

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: SI03Event #: 1Ship: TULLYUTC Date (dd|mmm|yyyy): 25 MAY 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments	
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH ₄	CH ₄	HP ₄ C	Flask Serial #	Value mL · L ⁻¹				
1	1	1	Bot-10			✓	✓						9.3	3190	0	Sulfur smell present
2	2	2	200			✓	✓	✓					9.2	3024	0	"
3	3	3	175			✓	✓						9.3	3047	0	"
4	4	4	150			✓	✓						9.3	2085	0	"
5	5	5	125			✓	✓						9.3	3067	0.067	
6	6	6	100			✓	✓						8.7	2047	1.231	
7	7	7	75			✓	✓						8.5	3198	3.838	
8	8	8	50			✓	✓						8.1	3188	4.588	
9	9	9	30			✓	✓						8.7	2015	5.770	
10	10	10	20			✓	✓		✓	✓			8.9	3119	6.055	
11	11	11	10			✓	✓		✓	✓			9.5	3201	7.614	
12	12	12	5			✓	✓	✓	✓	✓			9.7	639	8.181	
13																
14																
15	6	6	Dup										8.7	1485	1.244	
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: _____ m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0255	1955
Bottom	0300	
End	0320	

Positional Information

Start
Lat: 48 ° 35.36 N
Lon: 123 ° 30.18 WBottom
Lat: 48 ° 35.38 N
Lon: 123 ° 30.19 WEnd
Lat: 48 ° 35.42 N
Lon: 123 ° 30.24 W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹Std Value: 0.777 mL · L⁻¹*Date Run: 25 May 2011Analyst: CS

* 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: 2011-16 Station: 2 B01 Event #: 2 Ship: TULLY UTC Date (dd|mmm|yyyy): 25 | 05 | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken									Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	pH	CHL	HPCL				Flask Serial #	Value mL · L ⁻¹	
1	1	13	Bot-10	✓	26	✓	✓	✓	✓	✓				1298	4.421	8.2
2	2	14	10	✓		✓	✓	✓	✓	✓				2014	7.531	8.8
3	3	15	5	✓		✓	✓	✓	✓	✓				1307	10.027	10.0
4																
5	2				DUP O ₂									1408	7.558	8.8
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): 3Ms

Bottom Depth: 37 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1541	0841
Bottom	1542	
End	1546	

Positional Information
Start Lat: 48 ° 40.45 N
Lon: 124 ° 59.30 W

Bottom Lat: 48 ° 40.45 N
Lon: 124 ° 59.29 W

End Lat: 48 ° 40.48 N
Lon: 124 ° 59.21 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.777 mL · L⁻¹
*Date Run: 25 | 05 | 2011
Analyst: CS

* 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: 2011-16 Station: 432 Event #: 3 Ship: TULLY UTC Date (dd|mmm|yyyy): 25 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken									Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CHL	HPLC				Flask Serial #	Value mL · L ⁻¹	
1	1	16	Bot-10	✓	45	✓	✓							3206	3.899	8.0
2	2	17	30	✓		✓	✓							3090	4.417	8.2
3	3	18	20	✓		✓	✓	✓	✓	✓				1180	4.810	8.3
4	4	19	10	✓		✓	✓	✓	✓	✓				1404	6.612	8.9
5	5	20	5	✓		✓	✓	✓	✓	✓				3126	9.651	10.0
6																
7	1		DUP O2											1392	3.889	8.0
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): 3Ms

Bottom Depth: 57 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1621	0921
Bottom	1624	
End	1629	

Positional Information
Start
Lat: 48 ° 39.02 N
Lon: 125 ° 02.46 W

Bottom
Lat: 48 ° 39.01 N
Lon: 125 ° 02.44 W

End
Lat: 48 ° 39.03 N
Lon: 125 ° 02.41 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.127 mL · L⁻¹
*Date Run: 25 | 05 | 2011
Analyst: CS

* 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: 2011-16 Station: ZB04 Event #: 5 Ship: TULLY UTC Date (dd|mmm|yyyy): 25 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CHL	HPDC			Flask Serial #	Value mL · L ⁻¹	
1	1	21	Bot-10	✓	103	✓	✓						1319	2.833	7.6 LEAKING AT SPICO
2	2	22	75	✓		✓	✓						1378	3.378	7.8 LEAKING AT SPICO
3	3	23	50	✓		✓	✓						647	3.9119	8.1
4	4	24	30	✓		✓✓	✓						621	4.3916	8.2
5	5	25	20	✓		✓	✓	✓	✓	✓			1261	4.141	8.4
6	6	26	10	✓		✓	✓✓	✓	✓	✓			1146	5.430	8.7
7	7	27	5	✓		✓	✓	✓	✓	✓			528	6.849	10.3
8															
9	4		DUP O ₂										3157	4.388	
10															
11															
12															
13			NOTE: Oxygen sampled from surface to bottom												8.2
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): 3M s

Bottom Depth: 114 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1737	1037
Bottom	1739	
End	1749	

Positional Information
Start
Lat: 48 ° 35.64 N
Lon: 125 ° 08 65 W

Bottom
Lat: 48 ° 35 62 N
Lon: 125 ° 08 60 W

End
Lat: 48 ° 35.59 N
Lon: 125 ° 08 52 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.727 mL · L⁻¹
*Date Run: 25 | 05 | 2011
Analyst: CS

* 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: 2011-16 Station: L306 Event #: 9 Ship: Tully UTC Date (dd|mmm|yyyy): 25 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								T	Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH ₄	chl	HPUC				Flask Serial #	Value mL · L ⁻¹	
1	1	28	8-10	✓ 75	✓	✓							7.9	3190	3564	failed to fire @ B
2	2	29	75	✓ 75	✓	✓							7.9	3166	3564	
3	3	30	50	✓ 50	✓	✓							8.1	1478	3880	
4	4	31	30	✓ 30	✓	✓							8.4	471	4778	
5	5	32	20	✓ 20	✓	✓		✓✓	✓✓	✓✓			8.6	3040	5.276	
6	6	33	10	✓ 10	✓	✓✓		✓✓	✓✓	✓✓			10.0	1497	9.887	
7	7	34	5	✓ 5	✓	✓		✓✓	✓✓	✓✓			10.7	1401	10373	
8	8	35	15	✓ 15						✓✓						
9																
10	4	31											8.5	2064	4.788	
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): DY/D8/KJ

Bottom Depth: 114 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2058	1358
Bottom	2100	1400
End	2111	1411

Positional Information
Start
Lat: 48 ° 32.16 N
Lon: 125 ° 15.53 W

Bottom
Lat: 48 ° 32.16 N
Lon: 125 ° 15.55 W

End
Lat: 48 ° 32.18 N
Lon: 125 ° 15.57 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.727 mL · L⁻¹
*Date Run: 25 05 2011
Analyst: CS

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

Silver box

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LB08Event #: 23Ship: TullyUTC Date (dd|mmm|yyyy): 26|MAY|2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments		
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	MS	NO ₃	H ₂ PO ₄	Flask Serial #	Value mL · L ⁻¹				
1	1	36	Bot-10	✓	155								73	3190	1.714	BROKE FLASK
2	2	37	125	✓									73	3024		
3	3	38	100	✓									76	3047	2.774	
4	4	39	75	✓		XX							8.1	2085	3.858	
5	5	40	50	✓			XX						8.2	2047	4.331	
6	6	41	30	✓									8.6	1485	5.219	
7	8	42	20	✓					2	2			8.8	3198	5.775	
8	10	43	10	✓					2	2			9.9	3188	8.657	
9	11	44	5	✓		↓	↓	X	2	2	2		10.3	2015	8.549	
10	7	45	MAX-10	✓	25						2					
11	9	46	MAX	✓	15						2					
12																
13		39											8.1	3067	3.818	
14																
15			NOTE:		Oxys	sampled from surface to bottom										
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
SMsBottom Depth: 164 mTransmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0516	2216
Bottom	0520	
End	0532	

Positional Information

Lat:	48 ° 25.65	N
Lon:	125 ° 28.35	W

Lat:	48 ° 25.63	N
Lon:	125 ° 28.31	W

Lat:	48 ° 25.63	N
Lon:	125 ° 28.28	W

Oxygen Info For This Cast

Blank Value: 0.003 mL • L⁻¹Std Value: 0.721 mL • L⁻¹*Date Run: 25|05|2011Analyst: OS

