

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11

Station: L301

Event #: 1

Ship: TULLY

UTC Date (dd|mmm|yyyy): 05 | Sep | 09

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						
1	1	1298	135283	Bot-10	☒ 25	☒	☒		✓	✓						Dosimat Froze 4X.
2	2	1316	4.89579	10	☒	☒	☒		✓	✓						
3	3	1393	5.12554	5	☒	☒	☒		✓	✓						
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MIL DM Ky

Bottom Depth: 35 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1106	0906
Bottom	1107	
End	1110	0910

Positional Information

Start

Lat: 48 ° 40 44 N

Lon: 124 ° 59 46 W

Bottom

Lat: 48 ° 40 44 N

Lon: 124 ° 59 48 W

End

Lat: 48 ° 40 44 N

Lon: 124 ° 59 50 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

Rosette Log

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

Cruise ID: 2009-11 Station: L302 Event #: 2 Ship: TULLY UTC Date (dd|mmm|yyyy): 5 | sep | 2009

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						
1	4	2019	281721	Bot-to	☒	45	☒	☒									
2	5	1401	296446	30	☒		☒	☒									
3	6	1392	298786	20			☒	☒		vv	vv						
4	7	—	—	10			☒	☒		vv	vv						no sample
5	8	—	—	5			☒	☒		vv	vv						
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

→ note: oxy file with event 2
is also with event 4
1 file for both events
file "2009-11-0002.oxy"

Watchkeeper(s):
MR DM KY

Bottom Depth: _____ m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1143	0443
Bottom	1144	
End	—	

Positional Information		
Start	Lat: 48 ° 38.99	N
	Lon: 125 ° 02.44	W
▼		
Bottom	Lat: 48 ° 38.99	N
	Lon: 125 ° 02.44	W
▼		
End	Lat: 48 ° —	N
	Lon: 125 ° —	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

Rosette Log

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

Cruise ID: 2009-11 Station: L304 Event #: 4 Ship: TULLY UTC Date (dd|mmm|yyyy): 05 | SEP | 2009

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						
1	9	1314	1.39548	Bot-n	☒	100	☒									
2	10	3160	2.05997	75	☒											
3	11	1491	2.10073	50	☒											
4	12	1395	2.82344	30	☒											
5	13	690	4.40138	20	☒				☒	☒						#1488 = 4.40568 mL
6	14	1318	5.48563	10	☒				☒	☒						#1690 - bubble o - probe
7	15	1180	5.57078	5					☒	☒						
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

note: Oxy file with event 4
is also with event 2
1 file for both
file: 2009-11-0002.oxy

Watchkeeper(s):
MR DM KY

Bottom Depth: 112 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1259	0559
Bottom	1302	
End	1311	

Positional Information

Start

Lat: 48 ° 35.62 N

Lon: 125 ° 08.73 W

Bottom

Lat: 48 ° 35.69 N

Lon: 125 ° 08.76 W

End

Lat: 48 ° 35.71 N

Lon: 125 ° 08.70 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

Rosette Log

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

Cruise ID: 2009-11 Station: L306 Event #: 8 Ship: TULLY UTC Date (dd|mmm|yyyy): 05 | SEP | 2009

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						
1	18	2088	0.98220	Bot-10	✓ 105	1	1									
2	19	2065	0.98890	25	✓ 105	1	1									
3	20	2061	1.53966	50	✓ 75	1	1									
4	21	2068	2.22647	30	✓ 50	1	1									
5	22	3184	2.83304	20	✓ 30	✓	1									471 295724 (bubbles on probe)
6	23	3194	4.37999	10	✓ 20				✓	✓						
7	24	3133	5.02811	8	✓ 10	✓	✓		✓	✓						
8	25	2000	5.04006	5	✓ 5	✓	✓		✓	✓						
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): M K D

Bottom Depth: 114 m

Transmisso Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		1634	0934
Bottom		1636	
End		1644	

Positional Information

Start

Lat: 48 ° 32.18 N

Lon: 125 ° 15.54 W

Bottom

Lat: 48 ° 32.18 N

Lon: 125 ° 15.50 W

End

Lat: 48 ° 32.19 N

Lon: 125 ° 15.56 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

Rosette Log

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

Cruise ID: 2009-11 Station: LB08 Event #: 22 Ship: Tully UTC Date (dd|mmm|yyyy): 12|05|2009

[illegible]**Watchkeeper(s):**

Bottom Depth: 140 m

Transmisso Cleaned: ☒ / N

<i>Time</i>	<i>UTC</i>	<i>Local</i>
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Start	0217	1917
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Bottom	0219	1910
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End	0231	193
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Positional Information

Lat: 48 ° 25.31 N

Lon: 125 ° 28.66 w

Lat: 48° 25.30' N

Lon: 125 ° 08.67 w

Lat: 48 ° 25.30 N

Lon: 125 ° 28.68 W

Oxygen Info For This Cast

Blank Value: 0.004 mL · L⁻¹

Std Value: 0.717 mL · L⁻¹

*Date Run: 09 | 04 | 09

Analyst: 

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LB09 Event #: 23 Ship: Tully UTC Date (dd|mmm|yyyy): 6 | Sep | 2009

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						
1	40	2090	0.67844	10	✓ 139	✓	✓									
2	41	1490	0.94247	100	✓ 100	✓	✓									
3	42	2082	1.34124	75	✓ 75	✓	✓									
4	43	3177	2.02968	50	✓ 49	✓	✓									#3108 = 2.02795
5	44	2073	2.66589	30	✓ 31	✓	✓									
6	45	2084	4.10609	20	✓ 20	✓	✓		✓	✓						
7	46	3188	5.20680	10	✓ 10	✓	✓		✓	✓						
8	47	3190	5.53747	5	✓ 5	✓	✓		✓	✓						
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): 284/etc

Bottom Depth: _____ m

Transmisso Cleaned: Y / N

	UTC	Local
Start	0326	2026
Bottom	0328	2028
End	0340	2040

Positional Information

Start

Lat: 48 ° 22.01 N

Lon: 125 ° 34.84 W

Bottom

Lat: 48 ° 22.02 N

Lon: 125 ° 34.84 W

End

Lat: 48 ° 22.04 N

Lon: 125 ° 34.85 W

Oxygen Info For This Cast

Blank Value: 0.004 mL · L⁻¹

Std Value: 0.717 mL · L⁻¹

*Date Run: 09104109

Analyst: MS

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: L311 Event #: 25 Ship: Tolly UTC Date (dd|mmm|yyyy): 6 | Sep | 2009

