

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: 55

Event #: 1

Ship: TULLY

UTC Date (dd|mmm|yyyy): 15 | 05 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation			Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒	Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	01	2088	0.535	125			105-D										
2	1	2068	0.532	125			510-D										
3	2	2065	0.523	125			510-D										
4	02	2061	0.527	1			105-D										
5	03	2090	0.488				105-D										
6	3	3184	0.508				510-D										
7	4	3051	0.548				510-D										
8	04	3133	0.538				105-D										
9	05	2082	0.586				105-D										
10	5	2027	0.567				510-D										
11	6	3194	0.549	✓			510-D										
12	06	3116	0.558	125			105-D										
13	07			75			105-D										Paper in sample
14	7	2089	4.663	75			510-D										
15	8	3151	4.658	75			510-D										
16	08	3188	4.663				105-D										
17	09	3190	4.643				105-D										
18	9	2047	4.630				510-D										very ugly peak
19	10	3177	4.680				510-D										
20	010	2084	4.669				105-D										
21	011	2073	4.657				105-D										
22	11	3108	4.647				510-D										
23	12	708	4.668	✓			510-D										
24	012	3033	4.660	75			105-D										

Watchkeeper(s): _____

Bottom Depth: 181 m

Transmisso Cleaned: Y / (N)

	Time	UTC	Local
Start			
Bottom		2041	
End		2104	

Positional Information		
Start	Lat: °	N
	Lon: °	W

Bottom	Lat: <u>48</u> ° <u>39.25</u>	N
	Lon: <u>123</u> ° <u>30.36</u>	W

End	Lat: <u>48</u> ° <u>39.22</u>	N
	Lon: <u>123</u> ° <u>30.30</u>	W

Oxygen Info For This Cast	
Blank Value:	<u>.001333</u> mL · L ⁻¹
Std Value:	<u>.720333</u> mL · L ⁻¹
*Date Run:	<u>15 05 09</u>
Analyst:	<u>Melissa</u>

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: SS Event #: 1 Ship: TULLY UTC Date (dd|mmm|yyyy): 15 | 05 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	013	2014	—	10		10S-D										Error, No DO value, Thio Vol = 1.337
2	13	589	7.514	10		510-D										
3	14	2092	7.488			510-D										
4	014	2033	7.476			10S-D										
5	015	3157	7.478			10S-D										
6	15	3063	7.472			510-D										
7	16	3135	7.369			510-D										
8	016	3206	—			10S-D										Titration ended early, Thio Vol: 0.125 + 1.083
9	017	3097	7.302			10S-D										
10	17	3196	7.339			510-D										
11	18	1365	7.266			510-D										
12	018	3084	7.271	10		10S-D										
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): _____

Bottom Depth: _____ m
Transmisso Cleaned: Y / N

	Time	UTC	Local
Start			
Bottom			
End			

Positional Information
Start
Lat: ° N
Lon: ° W

Bottom
Lat: ° N
Lon: ° W

End
Lat: ° N
Lon: ° W

Oxygen Info For This Cast
Blank Value: 0.001333 mL · L⁻¹
Std Value: _____ mL · L⁻¹
*Date Run: 16 | 05 | 2009
Analyst: Melissa

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

Sample 016 rerun @ end of cast

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: S5 Event #: 1 Ship: TULLY UTC Date (dd|mmm|yyyy): 15 | 05 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	1			125	✓ 122	xxx										
2	2			125	✓ 122											
3	3			125	✓ 122											
4	4			125	✓ 122											
5	5			125	✓ 122											
6	6			125	✓ 122											
7	7			75	✓ 66											
8	8			75	✓ 66											
9	9			75	✓ 66											
10	10			75	✓ 66											
11	11			75	✓ 66											
12	12			75	✓ 66											
13	13			10	✓ 11											
14	14			10	✓ 11											
15	15			10	✓ 11											
16	16			10	✓ 11											
17	17			10	✓ 11											
18	18			10	✓ 11	xxx										
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SA/JE/HM

Bottom Depth: 181 m

Transmisso Cleaned: Y / N

at 4m @ bot.

Time	UTC	Local
Start		
Bottom	<u>2041</u>	
End	<u>2104</u>	

Positional Information

Start
 Lat: ° N
 Lon: ° W

Bottom
 Lat: 48 ° 39.25 N
 Lon: 123 ° 30.36 W

End
 Lat: 48 ° 39.22 N
 Lon: 123 ° 30.30 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: 046 Event #: 2 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | 05 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation			Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed √	Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	19	3024	5.054	B-5		170											
2	20	2064	5.093	150		149											
3	21	3055	5.149	125		126											
4	22	3057	5.296	100		102											
5	23	3098	4.664	75		75											
6	24	3203	5.056	50		50											
7	25	3171	5.330	30		31											
8	26	3075	5.730	20		20											
9	27	3006	6.112	10		10											
10	28			0													
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Sample Not Taken

Watchkeeper(s):

Bottom Depth: 180 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<u>01:01:10</u>	
Bottom	<u>01:03:50</u>	
End		

Positional Information

Start

Lat: ° N

Lon: ° W

Bottom

Lat: 48 ° 51.400 N

Lon: 123 ° 10.880 W

End

Lat: 48 ° 51.391 N

Lon: 123 ° 10.960 W

Oxygen Info For This Cast

Blank Value: .001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 16|05|09

Analyst: WEL

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: 42 Event #: 3 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | 05 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	29	3018	4.261	B-5	✓ 315											
2	30	3012	4.284	300	✓ 300											wrong depth entered
3	31	3124	4.402	250	✓ 251											
4	32	2007	4.684	200	✓ 201											
5	33	2015	4.844	175	✓ 175											
6	34	2099	4.751	150	✓ 150											
7	35	2035	4.767	125	✓ 125											
8	36	3034	4.921	100	✓ 101											
9	37	2032	4.493	75	✓ 78											
10	38	3052	4.542	50	✓ 50											
11	39	3109	4.947	30	✓ 30											
12	40	3164	5.534	20	✓ 20											
13	41	3038	5.926	10	✓ 10											
14	42	2087	7.279	0	✓ 1											
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
SLBottom Depth: 321 mTransmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	02:56	
Bottom	03:03	
End	03:23	

