

Chl 500

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: L301 Event #: 1 Ship: TULLY UTC Date (dd mmm yyyy): 2 SEP 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						OXY T	Comments		
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄	HPLC				
1	1	1213	3.493	Bot-10	27	✓	✓		✓	✓	✓			9.6	Trouble starting pump
2	2	1158	4.358	10		✓	✓		✓	✓	✓			10.2	
3	3	1306	5.064	5		✓	✓	✓	✓	✓	✓			10.6	
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SR

Bottom Depth: 34 m

Transmisso Cleaned: Ⓟ 1 N

Time	UTC	Local
Start	1452	0752
Bottom	1454	
End	1456	

Positional Information

Start
 Lat: 48 ° 40.41 N
 Lon: 124 ° 59.48 W

Bottom
 Lat: 48 ° 40.40 N
 Lon: 124 ° 59.48 W

End
 Lat: 48 ° 40.40 N
 Lon: 124 ° 59.48 W

Sept. 2/11
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01 09 2011
 Analyst: JEB-C

* 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: 2011-17 Station: L302 Event #: 2 Ship: TULLY UTC Date (dd|mmm|yyyy): 2 | SEP | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						T Oxy	Comments	
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄				
1	4	1496	2.878	Bot-10		✓	✓						8.2	
2	5	1106	2.959	25		✓	✓		✓	✓			8.7	
3	6	2063 3075	3.987 3.988	10		✓	✓		✓	✓			9.9 9.9	
4	7	1377	5.123	5		✓	✓		✓	✓			10.6	
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): SJR

Bottom Depth: 56 m

Transmisso Cleaned: Y N

Time	UTC	Local
Start	1532	0832
Bottom	1534	
End	1539	

Positional Information

Start
 Lat: 48 ° 38.98 N
 Lon: 125 ° 2.42 W

Bottom
 Lat: 48 ° 38.98 N
 Lon: 125 ° 2.42 W

End
 Lat: 48 ° 38. N
 Lon: 125 ° 2. W

Sept 2/11
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01 09 2011
 Analyst: JPB-C

*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: 2011-17 Station: LR04 Event #: 4 Ship: Tully UTC Date (dd|mmm|yyyy): 2 SEP 2011

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	HPCC		T _{oxy}	
1	8	3019	1.809	8at -10		✓	✓						7.3	
2	9	1314	2.419	75		✓	✓						7.5	
3	10	1128	2.804	50		✓	✓						7.8	
4	11	3189	3.853	25		✓	✓						8.6	
5	12	94	4.434	10		✓	✓	✓					9.9	
6	13	712/3016	4.456/4.456	5		✓	✓		✓	✓	✓		7.1	Bubble on lens - dupA
7	14	1247	5.116	Chl Max	3	✓	✓		✓	✓	✓		10.3	
8	15	2061	4.366	Chl 10	13	✓	✓		✓	✓	✓		9.7	
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): SR

Bottom Depth: 112 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1632	0932
Bottom	1635	
End	1648	

Positional Information

Start Lat: 48 ° 35.65 N
 Lon: 125 ° 8.77 W

Bottom Lat: 48 ° 35.66 N
 Lon: 125 ° 8.77 W

End Lat: 48 ° 35.60 N
 Lon: 125 ° 8.83 W

Sept 2/11
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01 09 2011
 Analyst: JFB-C

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

1-4, 8, 5, 6, 7

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: L306

Event #: 8

Ship: Tully

UTC Date (dd|mmm|yyyy): 2 | SEP | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						T _o	Comments		
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl	NH ₄	HPLC				
1	16	2017	1.588	Bot -10	✓ 105	✓	↓							7.2	
2	17	3190	1.698	75	✓	↓	↓	✓						7.3	
3	18	3177	2.067	50	✓	↓	↓							7.8	
4	19	3034	2.177	25	✓	✓	↓							90/9.0	
7	20	1485	6.325	10	✓	↓	W							12.5	
8	21	1209	6.336	5	✓	↓	↓		2	2	2			12.7	
6	22			CHL MAX	✓ 15	↓	↓		2	2	2				
5	23			CHL 10	✓ 25	↓	↓		2	2	2				
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): MR

Bottom Depth: 115 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1938	1238
Bottom	1941	
End	1949	

Positional Information

Start
 Lat: 48 ° 32.18 N
 Lon: 125 ° 15.52 W

Bottom
 Lat: 48 ° 32.18 N
 Lon: 125 ° 15.51 W

End
 Lat: 48 ° 32.19 N
 Lon: 125 ° 15.50 W

Sept 2/11
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01|09|2011
 Analyst: JER-C

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

X 2 3 4 5 6

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: L308 Event #: 21 Ship: TULLY UTC Date (dd mmm yyyy): 03 SEP 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments	
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl	NH ₄	HPLC	DIC	T _{OXY}				
	1	3043	1.139	Bot-8	/	x	x									7.2	
	2	2019/2020	1.127	125	/	xx	x									7.2 7.2	
	3	668	1.430	100	/	x	x									7.2	
	4	2082	1.552	75	/	x	x									7.3	
	5	657	2.316	50	/	x	x									7.7	
	6	1477	3.698	25	/	x	x									9.1	
	7	1470	4.483	10	/	x	x									10.1	
	8	1312	5.827	5	/	x	xx	x								11.1	
	9			MAX 10	/				xx	xx	xx						
	10			MAX	/				xx	xx	xx						→ MAX @ ~5...
	11			5	/				xx	xx	xx						
	12																
	13																
	14																
	15																
	16																
	17																
	18																
	19																
	20																
	21																
	22																
	23																
	24																

OXY dup 1
1.121

Watchkeeper(s):
MR

Bottom Depth: 135 m

Transmisso Cleaned: Y N

	UTC	Local
Time Start	0416	2116
Bottom	0420	
End	0432	

Positional Information
 Start
 Lat: 48° 25.27 N
 Lon: 125° 28.58 W

Bottom
 Lat: 48° 25.28 N
 Lon: 125° 28.57 W

End
 Lat: 48° 25.29 N
 Lon: 125° 28.61 W

3 Sep. 2011
 Oxygen Info For This Cast
 Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01 SEP 2011
 Analyst: JEB-C

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

~~1 2 3 4 5 6 7 8 11~~

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: 2309 Event #: 23 Ship: TULLY UTC Date (dd|mmm|yyyy): 03 | SEP | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						Comments			
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl	NH ₄					
1	35	3084	1.401	Bot-10	✓ 140	*	**							7.0	1% 108.9 at end!!
2	36	2055	1.429	125	✓	*	*							7.1	stirrer off @ start
3	37	3180	1.292	100	✓	*	*							7.2	
4	38	1367	1.585	75	✓	*	*							7.3	
5	39	1316	2.539	50	✓	*	*							8.1	
6	40	557/715	3.117 3.114	25	✓	**	*							9.0 9.1	
9	41	1174	4.716	10	✓	*	*							10.6	
10	42	1389	5.828	5	✓	*	*	*						11.2	
7	43			MAX 10	✓ 25				**	**					
8	44			MAX	✓ 15				**	**					
11	45			5	✓ 5				**	**					"MAX" @ 5
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): NR

