

End

Lat: 51 ° 41.390

N

Lon: 129 ° 57.650

W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: MS8

Event #: 51

Ship: Tully

UTC Date (dd mmm yyyy): 04 AUG 2019

Cruise ID: 2019-069			Station: MS6			Event #:			Ship:			Date:			Time:			Comments		
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments			
			Target Pressure	Confirmed Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18		SPC	NUTC	
				✓			FROZEN	COOL												
1		117	b-5	✓	2019				X					X	X	X	X			
2		118	b-5	✓	2019	X	X	X										X		
3		119	1500	✓	1500	X	X	X										X		
4		120	1000	✓	1000	X	X	XX										X		
5		121	750	✓	750	XX	X	X										X		
6		122	500	✓	500	X	X	X										XX		
7		123	400	✓	400	X	X	X										X		
8		124	300	✓	300	X	XX													
9		125	250	✓	250	XX	X													
10		126	200	✓	200	X	X													
11		127	150	✓	150	X	X													
12		128	100	✓	100	X	X													
13		129	75	✓	75	X	X													
14		130	50	✓	50	X	X													
15		131	50	✓	50				X				X	X	X	X				
16		132	30	✓	30	X	XX													
17		133	20	✓	20	X	X			X										
18		134	10	✓	10	XX	X			XX										
19		135	0	✓	2.4				X				XX	XX	XX	X				
20		136	0	✓	2.4	X	X			X										
21		137	0	✓	2.4												XXX			
22																				
23																				
24																				

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

Bottom Depth: 2010 m

Transmissometer Cleaned: N

Time	TC	Local
Start	1310	
Bottom	1345	
End	1432	

Positional Information

Start	Lat: 51° 23.98' N
	Lon: 130° 42.18' W

Bottom

	Lat: 51° 24.08' N
	Lon: 130° 42.22' W

End

	Lat: 51° 24.15' N
	Lon: 130° 42.17' W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: MT11B Event #: Ship: Tully UTC Date (dd mmm yyyy):

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18		SPC
							FROZEN	COOL										
1		138	b-5						X					X	X	X	X	
2		139	b-5			X	X	X										
3		140	1000			X	X	X										
4		141	750			X	X	XX										
5		142	500			XX	X	X										
6		143	400			X	X	X										
7		144	300			X	X											
8		145	250			X	XX											
9		146	200			XX	X											
10		147	150			X	X											
11		148	100			X	X											
12		149	75			X	X											
13		150	50						X				X	X	X	X		
14		151	50			X	X											
15		152	30			X	X											
16		153	20			X	XX			X								
17		154	10			XX	X			X								
18		155	0			X	X			XX								
19		156	0						X				XX	XX	XX	X		
20		157	0														XXX	
21			b-5															
22																		
23																		
24																		

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

Bottom Depth: m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start		
Bottom		
End		

Positional Information

Lat:	°	N
Lon:	°	W

Bottom

Lat:	°	N
Lon:	°	W

End

Lat:	°	N
Lon:	°	W

Extra comments:

snapped bottle 21 for Cindy - deepwater collection personal use, no sample #

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: MT08B

Event #: 56

Ship: Tully

UTC Date (dd mmm yyyy): 05 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													Comments	
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC		
					FROZEN	COOL													
1		158	b-5	✓ 497				X					X	X	X	X			
2		159	b-5	✓ 497	X	X	X												
3		160	400		X	X	XX												
4		161	300		X	X													
5		162	250		XX	X													
6		163	200		X	XX													
7		164	150		X	X													
8		165	100		X	X													
9		166	75		X	X													
10		167	50		XX	X													
11		168	50					X					X	X	X	X			
12		169	30		X	XX													
13		170	20		X	X			XX										
14		171	10		X	X			X										
15		172	0		X	X			X										
16		173	0					X					XX	XX	XX	X			
17		174	0														XXX		
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 498 m
Transmissio Cleaned / N

Time	TC	Local
Start	0641	2341
Bottom	0650	
End	0712	

Positional Information

Start	Lat: 52°13.980 N
	Lon: 130°11.450 W
Bottom	Lat: 52°13.980 N
	Lon: 130°11.450 W
End	Lat: 52°13.960 N
	Lon: 130°11.490 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069