Positional Information

Start	Lat: <u>49</u> ° <u>1.787</u> N
	Lon: <u>123</u> ° <u>26.204</u> W
Bottom	Lat: <u>49</u> ° <u>1.774</u> N
	Lon: <u>123</u> ° <u>26.156</u> W
End	Lat: <u>49</u> ° <u>1.786</u> N
	Lon: <u>123</u> ° <u>26.084</u> W

Oxygen Info For This Cast

Blank Value: <u>2.001333</u> mL · L ⁻¹
Std Value: <u>0.7</u> mL · L ⁻¹
*Date Run: <u> </u> <u> </u> <u> </u>
Analyst: <u> </u>

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

BLUE OXY BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: 39

Event #: 4

Ship: Tully

UTC Date (dd|mmm|yyyy): 16 | 05 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	43	611	4.543	6-10	/	368										
2	44	621	4.819	300	/	300		X								
3	45	1487	4.856	250	/	247										
4	46	622	4.660	200	/	200										
5	42	1465	4.720	175	/	174										
6	48	657	4.759	150	/	150										
7	49	620	4.891	125	/	122										
8	50	715	4.577	100	/	99										
9	51	1368	4.555	75	/	76										
10	52	639	4.619	50	/	51										
11	53	647	4.807	30	/	30										
12	54	700	5.767	20	/	20										
13	55	1338	6.187	10	/	10										
14	56	1174	7.501	0	/	1										bubbles in flask
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

No DMQ on Oxy Flasks

Watchkeeper(s): SA/ MH/ LP

Bottom Depth: 375 m

Transmisso Cleaned: ☒ / N

	UTC	Local
Time Start	0430	
Bottom	0438	
End	0455	

Positional Information

Start Lat: 49 ° 9.877 N

Lon: 123 ° 32.824 W

Bottom Lat: 49 ° 9.596 N

Lon: 123 ° 32.754 W

End Lat: 49 ° 10.219 N

Lon: 123 ° 32.570 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 16|05|09

Analyst: Mei

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: 14 Event #: 7 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | 5 | 09

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	57	2014	3.563	B-5	310											
2	58	589	3.302	250	250											
3	59	2092	3.895	200	200											
4	60	2033	3.879	175	177											
5	61	3157	3.950	150	150											
6	62	3063	4.045	125	125											
7	63	3135	3.729	100	99											
8	64	3097	3.821	75	75											
9	65	3196	4.618	50	50											
10	66	1365	5.163	30	30											
11	67	3084	5.303	20	20											
12	68	3206	6.033	10	10											
13	69	2055	7.082	0	16											
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): _____

Bottom Depth: 316 m

Transmissio Cleaned: Y / N

Time	UTC	Local
Start	1806	
Bottom	1816	
End	1832	

Positional Information
 Lat: 49 ° 53.027 N
 Lon: 124 ° 59.581 W

Start

Lat: 49 ° 53.072 N
 Lon: 124 ° 59.620 W

Bottom

Lat: 49 ° 53.051 N
 Lon: 124 ° 59.822 W

End

Oxygen Info For This Cast
 Blank Value: 0.001333 mL · L⁻¹
 Std Value: 0.720333 mL · L⁻¹
 *Date Run: 16 | 05 | 09
 Analyst: Mol

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: SOGN

Event #: 8

Ship: Tully

UTC Date (dd|mmm|yyyy): 16 | 5 | 09

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄				
1	70	3094	3.502	6-10	/ 334									
2	71	371	3.900	250	/ 250			X						
3	72	557	3.970	200	/ 200									
4	73	632	4.147	175	/ 175									
5	74	1085	4.059	150	/ 150									
6	75			125	/ 125									broken bottle - not taken
7	76	559	3.709	100	/ 100									
8	77	1158	4.010	75	/ 75									
9	78	2075	4.839	50	/ 50									
10	79	3118	5.718	30	/ 30									
11	80	76	6.354	20	/ 20									
12	81	1312	6.826	10	/ 10									
13	82	1497	7.674	0	/ 1									bubble in flask
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): SM/LP/MA

Bottom Depth: 339 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1919	
Bottom	1927	
End	1943	

Positional Information

Start

Lat: 49 ° 49.873 N

Lon: 124 ° 52.414 W

Bottom

Lat: 49 ° 49.824 N

Lon: 124 ° 52.457 W

End

Lat: 49 ° 49.724 N

Lon: 124 ° 52.483 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL • L⁻¹

Std Value: 0.720333 mL • L⁻¹

*Date Run: 17 | 05 | 09

Analyst: Mei

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

Sample #
wrong in
oxy data:
8 should be 83

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: 12

Event #: 9

Ship: Tully

UTC Date (dd|mmm|yyyy): 16 | 5 | 09

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	83	1477	3.711	6-5	350	✓										flask 1459, DO 3.697
2	84	1134	3.792	300	300			X								
3	85	1498	3.858	250	250											
4	86	1492	3.991	200	200											
5	87	745	4.023	175	175											
6	88	668	4.022	150	150											
7	89	1126	4.180	125	125											
8	90	1489	3.929	100	100											
9	91			75	75											flask not capped - stopper popped out?
10	92	1488	4.628	50	50											
11	93	1464	5.502	30	30											
12	94	1473	6.144	20	20											
13	95	1485	6.822	10	10											
14	96	1483	8.103	0	1											bubble in oxy flask
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Son/LP/MT

Bottom Depth: 355 m

Transmissometer Cleaned: ☒ Y / ☐ N

small bubble in flask of duplicate sample

Time	UTC	Local
Start	2216	
Bottom	2225	
End	2245	

Positional Information

Start Lat: 49 ° 43.603 N
Lon: 124 ° 40.823 W

Bottom Lat: 49 ° 43.595 N
Lon: 124 ° 40.810 W

End Lat: 49 ° 43.595 N
Lon: 124 ° 40.824 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 17 | 05 | 09

Analyst: mei

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

~~NO DMQ ON OXY FLASKS~~

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: 9 Event #: 10 Ship: Tully UTC Date (dd|mmm|yyyy): 16 | 5 | 9

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	97	611	3.464	6-5	☒												
2	98	621	3.439	150	☒			X									
3	99	1487	3.779	125	☒												
4	100	622	3.913	100	☒	2		X									Flask: 1465, DO: 3.972
5	101	657	4.240	85	☒												
6	102	620	4.591	50	☒												
7	103	715	5.135	30	☒												
8	104	1368	5.900	20	☒												wrong depth: 30 should be 20
9	105	639	7.138	10	☒												
10	106	647	8.522	0	☒												
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): SR