Bottom Depth: 150 m

Transmisso Cleaned: (Y) I N

Time	UTC	Local
Start	0533	2233
Bottom	0536	
End	0546	

Positional Information

Start
 Lat: 48 ° 21.96 N
 Lon: 125 ° 34.82 W

Bottom
 Lat: 48 ° 21.96 N
 Lon: 125 ° 34.79 W

End
 Lat: 48 ° 21.96 N
 Lon: 125 ° 34.83 W

3 Sep. 2011
 Oxygen Info For This Cast
 Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01 Sep 2011
 Analyst: JFB-C

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

X 2 3 4 5 6 7 8 9 10 11

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: LB 11 Event #: 25 Ship: JP TULLY UTC Date (dd|mmm|yyyy): 3 SEP 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							Comments	
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut Froz	Sal	Chl a	NH ₄	GASES	T		
1	46	1213	1.831	Bot-10	195	x	x				xx	7.1		
2	47	1158	1.943	175		x	xx				xx	7.2		
3	48	1306	2.054	150		x	x				xx	7.4		
4	49	1496	3.453	125		x	x				xx	7.9		
5	50	1106	4.158	100		x	x				xx	8.1		
6	51	2063/3025	5.324 5.336	75		xx	x				xx	8.1 8.1		
7	52	1377	6.168	50		x	x				xx	8.6		
8	53	3019	6.776	25		x	x				xx	10.3		
9	54	1314	6.619	10		x	x					12.6		
10	55	1128	6.614	5		x	x	x			xx	12.7		
11	56			CHE MAX	13				xx	xx				
12	57			CHE 10	23				xx	xx				
13	58			5					xx	xx				
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): SR

Bottom Depth: 205 m

Transmisso Cleaned: 1 N

Time	UTC	Local
Start	0715	0015
Bottom	0719	
End	0736	

Positional Information

Start
 Lat: 48° 15.19 N
 Lon: 125° 47.71 W

Bottom
 Lat: 48° 15.15 N
 Lon: 125° 47.75 W

End
 Lat: 48° 15.19 N
 Lon: 125° 47.73 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01|09|2011
 Analyst: JEB-C

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

1-8, 12, 11, 9, 10, 13

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: L812 Event #: 27 Ship: Tully UTC Date (dd|mmm|yyyy): 3|SEP|2011

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	HPLC	NUT COOL	T		
1	59	8056	0.094	Bot-10	502	x	x					x		6.2	lost oxy sample*
2	60	3061	0.934	400		x	x	x				x		6.5	
3	61	3178	1.473	300		x	x							6.8	
4	62	1201	1.983	250		x	x							7.1	Crud in Oxy sample
5	63	1414	1.912	200		x	x							7.4	Weird titrate curve
6	64	570	2.651	175		x	x	x						7.6	
7	65	1386	2.818	150		x	x							7.9	
8	66	3107	3.298	125		x	x							8.0	
9	67	1335	3.915	100		x	x							8.2	
10	68	1134/818	5.048 5.056	75		x	x							8.3 8.4	
11	69	2000	6.306	50		x	x							8.9	
12	70	3135	6.821	25		x	x							11.9	
13	71	1459	6.485	10		x	x							13.2	
14	72	1327	6.495	5		x	x	x						13.2	
15	73	615		MAX +10	18				xx	xx	xx				
16	74	815		MAX	8				xx	xx	xx				
17	75	3169		5					xx	xx	xx				
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SR

Bottom Depth: 508 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0908	0208
Bottom	0920	
End	0948	

Positional Information

Start
Lat: 48 ° 12.90 N
Lon: 125 ° 51.83 W

Bottom
Lat: 48 ° 12.90 N
Lon: 125 ° 51.87 W

End
Lat: 48 ° 12.91 N
Lon: 125 ° 51.88 W

Oxygen Info For This Cast

Blank Value: 0.0023 mL·L⁻¹

Std Value: 0.705 mL·L⁻¹

*Date Run: 01 Sep 2011

Analyst: JTB-C

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

1-12, 15, 13, 16, 14, 17

* dosed 0.088 ml before re-running

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LB14

Event #: 29

Ship: Tully

UTC Date (dd mmm yyyy): 03 SEP 2011

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	NUT COOL	HPDC		T	
1	76	559	0.423	Bot-10	1172		↓				X		4.8		Tiny bubbles on lens
2	77	2088	0.298	1000			↓	X			X		5.4		"
3	78	1491	0.254	750			XX				XX		5.8		
4	79	2015	0.695	500							X		6.5		
5	80	632	1.047	400							X		6.8		
6	81	552	1.576	300									7.0		
7	82	3121	1.890	250			↓						7.5		
8	83	1085/2090	2.630/2.634	200			XX						7.7/7.8		
9	84	1218	2.795	175									7.9		
10	85	1175	2.869	150									8.1		
11	86	1465	3.416	125									8.4		
12	87	3198	4.181	100									8.6		
13	88	3188	5.622	75									8.8		
14	89	510	6.712	50									9.6		
15	90	620	6.874	25									13.3		
16	91(94)	1333		10(16)			↓	↓					15.2		
17	92	611	6.051	5			↓	↓	X				15.4		- wrong depth entered in log shud be 5m
18	93			CHL MAX	6					2	2		2		
19	94			CHL-10	16					2	2		2		
20	95			5						2	2		2		
21				300											
22	91	1333	6.040	10m									15.3		
23															
24															

Watchkeeper(s): SR

Bottom Depth: 1172 m

Transmisso Cleaned: Y/N

Time	UTC	Local
Start	1141	0441
Bottom	1159	
End	1240	

Positional Information

Start
 Lat: 48 ° 8.46 N
 Lon: 125 ° 59.93 W

Bottom
 Lat: 48 ° 8.46 N
 Lon: 125 ° 59.92 W

End
 Lat: 48 ° 8.43 N
 Lon: 125 ° 59.90 W

Sept. 3, 2011

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹

Std Value: 0.705 mL·L⁻¹

*Date Run: 01 09 2011

Analyst: JBB-C

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

1, 15, 19, 16¹⁸, 17, 20

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LC 11

Event #: 34

Ship: Tully

UTC Date (dd|mmm|yyyy): 04 | SEP | 2011

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	HPLC	NUT COOL		T				
1	1	96	2019	0.727	B-10	✓	1450	↓	↓					X	3.8			Oxy Samples
2	2	97	3187	0.407	1250	✓		↓	↓	X				X	4.1			not shaken
3	3	98	1313	0.221	1000	✓		↓	↓					X	4.9			twice - no water
4	4	99	1389	0.226	750	✓		↓	XX					XX	5.6			on top.
5	5	100	1337	0.597	500	✓		↓	↓					X	6.3			
6	6	101	2051/3188	0.912/0.911	400	✓		XX	↓					X	6.5/6.7			
7	7	102	1367	1.597	300	✓		↓	↓						7.1			
8	8	103	1316	2.147	250	✓		↓	↓						7.4			
9	9	104	557	2.518	200	✓		↓	↓						7.8			
10	10	105	715	2.646	175	✓		↓	↓						8.0			
11	11	106	1477	2.927	150	✓		↓	↓						8.3			
12	12	107	1470	3.791	125	✓		↓	XX						8.3			
13	13	108	1312/1478	4.798/4.793	100	✓		XX	↓						8.7/8.9			
14	14	109	3043	6.230	75	✓		↓	↓						9.2			
15	15	110	668	7.064	50	✓		↓	↓						10.1			
16	16	111	1174	6.042	25	✓		↓	↓						15.5			
17	17	112	2086	6.085	10	✓		↓	↓						15.9			
18	18	113	3084	6.112	5	✓		↓	↓	X					16.1			Top valve open
19	19	114			CHI MAX	✓	55				2	2	2					MAX
20	20	115			CHI*10	✓	25				2	2	2					2 nd MAX
21	21	116			5	✓					2	2	2					
22	22																	
23	23																	
24	24																	

Watchkeeper(s): ML

Bottom Depth: 1451 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0019	1719
Bottom	0047	
End	0127	