Station: JUAN241

Event #: 62

Ship: Tully

UTC Date (dd mmm yyyy): 05 AUG 2019

Cruise ID: 2019-069			Station: JUAN211		Event #:		Date: 7/1/2019												Ship: R/V		Comments	
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										O18	SPC						
			Target Pressure	Confirmed Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC					CDOM			
				✓			FROZEN	COOL														
1		175	b-5	✓ 218					X					X	X	X	X					
2		176	B-5	✓ 218	X	X																
3		177	200	✓ 200	X	X																
4		178	150	✓ 150	X	X																
5		179	100	✓ 100	XX	X																
6		180	75	✓ 75	X	XX																
7		181	50	✓ 50				X					X	X	X	X		no oxygen read				
8		182	50	✓ 50	X	X					XX											
9		183	40	✓ 40							XX											
10		184	30	✓ 30	XX	X					XX											
11		185	20	✓ 20	X	X			X													
12		186	10	✓ 10	X	X			XX													
13		187	0	✓ 2.4				X					XX	XX	XX	X						
14		188	0	✓ 2.4	X	X			X													
15		189	0	✓ 2.4													XXX					
16																						
17																						
18																						
19																						
20																						
21																						
22																						
23																						
24																						

http://www.pac.dfo-

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

Bottom Depth: 222 m

Transmisso Cleaned: N

Time	TC	Local
Start	0854	
Bottom	0858	
End		

Positional Information

Start	Lat: 52° 31.230N
	Lon: 131° 25.890W

Bottom

	Lat: 52° 31.230N
	Lon: 131° 25.900W

End

	Lat: 52° 31.230N
	Lon: 131° 25.900W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: JPS1

Event #: 64

Ship: Tully

UTC Date (dd mmm yyyy): 05 AUG 2019

Cruise ID: 2019-069			Station: JPS1			Event #: 007			Camp: 001			Party: 001			Comments			
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials													
			Target Pressure	Confirmed Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC				CDOM
				✓			FROZEN	COOL										
1		190	B-5	✓	134				X					X	X	X	X	
2		191	B-5	✓	134	X	X											
3		192	100	✓	100	X	X											
4		193	75	✓	75	X	X											
5		194	50	✓	50				X				X	X	X	X	X	
6		195	50	✓	50	XX	X											
7		196	30	✓	30	X	X											
8		197	20	✓	20	X	XX			X								
9		198	10	✓	10	X	X			X								
10		199	0	✓	2.6	X	X			XX	X							
11		200	0	✓	2.6				X				XX	XX	XX	X		
12		201	0	✓	2.6												XXX	
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

http://www.pac.dfo-

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

Bottom Depth: 136 m

Transmisso Cleaned: N

Time	TC	Local
Start		1118
Bottom		1121
End		1129

Positional Information

Start	Lat: 52° 36.26' N
	Lon: 131° 40.16' W

Bottom

Lat: 52° 36.28' N
Lon: 131° 40.17' W

End

Lat: ° N
Lon: ° W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: JPS7

Event #: 70

Ship: Tully

UTC Date (dd mmm yyyy): 05 AUG 2019

			Rosette Operation		Samples Taken / Sampler's Initials														Comments
Niskin #	Firing #	Sample #	Target	Confirmed	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC		
			Pressure	✓ Pressure		FROZEN	COOL												
1		202	B-5	✓	131				X					X	X	X	X		
2		203	B-5	✓	131	X	X												
3		204	75	✓	75	X	X												
4		205	50	✓	50	X	X												
5		206	50	✓	50				X					X	X	X	X		
6		207	30	✓	30	XX	X												
7		208	20	✓	20	X	XX		X									huge chl a peak at 15-20m	
8		209	10	✓	10	X	X		XX										
9		210	0	✓	2.4	X	X		X		X								
10		211	0	✓	2.4				X				XX	XX	XX	X			
11		212	0	✓	2.4												XXX		
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 135 m
Transmisso Cleaned: N

Time	TC	Local
Start		1622
Bottom		1624
End		1633

Positional Information

Start	Lat: 52 ° 33.930 N
	Lon: 131 ° 6.230 W
Bottom	Lat: 52 ° 33.940 N
	Lon: 131 ° 6.230 W
End	Lat: 52 ° 33.960 N
	Lon: 131 ° 6.200 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2019-069

Station: MT05

Event #:

71

Ship:

Tully

UTC Date (dd mmm yyyy): 06 Aug 2019

			Rosette Operation		Samples Taken / Sampler's Initials													Comments	
Niskin #	Firing #	Sample #	Target	Confirmed	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC		
			Pressure	✓ Pressure		FROZEN	COOL												
1		213	b-5		260				X					X	X	X	X		
2		214	b-5		260	X	X												
3		215	200			X	X												
4		216	150			X	X												
5		217	100			XX	X												
6		218	75			X	XX												
7		219	50					X					X	X	X	X			
8		220	50			X	X												
9		221	30			X	X												
10		222	20			XX	X		X										
11		223	10			X	X		X										
12		224	0			X	XX		XX										
13		225	0					X					XX	XX	XX	X			
14		226	0														XXX		
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 264 m

