

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

S:03

Event #:

1

Ship:

Tully

UTC Date (dd|mmm|yyyy): 6 | Feb | 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's initials												Comments
			Target Pressure	Confirmed ✓ Pressure	PIC												
1	1	1	Bot-10	✓ 215	x												
2	2	2	175	✓ 175	x												
3	3	3	150	✓ 150	x												
4	4	4	100	✓ 100	x												
5	5	5	50	✓ 50	x												
6	6	6	25	✓ 25	x												
7	7	7	5	✓ 5	x												
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

MATE

Bottom Depth: 225 m

Transmisso Cleaned: Y / N

Time UTC Local

Start 0335 1935

Bottom 0341 1941

End 0353 1953

Positional Information

Start Lat: 48 ° 35 60 N

Lon: 123 ° 30 00 W

Bottom Lat: 48 ° 35 59 N

Lon: 123 ° 30 02 W

End Lat: 48 ° 35 59 N

Lon: 123 ° 30 06 W

Extra comments:

all closed @ surface.

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P1 Event #: 6 Ship: Tully UTC Date (dd|mmm yyyy):

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal-R	Chl	HPLC	DIC	Oxy	PH				
1	1	8	Bot-10		x				x x	x	xxx				
2	2	9	Max		x		x x	x x							
3	3	10	5		x	x	x x	x x	x	x	x				
4															
5															
6															
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17															
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19															
20															
21															
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

Start

Lat: ° N

Lon: ° W

Bottom

Lat: ° N

Lon: ° W

End

Lat: ° N

Lon: ° W

Extra comments:

Cancelled - too rough

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P2 Event #: 6 Ship: Tully UTC Date (dd/mmm/yyyy): 6 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials							Comments						
			Target Pressure	Confirmed ✓ Pressure		DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC							
1	1	11	100	✓	100	x	x	x	xx	x								
2	2	12	75	✓	78	x			x	x								
3	3	13	50	✓	51	x			x	x								
4	4	14	40	✓	41	x			x	x								
5	5	15	30	✓	30	x			x	x								
6	7	16	25	✓	25	x			x	xx								
7	8	17	20	✓	20	xx	xx	xx	x	x								
8	9	18	15	✓	15	x			x	xx								
9	11	19	10	✓	10	x			x	x								
10	12	20	5	✓	5	x	x	x	x	xx								
11	14	21	0	✓	2	x	x	x	x	x								
12	6	22	Max-10	✓	30					xx	xx							
13	10	23	Max	✓	15					xx	xx							
14	13	24	5	✓	5					x	xx							
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 118 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	2138	1338
Bottom	2140	1340
End	2154	1354

Positional Information
Start
Lat: 48° 36' 17" N
Lon: 125° 59' 9" W

Bottom
Lat: 48° 36' 19" N
Lon: 125° 59' 89" W

End
Lat: 48° 36' 24" N
Lon: 125° 59' 82" W

Extra comments:
DMS cast; out-of-order
1 2 3 4 5 12 6 7 8 13
9 10 14 11

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P2 Event #: 7 Ship: Tully UTC Date (dd|mm|yyyy): 6 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure		Oxy	Nut-C	Nut-F	Sal	DIC	pH	PIC						
						MR/KS	EB		MR	MR/KS	GC	JS						
1	1	25	Bot-10	✓	104	xx	x			x	x							
2	2	26	100	✓	100	x	x			x	x	x						
3	3	27	75	✓	76	x	x			xx	x							
4	4	28	75	✓	75	x	x			x	x	x						
5	5	29	50	✓	51	x	x			x	xxx	x						
6	6	30	25	✓	26	x	xx			x	x	x						
7	7	31	10	✓	10	x	x			x	x	x						
8	8	32	5	✓	5	x	x		x	x	x	x						
9																		
10																		
11																		
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22																		
23																		
24																		

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

Bottom Depth:	118?	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	2236	1436
Bottom	2239	2239
End	2248	2248

Positional Information		
Start	Lat: 48° 35.99	N
	Lon: 125° 59.86	W

Bottom	Lat: 48° 36.00	N
	Lon: 125° 59.86	W

End	Lat: 48° 36.03	N
	Lon: 125° 59.80	W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P3 Event #: 8 Ship: Tully UTC Date (dd|mmm|yyyy): 07 | FEB | 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC										
1	1	33	Max	✓	30	x		x x	x x									
2	2	34	5	✓	5	x	x	x x	x x									
3																		
4																		
5																		
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22																		
23																		
24																		

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

Bottom Depth: 810? m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0053	1653
Bottom	0107	1707
End	0123	1723

Positional Information
Start
Lat: 48° 37.50 N
Lon: 126° 19.76 W

Bottom
Lat: 48° 37.57 N
Lon: 126° 19.67 W

End
Lat: 48° 37.55 N
Lon: 126° 19.71 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P5 Event #: 9 Ship: Tully UTC Date (dd/mm/yyyy): 1 2 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Nut-F	Sal	Chl	HPLC										
			Pressure	✓ Pressure														
1	✓	35	Max		30 m	x		x x	x x									
2		36	5			x	x	x x	x x									
3																		
4																		
5																		
6																		
7																		
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19																		
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21																		
22																		
23																		
24																		

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): MR/H.7

Bottom Depth: 2090 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0642	2242
Bottom	0720	2320
End	0806	2406

Positional Information
Start Lat: 48 ° 41.55 N
Lon: 127 ° 09.93 W
Bottom Lat: 48 ° 41.54 N
Lon: 127 ° 09.74 W
End Lat: 48 ° 41.43 N
Lon: 127 ° 04.53 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P6 Event #: 10 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | 2 | 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC										
1		37	Max	✓	30	x		xx	xx									
2		38	5	✓		x	x	xx	xx									
3																		
4																		
5																		
6																		
7																		
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17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 2146 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1142	0342
Bottom	1221	0421
End	1257	0457

Positional Information
Start
Lat: 48 ° 44.57 N
Lon: 127 ° 39.99 W

Bottom
Lat: 48 ° 44.50 N
Lon: 127 ° 40.01 W

End
Lat: 48 ° 44.37 N
Lon: 127 ° 39.88 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P7 Event #: 11 Ship: Tully UTC Date (dd:mmm/yyyy): 7 2 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC								
1		39	Max	✓ 30	x		x x	x x								
2		40	5	✓	x	x	x x	x x								
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
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16																
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18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth:	2511	m
Transmisso Cleaned:	☒ Y / ☐ N	

	UTC	Local
Time		
Start	1601	0801
Bottom	1644	0844
End	1724	0924

Positional Information		
Start	Lat: 48 ° 46.74	N
	Lon: 128 ° 10.35	W

Bottom	Lat: 48 ° 46.78	N
	Lon: 128 ° 10.48	W

End	Lat: 48 ° 46.60	N
	Lon: 128 ° 10.48	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P8 Event #: 13 Ship: Tully UTC Date (dd mmm/yyyy): 07 02 2013

