

Water Properties Group

Sampling Log

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

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

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

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

Bottom Depth: 235 m
Transmisso Cleaned: Y/N

Time	UTC	Local
Start	1658	0958
Bottom	1703	
End	1732	

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

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

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

Extra comments:
Debby

Water Properties Group

Sampling Log

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

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

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

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

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

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

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

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

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

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

Water Properties Group

Sampling Log

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

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

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

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

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

Time	UTC	Local
Start	0653	2353
Bottom	0655	
End	0702	

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

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

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

Extra comments:

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

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

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

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

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

Time	UTC	Local
Start	0925	0225
Bottom	0928	
End	0939	

Positional Information

Lat:	48 ° 35.95	N
Lon:	126 ° 0.05	W

▼

Lat:	48 ° 35.96	N
Lon:	126 ° 0.06	W

▼

Lat:	48 ° 35.97	N
Lon:	126 ° 0.04	W

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

Water Properties Group

Sampling Log

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

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments		
			Target Pressure	Confirmed ☒ Pressure	DMS	DMSP	DMSP	Nut-Fr	Chl	HPLC							
1		41	100	☒	x	x	x	xx	x								
2		42	75	☒	x			x	x								
3		43	50	☒	x			x	x								
4		44	40	☒	x			x	x								
5		45	30	☒	x			x	x								
6		46	25	☒	x			x	xx								
7		47	20	☒	xx	xx	xx	x	x								
8		48	15	☒	x			x	x								
9		49	10	☒	x			x	x								
10		50	5	☒	x	x	x	x	x								
11		51	0	☒	x	x	x	x	x								
12		52	30 / M*10	☒ 20					xx	xx							
13		53	15 / Max	☒ 10					xx	xx							
14		54	5	☒					xx	xx							
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type:
ROS TRM X-Niskin other?

Watchkeeper(s): SR

Bottom Depth: 117 m

Transmisso Cleaned: (Y) 1 N

Time	UTC	Local
Start	1015	0315
Bottom	1018	
End	1034	

Positional Information

Start

Lat: 48 ° 35.91 N

Lon: 126 ° 0.04 W

Bottom

Lat: 48 ° 35.92 N

Lon: 126 ° 0.04 W

End

Lat: 48 ° 35.91 N

Lon: 126 ° 59.96 W

Extra comments:

DMS cast; out-of-order

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

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC							
1		55	30 / Max	☒ 18	x		x x	x x							
2		56	5	☒	x	x	x x	x x							
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 808 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1209	0509
Bottom	1224	
End	1240	

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

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

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

Extra comments:

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

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

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

Watchkeeper(s): SR

Bottom Depth: 1325 m

Transmisso Cleaned: Y / ☒ N

Time	UTC	Local
Start	1442	0742
Bottom	1445	
End	1455	

Positional Information

Start

Lat: 48 ° 38.96 N

Lon: 126 ° 39.97 W

Bottom

Lat: 48 ° 38.95 N

Lon: 126 ° 39.94 W

End

Lat: 48 ° 38.94 N

Lon: 126 ° 39.98 W

Extra comments:

Cesium #1

Water Properties Group

Sampling Log

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

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

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

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

Bottom Depth: 1322 m
 Transmisso Cleaned: Y / N

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

Positional Information

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

Bottom

Lat: 48 ° 38.75 N
Lon: 126 ° 39.96 W

End

Lat: 48 ° 38.75 N
Lon: 126 ° 38.75 W

Extra comments:

TMR BOTTLE 400
 TRIPPED AT SURFACE
 BOTTLE 7 LEAKING
 SPIGOT

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P4 Event #: 20 Ship: Tully UTC Date (dd|mmm|yyyy): 21|Aug|2014

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

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

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

Time	UTC	Local
Start	1715	1015
Bottom	1721	
End	1741	

Positional Information

Lat:	48 ° 38.97	N
Lon:	126 ° 40.02	W

▼

Lat:	48 ° 38.97	N
Lon:	126 ° 40.07	W

▼

Lat:	48 ° 38.98	N
Lon:	126 ° 40.09	W

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

Water Properties Group

Sampling Log

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

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure													
1		110	400m														
2		111	300m														
3		112	150m														
4		113	75m														
5		114	25m														
6		115															
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type: in-situ pumps
ROS TRM X-Niskin other?
Watchkeeper(s): NR/OS