Transmisso Cleaned / N

Time	UTC	Local
Start	0512	2212
Bottom	0516	
End	0535	

Positional Information
Start
Lat: 52° 40.738' N
Lon: 129° 59.663' W

Bottom
Lat: 52° 40.730' N
Lon: 129° 59.670' W

End
Lat: 52° 40.729' N
Lon: 129° 59.642' W

Extra comments:

CAST ABORTED DUE TO CARS
bender LEAK

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: SRN (MT01)

Event #: 80

Ship: Tully

UTC Date (dd mmm yyyy): 06 AUG 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18		SPC
			Pressure	✓ Pressure		FROZEN	COOL											
1		227	b-5	✓ 201				X					X	X	X	X		
2		228	b-5	✓ 201	X	X												
3		229	150	✓ 150	X	X												
4		230	100		X	X												
5		231	75		XX	XX												
6		232	50		X	X												
7		233	50				X					X	X	X	X			
8		234	30		X	XX												
9		235	20		X	X												
10		236	10		XX	X												
11		237	0		X	X				X								
12		238	0				X					XX	XX	XX	X			
13		239	0													XXX		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 205 m
Transmisso Cleaned: N

Time	TC	Local
Start		0742
Bottom		
End		

Positional Information
Start
Lat: 53° 6.540' N
Lon: 130° 23.88' W

Bottom
Lat: ° N
Lon: ° W

End
Lat: ° N
Lon: ° W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2019-069

Station:

HECS4

Event #:

89

Ship:

Tully

UTC Date (dd mmm yyyy):

06 AUG 2019

Cruise ID: 2019-069			Station: HEC34		Event #														Comments
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														
			Target Pressure	Confirmed Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18		SPC	NH4
				✓			FROZEN	COOL											
1		240	b-5	✓	112				X					X	X	X	X		
2		241	b-5	✓	112	XX	X												
3		242	75	✓	75	X	X												
4		243	50	✓	50	X	XX												
5		244	50	✓	50				X				X	X	X	X			
6		245	30	✓	30	XX	X												
7		246	20	✓	20	X	X			X									
8		247	10	✓	10	X	XX			XX									
9		248	5	✓	5	X	X												
10		249	0	✓	2.5	X	X			X									
11		250	0	✓	2.5				X				XX	XX	XX	X			
12		251	0	✓	2.5												XXX		
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 115 m

Transmisso Cleaned: N

Time	TC	Local
Start	1634	
Bottom	1636	
End	1645	

Positional Information

Start
Lat: 53° 48.22' N
Lon: 130° 49.43' W

Bottom
Lat: 53° 48.22' N
Lon: 130° 49.44' W

End
Lat: 53° 48.21' N
Lon: 130° 49.47' W

Extra comments:

Sampling Log

92

Event #:

UTC Date (dd mmm yyyy): 07 Aug 2019

Version: 25 Nov 2011

Transmissometer to be cleaned before each cast, do not use Ammonia products

Sampling Log

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

Cruise ID:

2019-069 **Station:** HECS8

Event #:

93

Ship:

Tully

UTC Date (dd mmm yyyy): 07 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials																Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut FROZEN	Nut COOL	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC	NH4			
1		264	b-5	/ 117				X					X	X	X	X					
2		265	b-5	/ 117	X	X											XX				
3		266	75	/	X	X											XX				
4		267	50	/	X	X											XX				
5		268	50	/				X					X	X	X	X					
6		269	30	/	X	X											XX				
7		270	20	/	X	X			XX								XX				
8		271	10	/	XX	X			X								XX				
9		272	5	/	X	XX											XX				
10		273	0	/	X	X			X								XX				
11		274	0	/				X					XX	XX	XX	X					
12		275	0	/													XXX				
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

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

Watchkeeper(s): SR

Bottom Depth: 120 m

Transmisso Cleaned: Y I N

Time UTC Local

Start 0717 0017

Bottom 0721

End 0730

Positional Information
Lat: 54 ° 23.250 N
Lon: 131 ° 5.580 W
▼
Lat: 54 ° 23.270 N
Lon: 131 ° 5.590 W
▼
Lat: 54 ° 23.280 N
Lon: 131 ° 5.590 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069