Positional Information

Start
 Lat: 48° 18.91 N
 Lon: 126° 26.65 W

Bottom
 Lat: 48° 18.94 N
 Lon: 126° 26.69 W

End
 Lat: 48° 18.93 N
 Lon: 126° 26.75 W

Sept 4/11
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.705 mL·L⁻¹
 *Date Run: 01 | 09 | 2011
 Analyst: JEB-C

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

1-14, 19, 15, 16+20, 17, 18+21

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LC09/A3

Event #: 36

Ship: Tully

UTC Date (dd|mmm|yyyy): 04|Sep|2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments			
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy MR	Nut NR	Sal MB	Chl DW a	NH ₄ DW	DIC AC	HPLC DW	NUT COOL				
1	1	117	1213	0.336	B-10	✓							X		X	5.9	
2	2	118	1158	0.613	500	✓			X	X			X		XX	6.1	
3	3	119	1306	0.933	400	✓							XX		X	6.4	
4	4	120	1496	1.809	300	✓							X			6.9	
5	5	121	1106 2063	2.445 2.443	250	✓		X					X			7.1 7.3	
6	6	122	3189	2.874	200	✓							X			7.6	
7	7	123	1377	3.053	175	✓										7.9	
8	8	124	3019	3.423	150	✓										8.1	
9	9	125	1314	3.734	125	✓										8.4	
10	10	126	1128	4.310	100	✓							XX			8.4	
11	11	127	3015/94	5.953 5.964	75	✓		X								8.6 8.8	
12	12	128	712	6.844	50	✓							X			9.6	
14	13	129	3016	6.666	25	✓			X				X			13.5	
16	14	130	1247	6.700	15	✓										14.3	
17	15	131	2061	7.105	10	✓							X			14.7	
18	16	132	2017	7.350	5	✓			X				X			15.1	Bubble on lens OXY poor curve
13	17	133			CHI*10%	✓	30						2	2	2		
15	18	134			CHI*MAX	✓	20						2	2	2		
19	19	135			5	✓							2	2	2		VERY HIGH FLUO ↑
	20																
	21																
	22																
	23																
	24																

Watchkeeper(s): HR

Bottom Depth: 605 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0342	2042
Bottom	0353	
End	0418	2118

Positional Information

Start
 Lat: 48°25.92 N
 Lon: 126°13.69 W

Bottom
 Lat: 48°25.91 N
 Lon: 126°13.69 W

End
 Lat: 48°25.93 N
 Lon: 126°13.68 W

Sep 4/11 10:30 am local
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7047 mL·L⁻¹
 *Date Run: 04|09|11
 Analyst: JDS-C

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

1-12 17 18 19 20 21 22 23 24

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: LC08/A1 Event #: 40 Ship: LP TOLLY UTC Date (dd|mmm|yyyy): 4|SEP|2011

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	136	2019	2.240	B01-10		X	X					7.3	
2	137	3187	2.505	175		X	X					7.5	
3	138	1313/1389	3.132/3.128	150		X	X					7.8/7.9	
4	139	1337	3.543	125		X	X					8.0	
5	140	2051	4.353	100		X	X					8.1	
6	141	1477	5.398	75		X	XX					8.2	
7	142	715	6.489	50		X	X					8.8	
8	143	557	6.282	25		X	X					12.2	
9	144	3180	7.141	10		X	X					13.7	
10	145	1316	7.451	5		X	X	X				13.9	
11	146			CHL MAX	3				XX	XX			
12	147			BHL-10	13				XX	XX			
13	148			5					XX	XX			
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													

Watchkeeper(s): SR

Bottom Depth: 198 m

Transmisso Cleaned: Y / N

	UTC	Local
Time Start	0715	0015
Bottom	0720	
End	0738	

Positional Information

Start
 Lat: 48 ° 29.42 N
 Lon: 126 ° 7.09 W

Bottom
 Lat: 48 ° 29.43 N
 Lon: 126 ° 7.06 W

End
 Lat: 48 ° 29.44 N
 Lon: 126 ° 7.08 W

Sept 4/11 11:45 start
 Oxygen Info For This Cast
 Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7047 mL·L⁻¹
 *Date Run: 04|09|2011
 Analyst: JEB-C

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

1-8, 12, 9, 10, 13, 11

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LC06

Event #: 44

Ship: Tully

UTC Date (dd|mmm|yyyy): 4 SEP 2011

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	HPLC	DIC		
1	149	1367	2.436	BOT-10								X		7.7
2	150	1470	2.758	75								X		7.7
3	151	1312/1498	2.962	50		XX						X		8.0/8.1
4	152	3043	3.499	25			XX					XX		9.0
5	153	3668	4.181	10								XX		10.3
6	154	1174	8.457	5		↓	↓	X				X		12.3
7	155	1174		CHL MAX	8				2	2	2			
8	156			CHL-10	18				2	2	2			
9	157			5					2	2	2			Was not fired, took
10														5m water from botb
11														which was 5m water also
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): SRZ

Bottom Depth: 92 m

Transmisso Cleaned: (Y) / N

	UTC	Local
Start	1009	0309
Bottom	1011	
End	1020	

Positional Information

Start
 Lat: 48° 36' 48" N
 Lon: 125° 53' 96" W

Bottom
 Lat: 48° 36' 49" N
 Lon: 125° 53' 97" W

End
 Lat: 48° 36' 50" N
 Lon: 125° 54' 01" W

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7047 mL·L⁻¹
 *Date Run: 04:09:2011
 Analyst: JERC

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

dup @ 50
1498 = 2045

1-4, 8, 5, 7, 6, 9

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: LC04 Event #: 47 Ship: Tully UTC Date (dd|mmm|yyyy): 4 Sep 2011

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	HPLC		T (°C)
1	158	2056	2.185	B-10		↓	↓						7.9
2	159	3061	1.956	125				X					8.0
3	160	3178	1.967	100		↓						*	8.1
4	161	1201	2.007	75			XX						8.3
5	162	570	2.675	50		XX	↓						8.7
6	163	1414/3107	3.483 3.492	25		XX	↓						9.8/9.9
7	164			15		Bct12	Bct12		2	2	2		
8	165	1335	5.082	10		↓	↓						11.5
9	166	1134	8.411	5				X					13.1
10	167	3118		CHLMAX	12				2	2	2		
11	168			CHL-10	22				2	2	2		
12	169	1386	4.069	15		X			2	2	2		10.5
13													
14													
15													
16	oxy comments: NOT Shaker twice until 9 hrs late + water added then.												
17													
18	*Flush This -big bubbles on base of syringe barrel												
19													
20													
21													
22													
23													
24													

Watchkeeper(s): SR

Bottom Depth: 167 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1217	0517
Bottom	1220	
End	1240	

Positional Information
 Start
 Lat: 48° 43.48 N
 Lon: 125° 40.78 W

Bottom
 Lat: 48° 43.43 N
 Lon: 125° 40.85 W

End
 Lat: 48° 43.44 N
 Lon: 125° 41.05 W

Sept 4/11 17:45 local
 Oxygen Info For This Cast
 Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7047 mL·L⁻¹
 *Date Run: 04:09:2011
 Analyst: JEB:c

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

1-6, 11, 12, 10, 8, 9, ~~12~~
 X

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LC02

Event #: 49

Ship: Tully

UTC Date (dd mmm yyyy): 4 SEP 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							T _{oxy}	Comments			
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄	DIC						
1	170	559	2.656	B-10	100		↓						X			8.2	
2	171	2088	2.979	75			↓						X			8.3	oxy) from same
3	172	1491	2.979	50			XX						XX			8.6	oxy) bottle?
4	173	2015 632	3.849 3.851	25		XX	↓						X			9.9 9.9	
5	174	552	5.109	10		↓	↓						X			12.1	
6	175	3121	7.870	5		↓	↓	X					X			13.7	
7	176			CHLMX	6					2	2						
8	177			CHL+10	16					2	2						
9	178			5						2	2						
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

oxy from wrong bottle?