Bottom Depth: 189 m

Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	2352	
Bottom	2357	
End	0008	

Positional Information

Start
 Lat: 49 ° 35.503 N
 Lon: 124 ° 38.301 W

Bottom
 Lat: 49 ° 35.508 N
 Lon: 124 ° 38.312 W

End
 Lat: 49 ° 35.503 N
 Lon: 124 ° 38.507 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 17.105.109

Analyst: mel

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: 6

Event #: 11

Ship: Tully

UTC Date (dd|mmm|yyyy): 17 | 5 | 9

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	107	1338	3.838	6-5	☒ 185									
2	108	1174	3.838	175	☒ 175									
3	109	700	4.030	150	☒ 150									
4	110	638	4.228	125	☒ 125									
5	111	1327	4.062	100	☒ 100									
6	112	1302	4.114	75	☒ 75									
7	113	1301	4.620	50	☒ 50									
8	114	1374	5.395	30	☒ 30									
9	115	1367	6.009	20	☒ 20									
10	116	712	6.604	10	☒ 10									titration ended early ↓ ↓ ↓
11	117	1105	—	0	☒ 0									
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): SR

Bottom Depth: 193 m

Transmisso Cleaned: ☒ Y / N

	UTC	Local
Time Start	<u>0015</u>	
Bottom	<u>0019</u>	
End	<u>0030</u>	

Positional Information
 Start Lat: 49 ° 30.626 N
 Lon: 124 ° 27.769 W

Bottom Lat: 49 ° 30.631 N
 Lon: 124 ° 27.762 W

End Lat: 49 ° 30.635 N
 Lon: 124 ° 27. W

Oxygen Info For This Cast
 Blank Value: 0.001333 mL · L⁻¹
 Std Value: 0.120333 mL · L⁻¹
 *Date Run: 17/05/09
 Analyst: wle

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

Water Properties Group

Rosette Log

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

* Labels may be labeled as '12'
↑ station

Cruise ID: 2009-40

Station: 3

Event #: 13

Ship: Tully

UTC Date (dd|mmm|yyyy): 17 | 005 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	118	2014	4.209	6-5	✓ 315											
2	119	589	4.133	300	✓ 300			X								
3	120	2092	3.890	250	✓											
4	121	2033	3.885	200	✓											
5	122	3157	4.073	175	✓											
6	123	3063	4.271	150	✓											
7	124	3135	4.340	125	✓											
8	125	1365	4.434	100	✓		2									flask: 3084, DO: 4.457
9	126	3206	4.147	75	✓											
10	127	2055	4.762	50	✓											
11	128	3094	5.974	30	✓											
12	129	371	6.381	20	✓											
13	130	557	7.334	10	✓											
14	131	632		0												critters in sample ↳ titration ended early ↳ too many bugs
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
SR/LP/MH

Bottom Depth: 323 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0333	
Bottom	0341	
End	0359	

Positional Information

Start

Lat: 49 ° 26.575 N

Lon: 124 ° 20.228 W

Bottom

Lat: 49 ° 26.615 N

Lon: 124 ° 20.230 W

End

Lat: 49 ° 26.565 N

Lon: 124 ° 20.234 W

Oxygen Info For This Cast

Blank Value: 0.00333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 17 | 05 | 09

Analyst: WJL

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: 2 Event #: 14 Ship: Tully UTC Date (dd|mmm|yyyy): 17|5|2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	132	3024	4.133	6-5	/	274										
2	133	2064	4.098	250	/			X								
3	134	3055	4.651	200	/											
4	135	3057	4.571	175	/											
5	136	3098	4.766	150	/											
6	137	3203	4.692	125	/											
7	138	3075	4.366	100	/	2										flask: 3171 DO: 4.389
8	139	3006	4.352	75	/											
9	140	3018	4.448	50	/											
10	141	2099	5.589	30	/											
11	142	3124	6.393	20	/											
12	143	2007	6.461	10	/											
13	144	2015	6.978	0	/											
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SP/LP/MH

Bottom Depth: 280 m

Transmisso Cleaned: ☒ Y / ☐ N

	UTC	Local
Time Start	0503	
Bottom	0505	
End	0525	

Positional Information

Start Lat: 49 ° 24.103 N
Lon: 124 ° 7.330 W

Bottom Lat: 49 ° 24.126 N
Lon: 124 ° 9.359 W

End Lat: 49 ° 24.050 N
Lon: 124 ° 9.322 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____|____|____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: LB02

Event #: 20

Ship: Tully

UTC Date (dd|mmm|yyyy): 18 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	145	559	4.472	50	☒ 50	1										
2	146	1158	6.977	36	☒ 30	1		X								
3	147	2075	6.788	20	☒ 20	xx										flask: 3118, DO: 6.750 ← weird peak
4	148	76	7.434	10	☒ 10	1										
5	149	1312	7.568	0	☒ 0	1										
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 57 m

Transmisso Cleaned: ☒ N

Time	UTC	Local
Start	0134	
Bottom	0137	
End	0142	

Positional Information

Start

Lat: 48 ° 39.040 N

Lon: 125 ° 2.315 W

Bottom

Lat: 48 ° 39.025 N

Lon: 125 ° 2.287 W

End

Lat: 48 ° 39.016 N

Lon: 125 ° 2.293 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 18 | 05 | 09

Analyst: me1

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: LB24 Event #: 22 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	150	611	2.373	5-5	/ 105											
2	151	621	3.690	75	/ 75											
3	152	1487	4.620	50	/ 50											
4	153	622	6.614	30	/ 30											
5	154	1465	6.699	20	/ 20	2		X								Flask: 657, DO: 6.730
6	155	620	6.968	10	/ 10											
7	156	715	2.46005	0	/ 1											titration ended early
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR/LP/HM