Station: CH6

Event #: _____

Ship: Tully

UTC Date (dd mmm yyyy): _____

Cruise ID: 2019-069			Station: CH6		Event #													Comments	
Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials														
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC		NH4
						FROZEN	COOL												
1		336	B-5			X													
2		337	250			X													
3		338	200			X													
4		339	150			X													
5		340	100			X													
6		341	75			XX													
7		342	50			X													
8		343	30			X													
9		344	20			X													
10		345	10			X													
11		346	5			XX													
12		347	0			X													
13																			
14																			
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CANCELLED

NUTRIENTS ONLY

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NUTRIENTS ONLY

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

Bottom Depth: _____ m
 Transmisso Cleaned: / N

Time	UTC	Local
Start		
Bottom		
End		

Positional Information

Start	Lat: ° N
	Lon: ° W

Bottom

	Lat: ° N
	Lon: ° W

End

	Lat: ° N
	Lon: ° W

Extra comments:

Water Properties Group

Sampling Log

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

UTC Date (dd mmm yyyy): 07 Aug 2019

Cruise ID: 2019-069 Station: CH15

Event #: 96

Ship: Tully

UTC Date (dd mmm yyyy): 07 Aug 2011

Comments

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

Watchkeeper(s): 

Bottom Depth: 190 m

Transmisso Cleaned: Y / N

Time	UTC	Local
------	-----	-------

Time	1042	0342
Start		

Bottom	1046
--------	------

End	1057	
-----	------	--

Positional Information

Lat: 54° 18.240 N

Lon: 130° 42.490 W

Lat: 54° 18.220 N

Lon: 130° 42.440 W

Lat: $54^{\circ} 18.180$

Lon: 130° 42.410

Extra comments:

NUTRIENTS ONLY

Transmissometer to be cleaned before each cast, do not use Ammonia products

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH13

Event #: 97

Ship: Tully

UTC Date (dd mmm yyyy): 07 Aug 2019

Cruise ID: 2019-069			Station: CH13			Event #: 97			Ship: Tully			UTC Date (dd mmm yyy): 8 Jun 2019										
Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	Profile type:				
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut FROZEN	Nut COOL	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18		SPC	NH4	ROS	TRM	X-Niskin
1		298	b-5	✓	152		X															
2		299	100	✓			X															
3		300	75	✓			X															
4		301	50	✓			X															
5		302	30	✓			X															
6		303	20	✓			X															
7		304	10	✓			XX															
8		305	5	✓			X															
9		306	0	✓			X															
10																						
11																						
12																						
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15																						
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19																						
20																						
21																						
22																						
23																						
24																						

Bottom Depth: 159 m

Transmisso Cleaned: Y I N

Time UTC

Start 1143 0443

Bottom 1147

End 1157

Positional Information

Lat: 54° 23.110 N

Lon: 130° 38.950 W

▼

Lat: 54° 23.120 N

Lon: 130° 38.890 W

▼

Lat: 54° 23.180 N

Lon: 130° 38.850 W

Extra comments:

NUTRIENTS ONLY

do not clean before each cast, do not use Ammonia products

Water Properties Group

Sampling Log

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

UTC Date (dd mmm yyyy): 07 aug 2019

Cruise ID: 2019-069 Station: CH10

Event #: 98

Ship: Tully

Comments

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): *SR*

Niskin #	Firing #	Sample #
-------------	-------------	-------------

Rosette Operation	
Target	Confirmed
Pressure	✓ Pressure

Samples Taken / Sampler's Initials	
1	
2	
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Oxy	Nut	Nut
	FROZEN	COOL

	Sal

	Chl a

APLO	
------	--

PHYSICS

DIC	

100	

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W	

01

1

Bottom Depth: 28 m

Transmisso Cleaned: Y / N

Time	UTC	Local
------	-----	-------

Start	1231	0431
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Bottom	1233	
--------	------	--

End	1241	
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Positional Information

Lat: 54° 26.842' N

Lon: 130° 39.167 W

Lat: 54° 26.833' N

Lon: 130° 39.102 W

Lat: 54 ° 20.808 N

Lon: 130° 37.108 W

Extra comments:

NUTRIENTS ONLY

Transmissometer to be cleaned before each cast, do not use Ammonia products

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH4

Event #: 99

Ship: Tully

UTC Date (dd mmm yyyy): 07 Aug 2019

Cruise ID: 2019-002			Station: 01		Samples Taken / Sampler's Initials														
Niskin #	Firing #	Sample #	Rosette Operation		Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC	NH4	
			Target Pressure	Confirmed ☒ Pressure															
1		315	b-5	✓ 88		X													
2		316	75	✓		X													
3		317	50			X													
4		318	30			X													
5		319	20			X													
6		320	10			X													
7		321	5			XX													
8		322	0			X													
9																			
10																			
11																			
12																			
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15																			
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17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