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

CHL MAX @ 30 SILVER BOX

NOTE: ALL SAMPLES
LABELLED AS LB07

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LB09 Event #: 24 Ship: TULLY UTC Date (dd|mmm|yyyy): 26 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	PH	CHL				Flask Serial #	Value mL · L ⁻¹	
1	1	47	Bot-10	✓	140	1							3201	1.804	7.1
2	2	48	100	✓		XX							639	2.271	7.6
3	3	49	75	✓									3121	3.701	7.9
4	4	50	50	✓									2025	5.305	8.2
5	5	51	30	✓		XX							3100	6.176	8.7
6	6	52	20	✓				XX	XX				3104	7.015	9.5
7	7	53	10	✓				XX	XX				3142	6.682	11.5
8	8	54	5	✓				XX	XX				2049	6.669	11.8
9															
10															
11		48	100			DUP							2090	2.276	7.6
12															
13															
14															
15			NOTE: Oxygen sampled from surface to bottom												
16															
17															
18															
19			53 B	← THIS CHLOROPHYLL SAMPLE WAS SPILLED → NO SAMPLE											
20			Chl												
21			LB09												
22			2011-16												
23			Bot 7												
24			Dup Sample												

Watchkeeper(s): BM

Bottom Depth: 151 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0623	2323
Bottom	0626	
End	0637	

Positional Information

Start
Lat: 48° 21.91 N
Lon: 125° 34.53 W

Bottom
Lat: 48° 21.92 N
Lon: 125° 34.54 W

End
Lat: 48° 21.92 N
Lon: 125° 34.54 W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹

Std Value: 0.727 mL · L⁻¹

*Date Run: 25 | 05 | 2011

Analyst: CS

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

CHL MAX @ 32m.

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16

Station: LB11

Event #: 26

Ship: Rully

UTC Date (dd|mmm|yyyy): 26 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CHL						Flask Serial #	Value mL · L ⁻¹	
1	1	S5	Bottom 10	✓ 194	✓	✓									1393	1.786	7.1
2	2	S6	175	✓ 175	✓	✓	✓								3196	2.123	7.2
3	3	S7	150	✓ 150	✓	✓									2068	2.314	7.3
4	4	S8	125	✓ 125	✓	✓									708	2.616	7.5
5	5	S9	100	✓ 100	✓	✓									1488	5.600	7.7
6	6	60	75	✓ 75	✓	✓									3181	5.095	8.0
7	7	61	50	✓ 50	✓	✓									1322	5.942	8.3
8	8	62	30	✓ 30	✓	✓										6.179	
9	9	63	20	✓ 20	✓	✓		✓	✓						3137	6.603	8.9
10	10	64	10	✓ 10	✓	✓		✓	✓						1481	6.625	9.4
11	11	65	5	✓ 5	✓	✓		✓	✓						1400	6.617	11.3
12										* Note 8-11 are on line down					2084		11.2
13																	
14	4	58			✓										1421	2.615	7.5
15					Oxy's sampled from surface to bottom												
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s):
CS / DB / JT

Bottom Depth: 208 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0829	01
Bottom	0834	
End	0849	

Positional Information

Start
Lat: 48 ° 15 ' 15 N
Lon: 125 ° 47.63 W

Bottom
Lat: 48 ° 15 ' 16 N
Lon: 125 ° 47.66 W

End
Lat: 48 ° 15 ' 18 N
Lon: 125 ° 47.76 W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹

Std Value: 0.727 mL · L⁻¹

*Date Run: 25 | 05 | 2011

Analyst: CS

* 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: 2011-16 Station: LB12 Event #: 28 Ship: Tully UTC Date (dd|mmm|yyyy): 26 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	chl	NH4	HPLC			Flask Serial #	Value mL · L ⁻¹	
1	1	66	Btm-10	✓ 506	✓	✓							6.0 3007	0.638	
2	2	67	400	✓ 400	✓	✓	✓						6.3 2033	0.942	no nut cool dup taken
3	3	68	300	✓ 300	✓	✓							6.5 1311	1.474	
4	4	69	250	✓ 250	✓	✓							6.8 3053	1.925	
5	5	70	200	✓ 200	✓	✓							7.2 2065	2.457	
6	6	71	175	✓ 175	✓	✓							7.5 2069	2.879	
7	7	72	150	✓ 150	✓	✓							6.90		HISTRIP - bottle closed
8	8	73	125	✓ 125	✓	✓							7.7 1489	3.196	
9	9	74	100	✓ 100	✓	✓							8.0 1464	3.522	
10	10	75	75	✓ 75	✓	✓							8.2 1387	4.340	
11	11	76	50	✓ 50	✓	✓							8.3 1365	6.651	no nut taken
12	14	77	30	✓ 30	✓	✓							8.9 638	6.805	no nut taken
13	15	78	20	✓ 20	✓	✓		✓	✓				10.7 3207	6.789	
14	16	79	10	✓ 10	✓	✓		✓	✓				11.1 2091	6.557	
15	17	80	5	✓ 5	✓	✓		✓	✓	✓			11.3 1337	6.549	Leaky spigot
16	12	81	chl-10	✓ 44	✓			✓		✓					
17	13	82	chl max	✓ 34	✓			✓		✓					
18													6.90		
710	6	71	Dep										7.5 1890	2.864	
20															
21															
22															
23															
24															

Watchkeeper(s): CDS

Bottom Depth: 570 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0958	0258
Bottom	10 06	
End	10 27	

Positional Information
Start Lat: 48 ° 12. 83 N
Lon: 175 ° 51. 82 W

Bottom Lat: 48 ° 12. 81 N
Lon: 175 ° 51. 90 W

End Lat: 48 ° 12. 82 N
Lon: 175 ° 52. 12 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.727 mL · L⁻¹
*Date Run: 25 05 2011
Analyst: CS
* 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: 2011-16Station: LB 14Event #: 30Ship: TullyUTC Date (dd/mmm/yyyy): 26 MAY 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								T °C	Oxygen Titrations		Comments	
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	CHI	NH ₄	HPLC	Nut Cool	Flask Serial #		Value mL · L ⁻¹			
1	1	83	Bot-10	✓ 1194	↓	↓					✓			4.7	3187	0.315	
2	2	84	1000	✓	↓	↓		✓			✓			4.9	3043	0.280	
3	3	85	750	✓	↓	↓					✓✓			5.7	2082	0.301	
4	4	86	500	✓	↓	↓					✓			6.1	1174	SPILLED	
5	5	87	400	✓	↓	↓					✓			6.3	2086	1.023	Red depth as 499
6	6	88	300		↓	↓								6.8	657	1.678	
7	7	89	250		↓	↓								7.1	1313	2.113	
8	8	90	200		↓	↓								7.4	1477	2.417	
9	9	91	175		XX	↓								7.5	1470	2.634	
10	10	92	150		↓	↓								7.6			LNSW Water for N
11	11	93	150		↓	↓								7.8	622	2.967	
12	12	94	125		↓	↓								8.1	1498	3.232	
13	13	95	100		↓	↓								8.5	3084	3.841	
14	14	96	75		↓	XX								8.4	2055	5.830	
15	15	97	50		↓	↓								8.9	2019	7.54	Bubble in flask
16	18	98	30		↓	↓								10.9	3180	6.494	
17	19	99	20		↓	↓		✓✓	✓✓					10.9	1367	6.471	
18	20	100	10		↓	↓		✓✓	✓✓					9.0	1316	6.781	* Sample may have come
19	21	101	5		↓	↓	✓	✓✓	✓✓	XX				9.4	668	7.075	
20	16	102	CHI-10	40						XX							
21	17	103	CHI max	30						XX							
22																	
23	Dwpox	91												7.6	557	2.639	
24																	

Watchkeeper(s): SRBottom Depth: 1180 mTransmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1217	0517
Bottom	1236	
End	1319	

Positional Information

Start
Lat: 48 ° 8.42 N
Lon: 126 ° 0.00 WBottom
Lat: 48 ° 8.41 N
Lon: 126 ° 0.12 WEnd
Lat: 48 ° 8.54 N
Lon: 126 ° 0.26 W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹Std Value: 0.727 mL · L⁻¹*Date Run: 25 105 1201Analyst: CS

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

* SAMPLED FIRING ORDER NOT NISKIN. *

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LC12 Event #: 34 Ship: TULLY UTC Date (dd|mmm|yyyy): 26 | MAY | 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			
1	104			MAX10	50		✓				✓			
2	105			MAX	40		✓				✓			
3	106			5	5		✓				✓			
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: 2505 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2238	1538
Bottom	2322	
End	2357	

Positional Information
Start
Lat: 48 ° 14. 91 N
Lon: 126 ° 40. 20 W

Bottom
Lat: 48 ° 14. 83 N
Lon: 126 ° 40. 30 W

End
Lat: 48 ° 14. 86 N
Lon: 126 ° 40. 32 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

Orange Box

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LC11Event #: 37Ship: TullyUTC Date (dd|mmm|yyyy): 27 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	chl	NutCap		Flask Serial #	Value mL · L ⁻¹	
1		107	B-10	✓ 1441						Y		1421	0.582	4.8
2		108	1250	✓			X			Y		708	0.414	4.8
3		109	1000	✓						XX		1488	0.247	5.3
4		110	750	✓		XX						3181	0.224	5.7
5		111	500	✓								1322	0.585	6.3
6		112	400	✓	XX					↓		3137	0.920	6.7
7		113	300	✓								2084	1.446	6.9
8		114	250	✓								1400	1.995	7.2
9		115	200	✓								3007	2.329	7.5
10		116	175	✓								2033	2.571	7.6
11		117	150	✓								1311	2.808	7.8
12		118	125	✓								3055	3.206	8.0
13		119	100	✓								2065	3.839	8.2
14		120	75	✓								690	5.023	8.5
15		121	50	✓								2069	6.219	8.6
16		122	30	✓								1490	7.069	9.3
17		123	20	✓				2	2			1489	6.727	10.8
18		124	10	✓				2	2			1464	6.480	11.3
19		125	5	✓			X	2	2			1387	6.479	11.3
20														
21														
22		112										1481	0.935	6.5
23														
24														

Oxys sampled surface to bottom.