Watchkeeper(s): SRZ

Bottom Depth: 110 m

Transmisso Cleaned: Y N

Time	UTC	Local
Start	1357	0657
Bottom	1400	
End	1409	

Positional Information

Start
 Lat: 48° 48.69 N
 Lon: 125° 30.91 W

Bottom
 Lat: 48° 48.69 N
 Lon: 125° 30.91 W

End
 Lat: 48° 48.70 N
 Lon: 125° 30.93 W

Sept 4/11 2:30pm loc.
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7047 mL·L⁻¹
 *Date Run: 04 09 2011
 Analyst: JES

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

1-4, 8, 5, 7, 6, 9

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LC 01

Event #: 50

Ship: Tolly

UTC Date (dd mmm/yyyy): 2011 09 04

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							T _{oxy}	Comments		
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄	HPLC					
1	179	1085	2.741	B-10	✓ 87	↓	↓								8.3	
2	180	2090	2.862	50	✓	↓	↓								8.6	
3	181	1218 1175	3.523 3.549	25	✓	XX	↓								9.6 9.7	
4	182	1465	4.744	10	✓	↓	XX								11.3	
5	183	3198	5.991	5	✓	↓	↓	X							12.5	
6	184			CHL MX	✓ 7				2	2	2					2° Max
7	185			CHL-10	✓ 17				2	2	2					
8	186			5	✓ 2				2	2	2					Real Max @ C
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
SK DW 74

Bottom Depth: 97 m

Transmisso Cleaned: (Y) N

	Time	UTC	Local
Start		1439	0739
Bottom		1441	
End		1450	

Positional Information

Start
Lat: 48 ° 50.43 N
Lon: 48 ° 50.42 W

Bottom
Lat: 125 ° 27.76 N
Lon: 125 ° 27.73 W

End
Lat: 48 ° 50.37 N
Lon: 125 ° 27.76 W

Sept 4/11 1507 local
Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
Std Value: 0.3047 mL·L⁻¹
*Date Run: 04 09 2011
Analyst: JRB-C
*Oxygen blanks and standards should be run daily, if possible

↓ 2 3 7 4 6 5 8
↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: LD04 Event #: 55 Ship: Tully UTC Date (dd|mmm|yyyy): 4|SEP|2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							T oxy	Comments		
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄	#PLC					
1	187	3188	2.808	B-10	52	↓	↓								8.2	
2	188	510 620	3.377 3.565	25		XX	↓								8.5 8.5	
3	189	611	4.381	10		↓	XX								10.3	
4	190	1333	7.084	5		↓	↓	X							12.2	
5	191			CHL MAX	5				2	2	2					
6	192			CHL-10	15				2	2	2					
7	193			5					2	2	2					
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

FILTERED ONLY @ 1933
8 HRS AFTER COLLECTION!

Watchkeeper(s): STR + MR

Bottom Depth: 63 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1835	1135
Bottom	1837	
End	1844	1144

Positional Information
 Start
 Lat: 48° 53.17 N
 Lon: 125° 56.99 W

Bottom
 Lat: 48° 53.17 N
 Lon: 125° 56.98 W

End
 Lat: 48° 53.17 N
 Lon: 125° 57.00 W

Sept 4/11 15:32 loc.
Oxygen Info For This Cast
 Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7047 mL·L⁻¹
 *Date Run: 04 09 2011
 Analyst: TEB-C

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

↓ 2 ↓ 6 3/4 5 7

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: L007

Event #: 59

Ship: JP TULLY

UTC Date (dd|mmm|yyyy): 4 | 9 | 11

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments	
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut FR02	Sal	Chl a	NH ₄	APC	GASES	NUT COOL		T
1	194	1213 ✓	0.704	Bot-10	✓ 466	↓	↓					x x	x	6.1	
2	195	1158 ✓	0.687	500	✓ 466	↓	↓					x x	x	6.1	
3	196	1306 ✓	0.915	400	✓	↓	↓	x				x x	x x	6.3	
4	197	1496 ✓	1.309	300	✓	↓	↓					x x		6.3	
5	198	1106 ✓ 2063 ✓	1.463 1.470	250	✓	x x	↓					x x		6.8%	
6	199	3189 ✓	1.761	200	✓	↓	↓					x x		7.0	
7	200	1377 ✓	2.185	175	✓	↓	↓					x x		7.3	
8	201	3019 ✓	2.178	150	✓	↓	↓					x x		7.5	
9	202	1314 ✓	2.938	125	✓	↓	↓					x x		7.8	
10	203	1128 ✓	3.417	100	✓	↓	↓					x x		7.9	
11	204	3075 ✓	4.185	75	✓	↓	↓					x x		8.0	
12	205	94 ✓	5.553	50	✓	↓	↓	x x				x x		8.2	
13	206	712 ✓ 3016 ✓	6.794 6.778	25	✓	x x	↓					x x		9.9 9.9	
14	207	1247 ✓	6.383	10	✓	↓	↓							11.8	
15	208	2061 ✓	8.535	5	✓	↓	↓	x				x x		12.9	
16	209			CHL*10	✓ 18				x x	x x	x x				
17	210			CHL*10	✓ 8				x x	x x	x x				
18	211			5	✓ 5				x x	x x	x x				
19															
20															
21															
22															
23															
24															

Watchkeeper(s): JM

Bottom Depth: 468 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2118	1418
Bottom	2126	1426
End	2151	1451

Positional Information

Start	Lat: 48 ° 42.65 N	Lon: 126 ° 16.73 W
Bottom	Lat: 48 ° 42.65 N	Lon: 126 ° 16.71 W
End	Lat: 48 ° 42.67 N	Lon: 126 ° 16.77 W

Sept 4/11 1745 local
Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.8047 mL·L⁻¹
 *Date Run: 04 | 09 | 2011
 Analyst: JTB-C

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

↓ 2 ✓ 3 ✓ 4 ✓ 5 ✓ 6 ✓ 7 ✓ 8 ✓ 9 ✓ 10 ✓ 11 ✓ 12 ✓ 13 ✓ 14 ✓ 15 ✓ 18

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: LD09 Event #: 61 Ship: JP TULLY UTC Date (dd mmm yyyy): 05 SEP 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments		
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut FROZ	Sal	Chl a	NH ₄	HPLC	NOT COOL	PHYTO	TO				
1	212	2019	0.302	800-16	✓ 1050	↓	↓										4.5	
2	213	3157	0.211	750	✓		xx										5.2	
3	214	1313	0.522	500	✓			x									5.9	
4	215	1389	0.908	400	✓												6.2	
5	216	1337	1.592	300	✓	↓											6.5	
6	217	2051/1471	2.310 2.300	250	✓		xx										6.9 7.0	
7	218	715	2.717	200	✓												7.3	
8	219	557	2.780	175	✓												7.5	
9	220	3180	3.162	150	✓												7.7	
10	221	1316	3.797	125	✓												7.9	
11	222	1367	4.302	100	✓												8.1	
12	223	1470	6.175	75	✓		↓										8.6	
13	224	1312	6.791	50	✓		xx										9.1	
14	225	1498	6.663	25	✓	↓	↓										14.1	
15	226	3043/1668	5.913 5.911	10	✓		xx										16.7 16.8	
16	227	1174	5.906	5	✓	↓	↓	x									16.8	
17	228			CHL=10	✓ 45				xx	xx	xx							2 nd peak
18	229			CHL MAX	✓ 25				xx	xx	xx							1 st peak
19	230			5	✓				xx	xx	xx		x					
20																		
21																		
22																		
23																		
24																		