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							
1	49	1298	12.5799	3-10	✓ 19.5	✓	✓										
2	50	1316	1.11229	175	✓ 177												
3	51	1393	0.74028	150	✓ 150	✓	✓										#1402 0.78046
4	52	2019	1.71289	125	✓ 125												
5	53	1401	2.42491	100	✓ 99												
6	54	1392	2.87305	75	✓ 75												
7	55			50	✓ 50												No trip
8	56	1313	3.32557	30	✓ 30												
9	57	1300	4.73535	20	✓ 20				✓✓	✓✓							
10	58	1314	5.64331	10	✓ 10				✓✓	✓✓							
11	59	3160	6.31738	5	✓ 4	✓	✓		✓✓	✓✓							
12																	
13																	
14																	
15																	
16																	
17																	
18																	1
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): Dry/ate

Bottom Depth: 205 m

Transmissio Cleaned: Y / N

	Time	UTC	Local
Start		0552	2252
Bottom		0555	2255
End			

Positional Information

Start

Lat: 48 ° 15.25 N

Lon: 125 ° 47.69 W

Bottom

Lat: 48 ° 15.25 N

Lon: 125 ° 47.69 W

End

Lat: ° N

Lon: ° 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

* O₂ sample = no - p, m, q, on top

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: L312 Event #: 27 Ship: TULLY UTC Date (dd|mmm|yyyy): 06 | 09 | 2009

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						
1	60	1247	0.90429	Bot - 10	☒ 500	☒	☒									
2	61	1320	1.01980	400	☒			☒								
3	62	1400	0.82134	300	☒			☒								
4	63	1175	1.53453	250	☒		☒									dosimat froze add. 2 titrate volume.
5	64	1209	1.67383	200	☒											
6	65	2020	1.78843	175	☒											
7	66	1384	1.87352	150	☒											
8	67	1406	1.86531	125	☒											
9	68	1322	2.460075	100	☒	☒										#1106 = 2.81820
10	69	1373	3.60907	75	☒											
11	70	1146	5.29216	50	☒											
12	71	1386	6.17078	30	☒											
13	72	631	5.57185	20	☒				☒	☒						
14	73	1414	6.27989	10	☒				☒	☒						
15	74	1397	6.29921	5	☒	☒	☒		☒	☒						
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): M MD

Bottom Depth: 505 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0712	0012
Bottom	0723	
End	0747	

Positional Information

Start Lat: 48 ° 12.92 N Lon: 125 ° 51.81 W

Bottom Lat: 48 ° 12.92 N Lon: 125 ° 51.86 W

End Lat: 48 ° 12.90 N Lon: 125 ° 51.91 W

Oxygen Info For This Cast

Blank Value: 0.004 mL • L⁻¹

Std Value: 0.717 mL • L⁻¹

*Date Run: 09 | 04 | 09

Analyst: MS.

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

OXY: YELLOW BOX NUT: YELLOW BACK

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: 2314 Event #: 29 Ship: TULLY UTC Date (dd|mmm|yyyy): 6 | SEP | 2009

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						
1	76	76	0.37087	Bot -10	✓	1182	✓									
2	77	371	0.22958	1000	✓		✓									
3	78	557	0.24447	750	✓											
4	79	559	0.90805	500	✓											
5	80	632	1.08684	400	✓											bubblew probe
6	81	3206	1.15392	300	✓											
7	82			250	✓											→ DID NOT CLOSE
8	83	1158	1.20190	200	✓											
9	84	1312	1.22988	175	✓											
10	85	1365	1.33401	150	✓											
11	86	2014	2.05218	125	✓											
12	87	3051	2.69588	100	✓											
13	88	2075	3.38276	75	✓		✓									
14	89	2092	4.90059	50	✓											
15	90	3024	5.64665	30	✓											#3097 = 5.62045
16	91	3196	6.07949	20	✓				✓	✓						
17	92	3084	6.24410	10	✓				✓	✓						
18	93	3094	6.31522	5	✓				✓	✓						
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MMD

Bottom Depth: 1190 m

Transmisso Cleaned: Y / ☒ N

Time	UTC	Local
Start	0945	0245
Bottom	1007	0307
End	1041	

Positional Information

Start Lat: 48 ° 08.41 N
Lon: 126 ° 00.06 W

Start

Bottom Lat: 48 ° 08.50 N
Lon: 125 ° 59.91 W

Bottom

End Lat: 48 ° 08.41 N
Lon: 125 ° 59.96 W

End

Oxygen Info For This Cast

Blank Value: 0.004 mL · L⁻¹
Std Value: 0.717 mL · L⁻¹
*Date Run: 09 | 04 | 09
Analyst: MA

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LC11 Event #: 38 Ship: Tully UTC Date (dd|mmm|yyyy): 6 | Sep | 2009

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						
1	98	1247	0.66647	B-10	✓ 1451	✓	✓	✓								
2	99	1320	0.39088	1250	✓ 1251	✓	✓	✓								
3	100	1400	0.21885	1000	✓ 999	✓	✓	✓								
4	101	1175	0.21446	750	✓ 750	✓	✓	✓								
5	102	1209	0.72485	500	✓ 498	✓	✓	✓								
6	103	2020	0.94200	400	✓ 400	✓	✓	✓								
7	104	1384	1.35899	300	✓ 301	✓	✓	✓								
8	105	1406	1.24065	250	✓ 250	✓	✓	✓								
9	106	1322	1.53382	200	✓ 200	✓	✓	✓								
10	107	1373	1.56699	175	✓ 176	✓	✓	✓								
11	108	1146	1.91447	150	✓ 151	✓	✓	✓								
12	109	1386	2.28845	125	✓ 125	✓	✓	✓								
13	110	631	2.76985	100	✓ 101	✓	✓	✓								
14	111	1414	3.79447	75	✓ 75	✓	✓	✓								#1106=3.79268
15	112	1397	6.18677	50	✓ 50	✓	✓	✓								
16	113	1409	6.67329	30	✓ 30	✓	✓	✓								
17	114	1326	6.84557	20	✓ 20	✓	✓	✓	✓	✓						*bubble in bottle
18	115	1123	6.03077	10	✓ 10	✓	✓	✓	✓	✓						
19	116	1411	6.00881	5	✓ 5	✓	✓	✓	✓	✓						
20																
21																
22																
23																
24																

Watchkeeper(s): J. Kyle

Bottom Depth: 1431 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2115	1415
Bottom	2132	1432
End	2216	1516

Positional Information

Start

Lat: 48 ° 18.97 N

Lon: 126 ° 26.67 W

Bottom

Lat: 48 ° 18.96 N

Lon: 126 ° 26.66 W

End

Lat: 48 ° 18.96 N

Lon: 126 ° 26.65 W

Oxygen Info For This Cast

Blank Value: 0.004 mL · L⁻¹

Std Value: 0.717 mL · L⁻¹

*Date Run: 09 | 04 | 09

Analyst: _____

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

Oxy = Yellow Nuts = Orange

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LC09 Event #: 40 Ship: Tully UTC Date (dd|mmm|yyyy): 7 | Sept | 09