Watchkeeper(s): 3MBottom Depth: 1483 mTransmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0418	2118
Bottom	0442	2142
End	0526	2226

Positional Information

Lat:	48 ° 18 91	N
Lon:	126 ° 26 72	W

Lat:	48 ° 19 07	N
Lon:	126 ° 26 64	W

Lat:	48 ° 19 08	N
Lon:	126 ° 26 60	W

Oxygen Info For This Cast

Blank Value: 6.003 mL · L⁻¹Std Value: 0.727 mL · L⁻¹*Date Run: 25 | 05 | 2011Analyst: CS

*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: 2011-16 Station: LC09 Event #: 40 Ship: LPTULLY UTC Date (dd|mmm|yyyy): 27 | 05 | 11

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments			
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	HPLC	DIC	CHL	Nut Cool	T	Flask Serial #		Value mL • L ⁻¹		
1	1	127	B-10	✓	595	✓	✓				✓		✓		5.7	638	0.450	
2	2	128	500	✓	500	✓	✓	✓			✓		✓✓		6.0	3207	0.752	
3	3	129	400	✓	400	✓	✓				✓		✓		6.1	2091	0.858	
4	4	130	300	✓	300	✓	✓				✓✓				6.5	3124	1.386	
5	5	131	250	✓	250	✓	✓				✓				6.7	3108	Broke	FLASK + LOG + sample
6	6	132	200	✓	200	✓	✓✓				✓				7.1	631	2.060	
7	7	133	175	✓	175	✓	✓								7.3	468	2.681	
8	8	134	150	✓	150	✓✓	✓								7.5	1475	3.040	
9	9	135	125	✓	125	✓	✓								7.8	3028	3.274	
10	10	136	100	✓	100	✓	✓				✓				7.8	1373	4.094	
11	11	137	75	✓	75	✓	✓								8.0	1397	5.026	
12	12	138	50	✓	50	✓	✓				✓✓				8.3	3151	5.498	
13	15	139	30	✓	30	✓	✓				✓				9.3	1318	6.915	
14	16	140	20	✓	20	✓	✓		✓✓			✓✓			10.5	745	6.861	
15	17	141	10	✓	10	✓	✓		✓✓		✓	✓✓			11.2	2020	6.508	
16	18	142	5	✓	5	✓	✓	✓	✓✓	✓✓	✓	✓✓			11.2	1300	6.493	
17	13	143	CHL-10	✓	48					✓✓								
18	14	144	CHL-Max	✓	33					✓✓								
19																		
20	8	134	150												7.5	1248	3.042	
21																		
22																		
23																		
24																		

Watchkeeper(s): CDT

Bottom Depth: 600 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0757	0057
Bottom	0808	0108
End	0830	01

Positional Information
Start
Lat: 48 ° 25.97 N
Lon: 126 ° 13.66 W

Bottom
Lat: 48 ° 25.96 N
Lon: 126 ° 13.67 W

End
Lat: 48 ° 25.95 N
Lon: 126 ° 13.67 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.727 mL · L⁻¹
*Date Run: 25, 05, 2011
Analyst: CS

* 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: 2011-16 Station: LLOB/A1 Event #: 44 Ship: Tully UTC Date (dd|mmm|yyyy): 27 MAY 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CAL						Flask Serial #	Value mL · L ⁻¹	
1		145	Btm-10	191	✓	✓									1321	1.602	battery died in temp gauge
2		146	175		✓	✓	✓								1406	1.611	
3		147	150		✓	✓									1407	2.591	
4		148	125		✓	✓									1476	2.593	
5		149	100		✓	✓									1123/1330	3.851/3.992	(1330 had big bubble)
6		150	75		✓	✓									1411	5.101	
7		151	50		✓	✓									650	6.248	
8		152	30		✓	✓									1144	6.704	
9		153	20		✓	✓		✓	✓						3190	6.848	
10		154	10		✓	✓		✓	✓						3047	6.618	
11		155	5		✓	✓		✓	✓						2085	6.581	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): SR

Bottom Depth: 198 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1116	0416
Bottom	1120	
End	1137	

Positional Information
Start Lat: 48 ° 29.47 N
Lon: 126 ° 7.09 W

Bottom Lat: 48 ° 29.47 N
Lon: 126 ° 07.06 W

End Lat: 48 ° 29.45 N
Lon: 126 ° 07.04 W

Oxygen Info For This Cast
Blank Value: 0.002 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 27 05 2011
Analyst: OS

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LC06 / B6Event #: 47Ship: TULLYUTC Date (dd|mmm|yyyy): 27 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	NH ₄	CHL	HPLC	DIC	°C	Flask Serial #	Value mL · L ⁻¹	
1	1	156	Btm-10	84	✓	✓					✓	7.5	2047	3.431	
2	2	157	75		✓	✓	✓				✓	7.6	1485	3.510	
3	3	158	50		✓	✓					✓	7.9	3198	5.570	
4	4	159	30		✓	✓				✓	✓	8.4	3188/205	5.187/5.786	
5	7	160	20		✓	✓		✓	✓		✓	9.2	3119	6.601	
6	8	161	10		✓	✓		✓	✓		✓	10.7	3201	7.180	
7	9	162	5		✓	✓		✓	✓		✓	10.8	639	7.246	
8	5	163	30							✓					
9	6	164	20							✓					
10	10	165	5							✓					
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SRBottom Depth: 92 mTransmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1323	0623
Bottom	1325	
End	1334	

Positional Information

Start
Lat: 48 ° 36.50 N
Lon: 125 ° 54.07 WBottom
Lat: 48 ° 36.51 N
Lon: 125 ° 54.08 WEnd
Lat: 48 ° 36.49 N
Lon: 125 ° 54.07 W

Oxygen Info For This Cast

Blank Value: 0.002 mL · L⁻¹Std Value: 0.7253 mL · L⁻¹*Date Run: 27.05.2011Analyst: CA

*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: 2011-16 Station: LCO4 Event #: 49 Ship: Tully UTC Date (dd|mmm|yyyy): 27 MAY 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken			Oxygen Titrations			Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Flask Serial #	Value mL · L ⁻¹		
1	11	166	Bot-10	157							
2	2	167	125	✓			X				
3	3	168	100	✓							
4	4	169	75	✓		XX					
5	5	170	50	✓							
6	6	171	30	✓	XX						
7	8	172	20	✓				2	2		
8	10	173	10	✓				2	2		
9	11	174	5	✓				2	2		
10	7	175	MAX-10	✓	25						
11	9	176	MAX	✓	15						
12	12	177	5	✓							
13											
14											
15											
16											
17	DUP	171	30								
18											
19											
20											
21											
22											
23											
24											

Watchkeeper(s): 3M3Bottom Depth: 164 mTransmisso Cleaned: (Y) N

Time	UTC	Local
Start	1504	0804
Bottom	1507	
End	1519	

Positional Information

Start	Lat: <u>48° 43.43</u>	<u>N</u>
	Lon: <u>125° 40.61</u>	<u>W</u>

Bottom	Lat: <u>48° 43.41</u>	<u>N</u>
	Lon: <u>125° 40.60</u>	<u>W</u>

End	Lat: <u>48° 43.25</u>	<u>N</u>
	Lon: <u>125° 40.65</u>	<u>W</u>

Oxygen Info For This Cast

Blank Value:	<u>0.002</u>	mL · L ⁻¹
Std Value:	<u>0.7253</u>	mL · L ⁻¹
*Date Run:	<u>27 05 2011</u>	
Analyst:	<u>DS</u>	