Watchkeeper(s): MR

Bottom Depth: 1055 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0035	1735
Bottom	0056	
End	0131	1831

Positional Information

Start
 Lat: 48° 35.67 N
 Lon: 126° 29.99 W

Bottom
 Lat: 48° 35.68 N
 Lon: 126° 30.00 W

End
 Lat: 48° 35.70 N
 Lon: 126° 29.99 W

Sept. 4/11 20:18 local

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7047 mL·L⁻¹
 *Date Run: 04 09 2011
 Analyst: JEB-C

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

1-13 17 18 14 15 16 19

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LD11

Event #: 65

Ship: JP TULLY

UTC Date (dd mmm yyyy): 05 SEP 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments		
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed Pressure	Oxy SR/HR	Nut	Sal M	Chl A ₂	NH ₄ M	HALE AL	NBT COOL	GASES	T ₀				
1	1	231	559	0.779	Bot 10	✓	1595								X		3.8	LEAKING
2	2	232	2088	0.622	1500	✓				X					X		3.8	
3	3	233	1491	0.398	1250	✓									X		4.2	
4	4	234	2051	0.234	1000	✓									XX		4.8	
5	5	235	632	0.216	750	✓									X		5.5	
6	6	236	552 1465	0.608 0.612	500	✓		XX							X		6.2	
7	7	237	1175	1.070	400	✓									X		6.5	
8	8	238	1218	2.045	300	✓											6.8	
9	9	239	2090	2.511	250	✓											7.1	
10	10	240	1085	3.138	200	✓											7.5	
11	11	241	3121	3.351	175	✓											7.7	
12	12	242	3198	3.697	150	✓											7.9	
13	13	243	3188	3.849	125	✓											8.1	
14	14	244	510	4.538	100	✓		↓	XX								8.3	
15	15	245	620 611	5.707 5.709	75	✓		XX									8.7 8.7	
16	16	246	1333	6.817	50	✓											9.5	
17	17	247	3094	5.802	25	✓											16.8	
18	18	248	505/319	5.771 5.785	10	✓		X									17.0 17.0	
19	19	249	3100	5.774	5	✓		↓	↓	X						XX	17.0	
20	20	250			CHLOR	✓	35				XX	XX	XX					
21	21	251			CHLOR	✓	45				XX	XX	XX					
22	22	252			5	✓					XX	XX	XX					
23																		
24																		

Watchkeeper(s): MR

Bottom Depth: 1587 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0529	2229
Bottom	0559	
End	0644	2344

Positional Information

Start
 Lat: 48 ° 28.77 N
 Lon: 126 ° 42.94 W

Bottom
 Lat: 48 ° 28.78 N
 Lon: 126 ° 42.89 W

End
 Lat: 48 ° 28.76 N
 Lon: 126 ° 42.92 W

Sept 5/11 12:35 local
 Oxygen Info For This Cast
 Blank Value: 0.0033 mL · L⁻¹
 Std Value: 0.7043 mL · L⁻¹
 *Date Run: 05 09 2011
 Analyst: JEB-C

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

1-16 ~~21~~ ~~20~~ ~~17~~ ~~18~~ ~~19~~ ~~22~~

Water Properties Group

Rosette Log

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

Cruise ID: 201117

Station: LG09

Event #: 66

Ship: Tully

UTC Date (dd mmm yyyy): 5 SEP 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							Comments		
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut F2O2	Sal	Chl a	NH ₄	APPC	NUT COOL		GASES	T
1	253	1213	1.477	Box-10	2000								X	4.0	Tiny bubbles on oxy
2	254	1158	0.651	1500									X	4.3	No DMP added to OXYs for this cast.
3	255	1306	0.345	1250				X					X	4.7	
4	256	1496	0.245	1000				XX					XX	5.2	
5	257	1106	0.234	750									X	5.8	
6	258	2065/3189	0.712/0.672	500				XX					X	6.3/6.3	*Tiny bubbles on 258A
7	259	1377	1.110	400									X	6.4	
8	260	3019	1.600	300										6.9	
9	261	1314	2.280	250										7.2	
10	262	1128	2.409	200										7.6	
11	263	3075	2.844	175										7.8	
12	264	94	3.103	150										8.1	
13	265	712	3.872	125										8.5	Bot 13 drawn after all the others due to a stopper coming off
14	266	3016	4.545	100										8.4	
15	267	1247	5.952	75										8.5	
16	268	2061	6.508	50										9.4	
17	269	2017/2047	5.834/6.840	25										15.9/15.9	fired 17 and then 21
18	270	3177	6.138	15										15.9	
19	271	3034	6.204	10										15.7	
20	272	3190	6.106	5										15.9	
21	273			CHL x 10	28										
22	274			CHL Max	18										
23	275			5											
24															

Watchkeeper(s): STR

Bottom Depth: 2056 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1055	0355
Bottom	1136	
End	1236	

Positional Information

Start
 Lat: 48° 51.19 N
 Lon: 127° 19.38 W

Bottom
 Lat: 48° 51.19 N
 Lon: 127° 19.37 W

End
 Lat: 48° 51.17 N
 Lon: 127° 19.43 W

Sept 5/11 14:10 local
 Oxygen Info For This Cast
 Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7043 mL·L⁻¹
 *Date Run: 05 SEP 2011
 Analyst: JBC

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

1-16, 21, 17, 22, 18, 19, 20, 23

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: LG06 Event #: 71 Ship: Tully UTC Date (dd|mmm|yyyy): 05 SEP 2011

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	HPLC	NAT COOI		T ₀₊₄			
1	1	276	2056	0.212	B-10	✓	970	↓	↓							5.1	
2	2	277	3061	0.205	750	✓		↓	↓	X						5.4	
3	3	278	3178	0.621	500	✓		↓	↓	XX						6.2	
4	4	279	1201	0.825	400	✓		↓	↓							6.3	
5	5	280	570	1.134	300	✓		↓	↓							6.6	
6	6	281	1414 1386	1.581 1.577	250	✓		XX	↓							6.9 7.0	
7	7	282	3107	1.899	200	✓		↓	↓							7.2	
8	8	283	1335	1.967	175	✓		↓	↓							7.4	
9	9	284	1134	2.856	150	✓		↓	↓							7.7	
10	10	285	3118	3.503	125	✓		↓	↓							7.9	
11	11	286	2060	5.157	100	✓		↓	↓	XX						8.0	
12	12	287	3135	5.786	75	✓		↓	↓							8.1	
13	13	288	1459 1327	6.388 6.382	50	✓		XX	↓							8.5 8.7	
14	14	289	3116	5.370	25	✓		↓	↓							9.9	
15	15	290	612	6.139	10	✓		↓	↓							11.9	
16	16	291	3164	8.022	5	✓		↓	↓	X						12.9	
17	17	292			Chl 10	✓	25 m				2	2	2				
18	18	293			Chl 15	✓	15 m				2	2	2				
19	19	294			5	✓					2	2	2				
20	20																
21	21																
22	22																
23	23																
24	24																

Watchkeeper(s): SR / MR

Bottom Depth: 970 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1813	1113
Bottom	1833	
End	1909	