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				
1	118	76.	0.43117	3-10	✓ 600	✓	✓	✓						
2	119	371	0.73768	500	✓ 500	✓	✓							
3	120	557.	1.07503	400	✓ 400	✓	✓							
4	121	559	1.19604	300	✓ 300	✓	✓							
5	122	632	1.25088	250	✓ 250	✓	✓							
6	123	—	—	250	✓ 250									Karyn
7	124	1085	1.50068	200	✓ 200	✓	✓							
8	125	1158	1.54441	175	✓ 176	✓	✓							#3157=1.54071
9	126	1312.	1.47162	150	✓ 151	✓	✓							
10	127	—	—	150	✓ 151									Karyn
11	128	2014	1.74754	125	✓ 125	✓	✓							
12	129	3051	2.71289	100	✓	✓	✓							
13	130	2075	5.24076	75	✓	✓	✓							
14	131	—	—	75	✓									Karyn
15	132	3024	6.10783	50	✓	✓	✓							
16	133	—	—	50	✓									Oaggs
17	134	3084	6.23391	30	✓ 30	✓	✓							bubble on probe - retook that point
18	135	—	—	25	✓									Karyn
19	136	3097	5.55921	20	✓ 20	✓	✓		✓	✓				
20	137	—	—	15	✓ 15									Karyn
21	138	3135	6.00114	10	✓ 10	✓	✓		✓	✓				
22	139	—	—	5	✓ 5									Karyn
23	140	1496	5.98070	5	✓ 5	✓	✓	✓	✓	✓				
24														

Watchkeeper(s): TRY

Bottom Depth: 606 m

Transmissio Cleaned: Y / N

Time	UTC	Local
Start	19033	
Bottom		
End	0109	

Positional Information

Start Lat: 48 ° 25.78 N
Lon: 126 ° 11.45 W

Bottom Lat: ° N
Lon: ° W

End Lat: 48 ° 25.78 N
Lon: 126 ° 13.46 W

Oxygen Info For This Cast

Blank Value: 0.004 mL · L⁻¹
Std Value: 0.717 mL · L⁻¹
*Date Run: 09 | 04 | 09
Analyst: MD

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

Oxy-Green

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11

Station: LL081A1

Event #: 45

Ship: Tully

UTC Date (dd|mmm|yyyy): 07 | Sep | 2009

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 ✓						
1	143	1247	1.27485	8-10	✓ 191	✓	✓									✓ Desire
2	144	1320	1.25490	175	✓ 125	✓	✓									
3	145	1400	1.83307	150	✓ 150	✓										#1386 = 1.75419
4	146	1175	1.83530	125	✓ 125											
5	147	1209	2.37829	100	✓ 100											
6	148	2020	2.36727	75	✓ 75											
7	149	1384	5.63252	50	✓ 50		✓									
8	150	1406	4.08630	30	✓ 30											
9	151	1322	5.93288	20	✓ 20				✓✓	✓✓						
10	152	1373	5.26161	10	✓ 10				✓✓	✓✓						lots of critters in
11	153	1146	5.913	5	✓ 5	✓	✓		✓✓	✓✓						lots of critters
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): PRY/etc

Bottom Depth: 200 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0435	2135
Bottom	0438	2138
End	0454	2154

Positional Information

Start

Lat: 48 ° 29.39 N

Lon: 126 ° 7.39 W

Bottom

Lat: 48 ° 29.37 N

Lon: 126 ° 7.39 W

End

Lat: 48 ° 29.32 N

Lon: 126 ° 7.46 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

Rosette Log

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

Cruise ID: 2009-11

Station: LC06

Event #: 48

Ship: Tully

UTC Date (dd|mmm|yyyy): 7 | Sep | 2009

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						
1	155	1414	1.42330	B-10	☒ 83	☒	☒									#1397 = 1.43501
2	156	1409	1.43234	75	☒											
3	157	1326	2.02996	50	☒											
4	158	1123	2.79676	30	☒											
5	159	1411	3.67951	20	☒				☒	☒						
6	160	1380	5.60149	10	☒		☒		☒	☒						
7	161	1144	5.63911	5	☒	☒	☒		☒	☒						
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): N M O

Bottom Depth: 93 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0705	0005
Bottom	0708	
End	0716	

Positional Information

Start

Lat: 48 ° 36 45 N

Lon: 125 ° 54 00 W

Bottom

Lat: 48 ° 36 43 N

Lon: 125 ° 54 01 W

End

Lat: 48 ° 36 42 N

Lon: 125 ° 54 14 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

Rosette Log

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

Cruise ID: 2009-11 Station: LC04 Event #: 52 Ship: TULLY UTC Date (dd|mmm|yyyy): 7 | SEP | 2009

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						
1	164	1298	1.73218	130 ± 10	☒ 158	☒	☒									
2	165	1316	1.86779	125	☒	☒	☒									
3	166	1393	2.28835	100	☒	☒	☒									
4	167	—	—	100	☒											K
5	168	—	—	75	☒											K
6	169	1402	2.63950	75	☒	☒	☒									
7	170	2019	2.58566	50	☒	☒	☒									
8	171	—	—	50	☒											K
9	172	1401	3.37525	30	☒	☒	☒									
10	173	—	—	25	☒											K
11	174	1392	5.06635	20	☒	☒	☒		☒	☒						#1377 = 5.02083
12	175	—	—	15	☒											K
13	176	1313	5.36711	10	☒	☒	☒		☒	☒						
14	177	1300	5.46788	5	☒	☒	☒	☒	☒	☒						
15	178	—	—	5	☒											K
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MMO

Bottom Depth: 167 m

Transmisso Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		0953	0253
Bottom		0956	
End		1009	

Positional Information

Start Lat: 48 ° 43.47 N
Lon: 125 ° 40.89 W

Bottom Lat: 48 ° 43.47 N
Lon: 125 ° 40.86 W

End Lat: 48 ° 43.47 N
Lon: 125 ° 40.78 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

Rosette Log

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

Cruise ID: 2009-11 Station: LC02 Event #: 56 Ship: TULLY UTC Date (dd|mmm|yyyy): 7 | Sep | 2009

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						
1	180	2088	1.99440	Bot-10	☒	100	✓	✓✓									
2	181	2065	2.34369	75	☒		✓	✓									
3	182	2061	2.99306	50	☒												- large bubble on probe
4	183	2068	4.33220	30	☒												
5	184	3194	3.63863	20	☒					✓✓	✓✓						
6	185	2000	4.87022	10	☒		✓	✓		✓✓	✓✓						#3184 = 4.88220
7	186			5	☒		✓✓	✓		✓✓	✓✓						→ DID NOT CLOSE
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): M. D. K.