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

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

Positional Information

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

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

Extra comments:
Shallow in-situ pumps

Water Properties Group

Sampling Log

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

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

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

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

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

Time	UTC	Local
Start	0116	1816
Bottom	0140	
End	0223	

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

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

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

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

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

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

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

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

Time	UTC	Local
Start	0343	214629
Bottom	0351	
End	0404	*

Positional Information
Start
Lat: 48 ° 38 99 N
Lon: 126 ° 40 06 W

Bottom
Lat: 48 ° 38 97 N
Lon: 126 ° 40 05 W

End
Lat: 48 ° 38 99 N
Lon: 126 ° 40 07 W

Extra comments:
Cesium 2

Water Properties Group

Sampling Log

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

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ✓ Pressure													
1		135	1250m														
2		136	1000m														
3		137	800m														*NO PLE FILLOW SUP
4		138	600m														
5		139	500m														
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Profile type: ☒ in-situ pumps
☐ ROS ☐ TRM ☐ X-Niskin ☐ other?
Watchkeeper(s): MB/DJ

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

Time	UTC	Local
Start	0420	2120
Bottom	0534	
End	0936	

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

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

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

Extra comments:
Deep in-situ pumps

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

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

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

Bottom Depth: 1319 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0950	0250
Bottom	1015	
End	1040	

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

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

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

Extra comments:
UBC - Andreas

Water Properties Group

Sampling Log

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

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

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

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

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

Time	UTC	Local
Start	1122	0422
Bottom	1145	
End	1232	

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

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

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

Extra comments:
Plastics cast

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials														Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy Uvic	ONAr Uvic	NH4/ HCO3	NO3/ HCO3	CHL	NH4	Nut-fr IOS	Sal IOS							
1	1	205	1%		25			x	xx	x	xx	x	X						
2	2	206	10%		13			x	xx	x	xx	x	X						
3	4	207	30%		6			x	xx	x	xx	x	X						
4	5	208	55%		3			x	xx	x	xx	x	X						
5	6	209	100%		2.5	xx	xx	xxx	xx	x	xx	x	x						
6	3	210	10 m		10	xx	xx					x							
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Watchkeeper(s): ER

Bottom Depth: 1321 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1308	0608
Bottom	1311	
End	1321	

Positional Information

Start

Lat: 48 ° 38.94 N

Lon: 126 ° 39.93 W

Bottom

Lat: 48 ° 38.95 N

Lon: 126 ° 39.94 W

End

Lat: 48 ° 38.95 N

Lon: 126 ° 39.98 W

Extra comments:

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

Water Properties Group

Sampling Log

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

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

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

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

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

Time	UTC	Local
Start	1548	0848
Bottom	1623	
End	1700	

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

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

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

Extra comments:
CHL max @ 26m

Water Properties Group

Sampling Log

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

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

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials													Comments
			Target	Confirmed	Pressure	Nut-F	Sal	Chl	HPLC										
				✓															
1	1	214	30 / Max	✓	34	x		x x	x x										
2	2	215	5	✓		x	x	x x	x x										
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

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

Time	UTC	Local
Start	1937	1237
Bottom	2013	
End	2051	

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

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

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

Extra comments:

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments
			Target Pressure	Confirmed ✓ Pressure	Nut-F	Sal	Chl	HPLC							
1		216	30 / Max	✓	34	x		x x	x x						
2		217	5	✓	5	x	x	x x	x x						
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

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

Bottom Depth: 2585 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2328	1628
Bottom	0003	
End	0037	

Positional Information
Start
Lat: 48 ° 46.61 N
Lon: 128 ° 09.72 W

Bottom
Lat: 48 ° 46.53 N
Lon: 128 ° 09.91 W

End
Lat: 48 ° 46.58 N
Lon: 128 ° 09.98 W

Extra comments:

Water Properties Group

Sampling Log

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

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

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

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

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

Bottom Depth: 2520 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0501	1001
Bottom	0531	
End	0625	

Positional Information
Start
Lat: 48 ° 48 99 N
Lon: 128 ° 39 99 W

Bottom
Lat: 48 ° 48 99 N
Lon: 128 ° 40 08 W

End
Lat: 48 ° 48 99 N
Lon: 128 ° 40 05 W

Extra comments:
Firing out of order
1+2 misfires @ surface
3-17, 22, 18, 23, 19, 20
21, 24