Niskin #	Firing #	Sample #	Rosemount Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Oxy	Sal	Nut Fr	Nut C	pH	Chl	HPLC	PIC			
				✓	MR/TF	JS/EB	MR	MR	GC	EB	TF	JS			
1		41	2000	✓ 2001	xx	xx	x	x				x			
2		42	1500	✓ 1500	x	x	x	x				x			
3		43	1250	✓ 1250	x	x	xx	xx				x			
4		44	1000	✓ 1000	x	xx	x	x				x			
5		45	800	✓ 800	x	x	x	x				x			
6		46	600	✓ * 600	x		x	x				x	and bottle 20		
7		47	400	✓ 400	x		x	x				x	and bottle 20		
8		48	300	✓ * 300	x		x					x	and bottle 21		
9		49	250	✓ 250	xx		x					x			
10		50	200	✓ * 200	x		x					x	and bottle 22		
11		51	175	✓ 175	x		x					x			
12		52	150	✓ 150	x		xx					x			
13		53	125	✓ 124	x		x					x			
14		54	100	✓ 100	x		x			x		x			DID NOT CLOSE
15		55	75	✓ * 75	x		x			x		x	and bottle 23		
16		56	50	✓ 50	x		x			xx	xx	x			
17		57	25	✓ +20 25	xx		x			x		x	add depth -20, bottle 24		
18		58	10	✓ 10	x		x			x		x			
19		59	5	✓ 5	x	x	x			xx	xx				
20		60	600	✓ 600		x	x		6						
21		61	300	✓ 300		x			6						
22		62	200	✓ 200		x			6						
23		63	75	✓ 75		x			6						
24		64	20	✓ 20						xx	xx				

Profile type:
ROS TRM X-Niskin other?
Watchkeeper(s): TFBottom Depth: 2522 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2055	1255
Bottom	2130	1330
End	2228	1428

Positional Information
Start
Lat: 48 ° 48.90 N
Lon: 128 ° 39.84 WBottom
Lat: 48 ° 48.89 N
Lon: 128 ° 39.58 WEnd
Lat: 48 ° 48.82 N
Lon: 128 ° 38.84 WExtra comments:
Firing out of order
1-2-3-4-5-6-20-1-8-21-9-10-22-11-12
13-14-15-23-16-17-24-18-19

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P9 Event #: 14 Ship: Tully UTC Date (dd|mmm|yyyy): 08|02|2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC								
1		65	Max 50	✓ 50	x		x x	x x								
2		66	5	✓ 5	x	x	x x	x x								
3																
4																
5																
6																
7																
8																
9																
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24																

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

Bottom Depth: 2350 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1417	1317
Bottom	0152	1752
End	0231	1831

Positional Information
Start
Lat: 48 ° 51.40 N
Lon: 129 ° 09.79 W

Bottom
Lat: 48 ° 51.35 N
Lon: 129 ° 09.68 W

End
Lat: 48 ° 51.25 N
Lon: 129 ° 09.92 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P10

Event #:

15

Ship:

Tully

UTC Date (dd|mmm|yyyy):

08 FEB 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC									
1		67	Max 50	☒	50	x		x x	x x								
2		68	5	☒	5.5	x	x	x x	x x								
3																	
4																	
5																	
6																	
7																	
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18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:

☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s):

TF

Bottom Depth: 2645 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	05:09	21:09
Bottom	05:45	21:45
End	06:22	22:22

Positional Information

Lat:	48 °	53.54	N
Lon:	129 °	40.00	W

Start

Lat:	48 °	53.33	N
Lon:	129 °	40.40	W

Bottom

Lat:	48 °	53.23	N
Lon:	129 °	40.69	W

End

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P11

Event #: 16

Ship: Tully

UTC Date (dd/mm/yyyy): 08 FEB 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments						
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC											
1		69	Max	✓	50	x		x x	x x										
2		70	5	✓		x	x	x x	x x										
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth:	2754	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	0854	0054
Bottom	0932	0132
End	1007	0207

Positional Information		
Start	Lat: 48 ° 56.00	N
	Lon: 130 ° 10.02	W

Bottom	Lat: 48 ° 55.94	N
	Lon: 130 ° 10.00	W

End	Lat: 48 ° 55.95	N
	Lon: 130 ° 10.00	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P12

Event #:

17

Ship:

Tully

UTC Date (dd|mmm|yyyy):

8

2

13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓ Pressure	UBC	Sal	Nut Fr	Nut-C										
1	1	71	2000	✓														
2	2	72	2000	✓		x	x	x	x									
3	3	73	2000	✓														
4	4	74	1000	✓														
5	5	75	1000	✓		x	x	x	x									
6	6	76	1000	✓														
7	7	77	500	✓														
8	8	78	500	✓		x	x	x	x									
9	9	79	500	✓														
10	10	80	10	✓														
11	11	81	10	✓		x	x	x										
12	12	82	10	✓														
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: 3230 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1246	0446
Bottom	1320	0520
End	1358	0558

Positional Information

Lat:	48 ° 58.26	N
Lon:	130 ° 39.86	W

Start

Bottom

Lat:	48 ° 58.26	N
Lon:	130 ° 39.80	W

End

Lat:	48 ° 58.29	N
Lon:	130 ° 39.83	W

Extra comments:

UBC cast

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P12

Event #: 19

Ship: Tully

UTC Date (dd:mmm:yyyy): 8 / 2 / 13

			Rosette Operation			Samples Taken / Sampler's Initials										Comments			
Niskin #	Firing #	Sample #	Target Pressure	Confirmed		Sal	NutFr	Nut-C		Fe(III)	Fe(III)								
				√	Pressure						unfilt	filtered							
1		86	1000			x	x	x		x	x								
2		87	800							x	x								
3		88	400							x	x								
4		89	300							x	x								
5																			
6																			
7																			
8																			
9																			
10																			
11																			
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16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

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

	UTC	Local
Start	1555	0755
Bottom	1634	0834
End	1705	0905

Positional Information
Start
Lat: 48 ° 58.25 N
Lon: 130 ° 39.87 W

Bottom
Lat: 48 ° 58.26 N
Lon: 136 ° 39.79 W

End
Lat: 48 ° 58.26 N
Lon: 130 ° 39.80 W

Extra comments:
Go-flos - Deep

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P12 Event #: 20 Ship: Tully UTC Date (dd:mmm:yyyy): 8/2/13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ☒ Pressure	Sal	NutFr			Fe(III) unfilt	Fe(III) filtered								
1		90	200		x	x			x	x								
2		91	150						x	x								
3		92	100						x	x								
4		93	75						x	x								
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3230 m
 Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1715	0915
Bottom	1730	0930
End	1754	0954