NUTRIENTS ONLY

incubator to be cleaned before each cast, do not use Ammonia products

NUTRIENTS ONLY

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

Bottom Depth: 92 m
 Transmisso Cleaned: Y / N

	UTC	Local
Time		
Start	1332	0632
Bottom	1335	
End	1342	

Positional Information
 Lat: 54° 32.480 N
 Lon: 130° 43.520 W

Lat: 54° 32.480 N
 Lon: 130° 43.520 W

Lat: 54° 32.510 N
 Lon: 130° 43.450 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH5

Event #: 100

Ship: Tully

UTC Date (dd mmm yyyy): 07 AUG 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	Profile type: ROS TRM X-Niskin other? Watchkeeper(s): SP								
			Target Pressure	Confirmed Pressure	Oxy	Nut FROZEN	Nut COOL	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC			CDOM	O18	SPC	NH4				
1		323	B-5	✓	140				X						X	X	X	X			XX		Bottom Depth: 144 m	
2		324	B-5	✓	140			X													XX		Transmisso Cleaned: Y / N	
3		325	100	✓	100			X													XX			
4		326	75	✓	75			X						X	X	X	X							Time UTC Local
5		327	50	✓	50				X												XX		Start 1419 0719	
6		328	50	✓	50			XX													XX		Bottom 1422 0722	
7		329	30	✓	30			X													XX		End 1432 0732	
8		330	20	✓	20			X													XX			
9		331	10	✓	10			X													XX		Positional Information	
10		332	5	✓	5			X													XX		Lat: 54° 33.680 N	
11		333	0	✓	2.3			X						XX	XX	XX	XX						Lon: 130° 37.630 W	
12		334	0	✓	2.3				X										XXX				Lat: 54° 33.680 N	
13		335	0	✓	2.3																		Lon: 130° 37.650 W	
14																							Lat: 54° 33.710 N	
15																							Lon: 130° 37.630 W	
16																								
17																								
18																								
19																								
20																								
21																								
22																								
23																								
24																								

MINI SUPER; NO DISSOLVED OXYGEN

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH7

Event #: 102

Ship: Tully

UTC Date (dd mmm yyyy): 07 AUG 2019

Cruise ID: 2019-069			Station: CH7			Event #: 70			Ship: Tully			Comments									
Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials																
			Target Pressure	Confirmed Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC		CDOM	O18	SPC	NH4		
				✓			FROZEN	COOL													
1		348	B-5	✓	85		X														
2		349	75	✓	75		X														
3		350	50	✓	50		X														
4		351	30	✓	30		X														
5		352	20	✓	20		XX														
6		353	10	✓	10		X														
7		354	5	✓	5		X														
8		355	0		2.4		X														
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

NUTRIENTS ONLY

http://www.pac.dfo-

NUTRIENTS ONLY

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

Bottom Depth: 90 m
 Transmisso Cleaned: N

Time	TC	Local
Start	1029	
Bottom	1031	
End	10	

Positional Information
 Start Lat: 54° 31' 58.0" N
 Lon: 130° 30' 93.0" W

Bottom Lat: 54° 31' 60.8" N
 Lon: 130° 30' 96.0" W

End Lat: 54° 31' 61.4" N
 Lon: 130° 30' 98.0" W

Extra comments:

Sampling Log

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

Cruise ID: 2019-069 Station: CHAT3

Event #: 104

Ship: Tully

UTC Date (dd mmm yyyy): 07 Aug 2019

Niskin #		Firing #	Sample #	Rosette Oper X	Samples Taken / Sampler's Initials														Ship: Tully		UTC Date (dd mmm yyyy): 07 AUG 2019		Comments	Profile type: ROS TRM X-Niskin other?		Watchkeeper(s): SP
				Target Pressure	Confirmed Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC	NH4							
1		369	B-5	✓	157				X						X	X	X	X								
2		370	B-5	✓	157	X	X		X						X	X	X	X								
3		371	100	✓	100	X	X		X				X						XX							
4		372	75	✓	75	X	X		X				X						XX							
5		373	50	✓	50	X	X		X				XX						XX							
6		374	50	✓	50				X				XX						XX							
7		375	30	✓	30	XX	X		X				XX	X	X	X	X		XX							
8		376	20	✓	20	X	XX		X	X			X						XX							
9		377	10	✓	10	X	X		X	XX			X						XX							
10		378	5	✓	5	XX	X		X				X						XX							
11		379	0	✓	2.4	X	X		X	X			X						XX							
12		380	0	✓	2.4				X				X						XX							
13		381	0	✓	2.4							X		XX	XX	XX	X									
14																		XXX								
15																										
16																										
17																										
18																										
19																										
20																										
21																										
22																										
23																										
24																										