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

Blown Box Oxy

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LC02 Event #: 52 Ship: TULLY UTC Date (dd|mmm|yyyy): 27 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation			Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒ Pressure		Oxy	Nut	Sal	NH4	chl	DIC			Flask Serial #	Value mL · L ⁻¹	
1	1	178	Bot-10	☒	100	☒	☒				☒			3191	—	7.7 → SPILLED
2	2	179	75	☒		☒	☒				☒			3166	3.759	8.2
3	3	180	50	☒		☒	☒				☒			471	4.089	8.0
4	4	181	30	☒		☒	☒				☒			2064	4.666	8.2
5	5	182	20	☒		☒	☒	☒	☒	☒	☒			3040	5.173	8.4
6	6	183	10	☒		☒	☒	☒	☒	☒	☒			1497	8.024	11.0
7	7	184	5	☒		☒	☒	☒	☒	☒	☒			1401	7.282	10.8
8																
9																
10																
11																
12		179	75			DUP								3160	3.754	8.0
13																
14						OXY: TOP to Bottom										
15																
16																
17																
18																→ Closed just to test See logbook
19																
20																
21																
22																
23																
24																

Watchkeeper(s): 3Ms

Bottom Depth: 110 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1647	0947
Bottom	1650	
End	1659	

Positional Information

Lat:	48 ° 48 71	N
Lon:	125 ° 30 91	W

▼

Lat:	48 ° 48.69	N
Lon:	125 ° 30 92	W

▼

Lat:	48 ° 48.66	N
Lon:	125 ° 30 95	W

Oxygen Info For This Cast

Blank Value: 0.002 mL · L⁻¹

Std Value: 0.7253 mL · L⁻¹

*Date Run: 27 | 05 | 2011

Analyst: CS

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

OXY BROWN BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LCO1Event #: 53Ship: TULLYUTC Date (dd|mmm|yyyy): 27 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	W4	W5	W6					Flask Serial #	Value mL · L ⁻¹	
1	1	185	Bot-10	✓	85	✓	✓								3038	3.495	7.9 LEAKY SPIGOT
2	2	186	75	✓		✓	✓								2032	3.704	7.9
3	3	187	50	✓		✓	✓								3174	4.351	8.1
4	4	188	30	✓		✓	✓								3052	4.390	8.1
5	6	189	20	✓		✓	✓	✓	✓						3057	5.391	8.5
6	8	190	10	✓		✓	✓	✓	✓						1317	8.505	10.1
7	9	191	5	✓		✓	✓	✓	✓								NO WATER
8	5	192	MAX-10	✓	30					✓							
9	7	193	MAX	✓	20					✓							
10	10	194	5	✓	5					✓					1492	8.370	10.1
11																	
12																	
13		190	10			DIP									3109	8.491	10.0
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s):
3MBottom Depth: 95 mTransmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1734	1034
Bottom	1736	
End	1745	

Positional Information

Start	Lat: 48 ° 50.50	N
	Lon: 125 ° 27.67	W

Bottom	Lat: 48 ° 50.49	N
	Lon: 125 ° 27.69	W

End	Lat: 48 ° 50.40	N
	Lon: 125 ° 27.73	W

Oxygen Info For This Cast

Blank Value:	<u>0.002</u>	mL · L ⁻¹
Std Value:	<u>0.7253</u>	mL · L ⁻¹
*Date Run:	<u>27 MAY 2011</u>	
Analyst:	<u>CS</u>	

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

OXY'S SAMPLED FROM TOP TO BOTTOM
NO WATER IN #7 SWITCH TO 10 FOR SAMPLING

BOT 1 LEAKING AT SPIGOT

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: 2D01 Event #: 2754 Ship: TULLY UTC Date (dd|mmm|yyyy): 27 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments			
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CHL	HPLC					T	Flask Serial #	Value mL • L ⁻¹
1	1	195	Bot-10	✓	28	✓	✓							9.3	1298	7.096	
2	2	196	20	✓		✓	✓		✓	✓				10.9	2014	7.449	
3	4	197	10	✓		✓	✓		✓	✓				10.8	1408	7.363	
4	6	198	5	✓		✓	✓		✓	✓				10.8	3206	7.353	
5	3	199	MAX-10	✓	20						✓						
6	5	200	MAX	✓	10						✓						
7	7	201	5	✓	5						✓						
8																	
9	4	197												10.8	1307	7.358	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): 27 DB J

Bottom Depth: _____ m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1922	1222
Bottom	1924	1224
End	1931	1231

Positional Information
Start
Lat: 48 ° 59.95 N
Lon: 125 ° 43.66 W

Bottom
Lat: 48 ° 59.95 N
Lon: 125 ° 43.65 W

End
Lat: 48 ° 59.94 N
Lon: 125 ° 43.64 W

Oxygen Info For This Cast
Blank Value: 0.002 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 27 05 2011
Analyst: CS

* 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: 2011-16 Station: L202 Event #: 55 Ship: TULLY UTC Date (dd|mmm|yyyy): 27 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	NH4	CHL						Flask Serial #	Value mL • L ⁻¹	
1		202	Bot-10	✓	34	✓	✓							8.2	3090	4,326	
2		203	30	✓		✓	✓							8.6	1180	4,410	
3		204	20	✓		✓	✓		✓✓	✓✓				9.2	1404	5,710	
4		205	10	✓		✓	✓		✓✓	✓✓				10.6	3126	7,513	
5		206	5			✓✓	✓✓	✓	✓✓	✓✓				10.9	1319	7,480	
6																	
7		206	5											10.9	1378	7,473	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): DY DB J

Bottom Depth: 43 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2002	1302
Bottom	2004	1304
End	2010	1310

Positional Information
Start
Lat: 48 ° 58.40 N
Lon: 125 ° 46.83 W

Bottom
Lat: 48 ° 58.39 N
Lon: 125 ° 46.83 W

End
Lat: 48 ° 58.38 N
Lon: 125 ° 46.87 W

Oxygen Info For This Cast
Blank Value: 0.002 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 27 05 2011
Analyst: O

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

123748569

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LDO4 Event #: 58 Ship: Tully UTC Date (dd|mmm|yyyy): 27 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments	
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH ₄	CH ₄	H ₂ PO ₄					Flask Serial #	Value mL · L ⁻¹		
1	✓	1	207	B-10	✓	53	✓	✓							8.1	647	4.114	
2	✓	2	208	50	✓	50	✓	✓	✓						8.1	3157	4.117	
3	✓	3	209	30	✓	30	✓	✓							8.3	621	4.566	
4		5	210	20	✓	20	✓	✓		✓	✓				8.6	1261	5.376	
5		7	211	10	✓	10	✓	✓		✓	✓				10.8	528	7.543	
6		8	212	5	✓	5	✓	✓		✓	✓				11.3	371	7.217	
7	✓	4	213	Max	✓	30					✓	✓						
8		6	214	Max	✓	20					✓	✓						
9		9	215	5	✓	5					✓	✓						
10																		
11		5	210												8.6	1146	5.379	
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Watchkeeper(s): JY DB J

Bottom Depth: 62 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2138	1438
Bottom	2140	1440
End	2149	1449

Positional Information
Start
Lat: 48 ° 53.29 N
Lon: 125 ° 56.90 W

Bottom
Lat: 48 ° 53.29 N
Lon: 125 ° 56.92 W

End
Lat: 48 ° 53.29 N
Lon: 125 ° 57.05 W

Oxygen Info For This Cast
Blank Value: 0.002 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 27 05 2011
Analyst: CS

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

1 2 3 4 9 5 10 6 7 8 11

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: CD06

Event #: 61

Ship: Tully

UTC Date (dd|mmm|yyyy): 27 May 2011

Nisk Firing #

Fired Niskin #

Sample #

Rosette Operation
Target Pressure
Confirmed Pressure

Samples Taken

Oxy

Nut

Sal

NH₄

chl

HPLC

T °C

Oxygen Titrations
Flask Serial #

Value mL · L⁻¹

Comments

1	1	216	B-10		124	✓	✓								7.1	1421	1.692	
2	2	217	100			✓	✓	✓							7.3	708	2.573	
3	3	218	75			✓✓	✓✓								7.8/7.8	1488/3181	5.115/5.111	
4	4	219	50			✓	✓								8.2	1322	6.346	
5	5	220	30			✓	✓								8.3	3137	4.734	
6	8	221	20			✓	✓		✓✓	✓✓					8.7	1481	5.544	
7	9	222	10			✓	✓		✓✓	✓✓					11.2	2084	6.609	
8	10	223	5			✓	✓		✓✓	✓✓					11.5	1400	6.518	
9	5	224	Max 10	30							✓✓							
10	7	225	Max	20							✓✓							
11	11	226	5								✓✓							
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Watchkeeper(s):