Positional Information
 Start
 Lat: 48° 58.26 N
 Lon: 130° 39.80 W

Bottom
 Lat: 48° 58.28 N
 Lon: 130° 39.83 W

End
 Lat: 48° 58.29 N
 Lon: 130° 39.90 W

Extra comments:
 Go-flos - Shallow

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P12

Event #: 22

Ship: Tully

UTC Date (dd|mm|yyyy): 8 2 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed Pressure	OXY	MR	Sal	Nut-F	Nut-C	DIC	pH	PIC	FCM	DNA	Gases	WGA		
				✓		MR	66	MR	MR	KS/BB	GC	JS		all	TP/SK			
1		94	Bot-10	✓	3257	x		x	x	x	x	x	x	x	xx	x		
2		95	3000	✓		x		x	x	xx	x	x						
3		96	3000	✓		xx	xx	x	x	x	x		x	x	xx	x		
4		97	2500	✓		x	x	xx	xx	x	xxx							
5		98	2000	✓		x	x	x	x	x	x	x	x	x	xx	x		
6		99	1500	✓		x	x	x	x	x	x	x	x	x	xx	x		
7		100	1250	✓		x	x	x	x	x	x		x	x	xx	x	bottle fire recorded - but heard no pres	
8		101	1000	✓		xx	xx	x	x	x	x	x	x	x	xx	x		
9		102	800	✓	801	x		x	x	x	x	x	x	x	xx	x		
10		103	600	✓		x		x	x	x	x	x	x	x	xx	x		
11		104	400	✓		x		x	x	x	x	x	x	x	xx	x		
12		105	300	✓		x		x		x	x	x	x	x	xx	x		
13		106	250	✓		x		x		x	x	x					did not close	
14		107	200	✓		x		x		x	xxx	x	x	x	xx	x		
15		108	175	✓	174	x		x		x	x							
16		109	150	✓		xx		x		x	x	x	x	x	xx	x		
17		110	125	✓		x		x		x	x	x						
18		111	100	✓		x		xx		x	x	x	x	x	xx	x		
19		112	75	✓		x		x		x	x	x						
20		113	50	✓		xx		x		x	x	x	x	x	xx	x		
21		114	25	✓		x		x		x	x	x	x	x	xx	x		
22		115	10	✓		x		x		x	x	x	x	x	xx	x		
23		116	5	✓		x	x	x		x	x							
24		100	250	✓														

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

Bottom Depth:	3232 m
Transmisso Cleaned:	☒ Y / ☐ N

Time	UTC	Local
Start	1847	1047
Bottom	1930	1130
End	2053	1253

Positional Information
Lat: 48 ° 58.20 N
Lon: 130 ° 40.06 W

Start
Bottom
Lat: 48 ° 58.19 N
Lon: 130 ° 40.04 W

End
Lat: 48 ° 58.19 N
Lon: 130 ° 40.05 W

Extra comments:
Deep cast

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

Cruise ID: 2013-01 **Station:** P12 **Event #:** _____ **Ship:** Tully **UTC Date (dd|mmm|yyyy):** _____|_____|_____

[illegible]

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

Bottom Depth: _____ m

Transmisso Cleaned: Y / N

<i>Time</i>	<i>UTC</i>	<i>Local</i>
Start		
Bottom		
End		

Positional Information

Lat:	0
Lon:	0

Lat:	°
Lon:	°

Lat:	°
Lon:	°

Extra comments:
DMS cast; out-of-order.

See revised sheet

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P12 Event #: 77 Ship: Tully UTC Date (dd|mmm|yyyy): 08 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments					
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC							
					MA/HR	HA	d MA	MR		EB	TF							
1	✓	117	300	✓ 300	x			x										
2	✓	118	200	✓ 200	x	x	x	x										
3	✓	119	175	✓ 175	x	x	x	x										
4	✓	120	100	✓ 100	x	x	x	x		x								
5	✓	121	75	✓ 75	x			x		x								
6	✓	122	50	✓ 50	x			x		x								
7	✓	123	40	✓	x			x		x								
8	✓	124	30	✓	x			x		xx								
9	✓	125	25	✓ 25	x			x		x								
10	✓	126	20	✓ 20	xx	xx	xx	x		x								
11	✓	127	15	✓ 15	x			x		x								
12	✓	128	10	✓ 10	x			xx		x								
24	✓	129	5	✓	x	x	x	x		x								
14	✓	130	0	✓ 3.4	x	x	x	x		x								
15	✓	131	Max-10	✓ 50						xx	xx							
16	✓	132	Max	✓ 40						xx	xx							
17	✓	133	5	✓ 30						xx	xx							
18																		
19		132	20	✓ 20														
20		133	5	✓ 5														
21																		
22																		
23																		
24	✓	129	5	✓ 5														

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

Bottom Depth: 3231 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2200	1420
Bottom		
End	2250	1450

Positional Information

Lat:	48 °	58.18	N
Lon:	130 °	39.92	W

Bottom

Lat:	°		N
Lon:	°		W

End

Lat:	48 °	58.16	N
Lon:	130 °	39.91	W

Extra comments:
DMS cast; out-of-order.
1 2 3 4 5 6 7 8
9 10 11 12 24
17 14

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P13

Event #:

25

Ship:

Tully

UTC Date (dd|mmm|yyyy): 09 FEB 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments									
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC										
1		134	Max 50	✓ 50	x		xx	xx										
2		135	5	✓ 5	x	x	xx	xx										
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Profile type:

☒ ROS ☐ TRM ☐ X-Niskin ☐ other?

Watchkeeper(s):

TF

Bottom Depth: 3239 m *need to check this - is correct in Season file*Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start		
Bottom	04:46	20:46
End	05:23	21:23

Positional Information

Lat:	49 °	02.60	N
Lon:	131 °	39.79	W

Lat:	49 °	02.569	N
Lon:	131 °	39.775	W

Lat:	49 °	02.569	N
Lon:	131 °	39.805	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01

Station: P14

Event #: 26

Ship: Tully

UTC Date (dd/mm/yyyy): 9/2/13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	
1		136	Max	✓ 50	x		xx	xx	
2		137	5	✓	x	x	xx	xx	
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

Profile type: ☒ RO8 TRM ☐ X-Niskin ☐ other?

Watchkeeper(s): H.M.

Bottom Depth: 3312 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1014	0214
Bottom	1046	0246
End	1115	0315

Positional Information

Start
Lat: 49° 07.44 N
Lon: 132° 39.97 W

Bottom
Lat: 49° 07.40 N
Lon: 132° 39.92 W

End
Lat: 49° 07.41 N
Lon: 132° 39.88 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P15 Event #: 27 Ship: Tully UTC Date (dd|mmm|yyyy): 9|2|13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials						Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	pH		
1		138	800	✓ 800		x			6	SPIGOT LEAKY	
2		139	400	✓ 100		x			6		
3		140	100	✓ 50		x			6		
4		141	50	✓ 50		x			6		
5		142	Max	✓ 50/0	x		xx	xx			
6		143	5	5	x	x	xx	xx			
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): U.m.

Bottom Depth:	3401	m
Transmisso Cleaned:	☒ Y / ☐ N	

Time	UTC	Local
Start	1556	0756
Bottom	1627	0827
End	1702	0902

Positional Information		
Lat:	49 ° 12.06	N
Lon:	133 ° 39.95	W

Start

Bottom

End

Lat:	49 ° 12.05	N
Lon:	133 ° 39.95	W

Lat:	49 ° 12.13	N
Lon:	133 ° 40.06	W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P16 Event #: 28 Ship: Tully UTC Date (dd mmm/yyyy): 09 FEB 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments					
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chl	HPLC							
					MA	t MA	d MA	EB		EB	EB							
1		144	300	✓ 300	x			x										
2		145	200	✓ 200	x	x	x	x										
3		146	175	✓ 175	x	x	x	x										
4		147	100	✓ 100.5	x	x	x	x										
5		148	75	✓ 75.5	x			x		x								
6	*	149	50	✓ 50 + 15	x			x		x								went to 50 by mistake went back down to 75
7		150	40	✓ 40	x			x		x								
8		151	30	✓ 30	x			x		xx								
9		152	25	✓ 25	x			x		x								
10	*	153	20	✓ 20 F#16	xx	xx	xx	x		x								
11		154	15	✓ 15	x			x		x								
12		155	10	✓ 10	x			xx		x								
13	*	156	5	✓ 5 F#17	x	x	x	x		x								
14		157	0	✓ 0	x	x	x	x		x								
15		158	50	✓ 50						xx	xx							
16		159	20	✓ 20						xx	xx							
17		160	5	✓ 5						xx	xx							
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3624.44 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	22:12	14:12
Bottom	22:17	14:17
End	22:39	14:39