Bottom Depth: 110 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1233	0533
Bottom	1236	
End	1245	

Positional Information

Start
 Lat: 48 ° 48.72 N
 Lon: 125 ° 30.96 W

Bottom
 Lat: 48 ° 48.73 N
 Lon: 125 ° 30.97 W

End
 Lat: 48 ° 48.67 N
 Lon: 125 ° 30.99 W

Oxygen Info For This Cast

Blank Value: 0.004 mL · L⁻¹
 Std Value: 0.717 mL · L⁻¹
 *Date Run: 09.04.09
 Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LC01 Event #: 57/58 Ship: TULLY UTC Date (dd|mmm|yyyy): 7 | 9 | 2009

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						
1	187	2027	2.39119	BOT-10	☒ 86	✓	✓									} 57
2	188	2082	2.34034	75	☒											
3	189	1490	3.97828	50	☒											
4	190	2090	4.64825	30	☒	✓	✓									} #2073 = 4.61956
5	191	3177	4.28485	20	☒				✓	✓						
6	192	2089	4.30006	10	☒				✓	✓						
7	193			5	☒											} NO GO
8	194	3188	4.52146	5	☒	✓	✓		✓	✓						
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MMK

Bottom Depth: 95 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1324	0624
Bottom	1326	
End	1335	

Positional Information

Start Lat: 48 ° 50.49 N
Lon: 125 ° 27.77 W

Bottom Lat: 48 ° 50.48 N
Lon: 125 ° 27.75 W

End Lat: 48 ° 50.48 N
Lon: 125 ° 27.74 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

Rosette Log

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

Cruise ID: 2009-11 Station: LD02 Event #: 60 Ship: Tully UTC Date (dd|mmm|yyyy): 08 | Sep | 2009

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						
1	195	1298	4.61731	8-10	☒ 33											Vent open
2	196	1316	4.62938	30	☒ 30				✓✓	✓✓						# 1248 = 4.61814
3	197	1393	4.64253	20	☒ 20			✓	✓✓	✓✓						
4	198	1402	4.78257	10	☒ 10				✓✓	✓✓						
5	199	2019	5.19119	5	☒ 5											bubblew probe-removed
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): _____

Bottom Depth: 43 m

Transmisso Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		0622	2322
Bottom		0623	2323
End		0629	2329

Positional Information

Start

Lat: 48 ° 58.37 N

Lon: 125 ° 46.99 W

Bottom

Lat: 48 ° 58.37 N

Lon: 125 ° 46.99 W

End

Lat: 48 ° 58.37 N

Lon: 125 ° 46.99 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹

Std Value: 0.718 mL · L⁻¹

*Date Run: 09 | 08 | 09

Analyst: MS

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: L204 Event #: 64 Ship: TULLY UTC Date (dd|mmm|yyyy): 8 | Sep | 2009

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						
1	200	1392	2.81695	Bot 70	☒ 55	☒	☒									
2	201	1377	3.24297	30	☒	☒	☒									-Posimort Froze -pause titration
3	202	1313	5.28897	20	☒	☒	☒		☒	☒						✓ connections restart + finish titration
4	203	1307	4.63639	10	☒	☒	☒		☒	☒						#1300 = 4.61567
5	204	1314	4.71494	5	☒	☒	☒		☒	☒						
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MMO

Bottom Depth: 63 m

Transmisso Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		0824	0124
Bottom		0826	
End		0831	

Positional Information

Start

Lat: 48 ° 53.16 N

Lon: 125 ° 56.96 W

Bottom

Lat: 48 ° 53.16 N

Lon: 125 ° 56.97 W

End

Lat: 48 ° 53.17 N

Lon: 125 ° 56.97 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹

Std Value: 0.718 mL · L⁻¹

*Date Run: 09108109

Analyst: MS

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LG 01 Event #: 65 Ship: TULLY UTC Date (dd|mmm|yyyy): 8 | 9 | 2009

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						
1	205	2088	2.73307	Bot 70	☒	46	☒	☒								
2	206	2065	3.40235	30	☒		☒	☒								#2061 = 34.1442
3	207	2068	5.01568	20	☒		☒		☒	☒						
4	208	3194	5.41540	10	☒		☒		☒	☒						
5	209	2000	5.79322	5	☒		☒		☒	☒						
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
M D K

Bottom Depth: 54 m

Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	1218	0518
Bottom	1220	
End	1225	

Positional Information

Start

Lat: 49 ° 20 51 N

Lon: 126 ° 35.06 W

Bottom

Lat: 49 ° 20.51 N

Lon: 126 ° 35.05 W

End

Lat: 49 ° 20 52 N

Lon: 126 ° 35 05 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

Rosette Log

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

Cruise ID: 2009-11 Station: LG02 Event #: 67 Ship: TULLY UTC Date (dd|mmm|yyyy): 8 | SEP | 2009

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						
1	210	3184	2.10710	Bot-10	☒ 90	☒	☒									
2	211	471	2.2786	75	☒	☒	☒									#3133 = 2.20301
3	212	3177	2.26981	50	☒											
4	213	14190	4.03211	30	☒											
5	214	2090	5.34537	20	☒				☒	☒						
6	215	3188	5.36316	10	☒				☒	☒						
7	216	2089	5.88322	5	☒	☒	☒		☒	☒						
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MDK

Bottom Depth: 100 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1310	0610
Bottom	1313	
End	1321	

Positional Information

Start

Lat: 49° 18.73 N

Lon: 126° 38.15 W

Bottom

Lat: 49° 18.73 N

Lon: 126° 38.14 W

End

Lat: 49° 18.74 N

Lon: 126° 38.14 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

Rosette Log

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

Cruise ID: 2009-11 Station: L604 Event #: 70 Ship: TULLY UTC Date (dd|mmm|yyyy): 8 | SEP | 2009

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						
1	218	2082	1.45808	Bot-10	☒	134	☒	☒									
2	219	2027	1.47598	125	☒		☒	☒									
3	220	3190	2.04735	100	☒		☒	☒									
4	221	2073	2.28383	75	☒		☒	☒									
5	222	3108	2.91429	50	☒		☒	☒									#2040 = 2.88819
6	223	3151	2.77339	30	☒		☒	☒									bubble on probe - removed
7	224			20	☒		☒	☒									DID NOT CLOSE ? no sample taken
8	225	708	5.94602	10	☒		☒	☒									
9	226	3033	6.27782	5	☒		☒	☒									
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): M D K

Bottom Depth: 144 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	15 12	08 12
Bottom	15 15	
End	15 25	

Positional Information

Start Lat: 49 ° 11.36 N
Lon: 126 ° 49.35 W

Bottom Lat: 49 ° 11.38 N
Lon: 126 ° 49.35 W

End Lat: 49 ° 11.42 N
Lon: 126 ° 49.32 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 09 | 08 | 09
Analyst: MS

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

OXY: Brown Box, no space.