Bottom Depth: 114 m

Transmisso Cleaned: ☒ N

	Time	UTC	Local
Start		0311	
Bottom		0315	
End		0323	

Positional Information

Start

Lat: 48 ° 35.671 N

Lon: 125 ° 8.671 W

Bottom

Lat: 48 ° 35.675 N

Lon: 125 ° 8.692 W

End

Lat: 48 ° 35.658 N

Lon: 125 ° 8.642 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 18105109

Analyst: mel

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: LB06

Event #: 24

Ship: Tully

UTC Date (dd|mmm|yyyy): 18 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	157	1497	1.874	6-5	/ 102	1										
2	158	1459	2.179	100	/ 100	2		X								flask: 1477, DO: 2.179
3	159	1134	2.620	75	/ 75											
4	160	1498	3.567	50	/ 50											
5	161	1492	5.384	30	/ 30											
6	162	745	—	20	/ 20											titration ended early
7	163	668	8.059	10	/ 10											
8	164	1126	8.158	0	/ 1											
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SP/CP/MH

Bottom Depth: 116 m

Transmisso Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		0437	
Bottom		0441	
End		0449	

thio: 0.432
+ 2nd titration had low endpoint
colorimeter @ 95.5

Start
Lat: 48 ° 32.176 N
Lon: 125 ° 15.480 W

Bottom
Lat: 48 ° 32.150 N
Lon: 125 ° 15.458 W

End
Lat: 43 ° 32.177 N
Lon: 125 ° 15.455 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 18 | 05 | 09

Analyst: mel

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: L807

Event #: 25

Ship: Tully

UTC Date (dd|mmm|yyyy): 18 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	165	1330	—	6-5	1	150	1									cap not on flask
2	166	1489	1.691	125	1	125	1	X								
3	167	1488	2.023	100	1	100	1									
4	168	1464	2.532	75	1	75	1									
5	169	1473	4.053	50	1	50	2									flask: 1485, DO: 4.066
6	170	1483	5.481	30	1	30	1									
7	171	1478	5.933	20	1	20	1									
8	172	1335	6.831	10	1	10	1									
9	173	1342		0	1	1	1									titration ended early
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SM/LP/MT

Bottom Depth: 160 m

Transmisso Cleaned: ☒ / N

	Time	UTC	Local
Start		0552	
Bottom		0556	
End		0606	

thio: 0.166 + 1.252
Positional Information
 Start Lat: 48 ° 28.650 N
 Lon: 125 ° 22.115 W

Bottom Lat: 48 ° 28.642 N
 Lon: 125 ° 22.057 W

End Lat: 48 ° 28.614 N
 Lon: 125 ° 22.060 W

Oxygen Info For This Cast
 Blank Value: 0.001333 mL · L⁻¹
 Std Value: 0.720333 mL · L⁻¹
 *Date Run: 18/05/09
 Analyst: Mei

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

Blue Box

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40Station: LBØ9Event #: 27Ship: TullyUTC Date (dd|mmm|yyyy): 18 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	174	3024	1.520	6-5	☒ 141	1										
2	175	2064	1.779	125	☒ 125	1										
3	176	3055	2.099	100	☒ 100	1										
4	177	3057	3.009	75	☒	1										
5	178	3098	4.772	50	☒	1										
6	179	3203	4.722	30	☒	2										Flask: 3075 DO: 4.636
7	180	3006	—	20	☒	1		X								titration ended early
8	181	3018	8.121	10	☒	1										
9	182	2015	8.105	0	☒	1										
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SRBottom Depth: 150 mTransmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0754	
Bottom	0758	
End	0809	

→ this is 0.371 + 0.639

Positional Information

Start
Lat: 48 ° 22.601 N
Lon: 125 ° 34.734 WBottom
Lat: 48 ° 21.998 N
Lon: 125 ° 34.700 WEnd
Lat: 48 ° 21.986 N
Lon: 125 ° 34.720 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹Std Value: 0.720333 mL · L⁻¹*Date Run: 18 | 05 | 09Analyst: Wei

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

White Box

Water Properties Group

Rosette Log

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

Cruise ID: 2009-HOStation: LB11Event #: 29Ship: TullyUTC Date (dd|mmm|yyyy): 18 May 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	183	611	1.889	B-5	☒ 202	1										
2	184	621	1.897	200	☒ 199	1										
3	185	622	1.957	175	☒ 175	1		X								
4	186	1487	2.558	150	☒ 150	2										flask: 1465 DO: 2.563
5	187	620	2.838	125	☒ 125	1										bubble in oxy flask
6	188	657	3.246	100	☒ 100	1										
7	189	715	4.647	75	☒ 75	1										Winch operator got
8	190	1368	6.051	50	☒ 50	1										confused on way
9	191	639	6.948	30	☒ 30	1										up to 75. Went to
10	192	647	7.288	20	☒	1										115 m of depth
11	193	1338	7.631	10	☒	1										before stopping,
12	194	1174		0	☒	1										titration ended early, this: 0.145 + 1.180 and going the
13																correct way
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SRBottom Depth: 206 mTransmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0957	
Bottom	1003	
End	1019	

Positional Information

Start
Lat: 48 ° 15.196 N
Lon: 125 ° 47.738 WBottom
Lat: 48 ° 15.233 N
Lon: 125 ° 47.674 WEnd
Lat: 48 ° 15. N
Lon: 125 ° 47. W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Blue Box

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: EFF01

Event #: 30

Ship: Tully

UTC Date (dd|mmm|yyyy): 18 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄				
1	195	3098	5.658	30	☒	1								
2	196	3075	8.134	20	☒	2		X						5 mab
3	197	2015	8.997	10		1								flask: 3018, DO: 8.268
4	198	3055	8.714	0		1								
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: 35 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2356	
Bottom	2359	
End		

Positional Information

Start Lat: 49 ° 5.543 N
Lon: 125 ° 11.670 W

Bottom Lat: 49 ° 5.536 N
Lon: 125 ° 11.668 W

End Lat: 49 ° 5.526 N
Lon: 125 ° 11.668 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹
Std Value: 0.720333 mL · L⁻¹
*Date Run: 19105109
Analyst: Mol

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: FFF02

Event #: 31

Ship: Tully

UTC Date (dd|mmm|yyyy): 19 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	199	3057	1.854	B-5	☒ 66	1										4 mab
2	200	2064	1.813	50	☒	2										flask: 3024, DO: 1.801
3	201	2099	3.902	30	☒	1		X								
4	202	2007	8.272	20	☒	1										
5	203	3124	—	10	☒	1										titration ended early
6	204	3171	—	0	☒	1										" " "thio: 0.248 + 1/10th
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 71 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0023	
Bottom	0026	
End	0033	