Bottom Depth: 162 m
 Transmisso Cleaned: (Y) N
 Time UTC Local
 Start 1826 1126
 Bottom 1829 1129
 End 1839 1139
 Positional Information
 Lat: 54° 31.588' N
 Lon: 130° 32.591' W
 Lat: 54° 31.588' N
 Lon: 130° 32.588' W
 Lat: 54° 31.588' N
 Lon: 130° 32.588' W
 Extra comments:
 bottles 5 & 6 swapped out-line of drawing samples as DOC was

MINI SUPER; INCLUDES DISSOLVED OXYGEN AND DIC/ALK

Version: 25 Nov 2011
 Transmissometer to be cleaned before each cast, do not use Ammonia products

Version: 25 Nov 2011

Transmissometer to be cleaned before each cast, do not use Ammonia products

taken from #6, not #5, by error

Sampling Log

UTC Date (dd mmm yyyy): 07 AUG 2019

Transmissometer to be cleaned before each cast, do not use Ammonia products

Ammonium
Cancelled

Sampling Log

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

Cruise ID:

2019-069

Station: CH11

Event #:

Ship: Tully

UTC Date (dd mmm yyyy):

07 AUG 2010

Cruise ID: 2019-069			Station: CH11		Event #: 700		Ship: R/V		Date: 11/11/2019		Comments		Profile type: ROS TRM X-Niskin other?							
Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials										Comments	Watchkeeper(s): SP				
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut FROZEN	Nut COOL	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC			CDOM	O18	SPC	NH4
1		382	B-5	✓	125				X				X	X	X	X				
2		383	B-5	✓	125			X									XX			Bottom Depth: 130 m
3		384	50	✓	50				X				X	X	X	X				Transmisso Cleaned: (Y) / N
4		385	50	✓	50			X									XX			Time UTC Loc
5		386	30	✓	30			X									XX			
6		387	20	✓	20			X			X						XX			Start 2017 1317
7		388	10	✓	10			XX			XX						XX			Bottom 2019 1319
8		389	5	✓	5			X									XX			End 2026 1326
9		390	0	✓	3.4				X				X	X	X	X				Positional Information
10		391	0	✓	2.4			X			X						XX			
11		392	0	✓	2.4												XX			Lon: 130° 33.020 W
12																				▼
13																				Lat: 54° 26.980 N
14																				Lon: 130° 33.030 W
15																				▼
16																				Lat: 54° 26.980 N
17																				Lon: 130° 33.050 W
18																				
19																				Extra comments:
20																				
21																				
22																				
23																				
24																				

MINI SUPER; NO DISSOLVED OXYGEN

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH12

Event #: 107

Ship: Tully

UTC Date (dd mmm yyyy): 07 AUG 2019

Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials													Comments	Profile type:			
			Target Pressure	Confirmed Pressure	Oxy	Nut FROZEN	Nut COOL	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC		NH4	ROS	TRM	X-Niskin
1	1	393	B-5	✓	135				X					X	X	X	X					
2	2	394	B-5	✓	135			X										XX				Bottom Depth: 143 m
3	3	395	100	✓	100			X										XX				Transmissio Cleaned: Y / N
4	4	396	75	✓	75			XX										XX				
5	5	397	50	✓	50				X				X	X	X	X						Time UTC Local
6	6	398	50	✓	50			X										XX				Start 2124 1424
7	8	399	30	✓	30			X										XX				Bottom 2126 1426
8	7	400	20	✓	20			X			X							XX				End 2137 1437
9	9	401	10	✓	10			X			X							XX				
10	10	402	5	✓	5			X										XX				Positional Information
11	11	403	0		2.2			X			X							XX				Lat: 54° 23.700 N
12	12	404	0		2.2				X				XX	XX	XX	X						Lon: 130° 33 910 W
13	13	405	0		2.2												XXX					
14																						Lat: 54° 23.690 N
15																						Lon: 130° 33 870 W
16																						
17																						Lat: 54° 23.680 N
18																						Lon: 130° 33.850 W
19																						
20																						
21																						Extra comments:
22																						bottle 8 fired
23																						before 7 as LARS
24																						missed 30m on
																						upcast.