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: 2606 Event #: 72 Ship: TULLY UTC Date (dd|mmm|yyyy): 8 | SEP | 2009

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						
1	228	611	0.22561	1300	✓	963	✓	✓								
2	229	620	0.22814	750	✓		✓	✓								
3	230	621	0.62351	500	✓		✓	✓								#638=0.63032 → LEAKING
4	231	639	0.92237	400	✓											
5	232	657	1.32453	300	✓											
6	233	712	1.95781	250	✓											
7	234	—	—	200	✓											→ closed @ surface no water
8	235	1105	2.2556	175	✓											
9	236	1301	2.84260	150	✓											
10	237	1321	2.81520	125	✓											
11	238	1333	2.73905	100	✓											
12	239	1374	3.29590	75	✓											
13	240	1174	4.47267	50	✓											
14	241	1487	4.19793	30	✓											
15	242	1465	4.93982	20	✓				✓	✓						
16	243	1368	6.04621	10	✓				✓	✓						
17	244	647	6.15597	5	✓		✓	✓	✓	✓						
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
M D a K

Bottom Depth: 950 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1704	1004
Bottom	1722	
End	1753	

Positional Information

Start

Lat: 49° 03.50 N

Lon: 127° 01.18 W

Bottom

Lat: 49° 03.50 N

Lon: 127° 01.18 W

End

Lat: 49° 03.48 N

Lon: 127° 01.18 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

Rosette Log

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

Cruise ID: 2009-11 Station: LBP7 Event #: 81 Ship: TULLY UTC Date (dd|mmm|yyyy): 09 | 09 | 09

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						
1	271	611	1.45931	2000	☒											
2	272	620	0.98095	1750	☒											
3	273	621	0.65393	1500	☒											
4	274	638	0.34850	1250	☒											
5	275	639	0.22831	1000	☒	1000										
6	276	657	0.27771	750	☒	750										
* 7	277	712	0.88325	500	☒	500										
* 8	278	715	0.82411	500	☒	500										
9	279	1105	1.00978	400	☒	401										
10	280	1301	1.41353	300	☒	300										
11	281	1321	1.51942	250	☒	250										
12	282	1333	1.61135	200	☒	200										
13	283	1374	1.59342	175	☒	175										
14	284	1174	1.79200	150	☒	150										
15	285	1487	2.88020	125	☒	125										
16	286	1465	3.47015	100	☒	101										
17	287	1368	4.65384	75	☒	75	☒									#1338=4.66577
18	288	647	5.11205	50	☒	50										
19	289	700	5.52744	30	☒	30										
20	290	1302	5.97312	20	☒	21										
21	291	1327	5.97488	10	☒	10										
22	292	1367	5.99854	5	☒	5										
23																
24																

Watchkeeper(s): M. De K

Bottom Depth: ~2200 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1746	1046
Bottom	1827	1127
End		

Positional Information

Start Lat: 49° 52.41 N
Lon: 128° 11.29 W

Bottom Lat: 49° 52.39 N
Lon: 128° 11.26 W

End Lat: ° N
Lon: ° W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹

Std Value: 0.718 mL · L⁻¹

*Date Run: 09 | 08 | 09

Analyst: MS

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

* hu

Oxy: WHITE Box No pH of glass lids

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LG09 Event #: 77 Ship: Tully UTC Date (dd|mmm|yyyy): 8 | Sept | 2009

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						
1	247	1298	1.44858	2000	☒ 2005	☒	☒	☒								
2	248	1316	0.98536	1750	☒ 1949											
3	249	1393	0.65118	1500	☒ 1500											
4	250	1402	0.36826	1250	☒ 1250											#1248 = 0.33467
5	251	2019	0.20333	1000	☒ 1000											
6	252	1401	0.23433	900	☒ 800											
7	253	1392	0.39893	600	☒ 600											
8	254	1377	0.71561	500	☒ 500											
9	255	1313	1.14720	400	☒ 400											
10	256	1300	2.15048	300	☒ 300											
11	257	1314	2.46638	250	☒ 250											
12	258	3160	2.74470	200	☒ 200											
13	259	1491	2.77293	175	☒ 175											
14	260	1395	3.13112	150	☒ 152											
15	261	690	4.02864	125	☒ 124											
16	262	1488	5.62522	100	☒ 98											
17	263	1318	5.61931	75	☒ 76											
18	264	1180	6.39249	50	☒ 51											
19	265	1213	6.42882	30	☒ 30											
20	266	1408	5.76162	20	☒ 20				☒	☒						
21	267	1389	5.74691	10	☒ 10				☒	☒						
22	268	1307	5.74414	0		☒	☒	☒	☒	☒						
23																
24																

Watchkeeper(s): DRY/DW/KSBottom Depth: 2057 mTransmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2316	1616
Bottom	0006	1706
End	0106	1806

Positional Information

Start
Lat: 48 ° 51.22 N
Lon: 127 ° 19.45 WBottom
Lat: 48 ° 51.19 N
Lon: 127 ° 19.37 WEnd
Lat: 48 ° 51.24 N
Lon: 127 ° 19.32 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹Std Value: 0.718 mL · L⁻¹*Date Run: 09 | 08 | 09Analyst: MB

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LBP5 Event #: 84 Ship: Tully UTC Date (dd|mmm|yyyy): 9 | Sept | 09

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						
1	294	1298	0.45696	800-10	✓ 1283	✓	✓✓									
2	295	1316	0.28276	1000	✓ 1000			✓								
3	296	1393	0.32696	750	✓ 750											
4	297	1402	0.86334	500	✓ 500											
5	298	2019	1.06412	400	✓ 401											
6	299	1401	1.30591	300	✓ 300											
7	300	1392	1.95894	250	✓ 250		✓									
8	301	1377	2.35061	200	✓ 200											
9	302	1248	2.94176	175	✓ 175	✓										#1313 = 2.97120
10	303	1300	3.59957	150	✓ 150											
11	304	1314	4.52320	125	✓ 125											
12	305	3160	5.19723	100	✓ 100											
13	306	1491	6.01043	75	✓ 75											
14	307	1395	6.51667	50	✓ 50											
15	308	690	5.88851	30	✓ 31											
16	309	1488	5.92898	20	✓ 21				✓✓	✓✓						
17	310	1318	5.94550	10	✓ 10			✓	✓✓	✓✓						
18	311	1180	5.96808	5	✓ 5	✓	✓✓		✓✓	✓✓						
19																
20																
21																
22																
23																
24																