Positional Information

Start Lat: 49°03.49 N Lon: 127°01.21 W

Bottom Lat: 49°03.50 N Lon: 127°01.18 W

End Lat: 49°03.50 N Lon: 127°01.19 W

Sept. 5/11 ~ 17:30 local
Oxygen Info For This Cast

Blank Value: 0.0023 mL·L⁻¹
Std Value: 0.7043 mL·L⁻¹
*Date Run: 05 09 2011
Analyst: JFBC

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

2010 colour meter

14, 17, 18, 18, 16, 18

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: 1604 Event #: 73 Ship: JP TOLUY UTC Date (dd mmm yyyy): 5 9 2011

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	APC	GASES						
1	295	2019	1.751	B-10	✓ 135	↓	↓								xx			7.3
2	296	3187	1.827	125	✓	↓	↓								xx			7.3
3	297	1313	2.509	106	✓	↓	xx								xx			7.5
4	298	1389	2.642	75	✓	↓	↓								xx			7.6
5	299	1337/2051	3.047/3.058	50	✓	xx	↓								xx			8.0 18.0
6	300	1477	2.828	25	✓	↓	↓								xx			8.8
7	301	715	8.078	10	✓	↓	↓											13.5
8	302	557	8.256	5	✓	↓	↓	x							xx			14.2
9	303			CHL*10	✓ 22				xx	xx	xx							
10	304			CHL MAX	✓ 12				xx	xx	xx							
11	305			5	✓ 5				xx	xx	xx							
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Watchkeeper(s): MV MB

Bottom Depth: 145 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2049	1349
Bottom	2052	1352
End	2105	1405

Positional Information

Start Lat: 49 ° 11.35 N
 Lon: 126 ° 49.40 W

Bottom Lat: 49 ° 11.32 N
 Lon: 126 ° 49.45 W

End Lat: 49 ° 11.30 N
 Lon: 126 ° 49.44 W

Sept 5/11 19:30 loc.

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹

Std Value: 0.7043 mL·L⁻¹

*Date Run: 05 09 2011

Analyst: JEB-C

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

↓ 2 ↓ 3 ↓ 4 ↓ 5 ↓ 6 ↓ 9 ↓ 19 ↓ 7 ↓ 8 ↓ 11

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: KG02 Event #: 76 Ship: JPTULLY UTC Date (dd|mmm|yyyy): 5|9|2011

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	HPLC			
1	306	1316	0.668	B-10	✓ 90	↓	↓						76	LEAKING!
2	307	1367	0.878	75	✓	↓	↓						77	
3	308	1470	2.483	50	✓	↓	↓						8.9	
4	309	1312	3.353	25	✓	↓	↓						9.6	
5	310	1498/3043	3.822 3.833	15	✓	xx	↓						10.1/10.1	KARYN
6	311	668	4.288	10	✓	↓	xx						10.5	
7	312	1174	8.365	5	✓	↓	↓	x					13.3	
8	313			CHL*10	✓ 23				xx	xx	xx			
9	314			CHL MAX	✓ 13				xx	xx	xx			Max on downcast
10	315			5	✓				xx	xx	xx			Max on upcast!
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

✓ check SA#

Watchkeeper(s): JY MG

Bottom Depth: 100 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2253	1513
Bottom	2256	1516
End	2306	1606

Positional Information
 Start
 Lat: 49 ° 18.69 N
 Lon: 126 ° 38.12 W

Bottom
 Lat: 49 ° 18.70 N
 Lon: 126 ° 38.12 W

End
 Lat: 49 ° 18.71 N
 Lon: 126 ° 38.06 W

Sept. 5/11 ~ 2000 loc.

Oxygen Info For This Cast
 Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7043 mL·L⁻¹
 *Date Run: 05|09|2011
 Analyst: JFB-C

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

1 ✓ 2 ✓ 3 ✓ 4 ✓ 5 ✓ 6 ✓ 7 ✓ 8 ✓ 9 ✓ 10 ✓

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: 2601 Event #: 78 Ship: JP TULLY UTC Date (dd mmm yyyy): 05 SEP 2011

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	T		
1	316	3084	2.652	B-10	✓ 43							9.2	leaking
2	317	2080	2.741	25	✓		x					9.2	leaking A LOT
3	318	2082/2055	4.166/4.163	10	✓	x						10.3/10.3	
4	319	657	6.206	5	✓	↓	↓	x				12.1	
5	320			CHL=10	✓ 25				xx	xx			
6	321			CHL MAX	✓ 10				xx	xx			
7	322			5	✓ 5				xx	xx			MAX
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													

Watchkeeper(s): HR

Bottom Depth: 52 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2351	1651
Bottom	2353	
End	2357	

Positional Information

Start Lat: 49° 20.55 N
 Lon: 126° 34.93 W

Bottom Lat: 49° 20.55 N
 Lon: 126° 34.94 W

End Lat: 49° 20.54 N
 Lon: 126° 35.00 W

Sept 5/11 2045 loc.
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7043 mL·L⁻¹
 *Date Run: 05/09/2011
 Analyst: JEB-C
 *Oxygen blanks and standards should be run daily, if possible

x 2 5 6 3 4 7

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LBP7

Event #: 93

Ship: Tolly

UTC Date (dd mmm yyyy): 6 9 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							T Oxy	Comments	
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄	HPLC	NUT COOL			UBC
1	323	2056	1.493	2000	✓ 2000		↓					X	xx	3.8	in sum
2	324	3061	0.728	1500	✓		XX					XX	xx	3.7	
3	325	2178	0.380	1250	✓			+5				X	xx	4.4	sal test.
4	326	1201	0.258	1000	✓							X	xx	4.7	
5	327	570	0.272	750	✓							X	xx	5.6	
6	328	1414 1386	0.647 0.644	500	✓		XX					X	xx	6.3 6.4	
7	329	2107	0.930	400	✓							X	xx	6.6	
8	330	1335	1.338	300	✓								xx	6.9	
9	331	1134	1.664	250	✓								xx	7.2	
10	332	3118	1.941	200	✓								xx	7.4	
11	333	2060	1.977	175	✓								xx	7.5	
12	334	3135	2.176	150	✓								xx	7.5	
13	335	1459	3.125	125	✓								xx	7.7	
14	336	1327	3.856	100	✓								xx	7.9	
15	337	3116	3.529	75	✓								xx	8.1	
16	338	612 3164	4.192 4.200	50	✓		XX						xx	8.4 8.5	
17	339	1460	4.748	25	✓		↓	XX					xx	10.1	
23	340	2000		10			↓	↓						14.2	not sampled Closed 15 @ 20
19	341	1302	6.424	5	✓		↓	↓	X↓				xx	14.2	
20	342			PHL+10	✓ 20					2	2	2			
21	343			PHMX	✓ 10					2	2	2			
22	344			5	✓ -					2	2	2			
23	340	2000	6.124	10	✓									12.5	
24															

Watchkeeper(s): My MS

Bottom Depth: 2189 m

Transmisso Cleaned: Y N

	UTC	Local
Time Start	2114	1414
Bottom	2159	1459
End	2255	

Positional Information

Start
Lat: 49° 52.42 N
Lon: 128° 11.18 W

Bottom
Lat: 49° 52.41 N
Lon: 128° 11.19 W

End
Lat: 49° 52.39 N
Lon: 128° 11.19 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹

Std Value: 0.7033 mL·L⁻¹

*Date Run: 06 09 2011

Analyst: JEB-C

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

1-17 20 18 21 19 22
23

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: LBP5

Event #: 96

Ship: IP JULY

UTC Date (dd mmm/yyyy): 07 Sep 2011

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	HPLC	NUT COOL		T	
1	345	1213	0.563	Bot-18	✓ 1275		xx					xx		3.9	
2	346	1158	0.324	1000	✓							x		4.4	Removed swimmer in Oxy sample
3	347	1306	0.280	750	✓			x				x		5.3	
4	348	1496	0.643	500	✓	↓						x		6.1	
5	349	94/112	0.887	400	✓			xx				x		6.4 6.5	
6	350	3189	1.451	300	✓									6.7	
7	351	1377	1.696	250	✓									7.1	
8	352	3019	1.913	200	✓									7.2	leaking top valve open
9	353	1314	2.129	175	✓									7.3	
10	354	1128	2.523	150	✓			xx						7.4	
11	355	3075	2.925	125	✓									7.5	
12	356	2063/1106	3.546 3.537	100	✓			xx						7.7 7.7	
13	357	3016	3.190	75	✓									8.1	
14	358	1247	3.448	50	✓									8.6	
15	359	2061	3.589	25	✓									9.7	
16	360	2017	5.576	10	✓									11.6	
17	361	2047	6.576	5	✓	↓	↓	x						12.5	leaking top valve open
18	362			CHL *10	✓ 25				xx	xx	xx				
19	363			CHL MAX	✓ 15				xx	xx	xx				
20	364			5	✓				xx	xx	xx				MAX
21															
22															
23															
24															

Watchkeeper(s): MR

Bottom Depth: 1284 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0114	1814
Bottom	0138	
End	0217	

Positional Information

Start

Lat: 49° 59.99 N

Lon: 128° 00.06 W

Bottom

Lat: 50° 00.01 N

Lon: 127° 59.98 W

End

Lat: 49° 59.98 N

Lon: 128° 00.00 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹

Std Value: 0.7033 mL·L⁻¹

*Date Run: 06 09 2011

Analyst: JBB-C

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

1-15 18 19 16 17 20

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: LBP3 Event #: 99 Ship: JPTULLY UTC Date (dd|mmm|yyyy): 07|SEP|2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							Comments			
		Flask Serial #	Value mL·L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut F202	Sal	Chl a	NH ₄	HAC	GASES				
1	365	2019	2.155	Bot-10	✓ 160										OT	7.3
2	366	3187	2.154	150	✓											7.3
3	367	1313	2.294	125	✓											7.4
4	368	1389	2.664	100	✓	↓										7.9
5	369	67/557	2.601 2.590	75	✓	XX										8.2/8.3
6	370	1477	2.718	50	✓	↓										8.4
7	371	715	3.052	25	✓	↓	↓									8.8
8	372	2051	3.883	10	✓	↓	XX									9.7
9	373	2055	7.353	5	✓	↓	↓	X								12.0 Niskin leak
10	374			CHL*10	✓ 25				X	X	X					
11	375			CHL MAX	✓ 10				X	X	X					no dup's?
12	376			5	✓				X	X	X					
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MR

Bottom Depth: 167 m

Transmisso Cleaned: Y N

Time	UTC	Local
Start	0412	2112
Bottom	0416	
End	0429	

Positional Information

Start
 Lat: 50° 03.22 N
 Lon: 127° 55.35 W

Bottom
 Lat: 50° 03.20 N
 Lon: 127° 55.38 W

End
 Lat: 50° 03.22 N
 Lon: 127° 55.41 W

Sept. 7/11 1540 loc.
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.7033 mL·L⁻¹
 *Date Run: 06 09 2011
 Analyst: JEBU

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

1-7 10 11 12

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: C501

Event #: 113

Ship: IP TULLY

UTC Date (dd|mmm|yyyy): 08|Sep|2011

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	HPLC	NUT COOC		GRASES	
1	377	1213	1.521		✓ 2000		↓	X				X			3.3
2	378	1158	0.578		✓ 1500		XX					XX		X	3.8
3	379	1306	0.292		✓ 1250							X			4.1 Hit pouse to clear bubble
4	380	1496	0.234		✓ 1000							X		X	4.7
5	381	94	0.276		✓ 750							X			5.4
6	382	712	0.631		✓ 500		↓					X			6.0
7	383	3189/1377	1.035 1.033		✓ 400	XX						X		X	6.3/6.6
8	384	3019	1.673		✓ 300										6.7
9	385	1314	2.219		✓ 250										6.9 7.0
10	386	1128	3.560		✓ 200										7.0 7.2
11	387	3075	3.169		✓ 175										7.2 7.5
12	388	2063	4.229		✓ 150									X	7.5 7.8
13	389	1106	4.643		✓ 125										7.8 7.9
14	390	3016	4.593		✓ 100										7.9 8.0
15	391	1247	5.343		✓ 75		↓								8.0 8.3
16	392	2061/2017	4.977 4.978		✓ 50	XX	↓								8.3 9.5/9.7
17	393	2047	5.535		✓ 25		XX							↓	11.7
18	394	3177	6.031		✓ 15										15.7
19	395	3034	6.099		✓ 10		↓								15.9
20	396	3190	6.142		✓ 5	↓	↓	X						XX	16.0
21	397			35	✓ CHL*10			XX	XX	XX	XX				
22	398			25	✓ CHL MAX	25		X	XX	XX	XX				
23	399				5				XX	XX	XX				
24															CLOSED, BIO OIL, NO SAMPLE

Watchkeeper(s): MR

Bottom Depth: 2107 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0212	1912
Bottom	0249	1949
End	0349	

Positional Information

Start
 Lat: 50° 34' 90" N
 Lon: 129° 41' 41" W

Bottom
 Lat: 50° 34' 91" N
 Lon: 129° 41' 48" W

End
 Lat: 50° 34' 93" N
 Lon: 129° 41' 52" W

Sept 8/11 10:00 loc.
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.703 mL·L⁻¹
 *Date Run: 08|09|2011
 Analyst: JBB-C

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

1-16 21 22 17 18 19 20 23

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: C504 Event #: 120 Ship: SPTOLLY UTC Date (dd:mmm:yyyy): 08 SEP 2011

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	HAC	GASES	T			
1	400	2019	3.013	B-10		x	x								8.2	
2	401	3187	3.571	75	76	x	x								8.3	
3	402	657/557	5.004 5.006	50	51	xx	y								7.3 9.4	
4	403	1313	5.330	25		x	xx								11.3	
5	404	1389	6.204	10		x	y								14.7	
6	405	1477	6.263	5	6	x	x	x							14.9	
7	406			CHL x 10	16				xx	xx	xx					
8	407			CHL MAX	6				xx	xx	xx					
9	408			5					xx	xx	xx					
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 102 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1002	0302
Bottom	1005	
End	1017	

Positional Information

Start
 Lat: 50° 49.20 N
 Lon: 129° 13.28 W

Bottom
 Lat: 50° 49.19 N
 Lon: 129° 13.26 W

End
 Lat: 50° 49.14 N
 Lon: 129° 13.18 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.703 mL·L⁻¹
 *Date Run: 08 09 2011
 Analyst: JEB-C
 *Oxygen blanks and standards should be run daily, if possible

1-4, 7, 5, 8, 9, 6,

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17

Station: C507

Event #: 131

Ship: Tully

UTC Date (dd|mmm|yyyy): 9 SEP 2011

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	#PLC								
1	409	715	3.506	B-10	✓	SS	x	x										8.4	
2	410	2051	3.531	50	✓		x	x										8.4	
3	411	2055	4.852	25	✓		x	x										10.9	
4	412	1316/1367	5.943 5.952	15	✓		XX	x										13.7 13.8	
5	413	1470	6.263	10	✓		x	XX										15.1	
6	414	1312	6.301	5	✓		x	x	X									15.5	
7	415			CHL-10	✓	25				2	2	2							
8	416			CHL MAX	✓	15				2	2	2							
9	417			5	✓					2	2	2							
10																			
11																			
12																			
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Watchkeeper(s): MR