MINI SUPER; NO DISSOLVED OXYGEN

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CHAT2

Event #: 109

Ship: Tully

UTC Date (dd mmm yyyy): 07 AUG 2019

[illegible]

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH17 Event #: 112 Ship: Tully UTC Date (dd mmm yyyy): 08 Aug 2019

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials											Comments	Profile type:				
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM		O18	SPC	NH4	ROS	TRM
1	1	406	b-5	☒			X														
2	2	407	50	☒			X														
3	3	408	30	☒			X														
4	4	409	20	☒			X														
5	5	410	10	☒			XX														
6	6	411	5	☒			X														
7	7	412	0	☒			X														
8																					
9																					
10																					
11																					
12																					
13																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

Bottom Depth: 92 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0316	
Bottom	0318	
End	0327	

Positional Information

Lat: 54° 20.390 N

Lon: 130° 33.210 W

▼

Lat: 54° 20.400 N

Lon: 130° 33.220 W

▼

Lat: 54° 20.410 N

Lon: 130° 33.240 W

Extra comments:

NUTRIENTS ONLY

Sampling Log

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

Cruise ID: 2019-069 Station: CH18

Event #: 113

Ship: Tully

UTC Date (dd mmm yyyy): 08 Aug 2019

[illegible]

Version: 25 Nov 2011

Transmissometer to be cleaned before each cast, do not use Ammonia products

Sample 473 cancelled

Sampling Log

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

Cruise ID: 2019-069 **Station:** CH19

Event #: 114

Ship: Tully

UTC Date (dd mmm yyyy): 08 Aug 2019

[illegible]

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH20 Event #: 115 Ship: Tully UTC Date (dd mmm yyyy): 28 Aug 2017

Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials												Comments	Profile type:					
			Target	Confirmed	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18		SPC	NH4	ROS	TRM	X-Niskin	other?
			Pressure	Pressure		FROZEN	COOL																
1		492	B-5	✓	153		X																
2		493	150	✓			X																
3		494	100	✓			X																
4		495	75	✓			X																
5		496	50	✓			XX																
6		497	30	✓			X																
7		498	20	✓			X																
8		499	10	✓			X																
9		500	5	✓			X																
10		501	0	✓			X																
11																							
12																							
13																							
14																							
15																							
16																							
17																							
18																							
19																							
20																							
21																							
22																							
23																							
24																							

Bottom Depth: 158 m

Transmisso Cleaned: Y / N

Time UTC Local

Start 0642 2342

Bottom 0645

End 0658

Positional Information

Lat: 54° 13.660 N

Lon: 130° 43.850 W

Lat: 54° 13.660 N

Lon: 130° 43.860 W

Lat: 54° 13.660 N

Lon: 130° 43.900 W

Extra comments:

NUTRIENT ONLY: NO DISSOLVED OXYGEN

Sampling Log

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

Cruise ID: 2019-069 Station: CH21

Event #: 110

Ship: Tully

UTC Date (dd mmm yyyy): 08 Aug 2019

Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials																Comments	Profile type:	
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut FROZEN	Nut COOL	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC	NH4	ROS	TRM		X-Niskin	other?
1		502	B-5	/	119				X					X	X	X	X					Watchkeeper(s): SR	
2		503	B-5	/	119		X							X	X	X	X		XX			Bottom Depth: 124 m	
3		504	100	/			X												XX			Transmisso Cleaned: Y / N	
4		505	75	/			XX												XX				
5		506	50	/					X					X	X	X	X						
6		507	50	/			X												XX			Time UTC Local	
7		508	30	/			X												XX			Start 0740 0040	
8		509	20	/			X			X									XX			Bottom 0743	
9		510	10	/			X			XX									XX			End 0753	
10		511	5	/			X												XX				
11		512	0	/					X					XX	XX	XX	X					Positional Information	
12		513	0	/			X			X									XX			Lat: 54° 11' 820 N	
13		514	0	/																		Lon: 130° 39' 389 W	
14																		XXX				▼	
15																						Lat: 54° 11' 820 N	
16																						Lon: 130° 39' 364 W	
17																						▼	
18																						Lat: 54° 11' 830 N	
19																						Lon: 130° 39' 300 W	
20																							
21																						Extra comments:	
22																							
23																							
24																							