Positional Information
 Lat: 49 ° 5.002 N
 Lon: 125 ° 10.322 W

Lat: 49 ° 4.998 N
 Lon: 125 ° 10.316 W

Lat: 49 ° 4.996 N
 Lon: 125 ° 10.318 W

Oxygen Info For This Cast
 Blank Value: 0.001333 mL · L⁻¹
 Std Value: 0.720333 mL · L⁻¹
 *Date Run: 19 | 05 | 09
 Analyst: IMel

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: EFFO 3 Event #: 32 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	205	3203	0.063	8-5	☒ 115	1										stinky sample
2	206	2035	0.040	100	☒ 100	1										" "
3	207	3034	0.192	75	☒ 74	2		X								flask: 2032, Do: 0.197
4	208	3052	2.365	50	☒ 50	1										
5	209	3109	4.525	30	☒ 30	1										
6	210	3164	8.161	20	☒ 20	1										sample # wrong in comp.
7	211	3038		10	☒ 10	1										titration ended early
8	212	2087		0	☒ 0	1										" " "
9																thio: 0.268 + 1.201
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 121 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0106	
Bottom	0109	
End	0118	

2010 should be 210
thio: 0.289 + 1.215

Positional Information
Start
Lat: 49 ° 4.252 N
Lon: 125 ° 9.392 W

Bottom
Lat: 49 ° 4.250 N
Lon: 125 ° 9.384 W

End
Lat: 49 ° 4.235 N
Lon: 125 ° 9.334 W

Oxygen Info For This Cast
Blank Value: 0.001333 mL · L⁻¹
Std Value: 0.720333 mL · L⁻¹
*Date Run: 19|05|09
Analyst: mel

* 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: _____

Station: EFF04Event #: 33Ship: TullyUTC Date (dd|mmm|yyyy): 19 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	213	1134	3.334	B-5	☒ 50	1										
2	214	1477	6.009	30	☒ 30	2										flask: 1126, DO: 6.166
3	215	1497	7.411	20	☒ 20	1										
4	216	1498	8.186	10	☒ 10	1										
5	217	668	8.185	0	☒ 0	1										
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SRBottom Depth: 57 mTransmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0143	
Bottom	0146	
End	0151	

Positional Information
Start
Lat: 49 ° 3.115 N
Lon: 125 ° 8.543 WBottom
Lat: 49 ° 3.103 N
Lon: 125 ° 8.538 WEnd
Lat: 49 ° 3.078 N
Lon: 125 ° 8.538 WOxygen Info For This Cast
Blank Value: 0.001333 mL · L⁻¹
Std Value: 0.720333 mL · L⁻¹
*Date Run: 19 | 05 | 09
Analyst: mel

* 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: 2009-40 Station: EFF05 Event #: 34 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	218	1492	0.050	B-5	☒ 195	1										
2	219	1459	0.053	175	☒ 175	1										
3	220	745	0.054	150	☒ 150	2										flask: 1128, DO: 0.090
4	221	1489	1.361	125	☒ 125	1										
5	222	1488	2.909	100	☒ 100	1										
6	223	1478	3.044	75	☒ 75	1										
7	224	1485	2.863	50	☒ 50	1										
8	225	1464	5.732	30	☒ 30	2										flask: 1483, DO: 5.728
9	226	1335	7.581	20	☒ 20	1										
10	227	1473	8.265	10	☒ 10	1										
11	228	1342	8.466	0	☒ 0	1										
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SRBottom Depth: 204 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0212	
Bottom	0215	
End	0227	

Positional Information

Start
Lat: 49 ° 2.536 N
Lon: 125 ° 9.186 WBottom
Lat: 49 ° 2.522 N
Lon: 125 ° 9.202 WEnd
Lat: 49 ° 2.496 N
Lon: 125 ° 9.268 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL • L⁻¹Std Value: 0.720333 mL • L⁻¹*Date Run: 19 | 05 | 09Analyst: WCI

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

Green Box

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: EFP06

Event #: 35

Ship: Tully

UTC Date (dd|mmm|yyyy): 19 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	229	2014	0.649	6-5	☒ 145											
2	230	589	1.310	125	125			X								
3	231	2092	2.572	100												
4	232	2033	2.970	75												
5	233	3157	2.843	50		2										flask: 3135, DO: 2.939
6	234	1085	5.238	30												
7	235	3097	7.046	20												
8	236	3196		10												titration ended early, this: 0.268+1.109
9	237	3063		0												" " " this: 0.227+1.259
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SL/LP/MA

Bottom Depth: 150 m

Transmisso Cleaned: Y / ☒ N

Time	UTC	Local
Start	0255	
Bottom	0259	
End	0308	

Positional Information

Start
Lat: 49 ° 1.762 N
Lon: 125 ° 9.187 WBottom
Lat: 49 ° 1.758 N
Lon: 125 ° 9.182 WEnd
Lat: 49 ° 1.748 N
Lon: 125 ° 9.184 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹Std Value: 0.120333 mL · L⁻¹

*Date Run: 19105109

Analyst: Mel

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: EFF07

Event #: 36

Ship: Tully

UTC Date (dd|mmm|yyyy): 19 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	238	1365	2.692	6-5	/ 115	2										2.57
2	239	2055	2.989	75	/ 25	2		X								2.98
3	240	371	2.748	50	/	2										3.99
4	241	3084	5.816	30	/	2										6.46
5	242	559	6.951	20	/	2										7.24
6	243	1312	8.236	10	/	2										7.49
7	244	1158		0	/	2										titration finished early
8																
9																SBE43 DO2
10																
11	0238	3206	2.664		115											2.24
12	0239	3094	2.942		75											2.80
13	0240	557	2.752		50											2.51
14	0241	632	5.825		30											5.74
15	0242	3118	6.941		20											6.44
16	0243	2075	8.237		10											7.7
17	0244	76	8.298		0											
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SL / LPI / MH

Bottom Depth: 120 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0325	
Bottom	0328	
End	0336	

Positional Information

Start

Lat: 49 ° 1.242 N

Lon: 125 ° 7.404 W

Bottom

Lat: 49 ° 1.229 N

Lon: 125 ° 7.412 W

End

Lat: 49 ° 1.152 N

Lon: 125 ° 9.430 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

Dupl. DO2 test station. 1 bottle regular 'stopper in, stopper out, chemicals'