D.Y. DB J

Bottom Depth: 135 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2343	1643
Bottom	2346	
End	2258	

Positional Information

Start
Lat: 48 ° 46.30 N
Lon: 126 ° 10.03 W

Bottom
Lat: 48 ° 46.30 N
Lon: 126 ° 10.06 W

End
Lat: 48 ° 46.27 N
Lon: 126 ° 10.15 W

Oxygen Info For This Cast

Blank Value: 0.002 mL · L⁻¹

Std Value: 0.7253 mL · L⁻¹

*Date Run: 21 05 2011

Analyst: CS

* 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: 2011-16 Station: LDO8 Event #: 63 Ship: Tully UTC Date (dd/mmm/yyyy): 28 MAY 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								T°C	Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	Chl	HPIC				Flask Serial #	Value mL · L ⁻¹	
1		227	Bot-10										5.2	3124	0.313	
2		228	500				X						5.8	1144	0.622	*
3		229	400										6.0	631	0.841	
4		230	300										6.5	468	1.353	
5		231	250										6.7	1475	1.542	
6		232	200										6.9	1248	2.026	*
7		233	175										7.3	3028	2.191	
8		234	150										7.5	1373	2.340	
9		235	125			XX	XX						7.7	1397	2.571	* 2.570
10		236	100										7.9	1318	3.215	*
11		237	75										7.9	1245	5.028	*
12	12	238	50										8.3	2020	6.635	*
13	15	239	30										8.8	1300	6.831	*
14	16	240	20					2	2				9.0	1395	6.924	
15	17	241	10					2	2				10.7	1321	6.700	
16	18	242	5					2	2				11.1	1406	6.579	
17	13	243	Chl max +10							2						
18	14	244	Chl max							2						
19	19	245	Chl 5m							2						
20																
21																
22																
23																
24																

Watchkeeper(s): SRBottom Depth: 752 mTransmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0153	
Bottom	0203	
End	0228	

Positional Information

Start	Lat: <u>48 ° 39. 26</u>	N
	Lon: <u>126 ° 23 21</u>	W
Bottom	Lat: <u>48 ° 39.25</u>	N
	Lon: <u>126 ° 23. 26</u>	W
End	Lat: <u>48 ° 39. 25</u>	N
	Lon: <u>126 ° 23. 27</u>	W

Oxygen Info For This Cast

Blank Value: 0.002 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 27 05 2011
Analyst: CB

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

OXY: RED Box

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16

Station: LDU

Event #: 67

Ship: TULLY

UTC Date (dd|mmm|yyyy): 28 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								T	Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CHL	MPLE	NUT			Flask Serial #	Value mL · L ⁻¹	
1	1	246	Bot-10	✓	1500	✓	✓				✓		3.6	3187	0.824	
2	2	247	1500	✓	1500	✓	✓				✓		3.6	3043	0.645	
3	3	248	1250	✓	1250	✓	✓				✓		4.6	2082	0.253	
4	4	249	1000	✓	1000	✓	✓				✓		4.7	1174 / 2082	0.244 / 0.244	
5	5	250	750	✓	750	✓	✓				✓		5.3	657	0.258	
6	6	251	500	✓	500	✓	✓				✓		5.8	1313	0.595	
7	7	252	400	✓	400	✓	✓				✓		6.2	1477	0.901	
8	8	253	300	✓	300	✓	✓						7.7	1470	4.301	Miss trip? Looks like it!
9	9	254	250	✓	250	✓	✓						6.9	557	1.688	
10	10	255	200	✓	200	✓	✓						7.2	622	2.070	
11	11	256	200	✓	200									—		WATER FOR NH ₄
12	12	257	175	✓	175	✓	✓						7.3	1498	2.280	
13	13	258	150	✓	150	✓	✓						7.3	3084	3.033	
14	14	259	125	✓	125	✓	✓						7.5	2055	3.546	
15	15	260	100	✓	100	✓	✓						7.7	2019	3.814	
16	16	261	75	✓	75	✓	✓						8.0	3180	5.420	
17	17	262	50	✓	50	✓	✓						8.3	1367 / 1316	6.302 / 6.296	
18	20	263	30	✓	30	✓	✓						8.7	668	6.773	
19	21	264	20	✓	20	✓	✓	✓	✓				9.9	715	7.052	
20	22	265	10	✓	10	✓	✓	✓	✓				10.8	1389	6.601	
21	23	266	5	✓		✓	✓	✓	✓				11.1	2051	6.568	
22	18	267	MAX-10	✓	45					✓						
23	19	268	MAX	✓	35					✓						
24	24	269	5	✓	5					✓						

Watchkeeper(s): 3Ms / CDS

Bottom Depth: 1580 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0636	2336
Bottom	0704	
End	07	

Positional Information

Lat: 48 ° 28.78 N
Lon: 126 ° 43.04 W

Start

Bottom

Lat: 48 ° 28.87 N
Lon: 126 ° 43.11 W

End

Lat: 48 ° 28. N
Lon: 126 ° 43. W

Oxygen Info For This Cast

Blank Value: 0.002 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 27 | 05 | 2011
Analyst: CS

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

Oxys sampled surface to deep.

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: L508 Event #: 70 Ship: Tully UTC Date (dd|mmm|yyyy): 28 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	HPDC					Flask Serial #	Value mL • L ⁻¹	
1		270	chl max	✓ 44		✓		✓✓							
2		271	chl max	✓ 34		✓		✓✓							
3		272	5	✓		✓		✓✓							
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: 2057 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1323	0623
Bottom	1356	0656
End	1432	0732

Positional Information

Start	Lat: 48 ° 55.28 N
	Lon: 127 ° 13.22 W
	▼
Bottom	Lat: 48 ° 55.28 N
	Lon: 127 ° 13.63 W
	▼
End	Lat: 48 ° 55.363 N
	Lon: 127 ° 13.962 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: 2011-16 Station: L606Event #: 73Ship: TullyUTC Date (dd|mmm|yyyy): 28 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								°C / TEMP	Oxygen Titrations		Comments	
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NAH	CHI	APIC	Nutcool	Flask Serial #		Value mL · L ⁻¹			
1	1	273	Bot-10	✓	975							X		5.6	3191	0.230	
2	2	274	750	✓				X				XX		5.6	3166	0.262	
3	3	275	500	✓								X		6.2	3160	0.638	
4	4	276	400	✓								X		6.3	471	0.901	
5	5	277	300	✓										6.7	2064	1.376	
6	6	278	250	✓										6.9	3040	1.662	
7	7	279	200	✓										7.3	1497	2.171	
8	8	280	175	✓		XX								7.4	1401	2.416	
9	9	281	150	✓										7.5	3098	2.680	
10	10	282	125	✓										7.7	3038	2.909	
11	11	283	100	✓			XX							7.9	2032	3.565	
12	12	284	75	✓										7.9	3174	5.509	
13	13	285	50	✓										8.1	3052	6.439	
14	16	286	30	✓										8.7	3057	6.891	
15	17	287	20	✓					✓✓	✓✓				10.7	1317	6.605	
16	18	288	10	✓					✓✓	✓✓				10.9	3109	6.576	
17	19	289	5	✓		✓	✓		✓✓	✓✓				11.0	1492	6.600	
18	14	290	CHM-10	✓	45						✓✓				3171		
19	15	291	CHmax	✓	35						✓✓				3184		
20	20	292	CHI 5m	✓							✓✓				3209		
21																	
22		280	175			DUP								7.4	2035	2.426	
23																	
24							OXY	TOP	TO	BOTTOM							

Watchkeeper(s): 3MBottom Depth: 945 mTransmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1711	1011
Bottom	1728	
End	1800	

Positional Information

Lat:	49° 03.50	N
Lon:	127° 01.16	W

Lat:	49° 03.51	N
Lon:	127° 01.33	W

Lat:	49° 03.55	N
Lon:	127° 01.26	W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹Std Value: 0.7253 mL · L⁻¹*Date Run: 29 | 05 | 2011Analyst: CS