SUPER MINI NO DISSOLVED OXYGEN

Version: 25 Nov 2014

Water Properties Group

Sampling Log

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

Cruise ID:

2019-069

Station: CH21

Event #:

117

Ship:

Tully

UTC Date (dd mmm yyyy): 08 Aug 2019

Niskin
#Firing
#Sample
#

Rosette Oper X

Target
PressureConfirmed
✓

Pressure

Samples Taken / Sampler's Initials

Oxy

Nut

Nut

Sal

Chl a

HPLC

PHYTO

DIC

TOC

DOC

CDOM

O18

SPC

NH4

Comments

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s): SR

Bottom Depth: 130 m

Transmisso Cleaned: Y / N

Time UTC Local

Start 0836 01

Bottom 0840

End 0848

Positional Information

Lat: 54° 10.001 N

Lon: 130° 34.908 W

Lat: 54° 10.000 N

Lon: 130° 34.919 W

Lat: 54° 9.990 N

Lon: 130° 34.930 W

Extra comments:

NUTRIENTS ONLY; NO DISSOLVED OXYGEN

Sampling Log

Cruise ID: 2019-069 Station: CH24 Event #: 118 Ship: Tully UTC Date (dd mmm yyyy): 08 Aug 2019

Niskin #		Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials								Comments						
				Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC	NH4	
							FROZEN	COOL												
1		523	B-5	✓	86	X														
2		524	30	✓		X														
3		525	20	✓		X														
4		526	10	✓		X														
5		527	5	✓		XX														
6		528	0	✓		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): SR

Bottom Depth: 90 m

Transmisso Cleaned: Y N

Time UTC Local

Start 0918 0218

Bottom 0921

End 0926

Positional Information

Lat: 54° 7.580 N

Lon: 130° 34.220 W

▼

Lat: 54° 7.580 N

Lon: 130° 34.230 W

▼

Lat: 54° 7.610 N

Lon: 130° 34.300 W

Extra comments:

NUTRIENTS ONLY; NO DISSOLVED OXYGEN

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH25 Event #: 119 Ship: Tully UTC Date (dd mmm yyyy): 08 Aug 2019

Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials													Comments	Profile type:				
			Target	Confirmed	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM	O18	SPC		NH4	ROS	TRM	X-Niskin	other?
			Pressure	✓	Pressure	FROZEN	COOL																
1		529	B-5		112				X					X	X	X	X						
2		530	B-5				X											XX				Bottom Depth: _____ m	
3		531	75				X											XX				Transmisso Cleaned: _____ Y / N	
4		532	50				XX											XX					
5		533	50					X					X	X	X	X						Time UTC Local	
6		534	30				X											XX				Start 1014 0314	
7		535	20				X		X									XX				Bottom 1016	
8		536	10				X			XX								XX				End 1025	
9		537	5				X											XX					
10		538	0				X			X								XX				Positional Information	
11		539	0					X					XX	XX	XX	X						Lat: 54 ° 8.840 N	
12		540	0														XXX					Lon: 130 ° 26.330 W	
13		541	0											X									
14																						Lat: 54 ° 8.850 N	
15																						Lon: 130 ° 26.360 W	
16																							
17																						Lat: 54 ° 8.890 N	
18																						Lon: 130 ° 26.480 W	
19																							
20																						Extra comments:	
21																							
22																							
23																							
24																							

Water Properties Group

Sampling Log

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

Cruise ID: 2019-069 Station: CH26

Event #: 120

Ship: Tully

UTC Date (dd mmm yyyy): 08 Aug 2019

Niskin #	Firing #	Sample #	Rosette Oper X		Samples Taken / Sampler's Initials											Comments	Profile type:				
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Nut	Sal	Chl a	HPLC	PHYTO	DIC	TOC	DOC	CDOM		O18	SPC	NH4	ROS	TRM
1		542	B-5			X															
2		543	50			X															
3		544	30			X															
4		545	20			XX															
5		546	10			X															
6		547	5			X															
7		548	0			X															
8		549	0											X							
9																					
10																					
11																					
12																					
13																					
14																					
15																					
16																					
17																					
18																					
19																					
20																					
21																					
22																					
23																					
24																					

Bottom Depth: _____ m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1107	0407
Bottom	1109	
End	1116	

Positional Information

Lat: 54° 8.810 N

Lon: 130° 21.380 W

▼

Lat: 54° 8.810 N

Lon: 130° 21.400 W

▼

Lat: 54° 8.800 N

Lon: 130° 21.400 W

Extra comments:

NUTRIENTS ONLY

BOTTLE 8 FOR ALISON