1 bottle

X stopper procedure, chemicals

Red Label

Dopes
no stopper

Dual DO2 → with and without stopper insert

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: EFP08 Event #: 37 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	245	715	2.989	6-5	☒ 83	1										
2	246	657	3.065	50	☒	2										No Dup?
3	247	1174	5.841	30	☒	1										
4	248	1465	6.829	20	☒											
5	249	620	8.067	10	☒											
6	250	1338	—	0	☒											titration ended early no data
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SM / LP / MH

Bottom Depth: 88 m
Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0354	
Bottom	0355	
End	0401	

Positional Information
Start
Lat: 49 ° 0.660 N
Lon: 125 ° 10.246 W

Bottom
Lat: 49 ° 0.649 N
Lon: 125 ° 10.254 W

End
Lat: 49 ° 0.628 N
Lon: 125 ° 10.259 W

Oxygen Info For This Cast
Blank Value: 0.001333 mL • L⁻¹
Std Value: 0.720333 mL • L⁻¹
*Date Run: 20105109
Analyst: Mel

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: EFP09 Event #: 39 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	251	1487	3.430	6-5	☒ 50											
2	252	1368	5.520	30	☒ 30											
3	253	1301	6.653	20	☒											
4	254	700	—	10	☒											titration ended early this time
5	255	638	—	0	☒											" " "this: 0.222x
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SM/LP/MH

Bottom Depth: 64 m
Transmisso Cleaned: ☒ N

0:309 + 0.978		
Time	UTC	Local
Start	0418	
Bottom	0421	
End	0426	

Positional Information
Start Lat: 49 ° 0.104 N
Lon: 125 ° 10.838 W

Bottom Lat: 49 ° 0.101 N
Lon: 125 ° 10.841 W

End Lat: 49 ° 0.085 N
Lon: 125 ° 10.842 W

Oxygen Info For This Cast
Blank Value: 0.00333 mL • L⁻¹
Std Value: 0.120333 mL • L⁻¹
*Date Run: 20 | 05 | 09
Analyst: MPE

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: EFF10 Event #: 39 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	256	1327	2.956	5-5	☒ 97											
2	257	1302	2.981	75	☒ 74											
3	258	647	3.193	50	☒											
4	259	1374	5.352	30	☒											
5	260	1105	6.773	20	☒											
6	261	1367		10	☒											titration ended early: this is 0.125
7	262	712	8.344	0												+1.287
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SP/CP/mt

Bottom Depth: 103 m
Transmisso Cleaned: Y / ☒ N

Time	UTC	Local
Start	0440	
Bottom	0443	
End	0450	

Positional Information
Start
Lat: 48 ° 59.832 N
Lon: 125 ° 11.215 W

Bottom
Lat: 48 ° 59.821 N
Lon: 125 ° 11.207 W

End
Lat: 48 ° 59.801 N
Lon: 125 ° 11.207 W

Oxygen Info For This Cast
Blank Value: 0.001333 mL • L⁻¹
Std Value: 0.720333 mL • L⁻¹
*Date Run: 20105109
Analyst: Mel

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

Water Properties Group

Rosette Log

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

BROWN

Cruise ID: 2009-40

Station: EPP11

Event #: 40

Ship: Tully

UTC Date (dd|mmm|yyyy): 19 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	263	2088	—	5-5	81											bad titration - ended wrong
2	264	2068	3.244	50												
3	265	2065	5.754	30												
4	266	2061	6.754	20												
5	267	2090	8.456	10												
6	268	3184	—	0												titration ended early
7																no data
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): 821 VP/mh

Bottom Depth: 86 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0509	
Bottom	0512	
End	0517	

Positional Information

Start

Lat: 48 ° 59.118 N

Lon: 125 ° 11.048 W

Bottom

Lat: 48 ° 59.108 N

Lon: 125 ° 11.012 W

End

Lat: 48 ° 59.089 N

Lon: 125 ° 10.910 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 20 | 05 | 09

Analyst: WCL

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

BROWN

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: EPP12 Event #: 41 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	269	3051	2.962	6-5	☒ 89											
2	270	3133	3.140	7.5	☒											
3	271	2082	3.746	50	☒											
4	272	2027	5.847	30	☒											
5	273	3194	7.330	20	☒											
6	274	3116		10	☒											
7	275	2000	—	0	☒											
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): ST/LP/MT

Bottom Depth: 94 m
Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0559	
Bottom	0601	
End	0608	

run @ end
thio: 0.207 + 1.427
Positional Information
Start Lat: 48 ° 58.004 N
Lon: 125 ° 10.454 W

Bottom Lat: 48 ° 58.006 N
Lon: 125 ° 10.478 W

End Lat: 48 ° 58.026 N
Lon: 125 ° 10.516 W

Oxygen Info For This Cast
Blank Value: 0.00333 mL · L⁻¹
Std Value: 0.720333 mL · L⁻¹
*Date Run: 20 | 05 | 09
Analyst: Mel

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

BROWN

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40Station: EFF13Event #: 42Ship: TullyUTC Date (dd|mmm|yyyy): 19 | 5 | 2005

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	276	2089	2.879	6-5	/ 99									
2	277	3151	3.070	75	/									
3	278	3188	4.572	50	/									
4	279	3190	6.008	30	/									
5	280	2047	6.558	20	/									
6	281	3177	—	10	/									
7	282	2084	—	0	/ 1									titration ended early - no data cap popped out of flask
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s):
SP/LP/MTBottom Depth: 104 mTransmisso Cleaned: ☒ Y / N

	UTC	Local
Time Start	0632	
Bottom	0636	
End	0643	

Positional Information

Start
Lat: 48 ° 56.482 N
Lon: 125 ° 10.663 WBottom
Lat: 48 ° 56.486 N
Lon: 125 ° 10.643 WEnd
Lat: 48 ° 56.467 N
Lon: 125 ° 10.577 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹Std Value: 0.720333 mL · L⁻¹*Date Run: 20 | 05 | 09Analyst: me1

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

BABY BLUE

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: EFF14

Event #: 43

Ship: Tully

UTC Date (dd|mmm|yyyy): 8 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	283	3098	3.344	6-5	☒ 100											CTD went from 100m
2	284	3075	3.200	75	☒ 75											to 90m before I remembered
3	285	3055	4.443	50	☒ 50											bot I had not been
4	286	2015	6.039	30	☒ 30											fired. We returned
5	287	3018	6.940	20	☒ 20											to 100m and collected
6	288	3203	7.951	10	☒ 10											the bottle.
7	289	3171	—	0	☒ 0											Sorry, Scott Rose
8																titration ended early, no data
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR IB