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

1 2 3 4 9 5 10 6 7 8 11

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LG04 Event #: 75 Ship: Tully UTC Date (dd|mmm|yyyy): 28 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH ₄	CW	HPDC			Flask Serial #	Value mL · L ⁻¹	
1	1	293	C-10	✓	✓	✓							7.0	1298	2.567
2	2	294	100	✓	✓	✓							7.6	2014	4.339
3	3	295	75	✓	✓	✓							7.8	1307	5.538
4	4	296	50	✓	✓	✓							8.0	3206	6.038
5	6	297	30	✓	✓	✓							8.1	1392	6.244
6	8	298	20	✓	✓	✓		✓	✓	✓			8.5	3090	6.787
7	9	299	10	✓	✓	✓		✓	✓	✓			10.5	1404	6.843
8	10	300	5	✓	✓	✓		✓	✓	✓			10.9	3126	6.773
9	5	301	Max+10	✓	35					✓					
10	7	302	Max	✓	25					✓					
11	11	303	5	✓						✓					
12															
13	2	294											7.6	1408	4.353
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): DY DB JBottom Depth: 146 mTransmisso Cleaned: Y / N

Time	UTC	Local
Start	1929	1229
Bottom	1933	1233
End	1943	1243

Positional Information

Start
Lat: 49° 11' 27" N
Lon: 126° 49.51' WBottom
Lat: 49° 11.28' N
Lon: 126° 49.47' WEnd
Lat: 49° 11.25' N
Lon: 126° 49.54' W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹Std Value: 0.7253 mL · L⁻¹*Date Run: 29 05 2011Analyst: DB

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

1 2 3 8 4 9 5 6 7 10

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: LG02 Event #: 78 Ship: Tully UTC Date (dd|mmm|yyyy): 28 May 2011

Free	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	HALE			
1	1	304	1180	3.784	3-10	✓ 90	✓	✓							7.9
2	2	305	1378	4.632	75	✓ 75	✓	✓	✓						7.9
3	3	306	3157	4.603	50	✓ 50	✓	✓							8.4
5	4	307	621	6.393	30	✓ 30	✓	✓							8.4 9.1
7	5	308	1261	6.897	20	✓ 20	✓	✓		✓	✓				10.3
8	6	309	1146	6.772	10	✓ 10	✓	✓		✓	✓				11.3
9	7	310	528	6.767	5	✓ 5	✓	✓		✓	✓				11.3
4	8	311			Max 40	✓ 35						✓			
6	9	312			Max	✓ 25						✓			
10	10	313			5	✓ 5						✓			
	11														
12	12	308	1647	4.931											7.9
	13														
	14														
	15														
	16														
	17														
	18														
	19														
	20														
	21														
	22														
	23														
	24														

Watchkeeper(s):
DA DO JT

Bottom Depth: 100 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2130	1430
Bottom	2133	1433
End	2144	1444

Positional Information

Start

Lat: 49 ° 18.73 N

Lon: 126 ° 38.20 W

Bottom

Lat: 49 ° 18.73 N

Lon: 126 ° 38.22 W

End

Lat: 49 ° 18.76 N

Lon: 126 ° 38.30 W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹

Std Value: 0.7253 mL · L⁻¹

*Date Run: 29 J05 2011

Analyst: CS

* 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: 2011-16 Station: LGO1 Event #: 80 Ship: Tully UTC Date (dd|mmm|yyyy): 28 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	NH ₄	CH ₄						Flask Serial #	Value mL • L ⁻¹	
1		314	B-10		L	✓	✓								371	4.563	8.5
2		315	30			✓	✓								196	4.522	8.5
3		316	20			✓	✓		✓	✓					569	6.381	9.9
4		317	10			✓	✓		✓	✓					1374	7.258	11.1
5		318	5			✓	✓		✓	✓					1402	7.143	11.2
6																	
7		316													3182	6.392	9.9
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): 28

Bottom Depth: 51 m
Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	2224	
Bottom	2226	
End	2231	

Positional Information
Start
Lat: 49 ° 20.64 N
Lon: 126 ° 35.19 W

Bottom
Lat: 49 ° 20.65 N
Lon: 126 ° 35.19 W

End
Lat: 49 ° 20.71 N
Lon: 126 ° 35.21 W

Oxygen Info For This Cast
Blank Value: 0.003 mL • L⁻¹
Std Value: 0.7253 mL • L⁻¹
*Date Run: 29.05.2011
Analyst: OS

* 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: 2011-16 Station: LBPI Event #: 81 Ship: TULLY UTC Date (dd|mmm|yyyy): 29 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken			Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Flask Serial #	Value mL · L ⁻¹	
1	1	319	MAX-10	✓ 25		✓		2		
2	2	320	MAX	✓ 15		✓		2		
3	3	321	5	✓		✓		2		
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

Watchkeeper(s): 3 Ms

Bottom Depth: 52 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0534	2234
Bottom	0536	
End	0540	

Positional Information
Start
Lat: 50 ° 04.72 N
Lon: 127 ° 52.70 W

Bottom
Lat: 50 ° 04.73 N
Lon: 127 ° 52.70 W

End
Lat: 50 ° 04.68 N
Lon: 127 ° 52.77 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: 2011-16 Station: LBP3 Event #: 84 Ship: TULLY UTC Date (dd|mmm|yyyy): 29 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	PH	TEMP	DO	SP	CHL	Flask Serial #	Value mL · L ⁻¹	
1	1	322	Bot-70	✓ 164	✓	✓							1421	2.759	7.0
2	2	323	150	✓		✓							708	2.759	6.9
3	3	324	125	✓		✓✓							1488	3.129	7.2
4	4	325	100	✓									3181	4.106	7.6
5	5	326	75	✓									1322	4.917	7.8
6	6	327	50	✓									3137	5.388	8.2
7	7	328	30	✓									1481	5.637	8.8
8	9	329	20	✓	✓			✓✓	✓				2084	6.164	9.7
9	11	330	10	✓				✓✓	✓				3007	6.747	7.3 (7.1581P)
10	12	331	5	✓			✓	✓✓	✓				2033	6.762	10.3
11	8	332	MAX-10	✓ 25								✓			
12	10	333	MAX	✓ 15								✓✓			
13	13	334	5	✓								✓			
14															
15	9	329											1400	6.183	9.7
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): 3M / CDS

Bottom Depth: 168 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0640	2340
Bottom	0644	
End	0658	

Positional Information
Start
Lat: 50 ° 03 23 N
Lon: 127 ° 55 47 W

Bottom
Lat: 50 ° 03 21 N
Lon: 127 ° 55 58 W

End
Lat: 50 ° 03 21 N
Lon: 127 ° 55 87 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 29/05/2011
Analyst: CDS
* Oxygen blanks and standards should be run daily, if possible

Water Properties Group

Rosette Log 88

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

Cruise ID: 2011-16 Station: LBPS

Event #: 86

Ship: Tully

UTC Date (dd|mmm|yyyy): 29 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken				Oxygen Titrations				Comments			
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CH4	APL	NUT COOL	Flask Serial #		Value mL · L ⁻¹		
1	1	335	Btm-1	✓ 1270	✓	✓					✓		4.0	3187	0.449	
2	2	336	1000	✓ 1000	✓	✓	✓				✓✓		4.9	3043	0.293	
3	3	337	750	✓ 750	✓	✓					✓		5.2	2082	0.357	
4	4	338	500	✓ 500	✓	✓					✓		5.8	1174	0.754	
5	5	339	400	✓ 400	✓✓	✓					✓		6.1/6	657/206	0.995	0.992
6	6	340	300	✓ 300	✓	✓							6.3	1313	1.433	
7	7	341	250	✓ 250	✓	✓							6.4	1477	1.752	
8	8	342	200	✓ 200	✓	✓							6.6	1470	2.443	
9	9	343	175	✓ 175	✓	✓							6.9	557	3.023	
10	10	344	150	✓ 150	✓	✓							6.9	622	3.500	
11	11	345	125	✓ 125	✓	✓							7.2	1498	3.576	
12	12	346	100	✓ 100	✓	✓							7.5	3084	4.035	
13	13	347	75	✓ 75	✓	✓							7.7	2055	4.968	6 rows sample # bubble on colourim
14	14	348	50	✓ 50	✓	✓							8.1/2	2019/3180	5.833	5.837
15	16	349	30	✓ 30	✓	✓	✓						8.7	1367	5.601	
16	18	350	20	✓ 20	✓	✓		✓	✓				9.7	1316	6.371	
17	19	351	10	✓ 10	✓	✓		✓	✓				10.5	668	6.745	
18	20	352	5		✓	✓		✓	✓				10.5	715	6.746	
19	15	353	chl-10	✓ 25						✓						
20	17	354	chl max	✓ 25						✓						
21	21	355	5							✓						
22																
23																
24																