Watchkeeper(s): DRY/etc

Bottom Depth: 1300 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2219	1519
Bottom	2239	1539
End	2312	1612

Positional Information
Start
Lat: 50 ° 0.06 N
Lon: 128 ° 0.04 W

Bottom
Lat: 50 ° 0.03 N
Lon: 128 ° 0.02 W

End
Lat: 50 ° 0.04 N
Lon: 127 ° 59.97 W

Oxygen Info For This Cast
Blank Value: 0.001 mL • L⁻¹
Std Value: 0.718 mL • L⁻¹
*Date Run: 09 | 08 | 09
Analyst: _____

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

OXY ORANGE

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: LBP 3 Event #: 87 Ship: Tolly UTC Date (dd|mmm|yyyy): 10 | Sep | 2009

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						
1	313	2088	2.41992	B-10	✓ 160	✓	✓									
2	314	2065	3.06001	150	✓ 150	✓	✓									
3	315	2068	3.51012	125	✓ 125	✓	✓									
4	316	3194	4.28460	100	✓ 100	✓	✓									
5	317	2000	4.51738	75	✓ 75	✓	✓									
6	318	2061	7.9.1.	50	✓ 50	✓	✓									- Freeze Program 0.881 ml - could not EP
7	319			30	✓ 20	✓	✓									- No trip
8	320	3177	5.65942	20	✓ 20	✓	✓		✓	✓						#476 = 5.64048
9	321	1490	5.70563	10	✓ 11	✓	✓		✓	✓						
10	322	2090	5.84549	5	✓ 5	✓	✓		✓	✓						
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): dry/etc

Bottom Depth: 170 m

Transmisso Cleaned: Y / N

	UTC	Local
Time		
Start	0123	1823
Bottom	0128	1828
End	0141	1841

Positional Information

Start Lat: 50 ° 3.20 N
Lon: 127 ° 55.37 W

Bottom Lat: 50 ° 3.21 N
Lon: 127 ° 55.37 W

End Lat: 50 ° 3.23 N
Lon: 127 ° 55.36 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 09 | 08 | 09
Analyst: ME

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: CS01 Event #: 99 Ship: TULLY UTC Date (dd|mmm|yyyy): 10 | Sep | 2009

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						
1	329			250	☒											KARYN
2	330			150	☒											
3	331			75	☒											
4	332			25	☒											
5	333			15	☒											
6	334			5	☒											
7	335			5	☒		☒	☒	☒							
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): M. D. K.

Bottom Depth: 2140 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	16 16	09 16
Bottom	16 36	09 36
End	17 03	10 03

Positional Information

Start Lat: 50 ° 34.91 N
Lon: 129 ° 41.55 W

Start

Bottom Lat: 50 ° 34.91 N
Lon: 129 ° 41.44 W

Bottom

End Lat: 50 ° 34.886 N
Lon: 129 ° 41.470 W

End

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

Rosette Log

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

Cruise ID: 2009-11 Station: CS02 Event #: 101 Ship: TULLY UTC Date (dd|mmm|yyyy): 10 | SEP | 2009

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						
1	336	611	0.26171	1000	☒ 1000	✓	✓	✓								
2	337	620	0.25778	750	☒ 750	✓		✓								#1338 = 0.25284
3	338	621	0.70868	500	☒ 500											
4	339	638	1.03663	400	☒ 401		✓									
5	340	639	1.94269	300	☒ 300											
6	341	657	2.47075	250	☒ 250											
7	342	712	3.74875	200	☒ 202											
8	343	715	3.68165	200	☒ 202											
9	344	1105	3.07300	175	☒ 175											
10	345	1301	3.51073	150	☒ 150											
11	346	1321	3.71585	125	☒ 125											
12	347	1333	4.80452	100	☒ 100											
13	348	1374	5.66993	75	☒ 76											bubble on probe - remove
14	349	1174	6.45792	50	☒ 50											finish
15	350	1487	6.51907	30	☒ 30											
16	351	1465	6.35551	20	☒ 21				✓✓	✓✓						
17	352	1368	6.02866	10	☒ 10				✓✓	✓✓						
18	353	647	6.10071	5	☒ 5	✓	✓	✓	✓	✓✓	✓✓					
19																
20																
21																
22																
23																
24																

Watchkeeper(s): _____

Bottom Depth: 1930 m

Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Start	1843	
Bottom	1908	
End	1939	

Positional Information

Start
 Lat: 50 ° 41.29 N
 Lon: 129 ° 28.05 W

Bottom
 Lat: 50 ° 41.32 N
 Lon: 129 ° 28.10 W

End
 Lat: 50 ° 41.37 N
 Lon: 129 ° 28.09 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
 Std Value: 0.718 mL · L⁻¹
 *Date Run: 09 | 10 | 09
 Analyst: MS

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11

Station: C504

Event #: 105

Ship: Tully

UTC Date (dd|mmm|yyyy): 10 | Sept | 09

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						
1	355	2085	3.69447	30	☒ 90	☒	☒									
2	356	2065	3.79274	75	☒ 75	☒										* 2068 = 3.77777
3	357	2040	4.55504	50	☒ 50											
4	358	3194	5.02080	30	☒ 31											
5	359	2061	5.75895	20	☒ 20				☒	☒						
6	360	3177	5.97460	10	☒ 10				☒	☒						large critter in
7	361	3184	5.95009	5	☒ 5	☒	☒		☒	☒						Sample
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): DRY etc

Bottom Depth: 100 m

Transmisso Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		2235	1535
Bottom		2239	1539
End		2250	1550

Positional Information

Start

Lat: 50 ° 49.29 N

Lon: 129 ° 12.83 W

Bottom

Lat: 50 ° 49.30 N

Lon: 129 ° 12.81 W

End

Lat: 50 ° 49.34 N

Lon: 129 ° 12.76 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

Rosette Log

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

Cruise ID: 2009-11 Station: CS06 Event #: 113 Ship: Tolly UTC Date (dd|mmm|yyyy): 11|Sept|2009

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						
1	365	611	4.96183	50	☒	☒	☒									
2	366	620	5.71117	30	☒	☒	☒									
3	367	621	5.86770	20	☒	☒	☒		☒	☒						
4	368	638	5.93035	10	☒	☒	☒		☒	☒						#639 = 5.92906
5	369	657	5.90944	5	☒	☒	☒		☒	☒						
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MNO

Bottom Depth: 64 m

Transmisso Cleaned: ☒ Y / N

	UTC	Local
Time Start	0657	2357
Bottom	0659	
End	0705	0005

Positional Information

Start Lat: 51 ° 00.04 N
Lon: 128 ° 51.79 W

Bottom Lat: 51 ° 00.05 N
Lon: 128 ° 51.75 W

End Lat: 51 ° 00.03 N
Lon: 128 ° 51.68 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 09|08|09
Analyst: MB.