Bottom Depth: 108 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0714	
Bottom	0718	
End	0727	

Positional Information

Start Lat: 48 ° 54.010 N
Lon: 125 ° 12.942 W

Bottom Lat: 48 ° 53.952 N
Lon: 125 ° 12.956 W

End Lat: 48 ° 53.935 N
Lon: 125 ° 12.959 W

Oxygen Info For This Cast

Blank Value: 0.00333 mL · L⁻¹
Std Value: 0.120333 mL · L⁻¹
*Date Run: 20105109
Analyst: Mel

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

Water Properties Group

Rosette Log

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

Red

Cruise ID: 2009-40

Station: EFF03

Event #: 414

Ship: Tully

UTC Date (dd|mmm|yyyy): 19 | 05 | 09

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄	POM	
1	290			116	✓ B-3	✓					✓	No sample - flask empty
2	291	3174	0.015	114	✓ B-5						✓	stinky sample
3	292	3204	0.016	114	✓ B-5		✓					" "
4	293	3119	0.027	108	✓ B-10						✓	" "
5	294	3191	0.052	100	✓		✓					
6	295	1421	0.085	75	✓		✓					
7	296	3207		50	✓						✓	No sample - flask empty
8	297	3061	2.409	50	✓		✓					
9	298	3104	4.928	30	✓		✓					
10	299	3142	7.302	20	✓		✓					
11	300	3069		10	✓		✓					titration ended early x2
12	301	3200		0	✓		✓					titration ended early
13												thio: 0.125 ± 1.265
14												black flakes in sample
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												

First 6 samples had wrong station entered in oxy data.

Watchkeeper(s): H.M.

Bottom Depth: 119 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1730	
Bottom	1732	
End	1744	

Positional Information

Lat: 49 ° 04.25 N

Lon: 125 ° 09.39 W

Lat: 49 ° 04.25 N

Lon: 125 ° 09.39 W

Lat: 49 ° 04.25 N

Lon: 125 ° 09.40 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 20 | 05 | 09

Analyst: Mel

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

Water Properties Group

Rosette Log

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

GH05T

Cruise ID: 2009-40

Station: EFF15

Event #: 47

Ship: T-119

UTC Date (dd|mmm|yyyy): 20 | 5 | 2005

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	Nit	DBL	NAT	
1	302	611	3.408	B-5	☒ 87	X	2				X	X		
2	303	621	3.458	75	☒	X	2				X	X		
3	304	622	4.827	50	☒	X	2				X	X		
4	305	639	5.616	30	☒	X	2				X	X		
5	306	715	6.105	20	☒	X	2				X	X		
6	307	1174	—	10	☒	X	2				X	X		titration ended early
7	308			0		X	2				X	X		DID NOT TIP
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): SR/LP/MH

Bottom Depth: 92 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	<u>0405</u>	
Bottom	<u>0412</u>	
End	<u>0420</u>	

Positional Information

Start

Lat: 48 ° 51.385 N

Lon: 125 ° 14.983 W

Bottom

Lat: 48 ° 51.384 N

Lon: 125 ° 14.998 W

End

Lat: 48 ° 51.420 N

Lon: 125 ° 14.923 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.020333 mL · L⁻¹

*Date Run: 20.05.09

Analyst: Mei

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: LC02 Event #: 49 Ship: Tully UTC Date (dd|mmm|yyyy): 20 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	309	657	3.318	6-5	☒	100										
2	310	620	3.980	75	☒		2									flask: 1301, DO: 4.020
3	311	1465	4.566	50	☒											
4	312	1487	5.149	30	☒											bugs in sample
5	313	1338	6.349	20	☒											
6	314	700	7.864	10	☒											
7	315	1368	7.739	0	☒											
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SM/LP/MTT

Bottom Depth: 105 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	06:37	
Bottom	06:40	
End	06:51	

Positional Information

Start
Lat: 48 ° 48.620 N
Lon: 125 ° 30.960 W

Bottom
Lat: 48 ° 48.620 N
Lon: 125 ° 30.962 W

End
Lat: 48 ° 48.624 N
Lon: 125 ° 30.972 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.120333 mL · L⁻¹

*Date Run: 20 | 05 | 09

Analyst: Mei

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: LG07

Event #: 53

Ship: Tully

UTC Date (dd|mmm|yyyy): 21 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	316	2068	1.072	B-10	/	1740										
2	317	2088	0.683	1500	/	1500										
3	318	2065	0.400	1200	/	1200										
4	319	2061	0.277	1000	/	1000		X								
5	320	2090	0.234	800	/	800										
6	321	2027	0.371	600	/	600										
7	322	3051	0.723	500	/											
8	323	3184	1.037	400	/											
9	324	3194	1.982	300	/											
10	325	2082	2.358	250	/											
11	326	2000	2.956	200	/											
12	327	3133	3.116	175	/											
13	328	3116	3.578	150	/											
14	329	3190	3.982	125	/											
15	330	3151	5.161	100	/											
16	331	3188	6.887	75	/											
17	332	2084	7.053	50	/		2									Flash: 2089 DO: 6.940
18	333	2047	7.021	30	/											
19	334	3177	7.195	20	/											
20	335	2073	7.200	10	/											
21	336	3108	7.348	0	/											
22																
23																
24																

Watchkeeper(s): SP/LP/MT

Bottom Depth: 1750 m

Transmisso Cleaned: Y / N

	Time	UTC	Local
Start		0342	
Bottom		0349	
End		0435	

Positional Information

Start

Lat: 48 ° 59.355 N

Lon: 127 ° 7.180 W

Bottom

Lat: 48 ° 59.333 N

Lon: 127 ° 7.266 W

End

Lat: 48 ° 58.685 N

Lon: 127 ° 6.962 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 21 | 05 | 09

Analyst: MEI

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

Not stoppering DO2 bottles before picking

WHITE ASPARAGUS

Water Properties Group

Rosette Log

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

Cruise ID: 2005-40 Station: 2605 Event #: 55 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | 5 | 2005