Positional Information
Start
Lat: 49 ° 17.030 N
Lon: 134 ° 39.992 W

Bottom
Lat: 49 ° 17.010 N
Lon: 134 ° 39.970 W

End
Lat: 49 ° 17.010 N
Lon: 134 ° 39.870 W

Extra comments:
DMS cast; out-of-order.
X 23 4 5 6 15
(back to 7) 8 9 10 16
X 12 13 17 14

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P16 Event #: 30 Ship: Tully UTC Date (dd mmm yyyy): 09 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials															Comments
			Target Pressure	Confirmed ✓ Pressure	OXY		Sal	Nut-F	Nut-C	DIC	pH	PIC		FCM	DNA	Gases	WGA			
					MR		TF	MR	MR	KS	GC			SK	SL	SK/TF	SK			
1	1	161	Bot-10	✓	3680	x			x	x	x	x	x		x	x	xx	x		
2	2	162	3500	✓	3500	x			x	x	xx	x	x							
3	3	163	3500	✓	3500	x		x	x	x	x	x								
4	4	164	3000	✓	3003	x		xx	x	x	x	x	x		x	x	xx	x		
5	5	165	2500	✓	2501	x		x	x	x	x	xxx								
6	6	166	2000	✓	2001	xx		xx	x	x	x	x	x		x	x	xx	x		
7	7	167	1500	✓	1500	x		x	xx	xx	x	x	x		x	x	xx	x		
8	8	168	1250	✓	1250	x		x	x	x	x	x			x	x	xx	x		
9	9	169	1000	✓	1000	x		xx	x	x	x	x	x		x	x	xx	x		
10	10	170	800	✓	800	x			x	x	x	x	x		x	x	xx	x		
11	11	171	600	✓	600	x			x	x	x	x	x		x	x	xx	x		
12	12	172	400	✓	400	x			x		x	x	x		x	x	xx	x		
13	13	173	300	✓	300	xx			x		x	x	x		x	x	xx	x		
14	14	174	250	✓	250	x			x		x	xxx	x							
15	15	175	200	✓	199	x			x		x	x	x		x	x	xx	x		
16	16	176	175	✓	175	xx			x		x	x	x							
17	17	177	150	✓	151	x			x		x	x	x		x	x	xx	x		
18	18	178	125	✓	125	x			x		x	x								
19	19	179	100	✓	101	x			x		x	x	x		x	x	xx	x		
20	20	180	75	✓	75.7	xx			x		x	x								
21	21	181	50	✓	50	x			xx		x	x	x		x	x	xx	x		Slightly <30 second
22	22	182	25	✓	26	x			x		x	x	x		x	x	xx	x		
23	23	183	10	✓	10.3	x			x		x	x	x		x	x	xx	x		
24	24	184	5	✓	5.4	x		x	x		x	x								

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

Bottom Depth:	3622 m
Transmisso Cleaned:	☒ Y / ☐ N

Time	UTC	Local
Start	2329	1529
Bottom	0040	1640
End	0211	1811

Positional Information
Lat: 49° 16.88 N
Lon: 134° 40.04 W

Start

Bottom

End

Lat: 49° 16.83 N
Lon: 134° 40.04 W

Lat: 49° 16.831 N
Lon: 134° 40.04 W

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P16 Event #: 31 Ship: Tully UTC Date (dd|mmm|yyyy): 10|02|2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Sal	NutFr			Fe(III) unfilt	Fe(III) filtered					
1		185	40						x x	x x					
2		186	25						x	x					
3		187	10						x	x					
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Profile type: ROS TRM X-Niskin other? *other?*
Watchkeeper(s): *KS/TF*

Bottom Depth: *3021* m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<i>03:40</i>	<i>19:40</i>
Bottom		
End		

Positional Information
Start
Lat: *49* ° *17.50* N
Lon: *134* ° *39.85* W

Bottom
Lat: ° N
Lon: ° W

End
Lat: ° N
Lon: ° W

Extra comments:
Pumping

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P16

Event #:

32

Ship:

Tully

UTC Date (dd/mm/yyyy):

10/02/2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Sal	NutFr			Fe(III) unfilt	Fe(III) filtered					
1		192	200		X	X			X	X					
2		193	150						X	X					
3		194	100						X	X					
4		195	75						X	X					
5		188	1000		X	X			X	X					
6		189	800						X	X					
7		190	400						X	X					
8		191	300						X	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): GO-FLO TE/KS

Bottom Depth: 3622 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0404	2104
Bottom	0420	2120
End	0500	2200

Positional Information

Lat:	49 °	16.99	N
Lon:	134 °	39.86	W

Start

Bottom

End

Lat:	49 °	16.99	N
Lon:	134 °	39.86	W

Lat:	49 °	16.99	N
Lon:	134 °	39.86	W

Extra comments:

Go-flos - Shallow

deep 21:22 - 21:33

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P16

Event #:

33

Ship:

Tully

UTC Date (dd/mm/yyyy):

10/02/2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	Sal	NutFr	Nut-C		Fe(III) unfilt	Fe(III) filtered							
1		188	1000			x	x	x		x	x						
2		189	800							x	x						
3		190	400							x	x						
4		184	300							x	x						
5		192	200			x	x	x		x	x						
6		193	150							x	x						
7		194	100							x	x						
8		195	75							x	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):	TF/KS			

Bottom Depth:	3624	m	
Transmisso Cleaned:	Y	/	N

Time	UTC	Local
Start	0501	2201
Bottom	0517	2217
End	0534	2234

Positional Information
Lat: 49 ° 16.99 N
Lon: 134 ° 39.86 W

Start
Lat: 49 ° 17.00 N
Lon: 136 ° 39.86 W

Bottom
Lat: 49 ° 16.99 N
Lon: 136 ° 39.86 W

Extra comments:

Go-flos - Deep

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P18 Event #: 38 34 Ship: Tully UTC Date (dd mmm yyyy): 10 2 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC	pH						
1		196	2000	✓											
2		197	2000	✓											
3		198	2000	✓											
4		199	2000	✓											Water for Kenny's
5		200	2000	✓											Salt exp
6		201	2000	✓											
7		202	Max	✓	50	x		xx	xx						
8		203	5	✓		x	x	xx	xx						
9		204		✓	450		y			6					
10		205		✓	225		y			6					
11		206		✓	150		x			6					
12		207		✓	125		y			6					
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: 4024 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1626	0826
Bottom	1655	0855
End	1734	0934

Positional Information
Start
Lat: 49 ° 26.05 N
Lon: 136 ° 40.00 W

Bottom
Lat: 49 ° 26.07 N
Lon: 136 ° 39.99 W

End
Lat: 49 ° 26 07 N
Lon: 136 ° 40.02 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01

Station: P19

Event #: 36

Ship: Tully

UTC Date (dd:mmm:yyyy): 10 FEB 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	
1	1	208	50	✓ 52	x		xx	xx	
2	2	209	5	✓ 5.5	x	x	xx	xx	
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