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: CS07 Event #: 116 Ship: TULLY UTC Date (dd|mmm|yyyy): 11 | Sep | 2009

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						
1	370			50	☒											
2	371			25	☒											
3	372			15	☒											
4	373			5	☒											
5	374			5	☒		☒	☒	☒							
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MMD

Bottom Depth: 64 m

Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Start	0844	0144
Bottom	0847	
End	0853	

Positional Information

Start
 Lat: 51 ° 04 51 N
 Lon: 128 ° 43.99 W

Bottom
 Lat: 51 ° 04 51 N
 Lon: 128 ° 43.96 W

End
 Lat: 51 ° 04 52 N
 Lon: 128 ° 43.88 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

Rosette Log

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

Cruise ID: 2009-11 Station: C509 Event #: 120 Ship: TULLY UTC Date (dd|mmm|yyyy): 11 | Sep | 2009

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						
1	375	715	2.31277	Bot-10	☒	185	✓									
2	376	1105	2.34590	175	☒			✓								
3	377	1301	2.57658	150	☒											
4	378	1321	2.88493	125	☒											
5	379	1333	3.84301	100	☒											
6	380	1374	4.07939	75	☒											
7	381	1174	4.49645	50	☒	✓										#1487 = 4.48807.
8	382	1465	5.95959	30	☒											
9	383	1368	5.88240	20	☒		✓		✓	✓						
10	384	647	5.910420	10	☒				✓	✓						
11	385	700	5.92538	5	☒	✓	✓	✓	✓	✓						
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
M. Dolk

Bottom Depth: 195 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1219	0519
Bottom	1224	0524
End	1237	

Positional Information

Start
Lat: 51 ° 12' 44 N
Lon: 128 ° 27' 91 W

Start

Bottom
Lat: 51 ° 12' 43 N
Lon: 128 ° 27' 86 W

Bottom

End
Lat: 51 ° 12' 42 N
Lon: 128 ° 27' 81 W

End

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 09108109
Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: M4 Event #: 125 Ship: TULLY UTC Date (dd|mmm|yyyy): 11 | Sep | 09

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						
1	388	1298	232386	Bot-10	✓ 421	✓	✓									
2	389	1316	234889	300	✓ 301											
3	390	1393	240648	250	✓ 251											
4	391	1402	243693	200	✓ 200											bubble on probe at end
5	392	2019	243785	175	✓ 175											
6	393	1401	244446	150	✓ 150											
7	394			125	✓ 125											NO SAMPLE
8	395	1377	284170	100	✓ 101	✓			✓							#1313 = 2.79693
9	396	1300	395174	75	✓ 75				✓							
10	397	1314	379111	50	✓ 50				✓							
11	398	3160	479303	30	✓ 30				✓							
12	399	1491	513208	20	✓ 20		✓		✓							
13	400	1395	591440	10	✓ 10		✓		✓							
14	401	690	609850	5	✓ 5	✓	✓	✓	✓							
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):

Bottom Depth: 436 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1848	1148
Bottom	1900	1200
End	1925	1925

Positional Information

Start
Lat: 51 ° 44.65 N
Lon: 128 ° 0.19 W

Bottom
Lat: 51 ° 44.63 N
Lon: 128 ° 0.20 W

End
Lat: 51 ° 44.62 N
Lon: 128 ° 0.22 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 09 | 08 | 09
Analyst: MS.

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: M3 Event #: 126 Ship: Tully UTC Date (dd|mmm|yyyy): 11 | Sep | 09

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						
1	402	2088	2.35400	8-10	☒ 317											
2	403	2065	2.36931	300	☒ 300											
3	404	2040	2.60080	250	☒ 250											
4	405	3194	2.47061	200	☒ 200											
5	406	2061	2.49099	175	☒ 175		☒									
6	407	3177	2.57393	150	☒ 150											
7	400			125	☒ 125											
8	409	2068	2.70158	100	☒ 100				☒							
9	410	1490	3.28574	75	☒ 75	☒			☒							#2090 = 3.26839
10	411	471	4.07939	50	☒ 50				☒							
11	412	3188	4.32725	30	☒ 30				☒							-bubble on probe giv
12	413	2089	4.54797	20	☒ 20				☒	☒						
13	414	3133	4.78065	10	☒ 10				☒							
14	415	2082	5.61906	5	☒ 5			☒	☒							
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Dry/etc

Bottom Depth: 327 m

Transmisso Cleaned: ☒ Y / N

	UTC	Local
Start	2021	1321
Bottom	2029	1329
End	2051	1351

Positional Information

Start
Lat: 51 ° 46.29 N
Lon: 127 ° 54.53 W

Bottom
Lat: 51 ° 46.29 N
Lon: 127 ° 54.57 W

End
Lat: 51 ° 46.32 N
Lon: 127 ° 54.67 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 09 | 08 | 09
Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: 02 Event #: 127 Ship: Tolly UTC Date (dd|mmm|yyyy): 11 | 9 | 09

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						
1	416	1247	2.67412	B-10	✓ 168	✓	✓									
2	417	1320	2.48930	150	✓ 150			✓								
3	418	1400	2.53140	125	✓ 125											
4	419	1175	2.76825	100	✓ 100				✓							
5	420	1209	3.50635	75	✓ 76				✓							
6	421	2020	4.26493	50	✓ 50				✓							
7	422	1384	4.39707	30	✓ 31				✓							
8	423	1406	4.50574	20	✓ 20	✓			✓							
9	424	1373	4.95527	10	✓ 10		✓		✓							
10	425	1146	6.50601	5	✓ 5	✓	✓		✓							
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Dry/etc

Bottom Depth: 175 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2121	1421
Bottom	2126	1426
End	2140	1440

Positional Information
 Start
 Lat: 51 ° 46.47 N
 Lon: 127 ° 53.27 W

Bottom
 Lat: 51 ° 46.46 N
 Lon: 127 ° 53.19 W

End
 Lat: 51 ° 46.48 N
 Lon: 127 ° 53.25 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

Rosette Log

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

Cruise ID: 2009-11 Station: 28 UBC2 Event #: 129 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | 9 | 09

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				
1	426	611	230184	B-10	✓ 150	✓	JW							
2	427	620	2.46877	125	✓ 125	✓								#621 = 2.44863.
3	428	638	2.91883	100	✓ 100									
4	429	657	3.75149	75	✓ 75				✓					
5	430			50	✓ 50				✓					No Trip
6	431	712	5.12686	30	✓ 30				✓					
7	432			20	✓ 20				✓					No Trip
8	433	1105	5.87575	10	✓ 10				✓					"2 Double
9	434			10	✓ 10	✓	JW		✓				no sampling	& tripped "
10	434	1301	6.70912	05		✓	✓		✓					UBC samples
11	435	UBC		0										UBC samples
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): DRY/etc.