Bottom Depth: 64 m

Transmissio Cleaned: (Y) / N

Time	UTC	Local
Start	0038	1738
Bottom	0040	
End	0047	

Positional Information

Start Lat: 51°04'59 N
Lon: 128°43'97 W

Bottom Lat: 51°04'61 N
Lon: 128°43'97 W

End Lat: 51°04'69 N
Lon: 128°43'97 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
Std Value: 0.703 mL·L⁻¹
*Date Run: 08/09/2011
Analyst: JEB-C

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

x z B x x A D 6 D

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: C509 Event #: 135 Ship: TULLY UTC Date (dd mmm yyyy): 09 SEP 2011

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	HPLC	GRSES			Tox		
1	418	1209	1.946	B-10	✓ 184			X						XX		6.8	
2	419	3043	1.978	150	✓									XXX		6.8	
3	420	1174	2.125	125	✓			X						XX		7.0	
4	421	3180	2.872	100	✓									XX		7.3	
5	422	3084/668	3.881 3.888	75	✓		X							XX		8.5/8.5	
6	423	2086	4.565	50	✓									XXX		9.3	
7	424	2082	5.818	25	✓									XX		12.8	
8	425	1498	6.252	10	✓											13.7	
9	426	1337	6.612	5	✓		↓	↓	X	XX		XX	XX			13.9	
10	427			CHL-10	✓ 25					XX	XX	XX					
11	428			CHLMAX	✓ 15					XX	XX	XX					
12	429			5	✓					XX	XX	XX					
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): MR

Bottom Depth: 195 m

Transmissio Cleaned: Y / N

Time	UTC	Local
Start	0302	2002 <i>Sept 8/11</i>
Bottom	0307	
End	0320	2020

Positional Information

Start
 Lat: 51° 12.51 N
 Lon: 128° 27.98 W

Bottom
 Lat: 51° 12.53 N
 Lon: 128° 27.93 W

End
 Lat: 51° 12.58 N
 Lon: 128° 27.81 W

Anal Sept. 09/11 1200 loc.
 Oxygen Info For This Cast

Blank Value: 0.0033 mL·L⁻¹
 Std Value: 0.703 mL·L⁻¹
 *Date Run: 08.09.2011
 Analyst: JEB-C

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

X 2 3 4 8 4 7 10 11 8 9 12

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: UBC7 Event #: 144 Ship: TULLY UTC Date (dd|mmm|yyyy): 9 | SEP | 2011

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	423			30											
2	424			5											
3	425			0											
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SR

Bottom Depth: 158 m

Transmisso Cleaned: Y / N

	UTC	Local
Time Start	1247	
Bottom	1250	
End	1258	

Positional Information
 Start
 Lat: 51 ° 30.00 N
 Lon: 127 ° 49.01 W

Bottom
 Lat: 51 ° 30.00 N
 Lon: 127 ° 49.01 W

End
 Lat: 51 ° 29.98 N
 Lon: 127 ° 40.03 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: 2011-17 Station: R:1 Event #: 146 Ship: TULLY UTC Date (dd|mmm|yyyy): 09 | Sep | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							Comments		
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	Oxy	Nut	Sal	Chl a	NH ₄					
1	428			30											
2	429			5											
3	430			0											
4															
5															
6															
7															
8															
9															
10															
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16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SR

Bottom Depth: 330 m

Transmisso Cleaned: Y / N

	UTC	Local
Time Start	1426	
Bottom	1433	
End	1442	

Positional Information
 Start
 Lat: 51° 26.39 N
 Lon: 127° 38.15 W

Bottom
 Lat: 51° 26.44 N
 Lon: 127° 38.15 W

End
 Lat: 51° 26.42 N
 Lon: 127° 38.11 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

30 435 30 5: 434 0 437

Water Properties Group

Rosette Log

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

Cruise ID: 2011-17 Station: R: 2 Event #: 147 Ship: T2247 UTC Date (dd|mmm|yyyy): 9 | Sep | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						Comments	
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed <input type="checkbox"/> Pressure	Oxy	Nut	Sal	Chl a	NH ₄			
1	147-1			250									
2	147-2			150									
3	147-3			75									
4	435			30									
5	147-5			25									
6	147-6			15									
7	436			5									
8	437			0									
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													

Watchkeeper(s): SR

Bottom Depth: 331 m

Transmisso Cleaned: Y / N

	UTC	Local
Start	1540	
Bottom	1546	
End	1601	

Positional Information
 Start
 Lat: 51 ° 31 24 N
 Lon: 127 ° 33 61 W

Bottom
 Lat: 51 ° 31 20 N
 Lon: 127 ° 33 61 W

End
 Lat: 51 ° 31 21 N
 Lon: 127 ° 33 75 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: 201117 Station: R13 Event #: 150 Ship: TULLY UTC Date (dd|mmm|yyyy): 9 | SEP | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							Comments			
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	440			30												
2	441			5												
3	442			0												
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
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17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 327 m

Transmisso Cleaned: Y / N

	UTC	Local
Time Start	1729	
Bottom	1735	
End	1744	

Positional Information

Start Lat:	51 ° 35.90	N
Start Lon:	127 ° 32.08	W
Bottom Lat:	51 ° 35.91	N
Bottom Lon:	127 ° 32.09	W
End Lat:	51 ° 35.92	N
End Lon:	127 ° 32.13	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: 2011-17 Station: Ri4 Event #: 153 Ship: TULLY UTC Date (dd|mmm|yyyy): 9 | SEP | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken							Comments			
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed <input checked="" type="checkbox"/> Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	445			30	<input checked="" type="checkbox"/>											
2	446			5	<input checked="" type="checkbox"/>											
3	447			0												
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MR

Bottom Depth: 300 m

Transmisso Cleaned: Y / N

	UTC	Local
Time Start	<u>2001</u>	
Bottom	<u>2007</u>	
End	<u>2016</u>	

Positional Information
 Start
 Lat: 51 ° 38.94 N
 Lon: 127 ° 26.71 W

Bottom
 Lat: 51 ° 38.93 N
 Lon: 127 ° 26.72 W

End
 Lat: 51 ° 38.91 N
 Lon: 127 ° 26.71 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: 2011-17 Station: RIS Event #: 155 Ship: TULLY UTC Date (dd|mmm|yyyy): 9 | SEP | 2011

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	450			30	✓											
2	451			5	✓											
3	452			0												
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): M.R.

Bottom Depth: 202 m

Transmisso Cleaned: Y / N

	Time	UTC	Local
Start		2119	1419
Bottom		2124	
End		2130	

Positional Information
 Start
 Lat: 51 ° 40.73 N
 Lon: 127 ° 19.98 W

Bottom
 Lat: 51 ° 40.73 N
 Lon: 127 ° 19.98 W

End
 Lat: 51 ° 40.72 N
 Lon: 127 ° 19.99 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: 2011-17 Station: RIG Event #: 158 Ship: TULLY UTC Date (dd|mmm|yyyy): 09 | SEP | 2011

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	455			30	✓							
2	456			5	✓							
3	457			0								
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												

Niskins 4-24 closed @ surface just to close them, no samples taken.

Watchkeeper(s): MR

Bottom Depth: 146 m
 Transmisso Cleaned: Y / N

	UTC	Local
Time Start	2250	1550
Bottom	2254	
End	2301	

Positional Information
 Start
 Lat: 51° 40.52 N
 Lon: 127° 17.06 W

Bottom
 Lat: 51° 40.51 N
 Lon: 127° 17.04 W

End
 Lat: 51° 40.48 N
 Lon: 127° 17.03 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