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

Bottom Depth: 3912 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2211	1411
Bottom	2242	1442
End	2321	1521

Positional Information
Start
Lat: 49 ° 30.041 N
Lon: 137 ° 40.105 W

Bottom
Lat: 49 ° 30.053 N
Lon: 137 ° 40.114 W

End
Lat: 49 ° 30.090 N
Lon: 137 ° 40.057 W

Extra comments: (is actually marked)
bottle #5 open on top but closed on bottom - Marie fixed but knot in lanyard to shorter

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P21

Event #:

37

Ship:

Tully

UTC Date (dd|mmm|yyyy): 11 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments									
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC										
1		210	50	✓	x		xx	xx										
2		211	5		x	x	xx	xx										
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

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

Bottom Depth: 3941 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0815	0015
Bottom	0859	0059
End	0939	0139

Positional Information
 Start
 Lat: 49 ° 38.06 N
 Lon: 139 ° 39.98 W

Bottom
 Lat: 49 ° 38.03 N
 Lon: 139 ° 39.95 W

End
 Lat: 49 ° 38.00 N
 Lon: 139 ° 40.05 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P22

Event #: 38

Ship:

Tully

UTC Date (dd|mm|yyyy):

11 | 2 | 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials				Comments											
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC												
1		212	50	✓	x		xx	xx												
2		213	5	✓	x	x	xx	xx												
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				
21																				
22																				
23																				
24																				

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

Bottom Depth: 3844 m
 Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1408	0608
Bottom	1446	0646
End	1521	0721

Positional Information
 Start
 Lat: 49 ° 42.58 N
 Lon: 140 ° 39.43 W

Bottom
 Lat: 49 ° 42.58 N
 Lon: 140 ° 39.32 W

End
 Lat: 49 ° 42.60 N
 Lon: 140 ° 39.37 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P23 Event #: 39 Ship: Tully UTC Date (dd mmm yyyy): 11 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments						
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC	pH	DIC									
										GC	KS								
1		214	2000	✓ 2000		x				xxx	xxx								
2		215	2000	✓ 1999		x				xxx	xxx								
3		216	2000	✓ 1999		x				xxx	xxx								
4		217	2000	✓ 2000		x				xxx	xxx								
5		218	2000	✓ 2000		x				xxx	xxx								
6		219	2000	✓ 2000		x					X								
7		220	2000	✓ 2001		x					X								
8		221	2000	✓ 1999		x					X								
9		222	2000	✓ 2000		x					X								
10		223	2000	✓ 2000		x					X								
11		224	2000	✓ 2001		x					X								
12		225	2000	✓ 2001		x					X								
13		226	2000	✓ 2000		x					X								
14		227	2000	✓ 1999		x					X								
15		228	2000	✓ 2000		x					X								
16		229	2000	✓ 2001		x					X								
17		230	2000	✓ 1999		x					X								
18		231	2000	✓ 2000		x					X								
19		232	2000	✓ 2000		x					X								
20		233	2000	✓ 2000		x					X								
21		234	2000	✓ 2000		x					X								
22		235	2000	✓ 2000		x					X								
23		236	50	✓ 49.4	x			xx	xx										
24		237	5	✓ 4.7	x	x		xx	xx										

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

Watchkeeper(s): TF

Bottom Depth: 4032 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	21:26	13:26
Bottom	22:01	13:01
End	22:48	14:48

Positional Information

Lat:	49 ° 46.22	N
Lon:	141 ° 40.051	W

Start

Bottom

End

Lat: 49 ° 46.282 N

Lon: 141 ° 40.007 W

Lat: 49 ° 46.279 N

Lon: 141 ° 40.031 W

Extra comments:

forgot to do down 10 and up 10 but I think we were riding enough to accomplish that!

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P26 Event #: 41 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | 2 | 13

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

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

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

Time	UTC	Local
Start	1928	1128
Bottom	1935	1135
End	1955	1155

Positional Information

Lat:	49° 59.99	N
Lon:	145° 00.02	W

▼

Lat:	49° 59.98	N
Lon:	145° 00.07	W

▼

Lat:	49° 59.97	N
Lon:	144° 59.99	W

Extra comments:
DMS cast; out-of-order.
bottle #10 bottom spigot leaking

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P26 Event #: 42 Ship: Tully UTC Date (dd mmm/yyyy): 12 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed Pressure	OXY	Sal R	Nut Fr	NutCo	DIC	Alk	pH	PIC	FCM	DNA	Gases	WGA		
1	1	244	Bot-10	✓ 4315	x		xx	x	x	x	x	x	x	x	xx	x		
2	2	245	4000	✓ 4000	xx	x	xx	1+4	xx	x	x	x	x	x	xx	x		
3	3	246	3500	✓ 3501	x	x	xx	x	x	x	x							
4	4	247	3000	✓ 3000	x	xx	xx	x	x	x	x	x	x	x	xx	x		
5	5	248	2500	✓ 2500	x	x	xx	xx	x	x	xxx							~2450 cable did "crunch" JMC so crew put it down & up again ~2445 more cable reeled in up and down
6	6	249	2000	✓ 2001	x	x	xx	x	x	x	x	x	x	x	xx	x		
7	7	250	1500	✓ 1500	x	x	xx	x	x	x	x	x	x	x	xx	x		
8	8	251	1250	✓ 1250	xx	x	xx	x	x	x	x		x	x	xx	x		~1277 more cable reeled in on spool
9	9	252	1000	✓ 1000	x	xx	xx	1+4	x	x	x	x	x	x	xx	x		
10	10	253	800	✓ 800	x	x	xxx	xx	x	x	x	x	x	x	xx	x		
11	11	254	600	✓ 600	x	x	xx	1+4	x	x	x	x	x	x	xx	x		
12	12	255	400	✓ 400	x	x	xx	1+4	x	x	x	x	x	x	xx	x		
13	13	256	300	✓ 301	x	x	xx		x	x	x	x	x	x	xx	x		
14	14	257	250	✓ 250	xx	x	2+4		x	x	x	x						
15	15	258	200	✓ 200	x	x	xx		x	x	x	x	x	x	xx	x		
16	16	259	175	✓ 176	x	x	xx		x	x	x							
17	17	260	150	✓ 151	x	x	xx		x	x	x	x	x	x	xx	x		
18	18	261	125	✓ 124	xx	x	xx		x	x	x							
19	19	262	100	✓ 100	x	x	xx		x	x	x	x	x	x	xx	x		
20	20	263	75	✓ 70	x	x	xx		x	x	xxx	x						
21	21	264	50	✓ 50	x	x	xx		x	x	x	x	x	x	xx	x		
22	22	265	25	✓ 25	x	x	xx		x	x	x	x	x	x	xx	x		
23	23	266	10	✓ 10	x	x	2+4		x	x	x	x	x	x	xx	x		
24	24	267	5	✓ 6	x	x	xx		x	x	x							

Profile type:

ROS TRM X-Niskin other?