Bottom Depth: 160 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2359	1659
Bottom	0003	1703
End	0016	1716

Positional Information

Start

Lat: 51 ° 30.03 N

Lon: 127 ° 49.09 W

Bottom

Lat: 51 ° 30.04 N

Lon: 127 ° 49.10 W

End

Lat: 51 ° 30.07 N

Lon: 127 ° 49.10 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

Rosette Log

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

Cruise ID: 2009-11 Station: R12 Event #: 133 Ship: Tully UTC Date (dd|mmm|yyyy): ____ | ____ | ____

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				
1	437			B-10	✓ 324	✓	✓							
2	434			250	✓ 250	✓	✓							Karyn
3	435			200	✓ 200	✓	✓	✓						
4	436			175	✓ 175	✓	✓							
5	437			150	✓ 150	✓	✓							Karyn
6	438			125	✓ 125	✓	✓							
7	439			100	✓ 100	✓	✓		✓					
8	440			75	✓ 75	✓	✓		✓					Karyn
9	441			50	✓ 50	✓	✓		✓					
10	442			30	✓ 30	✓	✓		✓					
11	443			25	✓ 25									Karyn
12	444			20	✓ 20	✓	✓		✓					
13	445			15	✓ 15									Karyn
14	446			10	✓ 10	✓	✓		✓					
15	447			5	✓ 5	✓	✓		✓					Karyn
16														
17														
18														
19														
20														
21														
22														
23														
24														

NOT SAMPLED
(see 135)

Watchkeeper(s): _____

Bottom Depth: _____ m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0330	2030
Bottom	0338	2038
End	0356	2056

Positional Information		
Start	Lat: 51 ° 31.27	N
	Lon: 127 ° 33.46	W
▼		
Bottom	Lat: 51 ° 31.28	N
	Lon: 127 ° 33.49	W
▼		
End	Lat: 51 ° 31.27	N
	Lon: 127 ° 33.52	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

Rosette Log

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

Cruise ID: 2009-11 Station: R12 Event #: 135 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | 9 | 09

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						
1	437	2088	2.47486	10	✓ 322	✓	✓									
2	438	2065	2.47742	250	✓ 250	✓	✓							*2040 = 2.45710		Karyn
3	439	3194	2.53539	200	✓ 200	✓	✓									
4	440	2061	2.55182	175	✓ 175	✓	✓									
5		—	—	150	✓ 150											
6	441	3177	2.52970	150	✓ 150	✓	✓									Karyn
7		—	—	125	✓ 125											
8	442	3184	2.49253	125	✓ 125	✓	✓									
9	443	2068	3.03615	100	✓ 100	✓	✓		✓							
10	444	1490	3.64143	75	✓ 75	✓	✓		✓							Karyn
11	445	471	4.70382	50	✓ 50	✓	✓		✓							
12	446	3188	4.95362	30	✓ 30	✓	✓		✓							
13	447	—	—	25	✓ 25				✓							Karyn
14	448	2089	4.95127	20	✓ 20	✓	✓		✓							
15	449	—	—	15	✓ 15											Karyn
16	450	3133	4.98710	10	✓ 10	✓	✓		✓							
17	451	2082	5.07188	5	✓ 5	✓	✓		✓							Karyn
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): DRY/etc

Bottom Depth: 331 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0424	2224
Bottom	0432	2232
End	0450	2250

Positional Information
Start
Lat: 51 ° 31.25 N
Lon: 127 ° 33.58 W

Bottom
Lat: 51 ° 31.32 N
Lon: 127 ° 33.63 W

End
Lat: 51 ° 31.15 N
Lon: 127 ° 33.82 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

Rosette Log

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

Cruise ID: 2009-11 Station: R14 Event #: 139 Ship: Tully UTC Date (dd|mmm|yyyy): 12 | 9 | 09

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						
1	452	611	2.39211	B-10	☒	290	☒									
2	453	620	2.43321	250	☒											
3	454	621	2.57639	200	☒											
4	455	638	2.69177	175	☒											
5	456	639	2.74353	150	☒											
6	457	657	2.47075	125	☒											
7	458	712	3.06880	100	☒											
8	459	715	3.79573	75	☒											
9	460	1105	4.04247	50	☒											
10	461	1301	4.32734	30	☒											
11	462	1321	4.60488	20	☒											#1333=4.59679
12	463	1374	4.75095	10	☒											
13	464	1174	4.90063	5	☒											
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MMO

Bottom Depth: 300 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0749	0049
Bottom	0755	0055
End	0810	0110

Positional Information

Start Lat: 51 ° 38.89 N
Lon: 127 ° 26.73 W

Bottom Lat: 51 ° 38.88 N
Lon: 127 ° 26.71 W

End Lat: 51 ° 38.84 N
Lon: 127 ° 26.69 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 091028109
Analyst: MS

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-11 Station: SS7 Event #: 144 Ship: TULLY UTC Date (dd|mmm|yyyy): 12 | SEP | 2009

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						
1	474	1247	2.41375	Bot-10	☒	✓	✓									
2	475	1320	2.78113	100	☒	✓	✓									
3	476	1400	4.55770	75	☒	✓	✓									#1175 = 4.34462
4	477	1209	—	50	☒	✓	✓		✓							froze - not able to get EP.
5	478	2020	5.13257	30	☒	✓	✓		✓							
6	479	1384	5.18453	20	☒	✓	✓		✓							
7	480	1406	5.41896	10	☒	✓	✓		✓							
8	481	1322	5.53616	5	☒	✓	✓	✓	✓							
9																
10																
11																
12																
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14																
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16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MD.

Bottom Depth: 125 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1315	0615
Bottom	1319	0619
End	1330	0630

Positional Information

Start Lat: 51 ° 24.70 N
Lon: 127 ° 47.65 W

Bottom Lat: 51 ° 24.69 N
Lon: 127 ° 47.65 W

End Lat: 51 ° 24.69 N
Lon: 127 ° 47.67 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.718 mL · L⁻¹
*Date Run: 09 | 08 | 09
Analyst: MS.

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