Watchkeeper(s): COT

Bottom Depth: 1281 m

Transmissio Cleaned: (Y) / N

Time	UTC	Local
Start	1000	0300
Bottom	1021	0321
End		

Positional Information

Start Lat: 50° 00.04' N
Lon: 128° 00.29' W

Bottom Lat: 50° 00.12' N
Lon: 128° 00.11' W

End Lat: ° N
Lon: ° W

Oxygen Info For This Cast

Blank Value: 0.003 mL • L⁻¹

Std Value: 0.7253 mL • L⁻¹

*Date Run: 29 May 2011

Analyst: N2

* 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: 2011-16 Station: LBP7Event #: 92Ship: TullyUTC Date (dd|mmm|yyyy): 29 MAY 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								OC TEMP	Oxygen Titrations		Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	NH ₄	Chl	HPLC	Nutrool			Flask Serial #	Value mL · L ⁻¹	
1	1	356	2000	✓										3124	3.7	1.350
2		357	1500	✓			X							1144	4.2	0.606
3		358	1250	✓										631	4.2	0.362
4		359	1000	✓							XX			468	4.7	0.248
5		360	750	✓										1475	5.2	0.250
6		361	500	✓										1248	5.7	0.630
7		362	400	✓										3028	5.9	1.187
8		363	300	✓	XX									1373 1397	6.3/6.4	1.075 / 2.125
9		364	250	✓										3151	6.4	2.763
10		365	200	✓		XX								1318	6.7	3.262
11		366	175	✓										745	6.9	3.505
12		367	150	✓										2020	7.2	3.819
13		368	125	✓										1300	7.3	4.775
14	✓	369	100	✓										1395	7.6	4.683
15	15	370	75	✓										1321	7.4	6.756
16	17	371	50	✓	XX									1406/1407	8.1/8.1	7.149 / 7.143
17	19	372	30	✓	XX					2				1476	9.0	7.009
18	20	373	20	✓				2	2					1123	9.9	6.756
19	21	374	10	✓				2	2					1330	10.2	6.807
20	22	375	5	✓			X	2	2					14110	10.2	6.738
21	18	376	Chl m+10	✓	45					2						
22	16	377	Chl max	✓	55					2						
23	23	378	Chl S	✓						2						
24																

Watchkeeper(s): SR + MRBottom Depth: 2197 mTransmisso Cleaned: (Y) 1 N

	UTC	Local
Time		
Start		
Bottom	1512	0812
End	1609	

Positional Information

Start

Lat: 49° 52. N

Lon: 128° 11. W

Bottom

Lat: 49° 52.52 N

Lon: 128° 11.25 W

End

Lat: 49° 52.46 N

Lon: 128° 11.49 W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹

Std Value: 0.7258 mL · L⁻¹

*Date Run: 29 05 2011

Analyst: CS

*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: 2011-16 Station: C500

Event #: 102

Ship: TULLY

UTC Date (dd|mmm|yyyy): 30 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken						Oxygen Titrations		Comments				
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH4	CH1	HP/LC	Mut (CO2)	Temp		Flask Serial #	Value mL · L ⁻¹		
1		379	2005											2.9	1421	1.350	-tiny compromise on vent 1
2		380	1500					X						3.3	708	0.581	
3		381	1250								XX			7.8	1488	6.225	MISTRIP
4		382	1000											4.2	3181	0.291	Bottle tripped w/o
5		383	750											4.9	1322	0.263	
6		384	500			XX								5.6 5.7	3137 1481	0.833 0.892	
7		385	400				XX				✓			5.8	2084	1.261	
8		386	300											6.4	1400	1.846	
9		387	250											6.6	3007	2.340	
10		388	200											6.9	2033	3.039	
11		389	175											6.9	1311	3.882	
12		390	150											7.1	3055	3.990	
13		391	125											7.4	2065	13.552	Bubble in flask
14		392	100											7.6	690	4.551	
15		393	75			XX								7.7 7.7	2069 1490	5.800 5.799	
16	16	394	50											8.1	1489	6.509	
17	19	395	30											9.0	1464	6.928	
18	20	396	20						2	2				9.8	1387	6.866	
19	21	397	10						2	2				10.3	1365	6.705	
20	22	398	5			✓	✓	X	2	2				10.3	638	6.706	
21	17	399	Ch/max-10	42							2						
22	18	400	Ch/max	32							2						
23	23	401	Ch/5m	5							2						
24																	

Watchkeeper(s): SR

Bottom Depth: 2169 m

Transmisso Cleaned: (Y) N

seconds of wait + time

Time	UTC	Local
Start	1147	
Bottom	1222	
End		

Positional Information

Start
Lat: 50° 27.62 N
Lon: 129° 55.05 WBottom
Lat: 50° 27.63 N
Lon: 129° 55.06 WEnd
Lat: 50° 27. N
Lon: 129° 55. W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹Std Value: 0.7253 mL · L⁻¹

*Date Run: 27 May 2011

Analyst: A

* 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: 2011-16 Station: C502Event #: 106Ship: TOLLYUTC Date (dd|mmm|yyyy): 30 | 05 | 11

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken					Cool NUTs	°C TEMP	Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NAH	CHL	HALC		Flask Serial #	Value mL · L ⁻¹	
1	1	402	1000	✓							4.9	3187	0.266	
2	2	403	750	✓			X				5.1	3043	0.246	
3	3	404	500	✓							5.7	2082	0.635	
4	4	405	400	✓		xx					5.9	1174	1.047	
5	5	406	300	✓							6.4	2086	1.595	
6	6	407	250	✓							6.6	657	2.268	
7	7	408	200	✓							6.9	1477	2.625	
8	8	409	175	✓							7.1	1470	9.694	
9	9	410	150	✓	xx						7.3/7.3	1312/672	3.210/3	209
10	10	411	125	✓							7.4	1498	3.588	
11	11	412	100	✓							7.6	3084	4.222	
12	12	413	75	✓							7.7	2055	5.254	
13	13*	414	50	✓							7.7	1337	6.542	
14	15	415	30	✓							8.5	3180	6.608	
15	17	416	20	✓				xx	xx		10.2	1367	6.780	
16	18	417	10	✓				xx	xx		10.5	1316	6.731	
17	19	418	5	✓			X	xx	xx		11.2	668	6.702	
18	14	419	CHL MAX-10	✓	35					xx				
19	16	420	CUL MAX	✓	25					xx				
20	20	421	CNC 5M	✓	5					xx				
21														
22														
23														
24														

Watchkeeper(s):
3MsBottom Depth: 1893 mTransmisso Cleaned: ☒ Y ☐ N

	UTC	Local
Start	1752	1052
Bottom	1810	
End	1846	

Positional Information

Start
Lat: 50 ° 41.33 N
Lon: 129 ° 27.86 WBottom
Lat: 50 ° 41.34 N
Lon: 129 ° 27.97 WEnd
Lat: 50 ° 41.41 N
Lon: 129 ° 27.74 W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹Std Value: 0.7253 mL · L⁻¹*Date Run: 29 MAY 2011Analyst: CS

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

1 2 3 4 8 5 9 6 7 10

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: CS04 Event #: 109 Ship: Tully UTC Date (dd|mmm|yyyy): 30 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	NH ₄	chl	HAC					Flask Serial #	Value mL • L ⁻¹	
1	1	422	B-10	✓ 94	✓	✓									1298	3.979	7.5
2	2	423	75	✓			✓								2014		7.7 → Titrated Twice
3	3	424	50	✓											1408	6.047	8.0
4	4	425	30	✓		✓									1307	6.378	8.4 / 8.4
5	6	426	20	✓				✓	✓						1392	6.691	8.8 (Pld in wrong depth)
6	8	427	10	✓				✓	✓						3090	6.978	10.2
7	9	428	5					✓	✓						1404	6.958	10.6
8	5	429	Max 10	✓ 28						✓	✓						
9	7	430	Max	✓ 18						✓	✓						
10	10	431	5	5						✓	✓						
11																	
12	4	425	30												3206	6.373	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): 24 DB JT

Bottom Depth: 104 m
Transmisso Cleaned: (Y) / N

0.84 * 0.024 = 0.02016

	Time	UTC	Local
Start	2045		1345
Bottom	2047		1347
End	2056		1356

Positional Information
Start
Lat: 50 ° 49.08 N
Lon: 129 ° 13.22 W

Bottom
Lat: 50 ° 49.07 N
Lon: 129 ° 13.18 W

End
Lat: 50 ° 49.04 N
Lon: 129 ° 13.11 W

Oxygen Info For This Cast
Blank Value: 0.003 mL • L⁻¹
Std Value: 0.7253 mL • L⁻¹
*Date Run: 29 May 2011
Analyst: B

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

* Check depths on oxy file.