Water Properties Group

Sampling Log

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

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

Niskin #	Firing #	Sample #	Rosette Operation			Samples Taken / Sampler's Initials												Comments	
			Target	Confirmed	Pressure	Nut-F	Sal	Chl	HPLC										
			Pressure	✓															Pressure
1		240	50 / Max	✓	38	x		x x	x x										
2		241	5	✓		x	x	x x	x x										
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

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

Time	UTC	Local
Start	0912	0212
Bottom	0946	
End	1020	

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

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

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

Extra comments:
CHL max @ 38m

Water Properties Group

Sampling Log

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

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

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

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

Bottom Depth: 2660 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1253	0553
Bottom	1331	
End	1416	

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

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

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

Extra comments:

Water Properties Group

Sampling Log

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

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials												Comments
			Target Pressure	Confirmed ☒ Pressure	Nut-F	Sal	Chl	HPLC									
1		266	50 / Max	☒ 53	x		x x	x x									
2		267	5	☒	x	x	x x	x x									
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

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

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

Time	UTC	Local
Start	1649	0949
Bottom	1722	
End	1805	

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

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

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

Extra comments:
53?

Water Properties Group

Sampling Log

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

Cruise ID: 2014-19 Station: P12 Event #: 46 Ship: Tully UTC Date (dd|mmm|yyyy): 23 | AUG | 2014

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

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

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

Time	UTC	Local
Start	2032	1332
Bottom	2038	
End	2058	

Positional Information

Lat:	48 ° 58 23	N
Lon:	130 ° 39 90	W

Start

▼

Lat:	48 ° 58 27	N
Lon:	130 ° 39 89	W

Bottom

▼

Lat:	48 ° 58 19	N
Lon:	130 ° 40 05	W

End

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

Water Properties Group

Sampling Log

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

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

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

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

Bottom Depth: 3230 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2132	1432
Bottom	2226	
End	2339	

Positional Information

Lat:	48 ° 58 26	N
Lon:	130 ° 39 94	W

Start

Lat:	48 ° 58 23	N
Lon:	130 ° 39 99	W

Bottom

Lat:	48 ° 58 24	N
Lon:	130 ° 39 99	W

End

Extra comments:
Deep cast

Water Properties Group

Sampling Log

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

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

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

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

Bottom Depth: 3228 m
Transmisso Cleaned: Y / N

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

Positional Information

Lat:	48 ° 58.22	N
Lon:	130 ° 40.03	W

Start

Bottom

End

Lat: 48 ° 58.24 N
Lon: 130 ° 40.00 W

Lat: 48 ° 58.23 N
Lon: 130 ° 39.98 W

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

Water Properties Group

Sampling Log

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

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

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

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

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

Time	UTC	Local
Start	0430	2130
Bottom	0503	
End	0542	

Positional Information

Lat:	48 ° 58 25	N
Lon:	130 ° 39 96	W

Start

Lat:	48 ° 58 25	N
Lon:	130 ° 40 02	W

Bottom

Lat:	48 ° 58 19	N
Lon:	130 ° 41 00	W

End

Extra comments:
UBC - Andreas

Water Properties Group

Sampling Log

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

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

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken / Sampler's Initials										Comments				
			Target Pressure	Confirmed	Oxy	ONAr	NH4/	NO3/	CHL	NH4	Nut-fr	Sal							
				✓ Pressure	Uvic	Uvic	HCO3	HCO3			IOS	IOS							
1	1	336	1%	✓ 6.8 m			x x	x x	x	x x	x	x							
2	2	337	10%	✓ 36.5 m			x x	x x	x	x x	x	x							
3	3	338	30%	✓ 13.5 m			x x	x x	x	x x	x	x							
4	5	339	55%	✓ 4.5 m			x x	x x	x	x x	x	x							
5	6	340	100%	✓ 2.5 m	x x	x x	x x x	x x x	x	x x	x	x							
6	4	341	10 m	✓ 10 m	x x	x x						x							
7	7	342	100%	✓ 2.5 m															
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

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

Bottom Depth: 3229 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0623	
Bottom	0626	
End	0636	

Positional Information

Lat:	48 ° 58 21	N
Lon:	130 ° 39 97	W

Start

Lat:	48 ° 58 21	N
Lon:	130 ° 39 98	W

Bottom

Lat:	48 ° 58 22	N
Lon:	130 ° 39 96	W

End

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