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	337	639	1.263	6-10	☒ 269											
2	338	1174	1.608	200	☒ 200			X								
3	339	611	1.802	175	☒ 175											
4	340	621	1.960	150	☒ 150	2										flask: 715, DO: 1.990
5	341	622	2.662	125	☒ 125											
6	342	1338	3.371	100	☒ 100											
7	343	700	3.671	75	☒ 75											
8	344	1368	4.501	50	☒ 51											
9	345	1465	6.451	30	☒ 30											
10	346	1487	7.323	20	☒ 20											
11	347	620	7.688	10	☒ 10											
12	348	657	7.350	0	☒ 0											
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SN / 4 / MH

Bottom Depth: 271 m

Transmisso Cleaned: ☒ N

Time	UTC	Local
Start	0645	
Bottom	0653	
End	0709	

Positional Information

Start

Lat: 49 ° 7.369 N

Lon: 126 ° 55.262 W

Bottom

Lat: 49 ° 7.363 N

Lon: 126 ° 55.280 W

End

Lat: 49 ° 7.392 N

Lon: 126 ° 55.302 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 21 | 05 | 09

Analyst: Mel

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

Water Properties Group

Rosette Log

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

White Box

Verified by Ian

Cruise ID: 2009-40Station: LE08Event #: 59Ship: TullyUTC Date (dd|mmm|yyyy): 21 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	349	1174	0.493	1300	✓ 1300	1										
2	350	1338	0.399	1200	✓ 1200	1										
3	351	700	0.311	1000	✓ 1000	1										
4	352	622	0.251	800	✓ 801	2										flask: 1465, Do: 0.288
5	353	621	0.392	600	✓ 600	1										
6	354	611	0.586	500	✓ 500	1		X								
7	355	639	0.908	400	✓ 400	1										
8	356	1487	1.424	300	✓ 299	1										
9	357	1368	1.945	250	✓ 250	1										
10	358	620	2.423	200	✓ 200	1										
11	359	657	2.667	175	✓ 175	1										
12	360	715	2.919	150	✓ 149	1										
13	361	1301	3.650	125	✓ 126	1										
14	362	1374	4.885	100	✓ 100	1										
15	363	1327	6.450	75	✓ 76	1										
16	364	1302	6.919	50	✓ 50	1										
17	365	638	7.282	30	✓ 29	1										
18	366	1105	7.670	20	✓ 20	1										
19	367	712	7.980	10	✓ 10	1										
20	368	647	7.471	0	✓ 0	1										
21																
22																
23																
24																

Watchkeeper(s): SR IBBottom Depth: 1307 mTransmisso Cleaned: ☒ N

	UTC	Local
Time		
Start	2330	
Bottom	2346	
End	0019	

Positional Information

Start
Lat: 48 ° 40.295 N
Lon: 126 ° 38.003 WBottom
Lat: 48 ° 40.366 N
Lon: 126 ° 37.943 WEnd
Lat: 48 ° 40.732 N
Lon: 126 ° 37.524 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹Std Value: 0.720333 mL · L⁻¹*Date Run: 22 | 05 | 09Analyst: Mei

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40

Station: LE06

Event #: 61

Ship: Tully

UTC Date (dd|mmm|yyyy): 22 | May | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	369	2088	2.098	B-5	☒ 200											
2	370	2065	2.269	175	☒ 175											
3	371	2061	2.682	150	☒ 150											
4	372	2068	2.980	125	☒ 125			X								
5	373	3184	4.077	100	☒ 100											
6	374	3051	4.761	75	☒ 75											
7	375	3194	5.964	50	☒ 50											
8	76	2090	6.983	30	☒ 30											
9	77	2027	6.991	20	☒ 20											
10	78	2000	7.360	10		2										Flock: 3133, DO: 7.353
11	79	3116	7.337	0		1										
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 208 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0222	
Bottom	0227	
End	0239	

Positional Information

Start

Lat: 48 ° 48.476 N

Lon: 126 ° 26.269 W

Bottom

Lat: 48 ° 48.466 N

Lon: 126 ° 26.240 W

End

Lat: 48 ° 48.472 N

Lon: 126 ° 26.156 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 22 | 05 | 09

Analyst: MEI

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

BLOOD

Water Properties Group

Rosette Log

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

Cruise ID: 2009-40 Station: LE04 Event #: 63 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	380	3204	2.593	6-10	/	107										
2	381	3174	3.907	75	/			X								
3	382	3191	5.074	50	/	xx										flask: 3119, DO: 5.088
4	383	1421	6.264	30	/											
5	384	3069	7.138	20	/											
6	385	3007	7.519	10	/											
7	386	3207	7.519	0	/											
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SL/EP/mt

Bottom Depth: 117 m

Transmisso Cleaned: ☒ N

Time	UTC	Local
Start	0431	
Bottom	0434	
End	0442	

Positional Information

Start

Lat: 48 ° 56.455 N

Lon: 126 ° 14.990 W

Bottom

Lat: 48 ° 56.489 N

Lon: 126 ° 14.998 W

End

Lat: 48 ° 56.470 N

Lon: 126 ° 14.950 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL · L⁻¹

Std Value: 0.720333 mL · L⁻¹

*Date Run: 22 | 05 | 09

Analyst: Mei

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

Water Properties Group

Rosette Log

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

CARMINE

Cruise ID: 2009-40

Station: LE02

Event #: 65

Ship: Tully

UTC Date (dd|mmm|yyyy): 22 | 5 | 2009

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	387	3104	4.312	6-10	/	43	1									
2	388	3061	4.928	30	/		1									
3	389	3142	5.454	20	/		2									flask 3200 DO: 5.450
4	390	3107	7.422	10	/		1									
5	391	3096		0	/											titration ended early this: 0.207
6																1.211
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SP / LP / MH

Bottom Depth: 53 m

Transmisso Cleaned: ☒ / N

	Time	UTC	Local
Start		0620	
Bottom		0622	
End		0628	

Positional Information

Start
Lat: 49 ° 4.273 N
Lon: 126 ° 4.470 W

Bottom
Lat: 49 ° 4.295 N
Lon: 126 ° 4.465 W

End
Lat: 49 ° 4.290 N
Lon: 126 ° 4.447 W

Oxygen Info For This Cast

Blank Value: 0.001333 mL • L⁻¹

Std Value: 0.720333 mL • L⁻¹

*Date Run: 22 | 05 | 09

Analyst: Mel

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