V834758 69

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: CS06. Event #: 119 Ship: Tully UTC Date (dd|mmm|yyyy): 31 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken			Oxygen Titrations							Comments	
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	CHL	NH4	MPAC					Flask Serial #	Value mL · L ⁻¹
1	1	432	Bm-10	✓ 56	✓	✓									7.9 1378	5.567
2	2	433	50	✓ 50	✓	✓									7.8 1647	5.537
3	3	434	30	✓ 30	✓	✓									8.1 3157	6.094
4	4	435	20	✓ 20	✓	✓		✓	✓						8.3 621/1261	6.418/6.428
5	6	436	10	✓ 10	✓	✓		✓	✓						8.9 1146	7.035
6	8	437	5	✓ 5	✓	✓		✓	✓						9.7 528	8.206
7	5	438	CHL-10	✓ 17						✓						
8	7	439	CHL-10	✓ 7						✓						
9	9	440	5	✓ 5						✓						
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): CAT

Bottom Depth: 66 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0844	0144
Bottom	0846	0146
End	0851	0151

Positional Information
Start
Lat: 50 ° 59.99 N
Lon: 128 ° 51.96 W

Bottom
Lat: 50 ° 59.97 N
Lon: 128 ° 51.91 W

End
Lat: 50 ° 59.91 N
Lon: 128 ° 51.81 W

Oxygen Info For This Cast
Blank Value: 0.003 mL · L⁻¹
Std Value: 0.7253 mL · L⁻¹
*Date Run: 31 May 2011
Analyst: CS

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

ST. 128.516

DRAWING DRY BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2011-16 Station: C509 Event #: 126 Ship: TULLY UTC Date (dd|mmm|yyyy): 31 | MAY | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Temp	Flask Serial #	Value mL • L ⁻¹							
1	1	441	81m-10			✓	✓							6.7	1421	1.864	
2	2	442	175			✓	✓	✓						6.6	1408	1.847	
3	3	443	150			✓	✓							6.8	1488/3181	2.119/2.10	
4	4	444	125			✓	✓							6.9	1322	2.464	
5	5	445	100			✓	✓							7.3	8137	3.851	
6	6	446	75			✓	✓							7.8	1481	6.076	
7	7	447	50			✓	✓							8.3	2034	6.513	
8	8	448	30			✓	✓							8.5	1400	6.558	
9	11	449	20			✓	✓		✓✓	✓✓				8.9	2007	6.994	
10	12	450	10			✓	✓		✓✓	✓✓				10.7	1311	7.434	
11	13	451	5			✓	✓		✓✓	✓✓				11.0	2033	7.217	
12	9	452	chl-10	30						✓✓							
13	10	453	chl-mix	20						✓✓							
14	14	454	5							✓✓							
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): SRBottom Depth: 196 mTransmissio Cleaned: (Y) / N

	UTC	Local
Start	1722	
Bottom	1226	
End		

Positional Information

Start
 Lat: 51 ° 12.37 N
 Lon: 128 ° 28.27 W

Bottom
 Lat: 51 ° 12.36 N
 Lon: 128 ° 28.27 W

End
 Lat: 51 ° 12. N
 Lon: 128 ° 28. W

Oxygen Info For This Cast

Blank Value: 0.003 mL · L⁻¹Std Value: 0.7253 mL · L⁻¹*Date Run: 29 MAY 2011Analyst: CI

* 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: 2011-16 Station: UBC7 Event #: 133 Ship: Tolly UTC Date (dd|mmm|yyyy): 31 May 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken				Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	chl	Flask Serial #	Value mL · L ⁻¹	
1	1	455	30	✓ 30		✓		✓✓			UBC sampling
2	2	456	5	✓ 5		✓		✓✓			
3	3	457	0	✓ 1.5		✓		✓✓			
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

Watchkeeper(s): dy

Bottom Depth: 210 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2055	1355
Bottom	2058	1358
End	2104	1404

Positional Information

Start Lat: 51 ° 29.98 N
Lon: 127 ° 48.99 W

Bottom Lat: 51 ° 29.98 N
Lon: 127 ° 48.97 W

End Lat: 51 ° 29.92 N
Lon: 127 ° 48.95 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: 2011-16 Station: R101 Event #: 135 Ship: Tolly UTC Date (dd|mmm|yyyy): 31 May 2011

Firing #	Niskin #	Sample #	Rosette Operation			Samples Taken			Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒	Pressure	Oxy	Nut	Sal	Flask Serial #	Value mL · L ⁻¹	
1	1	458	30	☒	30		☒				UPC Sampling
2	2	459	5	☒	5		☒				
3	3	460	0	☒	1.6		☒				
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											

Watchkeeper(s): NY DB J RA

Bottom Depth: 328 m
Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	2219	1519
Bottom	2224	1524
End	2231	1531

Positional Information
Start
Lat: 51 ° 26.34 N
Lon: 127 ° 38.23 W

Bottom
Lat: 51 ° 26.30 N
Lon: 127 ° 38.30 W

End
Lat: 51 ° 26.23 N
Lon: 127 ° 38.43 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: 2011-16 Station: R. 2 Event #: 138 Ship: Tully UTC Date (dd|mmm|yyyy): 1 June 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	461			30			✓		✓✓✓					UBC
2	462			5			✓		✓✓✓					
3	463			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: 327 m

Transmisso Cleaned: ☒ N

	UTC	Local
Time Start	0005	1705
Bottom	0010	
End	0018	

Positional Information
 Start Lat: 51° 31.21 N
 Lon: 127° 33.62 W

Bottom Lat: 51° 31.21 N
 Lon: 127° 33.61 W

End Lat: 51° 31.19 N
 Lon: 127° 33.58 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: 2011-16 Station: RI 3 Event #: 140 Ship: Tully UTC Date (dd|mmm|yyyy): 1 | Jun | 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	464			30			✓		3							
2	465			5			✓		3							
3	466			0			✓		3							
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: 324 m

Transmisso Cleaned: ☒ Y ☐ N

	Time	UTC	Local
Start		0113	1813
Bottom		0118	
End		0126	

Positional Information

Start
 Lat: 51 ° 35.75 N
 Lon: 127 ° 32.08 W

Bottom
 Lat: 51 ° 35.76 N
 Lon: 127 ° 32.08 W

End
 Lat: 51 ° 35.71 N
 Lon: 127 ° 32.05 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: 2011-16 Station: R14 Event #: 142 Ship: Tully UTC Date (dd|mmm|yyyy): 1 | June | 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	467			30			/		3							
2	468			5			/		3							
3	469			0			/		3							
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: 295 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0223	1923
Bottom	0227	
End	0234	

Positional Information
 Start
 Lat: 51 ° 38.78 N
 Lon: 127 ° 26.98 W

Bottom
 Lat: 51 ° 38.78 N
 Lon: 127 ° 26.96 W

End
 Lat: 51 ° 38.76 N
 Lon: 127 ° 26.93 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: 2011-16 Station: R15 Event #: 144 Ship: Tully UTC Date (dd|mmm|yyyy): 1 | June | 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						
41	470			30	☒		☒		3							
52	471			5	☒		☒		3							
63	472			0	☒		☒		3							
4																
5																
6			Closed 4, 5, 6 as well as						1, 2, 3.							
7							Use		4, 5, 6							
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
3M

Bottom Depth: 193 m

Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	0329	
Bottom	0333	
End	0338	

Positional Information

Start

Lat: 51 ° 40.88 N

Lon: 127 ° 20.20 W

Bottom

Lat: 51 ° 40.88 N

Lon: 127 ° 20.23 W

End

Lat: 51 ° 40.91 N

Lon: 127 ° 20.28 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: 2011-16 Station: UBC 6 Event #: 146 Ship: TULLY UTC Date (dd|mmm|yyyy): 01 | Jun | 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	473			30	✓		✓		3							
2	474			5	✓		✓		3							
3	475			0			✓		3							
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): 3Ms

Bottom Depth: 145 m
Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0411	211
Bottom	0415	
End	0420	

Positional Information
Start
Lat: 51 ° 40 55 N
Lon: 127 ° 16 98 W

Bottom
Lat: 51 ° 40 57 N
Lon: 127 ° 17.00 W

End
Lat: 51 ° 40.59 N
Lon: 127 ° 17.00 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: 2011-16 Station: GEO1 Event #: 154 Ship: TULLY UTC Date (dd|mmm|yyyy): 02 | JUN | 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					
23	476			10	☒						W					
24	477			5	☒						W					
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): 3Ms

Bottom Depth: 397 m

Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	1800	1100
Bottom	1806	
End	1814	

Positional Information

Start Lat: 49 ° 14.77 N
Lon: 123 ° 44.60 W

Start

Bottom

Lat: 49 ° 14.75 N
Lon: 123 ° 44.53 W

End

Lat: 49 ° 14.74 N
Lon: 123 ° 44.46 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