Watchkeeper(s):

MR ITF

Bottom Depth: 4226 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2033	1233
Bottom	2157	1357
End	2348	1548

Positional Information

Lat:	50 ° 0.010	N
Lon:	144 ° 59.99	W

Start

Lat:	50 ° 00.010	N
Lon:	144 ° 59.987	W

Bottom

Lat:	50 ° 0.010	N
Lon:	144 ° 59.990	W

End

Extra comments:

Deep cast 1

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P26 Event #: 49 Ship: Tully UTC Date (dd/mmm/yyyy):

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target	Confirmed	Sal	NutFr			Fe(III)	Fe(III)								
			Pressure	✓ Pressure														unfilt
1		285	40						xx	x x								
2		286	25						x x	x x								
3		287	10						x x	x x								
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Version: 25 Nov 2011

Transmissometer to be cleaned before next use

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

Bottom Depth: 4225 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	02:54	18:54
Bottom		
End	03:54	19:54

Positional Information

Lat:	°	N
Lon:	°	W

▼

Lat:	°	N
Lon:	°	W

▼

Lat:	50 ° 00.01	N
Lon:	144 ° 59.97	W

Extra comments:
Pumping

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P26 Event #: 50 Ship: Tully UTC Date (dd mmm yyyy): 13 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments	
			Target Pressure	Confirmed ✓ Pressure	Sal	NutFr	Nut-C		Fe(III) unfilt	Fe(III) filtered						
1		288	1000		x	x	x		x	x						
2		289	800						x	x						
3		290	400						x	x						
4		291	300						x	x						
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Profile type: ROS TRM X-Niskin other?
Watchkeeper(s): TF/KS/GC

Bottom Depth: 4225 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	04:50	20:00
Bottom	04:47	20:47
End	05:30	21:30

Positional Information

Lat:	50 ° 00.01	N
Lon:	174 ° 59.57	W

▼

Lat:	50 ° 00.01	N
Lon:	174 ° 59.57	W

▼

Lat:	50 ° 00.0135	N
Lon:	174 ° 59.979	W

Extra comments:
Go-flos - Deep

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P26 Event #: 51 Ship: Tully UTC Date (dd|mmm|yyyy): 13 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☐	Pressure	Sal	NutFr			Fe(III) unfilt	Fe(III) filtered					
1		292	200			x	x			x	x					
2		293	150							x	x					
3		294	100							x	x					
4		295	75							x	x					
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): TF/KS/GC

Bottom Depth: 4225 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0530	2130
Bottom		
End	0630	1230

Positional Information

Start

Lat: 50 ° 00.0135 N

Lon: 144 ° 59.939 W

Bottom

Lat: ° N

Lon: ° W

End

Lat: 50 ° 00.013 N

Lon: 144 ° 59.938 W

Extra comments:

Go-flos - Shallow

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P26 Event #: 52 Ship: Tully UTC Date (dd/mm/yyyy): 13 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments			
			Target Pressure	Confirmed ✓ Pressure	UBC	Sal	Nut Fr	Nut-C								
1		296	2000	✓ 2000												
2		297	2000	✓ 2000	x	x	x	x								
3		298	2000	✓ 1999												
4		299	1000	✓ 1001												
5		300	1000	✓ 1001	x	x	x	x								
6		301	1000	✓ 1002												
7		302	500	✓ 500												
8		303	500	✓ 500	x	x	x	x								
9		304	500	✓ 500												
10		305	10	✓ 10												
11		306	10	✓ 10	x	x	x									
12		307	10	✓ 10												
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

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

Bottom Depth: 4225 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0632	2232
Bottom	0703	2303
End	0742	2342

Positional Information
Start
Lat: 50 ° 00.020 N
Lon: 144 ° 59.990 W

Bottom
Lat: 50 ° 00.022 N
Lon: 144 ° 59.992 W

End
Lat: 50 ° 0.020 N
Lon: 144 ° 59.992 W

Extra comments:
UBC cast

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

PA-006

Event #:

54

Ship:

Tully

UTC Date (dd/mmm/yyyy): 13 / 2 / 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials			Comments									
			Target Pressure	Confirmed Pressure	Oxy	ONAr	Sal										
1		308	10	✓	xx	xx	x										307, 650
2		309	5	✓	xx	xx	x										broke bottle → 248, 241
3		310	2	✓	xx	xx	x										731, 456
4																	↑
5																	air introduced into sample / sample compromised
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: 4209 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0942	0142
Bottom	0952	0152
End	1005	0205

Positional Information

Start	Lat: 50 ° 02.24	N
	Lon: 144 ° 55.81	W
Bottom	Lat: 50 ° 02.24	N
	Lon: 144 ° 55.81	W
End	Lat: 50 ° 02.24	N
	Lon: 144 ° 55.81	W

Extra comments:

ONAr 1

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: PA-006 Event #: 56 Ship: Tully UTC Date (dd mmm yyyy): 13 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	ONAr	Sal								
1		311	5	✓ 5	xx	xx	x								349, 424
2		312	2	✓ 3	xx	xx	x								269, 733
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 4211 m
Transmisso Cleaned: 1 N

Time	UTC	Local
Start	1207	0407
Bottom	1209	0409
End	1212	0412

Positional Information
Start
Lat: 50 ° 02.290 N
Lon: 144 ° 55.81 W

Bottom
Lat: 50 ° 02.29 N
Lon: 144 ° 55.81 W

End
Lat: 50 ° 02.29 N
Lon: 144 ° 55.81 W

Extra comments:
ONAr 2

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P35 Event #: 57 Ship: Tully UTC Date (dd mmm/yyyy): 13 2 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC	pH	DIC					
1		242	50	☒	x		xx	xx							
2		243	5	☒	x	x	xx	xx							
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 4127 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1502	0702
Bottom	1539	0739
End	1615	1815

Positional Information
 Start
 Lat: 50 ° 00.14 N
 Lon: 144 ° 18.19 W

Bottom
 Lat: 50 ° 00.11 N
 Lon: 144 ° 18.18 W

End
 Lat: 50 ° 00.16 N
 Lon: 144 ° 18.11 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P25 Event #: 58 Ship: Tully UTC Date (dd|mm|yyyy): 13 | 2 | 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	pH						
1	1	313	2000	✓		x			6						
2	2	314	350	✓	350	x			6						
3	3	315	175	✓	175	x			6						
4	5	316	10	✓	10	x			6						
5	4	317	50	✓	50	x		xx	xx						
6	6	318	5	✓	5	x	x	xx	xx						
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:	4125	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	1858	1058
Bottom	1930	1130
End	2010	1210

Positional Information		
Start	Lat: 50 ° 00.01 N	
	Lon: 143 ° 36.23 W	

Bottom	Lat: 50 ° 00 03 N	
	Lon: 143 ° 36 13 W	

End	Lat: 49° 59 99 N	
	Lon: 143 ° 36 04 W	

Extra comments:
pH experiment, OUT OF ORDER

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P24 Event #: 59 Ship: Tully UTC Date (dd|mm|yyyy): 14 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed Pressure	Nut-F	Sal	Chl	HPLC	pH	DIC					
1		319	50	✓ 51	x		xx	xx							stopped @ 1222 m to
2		320	5	✓ 5	x	x	xx	xx							check cable spool plus
3															some spool down to
4															fix cable cross on
5															spool
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): TF

Bottom Depth: 3971 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	00:07	16:07
Bottom	00:38	16:38
End	01:24	17:24

Positional Information

Start Lat: 49 ° 50.198 N

Start Lon: 142 ° 40.070 W

Bottom Lat: 49 ° 50.203 N

Bottom Lon: 142 ° 40.062 W

End Lat: 49 ° 50.209 N

End Lon: 142 ° 40.068 W

Extra comments:

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P20 Event #: 61 Ship: Tully UTC Date (dd/mm/yyyy): 14/2/13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments				
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP	DMSP	Nut-F		Chi	HPLC						
1		321	300	✓		x			x								
2		322	200	✓		x	x	x	x								
3		323	175	✓	175	x	x	x	x								
4		324	100	✓	100	x	x	x	x								
5		325	75	✓	75	x			x	x							
6	+15	326	50	✓	50	x			x	x							
7		327	40	✓	40	x			x x	x							
8		328	30	✓	30	x			x	x x							
9		329	25	✓	25	x			x	x							
10	+16	330	20	✓	20	x x	x x	x x	x	x							
11		331	15	✓	15	x			x	x							
12		332	10	✓	10	x			x	x							
13	+17	333	5	✓	5	x	x	x	x	x							
14		334	0	✓	3	x	x	x	x	x							
15		335	50	✓	50					x x	x x						
16		336	20	✓	20					x x	x x						
17		337	5	✓	5					x x	x x						
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 3947 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1931	1131
Bottom	1939	1139
End	20:02	12:02

Positional Information

Lat:	49 ° 34.05	N
Lon:	138 ° 39.99	W

Start

Lat:	49 ° 34.05	N
Lon:	138 ° 39.99	W

Bottom

Lat:	49 ° 34.05	N
Lon:	138 ° 39.99	W

End

Lat:	49 ° 34.048	N
Lon:	138 ° 39.989	W

Extra comments:
DMS cast; out-of-order.

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01

Station: P20

Event #: 62

Ship: Tully

UTC Date (dd|mmm|yyyy): 14 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed Pressure	Oxy	Nut-S	Nut-C	Sal-R	DIC	pH		PIC	UBC						
1	1	338	Bot-10	✓	4020	x	x	x		x	x		x	x					
2	2	339	3500	✓	3503	xx	x	x	x	xx	x								
3	3	340	3500	✓	3501	x	x	x	x	x	x								
4	4	341	3000	✓	3001	x	x	x	xx	x	x		x	x					
5	5	342	2500	✓	2500	x	xx	xx	x	x	x								
6	6	343	2000	✓	1999	x	x	x	x	x	x		x	x					
7	7	344	1500	✓	1500	x	x	x	x	x	x		x	x					
8	8	345	1250	✓	1251	x	x	x	x	x	xxx			x					
9	9	346	1000	✓	1002	xx	x	x	xx	x	x		x	x					
10	10	347	800	✓	799	x	x	x		x	x		x	x					
11	11	348	600	✓	600	x	xx	xx		x	x		x	x					
12	12	349	400	✓	400	x	x	x		x	x		x	x					
13	13	350	300	✓	301	x	x			x	x		x	x					
14	14	351	250	✓	249	x	x			x	x		x						
15	15	352	200	✓	199	x	x			x	x		x	x					
16	16	353	175	✓	176	x	x			x	xxx								
17	17	354	150	✓	151	x	x			x	x		x	x					
18	18	355	125	✓	126	xx	x			x	x								
19	19	356	100	✓	100	x	x			x	x		x	x					
20	20	357	75	✓	75	x	xx			x	x		x						
21	21	358	50	✓	50	x	x			x	x		x	x					
22	22	359	25	✓	25	x	x			x	x		x	x					
23	23	360	10	✓	11	x	x			x	x		x	x					
24	24	361	5	✓	5	xx	x			x	x								

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

Bottom Depth:	3947	m
Transmisso Cleaned:	☒ Y ☐ N	

Time	UTC	Local
Start	2043	1243
Bottom	2143	1343
End	2322	1522

Positional Information
Lat: 49 ° 34.048 N
Lon: 138 ° 39.994 W

Start

Bottom

End

Lat: 49 ° 34.048 N
Lon: 138 ° 39.992 W

Lat: 49 ° 34.050 N
Lon: 138 ° 39.990 W

Extra comments:

Deep cast

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P20 Event #: 63 Ship: Tully UTC Date (dd|mmm|yyyy): 15 | 2 | 2013

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target Pressure	Confirmed		Sal	NutFr			Fe(III)	Fe(III)								
				√	Pressure					unfilt	filtered								
1		362	40							x	x								
2		363	25							x	x								
3		364	10							x x	x x								
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type: pumpins
ROS TRM X-Niskin other?
Watchkeeper(s): KS/TF

Bottom Depth: 3950 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<u>00:28</u>	<u>16:28</u>
Bottom	<u>00:55</u>	<u>16:55</u>
End	<u>02:16</u>	<u>18:16</u>

Positional Information
Start
Lat: 49 ° 34.12 N
Lon: 138 ° 35.57 W

Bottom
Lat: ° N
Lon: ° W

End
Lat: 49 ° 34.12 N
Lon: 138 ° 35.57 W

Extra comments:
Pumping

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P20 Event #: 64 Ship: Tully UTC Date (dd mmm yyyy): 15 02 2013

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed		Sal	NutFr	Nut-C		Fe(III)	Fe(III)								
				√	Pressure					unfilt	filtered								
1		365	1000			x	x	x		x	x								
2		366	800							x	x								
3		367	400							x	x								
4		368	300							x	x								
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type: ROS TRM ☒ X-Niskin other?
Watchkeeper(s): TP/KS.

Bottom Depth: 3950 m
Transmisso Cleaned: Y ☒ N

Time	UTC	Local
Start	02:16	18:16
Bottom	02:39	18:39
End	03:19	19:19

1845 msgs

Positional Information
Start Lat: 49 ° 34.17 N
Lon: 138 ° 39.95 W

Bottom Lat: 49 ° 34.12 N
Lon: 138 ° 39.95 W

End Lat: 49 ° 34.16 N
Lon: 138 ° 40.03 W

Extra comments:
Go-flos - Deep

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P20 Event #: 65 Ship: Tully UTC Date (dd|mmm|yyyy): 15|02|2013

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target Pressure	Confirmed		Sal	NutFr			Fe(III)	Fe(III)								
				✓	Pressure					unfilt	filtered								
1		369	200			x	x			x	x								
2		370	150							x	x								
3		371	100							x	x								
4		372	75							x	x								
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Profile type: ROS TRM ☒ X-Niskin other?
Watchkeeper(s): TF/KS.

Bottom Depth: 3950 m
Transmisso Cleaned: ~~Y~~ ~~T~~ ~~N~~

Time	UTC	Local
Start	03:20	19:20
Bottom	03:32	19:32
End	03:51	19:51

Positional Information

Lat:	49 ° 34.16	N
Lon:	138 ° 40.03	W

Start

Lat:	49 ° 34.16	N
Lon:	138 ° 40.03	W

Bottom

Lat:	49 ° 34.16	N
Lon:	138 ° 40.03	W

End

Extra comments:
Go-flos - Shallow

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P17 Event #: 4366 Ship: Tully UTC Date (dd mmm yyyy): 15 Feb 2013

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC	pH								
1		373	50	✓ 50	x		x x	x x									
2		374	5	✓ 5.5	x	x	x x	x x									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

Bottom Depth: 3592 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2139	1339
Bottom	2158	1358
End	2222	1422

Positional Information
Start
Lat: 49 ° 21.100 N
Lon: 135 ° 40.030 W

Bottom
Lat: 49 ° 21.080 N
Lon: 135 ° 40.010 W

End
Lat: 49 ° 21.060 N
Lon: 135 ° 39.880 W

Extra comments:
closed all bottles or
way up (# 3-24) -
no samples in these
bottles

Water Properties Group

Sampling Log

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

Cruise ID:

2013-01

Station:

P4

Event #:

71

Ship:

Tully

UTC Date (dd:mmm/yyyy):

17 | 2 | 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments							
			Target Pressure	Confirmed ☒ Pressure	UBC	Sal	Nut Fr	Nut-C												
1	1	375	1250	☒									UBC cast							
2	2	376	1250	☒		x	x	x	x											
3	3	377	1250	☒																
4	4	378	1000	☒																
5	5	379	1000	☒		x	x	x	x											
6	6	380	1000	☒																
7	7	381	500	☒																
8	8	382	500	☒		x	x	x	x											
9	9	383	500	☒																
10	10	384	10	☒																
11	11	385	10	☒		x	x	x												
12	12	386	10	☒																
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: 1316 m
 Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1204	0404
Bottom	1229	0429
End	1255	0455

Positional Information
 Start
 Lat: 48 ° 39.03 N
 Lon: 126 ° 39.98 W

Bottom
 Lat: 48 ° 39.03 N
 Lon: 126 ° 39.98 W

End
 Lat: 48 ° 39.01 N
 Lon: 126 ° 40.01 W

Extra comments:
 UBC cast

Water Properties Group

Rosette Log

Pump S

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

Cruise ID: 2013-01 Station: 73 Event #: P4 Ship: TULLY UTC Date (dd|mmm|yyyy): 17 | 2 | 13

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed √ Pressure	Oxy	Nut	Sal	Chl a	NH ₄	Fe ³	Fe ³	Fe ³	Fe ³	Fe ³	
1	425	428				40m					x	x	x			
2	426	429				25m					x	x	x			
3	427	430				10m					xx	xx	xx			
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): KES/HIM.

Bottom Depth: 1330 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1354	0654
Bottom	1415	0615
End	1513	0715

Positional Information

Start Lat: 48 ° 38.34 N
Lon: 126 ° 40.52 W

Bottom Lat: 48 ° 39.35 N
Lon: 126 ° 40.57 W

End Lat: 48 ° 39.35 N
Lon: 126 ° 40.51 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

* Oxygen blanks and standards should be run daily, if possible

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P4 Event #: 74 Ship: Tully UTC Date (dd|mmm|yyyy): 17 | 2 | 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed ✓ Pressure		Oxy	Nut-F	Nut-C	Sal	DIC	pH		PIC		UBC				
1		387	Bot-10	✓	13 20	x	x	x		x	x		x		x				deep cast
2		388	1250	✓		x	x	x	x	xx	x				x				
3		389	1250	✓		xx	x	x	xx	x	x		x						
4		390	1000	✓		x	x	x	xx	x	x		x		x				
5		391	800	✓		x	x	x	x	x	x		x		x				
6		392	600	✓		x	xx	xx		x	xxx		x		x				
7		393	400	✓		x	x	x		x	x		x		x				
8		394	300	✓		x	x			x	x		x		x				
9		395	250	✓		x	x			x	x		x						
10	+20	396	200 *	✓		x	x			x	x				x				
11		397	175	✓		x	x			x	x		x						
12	+21	398	150 *	✓		x	x			x	x				x				
13		399	125	✓		x	xx			x	x		x						
14	+22	400	100 *	✓		x	x			x	x				x				
15		401	75	✓		xx	x			x	x		x						
16	+23	402	50 *	✓		x	x			x	x				x				
17	+24	403	25 *	✓		x	x			x	xxx				x				
18		404	10	✓		x	x			x	x		x		x				
19		405	5	✓		x	x		x	x	x		x						
20		406	200	✓		MR	MR	MR	MB	KS	GC		x						
21		407	150	✓		H.7				EB			x						
22		408	100	✓									x						
23		409	50	✓								IS	x		SK				
24		410	25	✓									x		TF				

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

Bottom Depth:	1318	m
Transmisso Cleaned:	(Y)	N

Time	UTC	Local
Start	1552	0752
Bottom	1617	0817
End	1701	0901

Positional Information
Start
Lat: 48 ° 39.25 N
Lon: 126 ° 40.39 W

Bottom
Lat: 48 ° 39.25 N
Lon: 126 ° 40.39 W

End
Lat: 48 ° 39.25 N
Lon: 126 ° 40.39 W

Extra comments:
Deep cast - OUT-OF-ORDER!
1 ... 9 - 10 - 20 - 11 - 12 - 21 - 13
14 - 22 - 15 - 16 - 23 - 24 - 17 - 18 - 19

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P4 Event #: 75 Ship: Tully UTC Date (dd|mmm|yyyy): 17 | 2 | 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials								Comments							
			Target Pressure	Confirmed ✓ Pressure	DMS	DMSP <i>t</i>	DMSP <i>d</i>	Nut-F		Chl	HPLC	Phyto	ONAr							
1		411	300	✓		x			x											
2		412	200	✓		x	x	x	x											
3		413	175	✓		x	x	x	x											
4		414	100	✓		x	x	x	x		x									
5		415	75	✓		x			x		x									
6		416	50	✓		x			x		x									
7		417	40	✓		x			x		x									
8	+15	418	30 *	✓		x			x		x									
9		419	25	✓		x			x		x									
10		420	20	✓		xx	xx	xx	x		x									
11	+16	421	15 *	✓		x			x		x									
12		422	10	✓		x			xx		x									
13	+17	423	5 *	✓		x	x	x	x		x									
14		424	0	✓		x	x	x	x		xx									
15		425	30	✓							xx	xx								
16		426	15	✓							xx	xx								
17		427	5	✓							xx	xx	xxx							
18																				
19																				
20																				
21																				
22																				
23																				
24																				

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

Watchkeeper(s): H.m.

Bottom Depth: 1318 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1805	1005
Bottom	1810	1010
End	1830	1030

Positional Information

Start

Lat: 48 ° 39.25 N

Lon: 126 ° 40.39 W

Bottom

Lat: 48 ° 39.25 N

Lon: 126 ° 40.39 W

End

Lat: 48 ° 39.25 N

Lon: 126 ° 40.39 W

Extra comments:

DMS cast; out-of-order.

1 ... 7 - 8 - 15 - 9 - 10 - 11 - 16 - 12

13 - 17 - 14

Water Properties Group

Sampling Log

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

Cruise ID: 2013-01 Station: P1 Event #: 78 Ship: Tully UTC Date (dd mmm/yyyy): 17 2 13

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments			
			Target Pressure	Confirmed ✓	Pressure	Nut-F	Sal-R	Chl	HPLC	DIC	Oxy	pH						
1	1	431	Bot-10	✓	104	x				xx	x	xxx						
2	2	432	30	✓		x		xx	xx									
3	3	433	5	✓		x	x	xx	xx	x	x	xxx						
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): 4.7

Bottom Depth: 111 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2331	1530
Bottom	2334	2334
End	2338	2338

Positional Information
Start
Lat: 48 ° 34.61 N
Lon: 125 ° 30.02 W

Bottom
Lat: 48 ° 34.61 N
Lon: 125 ° 30.07 W

End
Lat: 48 ° 34.65 N
Lon: 125 ° 30.15 W

Extra comments: