

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08 Station: SI02 Event #: 1 Ship: TULLY UTC Date (dd|mmm|yyyy): 27 | 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				
1	Bot-10	3203	0.00		☒ 215	/	/							ANOXIC
2	200	3098	0.00		☒			✓						ANOXIC
3	175	3018	0.00		☒			✓						ANOXIC
4	150	3075	0.00		☒									ANOXIC
5	125	2015	1.147		☒		✓							
6	100	3055	2.284		☒									
7	75	3171	3.499		☒	✓								
8	50	2064	5.642		☒									
9	30	3057	7.105		☒									
10	20	2055	7.418		☒				✓✓	✓✓				
11	10	2099	—		☒				✓✓	✓✓			*	END POINT TO EARLY
12	5	3124	—		☒	✓	✓	✓	✓✓	✓✓			*	SAL SAMPLED BY O2
13														
14														
15	75	2007	3.456											
16														
17													*	END POINT CAN'T BE
18														REACHED - KIT SAY TO
19														CLEAN AND THEN
20														SHUTS DOWN &
21														END POINT
22														
23														
24														

Watchkeeper(s): BLUE TEAM

Bottom Depth: 225 m

Transmisso Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		0250	1950
Bottom		0255	1955
End		0315	2015

Positional Information

Start
Lat: 48 ° 35 40 N
Lon: 123 ° 30 02 W

Bottom
Lat: 48 ° 35 40 N
Lon: 123 ° 29 97 W

End
Lat: 48 ° 35 38 N
Lon: 123 ° 29 94 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

NOTES: GREEN

OXY: LABELLED, DUPS

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: L301

Event #: 2

Ship: TULU

UTC Date (dd|mmm|yyyy): 27 | 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						
1	13	3084	3.882	Bot 5	☒ 26	☒	☒									
2	14	371	3.925	20	☒	☒	☒	☒	☒	☒						
3	15	1312	6.634	10	☒	☒	☒	☒	☒	☒						
4	16	557	6.960	5		☒	☒	☒	☒	☒						
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): BLUF/GREEN

Bottom Depth: 32 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1502	
Bottom	1503	
End	1508	

Positional Information

Start
 Lat: 48 ° 40 47 N
 Lon: 124 ° 59 61 W

Bottom
 Lat: 48 ° 40 46 N
 Lon: 124 ° 59 61 W

End
 Lat: 48 ° 40 42 N
 Lon: 124 ° 59 59 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: 2009-08 Station: L302 Event #: 3 Ship: TULLY UTC Date (dd|mmm|yyyy): 27 | 05 |

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	17	2035	3.824	Bot 10	✓	47	✓	✓									
2	18	3034	3.784	50	✓	47			✓								
3	19	2032	4.436	30	✓		✓	✓	✓								
4	20	3052	5.972	20	✓					✓	✓						
5	21	3109	7.543	10	✓					✓	✓						
6	22	3164	—	5	✓	*	✓	⊗	✓	✓	✓						NOT SAMPLED
7																	
8																*	END POINT TO
9	19	3038	4.424	30													LOW - SAME PROBLEM
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): GREEN TEAM

Bottom Depth: m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1555	0855
Bottom	1556	0856
End	1602	0902

Positional Information

Start Lat: 48 ° 39.00 N
Lon: 125 ° 02.42 W

Bottom Lat: 48 ° 39.01 N
Lon: 125 ° 02.41 W

End Lat: 48 ° 39.03 N
Lon: 125 ° 02.44 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: 2009-08 Station: LB04 Event #: 5 Ship: TULLY UTC Date (dd|mmm|yyyy): 27 | 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						
1	24	1298	2.081	80+70	√	100	✓	✓									
2	25	1316	2.789	75	√		✓	✓	✓								
3	26	1402	3.174	50	√				✓								
4	27	2019	4.603	30	√												LID NOT ON TIGHT
5	28	1401	5.513	20	√					✓	✓						
6	29	1392	7.356	10	√					✓	✓						
7	30	1377	—	5	√				✓	✓	✓						END ASHUT TOO EARLY
8																	
9																	
10																	
11	25	1393	2.780														SHOULD BE 75m NIT B.
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): Green Team

Bottom Depth: 112 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	17 07	10 07
Bottom	17 10	10 10
End	17 19	10 19

Positional Information

Start Lat: 48 ° 35.64 N
Lon: 125 ° 08.73 W

Bottom Lat: 48 ° 35.66 N
Lon: 125 ° 08.74 W

End Lat: 48 ° 35.68 N
Lon: 125 ° 08.76 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

Grey Box

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

Cruise ID: 2009-08

Station: L B06

Event #: 10

Ship: TULLY

UTC Date (dd|mmm|yyyy): 27 | 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	31	1477	1.742	Bot-10	✓ 109	✓	✓									
2	32	1128	3.297	75	✓ 75		✓	✓								
3	33	1489	4.026	50	✓ 50			✓								
4	34	1498	4.640	30	✓ 30											
5	35	1392	5.975	20	✓ 20	✓			✓✓	✓✓						
6	36	1473	7.155	10	✓ 10				✓✓	✓✓						
7	37	1335	8.046	0	✓ 0	✓	✓	✓	✓✓	✓✓						
8																
9																
10																
11																
12																
13	35	1126	5.981													
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
SR M G CP

Bottom Depth: 115 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2136	
Bottom	2139	
End	2149	

Positional Information

Start
Lat: 48 ° 32.20 N
Lon: 125 ° 15.42 W

Bottom
Lat: 48 ° 32.25 N
Lon: 125 ° 15.40 W

End
Lat: 48 ° 32.24 N
Lon: 125 ° 15.38 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: 2009-08 Station: 2807 Event #: 18 Ship: TULLY UTC Date (dd|mmm|yyyy): 28 | 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						
1	38			100	☒											
2	39			5	☒		☒	☒	☒							
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Green Team

Bottom Depth: 160 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0303	2003
Bottom	0307	2007
End	03	20

Positional Information

Start
 Lat: 48 ° 28 13 N
 Lon: 125 ° 21 72 W

Bottom
 Lat: 48 ° 28 13 N
 Lon: 125 ° 21 70 W

End
 Lat: 48 ° N
 Lon: 125 ° W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Grey box

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: L308

Event #: 0093

Ship: TULLY

UTC Date (dd|mmm|yyyy): 28 | 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	40	1477	1.413	Bot-10	✓ 145	✓	✓									
2	41	1128	1.595	125	✓ 125	✓	✓	✓								Low - 90% TRANS.
3	42	1489	1.899	100	✓ 100	✓	✓	✓								
4	43	1498	3.241	75	✓ 75	✓	✓									
5	44	1126	5.488	50	✓ 50	✓	✓									
6	45	1473	5.821	30	✓ 29	✓	✓									
7	46	1335	6.874	20	✓ 20	✓	✓		✓	✓						
8	47	1485	7.503	10	✓ 10	✓	✓		✓	✓						
9	48	1459	8.134	5		✓	✓	✓	✓	✓						95% TRANS.
10																
11																
12																
13	43	1342	3.251	75												
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 155 m

Transmisso Cleaned: Y / (N)

Time	UTC	Local
Start	0739	
Bottom	0742	
End	0754	

Positional Information

Start
 Lat: 48 ° 25.25 N
 Lon: 125 ° 28.79 W

Bottom
 Lat: 48 ° 25.29 N
 Lon: 125 ° 28.74 W

End
 Lat: 48 ° 25.34 N
 Lon: 125 ° 28.74 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Grey Box

Cruise ID: 2009-08

Station: L309

Event #: 25

Ship: Tally

UTC Date (dd|mmm|yyyy): 28 | 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	49	1476	1.603	125	✓ 142	✓	✓									
2	50	745	1.724	100	✓ 100	✓	✓	✓								
3	51	1464	3.447	75	✓ 75	✓	✓	✓								
4	52	1134	4.807	50	✓ 50	✓	✓									
5	53	1492	5.897	30	✓ 30	✓	✓									
6	54	1497	6.703	20	✓ 20	✓	✓		✓✓	✓✓						
7	55	668	7.362	10	✓ 10	✓	✓		✓✓	✓✓						
8	56	1483	7.171	5	✓ 5	✓	✓	✓	✓✓	✓✓						
9																
10																
11																
12	51	1478	3.431	75												
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR MG CP

Bottom Depth: m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0912	
Bottom	0915	
End	0925	

Positional Information

Start Lat: 48 ° 22.06 N
Lon: 125 ° 34.75 W

Bottom Lat: 48 ° 22.05 N
Lon: 125 ° 34.79 W

End Lat: 48 ° 22. N
Lon: 125 ° 34. 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: 2009-08

Station: LB 11

Event #: 27

Ship: Tully

UTC Date (dd|mmm|yyyy): 28 | 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						
1	57	1298	2.116	B-10	☒ 195	1	1									
2	58	1316	2.348	175	☒	1	1	X								
3	59	1393	2.596	150	☒	2	1	X								
4	60	2019	2.981	125	☒	1	1									
5	61	1401	4.007	100	☒	1	1									* Lid Loose
6	62	1392	4.072	75	☒	1	1									
7	63	1377	6.188	50	☒	1	2									
8	64	1313	6.571	30	☒	1	1									
9	65	1300	6.870	20	☒	1	1		2	2						
10	66	1314	7.482	10	☒	1	1		2	2						
11	67	3160	7.417	5	☒	1	1	X	2	2						
12																
13																
14																
15	59	1402	2.518	150												
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): H.T. / K.H. / S.R.

Bottom Depth: 207 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	11 13	
Bottom	11 17	
End	11 32	

Positional Information

Start Lat: 48 ° 15.23 N
Lon: 125 ° 47.71 W

Bottom Lat: 48 ° 15.21 N
Lon: 125 ° 47.78 W

End Lat: 48 ° 15.15 N
Lon: 125 ° 47.57 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: 2009-08

Station: LB 12

Event #: 29

Ship: TULLY

UTC Date (dd|mmm|yyyy): 28 | 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						
1	68	589	0.689	B-10	☒ 490	☒	☒									
2	69	2092	0.908	400	☒	↓	↓	x								
3	70	2014	1.613	300	☒ *	↓	↓	x								BUBBLE ON LENS
4	71	2033	1.799	250	☒	↓	↓									
5	72	1085	2.760	200	☒	2	↓									
6	73	3157	2.720	175	☒	↓	↓									973 in FILES @ 175
7	74	3196	2.792	150	☒	↓	↓									
8	75	3135	3.328	125	☒	↓	↓									
9	76	3063	4.192	100	☒	↓	↓									
10	77	3024	5.436	75	☒	↓	↓									
11	78	3094	6.842	50	☒	↓	↓									
12	79	1365	7.013	30	☒	↓	2									
13	80	3206	6.924	20	☒	↓	↓		2	2						
14	81	3084	7.254	10	☒	↓	↓	x	2	2						
15	82	371	7.352	5	☒	↓	↓		2	2						
16																
17																
18																
19	72	3097	2.795	200												73 in FILES @ 175
20																SHED BE 200
21																
22																
23																
24																

Watchkeeper(s): H.M./H.M./S.R.

Bottom Depth: 510 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1249	
Bottom	1257	
End	1320	

Positional Information

Start Lat: 48 ° 12.94 N

Lon: 125 ° 51.91 W

Bottom Lat: 48 ° 12.99 N

Lon: 125 ° 51.85 W

End Lat: 48 ° 12.98 N

Lon: 125 ° 51.84 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

GREEN BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: LB 14

Event #: 31

Ship: TULLY

UTC Date (dd|mmm|yyyy): 28 | 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						
1	83	3203	0.385	8-10	☒	1175	☒	☒								
2	84	3098	0.263	1000	☒			☒								
3	85	3018	0.276	750	☒			☒								
4	86	3075	0.556	500	☒	2										
5	87	3055	0.906	400	☒											
6	88	3171	1.224	300	☒											
7	89	2007	1.622	250	☒											
8	90	2064	2.050	200	☒											
9	91	3057	2.538	175	☒											
10	92	2055	2.902	150	☒											
11	93	2099	3.223	125	☒											
12	94	3124	4.318	100	☒											
13	95	2035	5.965	75	☒											
14	96	3034	6.634	50	☒		2									
15	97	2032	—	30	☒											END PT TOO LOW
16	98	3038	7.101	20	☒				2	2						
17	99	3052	7.028	10	☒				2	2						
18	100	3109	6.968	5	☒			☒	2	2						
19																
20																
21	86	2015	0.541	500												
22																
23																
24																

Watchkeeper(s): Green Team

Bottom Depth: 1171 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1504	0804
Bottom	1524	0824
End	1600	0900

Positional Information

Start

Lat: 48 ° 08.49 N

Lon: 125 ° 59.92 W

Bottom

Lat: 48 ° 08.52 N

Lon: 125 ° 59.97 W

End

Lat: 48 ° 08.60 N

Lon: 125 ° 59.85 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

NUTS: LIGHT BLUE RACK

OXY: LIGHT BLUE BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: LC11

Event #: 39

Ship: Tully

UTC Date (dd|mmm|yyyy): 29 | 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	102	589	0.576	B-10	✓	1475	✓									
2	103	2092	0.378	1250	✓			X								
3	104	2014	0.242	1000	✓			X								
4	105	2033	0.220	750	✓	XX										
5	106	3097	0.529	500	✓											
6	107	3157	0.940	400	✓		XX									
7	108	3196	1.389	300	✓											
8	109	3135	1.880	250	✓											
9	110	3063	2.437	200	✓											
10	111	3024	2.696	175	✓											
11	112	3094	3.336	150	✓											
12	113	1365	4.512	125	✓											
13	114	3206	5.781	100	✓											
14	115	3084	6.754	75	✓											
15	116	371	6.851	50	✓											
16	117	1312	7.68	30	✓											
17	118	557	7.246	20	✓				XX	XX						
18	119	3118	7.321	10	✓				XX	XX						
19	120	632	7.207	5	✓			X	XX	XX						
20																
21																
22	105	1085	0.227	750												
23																
24																

Watchkeeper(s): BLUE/GREEN

Bottom Depth: 1484 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0244	1944
Bottom	0310	2010
End	0354	2054

Positional Information

Start Lat: 48 ° 18.92 N
Lon: 126 ° 26.79 W

Bottom Lat: 48 ° 18.95 N
Lon: 126 ° 26.70 W

End Lat: 48 ° 19.15 N
Lon: 126 ° 26.58 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: 2009-08 Station: LC09/A3 Event #: 41 Ship: TULLY UTC Date (dd|mmm|yyyy): 29 | 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				
1	122	2007	0.433	Bot-10	✓ 600	✓	✓							
2	123	2015	0.530	500	✓	✓		✓						
3	124	2032	0.037?	400	✓	✓		✓						STILL YELLOW 1 ERRONEOUS THEN END POINT
4	125	2035	1.269	300	✓	✓								
5	126	2055	1.708	250	✓	✓								
6	127	2064	2.322	200	✓	✓								
7	128	2087	2.664	175	✓	✓								
8	129	2099	2.960	150	✓	✓								
9	130	3034	3.484	125	✓	✓								
10	131	3038	4.418	100	✓	✓	✓							
11	132	—	—	100	✓									} water for NH ₄ - JAWET
12	133	—	—	100	✓									
13	134	3040	5.728	75	✓	✓	✓							Should be #134 in file
14	135	3052	6.862	50	✓	✓								
15	136	3055	6.914	30	✓	✓								
16	137	3057	7.046	20	✓	✓			✓✓	✓✓				
17	138	3075	7.461	10	✓	✓			✓✓	✓✓				
18	139	3098	7.693	5	✓	✓	✓		✓✓	✓✓				
19														
20														
21	129	3018	2.978	150										
22														
23														
24														

Watchkeeper(s): GREEN

Bottom Depth: 608 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0619	2319
Bottom	0629	2329
End	0655	2355

Positional Information

Start

Lat: 48 ° 25.88 N

Lon: 126 ° 13.62 W

Bottom

Lat: 48 ° 25.90 N

Lon: 126 ° 13.65 W

End

Lat: 48 ° 25.90 N

Lon: 126 ° 13.60 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: 2009-08Station: A1/LC08Event #: 45Ship: TullyUTC Date (dd|mmm|yyyy): 29 | 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	140	1298	1.732	B-10	☒ 197											
2	141	1316	1.813	175	☒ 175			X								
3	142	1393	2.372	150	☒ 149			X								
4	143	1402	2.903	125	☒ 124	XX										9144 2019 - 2.904
5	144	1401	3.504	100	☒ 100											
6	145	1392	3.563	75	☒ 75											CORRECTED DEPTHS
7	146	1377	5.716	50	☒ 50		XX									
8	147	1313	5.611	30	☒ 30											
9	148	1300	6.674	20	☒ 20				2	2						
10	149	1314	7.779	10	☒ 10				2	2						~150ml lost Filter slipped off xM
11	150	3160	—	5	5			X	2	2						NOT FAST ENOUGH
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
Yellow TeamBottom Depth: 203 mTransmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1008	
Bottom	1011	
End	1026	

Positional Information

Start

Lat: 48 ° 29.31 N

Lon: 126 ° 7.11 W

Bottom

Lat: 48 ° 29.32 N

Lon: 126 ° 7.12 W

End

Lat: 48 ° 29.41 N

Lon: 126 ° 7.05 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: LC 06

Event #: 48

Ship: TULLY

UTC Date (dd|mmm|yyyy): 29 | 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						
1	151	1395	1.919	B-10	☒ 85	☒	☒	☒								
2	152	1317	3.952	75	☒	2		☒								152B 690 - 1.963
3	153	1318	4.135	50	☒											
4	154	1180	6.735	30	☒											
5	155	1213	7.084	20	☒				2	2						
6	156	1408	6.896	10	☒		2		2	2						
7	157	1389	6.891	5	☒	☒	☒	☒	2	2						
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): BLUC

Bottom Depth: 91 m

Transmisso Cleaned: ☒ N

Time	UTC	Local
Start	1259	
Bottom	1304	
End	1312	

Positional Information

Start
 Lat: 48 ° 36.47 N
 Lon: 125 ° 53.98 W

Bottom
 Lat: 48 ° 36.47 N
 Lon: 125 ° 54.00 W

End
 Lat: 48 ° 36.49 N
 Lon: 125 ° 54.01 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: 2009-08

Station: LC04

Event #: 52

Ship: Tully

UTC Date (dd|mmm|yyyy): 29 | 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						
1	158	2007	2.739	Bot-10	☒	157	☒									
2	159	2015	2.872	150	☒			☒								
3	160	2032	2.974	125	☒		☒	☒								
4	161	2055	3.247	100	☒											
5	162	2064	3.440	75	☒											
6	163	2087	3.515	50	☒											
7	164	2099	4.742	30	☒		☒									
8	165	3018	6.310	20	☒				☒	☒						
9	166	3034	8.200	10	☒				☒	☒						
10	167	3038	8.235	5	☒		☒	☒	☒	☒						
11																
12																
13																
14																
15	160B	2035	2.968			DAMEO # 161 - 100 - should be 160B - 125 - *										
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
Green Team

Bottom Depth: 167 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1556	0836
Bottom	1600	0900
End	1612	0912

Positional Information

Start
Lat: 48 ° 43 47 N
Lon: 125 ° 40 82 W

Bottom
Lat: 48 ° 43 46 N
Lon: 125 ° 40 82 W

End
Lat: 48 ° 43 49 N
Lon: 125 ° 40 84 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: 2009-08

Station: LC02

Event #: 55

Ship: TULLY

UTC Date (dd|mmm|yyyy): 29 | 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						
1	169	3052	2.716	Bot-10	☒ 100	✓	✓									
2	170	3055	2.963	75	☒	✓		✓								
3	171	3057	3.508	50	☒			✓								
4	172	3075	3.998	30	☒	✓										
5	173	3109	4.201	20	☒				✓	✓						
6	174	3124	5.421	10	☒				✓	✓						
7	175	3164	6.690	5	☒	✓	✓	✓	✓	✓						
8																
9																
10																
11																
12	172B	3098	4.021													
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Green Team

Bottom Depth: 109 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1757	1057
Bottom	1800	1100
End	1808	1108

Positional Information

Start
 Lat: 48 ° 48 62 N
 Lon: 125 ° 30 87 W

Bottom
 Lat: 48 ° 48 62 N
 Lon: 125 ° 30 85 W

End
 Lat: 48 ° 48 63 N
 Lon: 125 ° 30 88 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: LC01

Event #: 56

Ship: TULLY

UTC Date (dd|mmm|yyyy): 29 | 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	176	589	3.222	Bot-10	✓ 85	✓	✓									
2	177	2092	3.305	75	✓ 75	✓	✓	✓								
3	178	2014	3.789	50	✓ 50	✓	✓	✓								
4	179	2033	4.232	30	✓ 30	✓	✓		✓✓	✓✓						9.179 1085 - 4.236
5	180	3097	4.414	20	✓ 20	✓	✓		✓✓	✓✓						
6	181	3157	5.286	10	✓ 10	✓	✓		✓✓	✓✓						
7	182	—	—	5	✓ 5	✓	✓	✓								Bottle 7 didn't trip until it landed on deck. Suspect side loading of Danyard
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 95 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1859	
Bottom	1901	
End	1908	

Positional Information

Start Lat: 48 ° 50.36 N
Lon: 125 ° 27.65 W

Bottom Lat: 48 ° 50.36 N
Lon: 125 ° 27.62 W

End Lat: 48 ° 50.40 N
Lon: 125 ° 27.64 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: 2009-08

Station: LD02

Event #: 57

Ship: Tully

UTC Date (dd|mmm|yyyy): 29 | 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	182	3196	4.000	B-10	☒ 33	1	1							
2	183	3135	4.894	20	☒ 20	XX	1	X	XX	XX				9183 3094 - 4.885
3	184	3063	7.340	10	☒ 10	1	XX	X	XX	XX				
4	185	3024	—	5	☒ 5	1	1	X	XX	XX				NOT FAST ENOUGH
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: 42 m

Transmisso Cleaned: ☒ Y ☐ N

	Time	UTC	Local
Start		2121	
Bottom		2122	
End		2126	

Positional Information

Start
Lat: 48 ° 58.45 N
Lon: 125 ° 47.07 W

Bottom
Lat: 48 ° 58.45 N
Lon: 125 ° 47.07 W

End
Lat: 48 ° 58.46 N
Lon: 125 ° 47.05 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: Z009-08

Station: LD 06

Event #: 60

Ship: TULLY

UTC Date (dd|mmm|yyyy): 30 | 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				
1	186	3206	1.778	8-10	✓ 128	✓	✓	✓						
2	187	3084	2.186	100	✓			✓						
3	188	371	2.579	75	✓									
4	189	1312	3.582	50	✓									
5	9189	557	5.831	30	✓									
6	190	3118	7.594	20	✓		2		2	2				
7	191	632	7.760	10	✓				2	2				
8	192	2075	7.455	5	✓	2	1	✓	2	2				193 559 CRAP
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): BLUE

Bottom Depth: 138 m

Transmissometer Cleaned: (Y) / N

	UTC	Local
Start	0107	
Bottom	0110	
End	01	

Positional Information
 Start
 Lat: 48 ° 46.17 N
 Lon: 126 ° 10.07 W

Bottom
 Lat: 48 ° 46.18 N
 Lon: 126 ° 10.07 W

End
 Lat: 48 ° 46 N
 Lon: 126 ° 10 W

Oxygen Info For This Cast
 Blank Value: _____ mL · L⁻¹
 Std Value: _____ mL · L⁻¹
 *Date Run: ____ | ____ | ____
 Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-8 Station: LD 09 Event #: 63 Ship: TULLY UTC Date (dd|mmm|yyyy): 30 | 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						
1	194	1298	0.255	8.10	✓	1048	✓	✓									
2	195	1316	0.213	750	✓		✓	✓	✓								
3	196	1393	0.604	500	✓		✓	✓	✓								
4	197	1402	0.795	400	✓		✓	✓									
5	198	2019	1.307	300	✓		✓	✓									
6	199	1401	1.778	250	✓		✓	✓									
7	200	1392	2.273	200	✓		✓	✓									
8	201	1377	2.714	175	✓		✓	✓									
9	202	1313	2.993	150	✓		✓	✓									
10	203	1300	3.458	125	✓		2	✓									
11	204	3160	4.593	100	✓		✓	✓									
12	205	1491	6.718	75	✓		✓	✓									
13	206	1395	6.862	50	✓		✓	✓									
14	207	690	6.923	30	✓		✓	2									
15	208	1317	7.206	20	✓		✓	✓		2	2						Top valve leaking.
16	209	1318	7.401	10	✓		✓	✓		2	2						
17	210	1180	7.417	5	✓		✓	✓	✓	2	2						
18																	
19																	
20	203	1314	3.462														
21																	
22																	
23																	
24																	

Watchkeeper(s): Green Team

Bottom Depth: 1050 m

Transmisso Cleaned: Y / N

	UTC	Local
Start	0358	2058
Bottom	0414	2114
End	0447	

Positional Information

Start
Lat: 48 ° 35.66 N
Lon: 126 ° 30.07 W

Bottom
Lat: 48 ° 35.68 N
Lon: 126 ° 30.10 W

End
Lat: 48 ° 35.66 N
Lon: 126 ° 30.08 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

NUTS - WHITE CAGE OCGY - ORANGE (LABELED)

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08 Station: 4609 Event #: 67 Ship: TULLY UTC Date (dd|mmm|yyyy): 30 | 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						
1	211	2007	1.445	2000	☒	✓	✓	✓								
2	212	2015	0.646	1500	☒			✓								
3	213	2032	0.369	1250	☒											
4	214	2035	0.260	1000	☒											
5	215	2055	0.253	750	☒	✓										
6	216	2087	0.562	500	☒											
7	217	2099	0.982	400	☒											
8	218	3018	1.756	300	☒		✓									
9	219	3034	2.365	250	☒											
10	220	3038	2.739	200	☒											
11	221	3040	3.006	175	☒											
12	222	3052	3.121	150	☒											
13	223	3055	4.136	125	☒	✓										
14	224	3075	5.409	100	☒											
15	225	3098	—	75	☒											End Point too early
16	226	3109	6.891	50	☒											
17	227	3124	7.011	30	☒											
18	228	3164	7.157	20	☒				✓	✓						
19	229	3171	7.387	10	☒				✓	✓						
20	230	3203	7.382	5	☒	✓	✓	✓	✓	✓						
21																
22																
23	9215	2064	0.264	750	☒											
24	9223	3057	4.152	125												

Watchkeeper(s): BLUE

Bottom Depth: 2064 m

Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	1109	
Bottom	1141	
End	1232	

Positional Information

Start
Lat: 48 ° 51.15 N
Lon: 127 ° 19.49 W

Bottom
Lat: 48 ° 51.23 N
Lon: 127 ° 19.38 W

End
Lat: 48 ° 51.30 N
Lon: 127 ° 19.55 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: 2009-08

Station: LG06

Event #: 72

Ship: TULLY

UTC Date (dd|mmm|yyyy): 30 | 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						
1	232	1180	0.259	But-10	✓ 957	✓	✓									
2	233	1318	0.261	750	✓	✓		✓								
3	234	1402	0.478	500	✓			✓								
4	235	2019	0.771	400	✓											
5	236	1401	1.287	300	✓											
6	237	1392	1.765	250	✓											
7	238	1377	2.157	200	✓											
8	239	1313	2.909	175	✓											
9	240	1300	2.939	150	✓											
10	241	1314	2.982	125	✓											
11	242	3160	4.875	100	✓											
12	243	1491	6.247	75	✓											
13	244	1395	6.868	50	✓											
14	245	690	6.973	30	✓											
15	246			20	✓				✓	✓						→ DID NOT CLOSE
16	247	1316	7.529	10	✓		✓		✓	✓						
17	248	1298	7.520	5	✓		✓	✓	✓	✓						
18																
19																
20																
21	233	1393	0.211	750												
22																
23																
24																

Watchkeeper(s):
Green Team

Bottom Depth: _____ m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1752	1052
Bottom	1807	1107
End	1838	1138

Positional Information

Start Lat: 49 ° 03 44 N
Lon: 127 ° 01 17 W

Bottom Lat: 49 ° 03 49 N
Lon: 127 ° 01 17 W

End Lat: 49 ° 03 45 N
Lon: 127 ° 01 10 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: L604

Event #: 74

Ship: Tully

UTC Date (dd|mmm|yyyy): 30 | 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	249	509	1.797	B-10	✓ 135	1	1									
2	250	2092	1.785	125	✓ 125	1		X								
3	251	2014	3.368	100	✓ 100	1		X								
4	252	2033	3.764	75	✓ 74	2										
5	253	3097	5.563	50	✓ 49	1										
6	254	3157	6.137	30	✓ 30		2									
7	255	3196	6.945	20	✓ 20				2	2						
8	256	3135	—	10	✓ 10				2	2						END PT TOO EARLY
9	257	3094	7.926	5	✓ 5	1		X	2	2						
10																
11																
12																
13																
14	252	1005	3.772	75												
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Yellow

Bottom Depth: 145 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2034	
Bottom	2037	
End		

Positional Information

Start

Lat: 49 ° 11.20 N

Lon: 126 ° 49.40 W

Bottom

Lat: 49 ° 11.18 N

Lon: 126 ° 49.41 W

End

Lat: 49 ° 11. N

Lon: 126 ° 49. 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: 2009-08

Station: L602

Event #: 77

Ship: Tully

UTC Date (dd|mmm|yyyy): 30 | 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	258	3063	2.222	B-10	☒ 100	1	1									
2	259	3024	2.944	15	☒	1	1	X								
3	260	1365	3.473	50	☒	1	2	X								
4	261	3206	5.762	30	☒	2	1									
5	262	371	6.707	20	☒	1	1		2	2						
6	263	1312	7.806	10	☒	1	1		2	2						
7	264	557	—	5		1	1	X	2	2						End Point too early...
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22	9261	3064	5.731	30												
23																
24																

Watchkeeper(s):
YELLOW

Bottom Depth: 115 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2238	
Bottom	2240	
End		

Positional Information

Start
Lat: 49 ° 16.86 N
Lon: 126 ° 40.83 W

Bottom
Lat: 49 ° 16.85 N
Lon: 126 ° 40.83 W

End
Lat: 49 ° 16.83 N
Lon: 126 ° 40.89 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: 2009-08 Station: LG 01 Event #: 079 Ship: TULLY UTC Date (dd|mmm|yyyy): 30 | 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						
1	265	1477	3.624	B-10	☒ 43	☒	☒	☒								
2	266	1489	4.062	30	☒	2	☒									
3	267	1498	4.451	20	☒	☒	☒		2	2						
4	268	1342	6.215	10	☒	☒	2	☒	2	2						
5	269	1126	7.374	5	☒	☒	☒	☒	2	2						
6																
7																
8	266	1128	4.067	30												
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SLVE

Bottom Depth: 53 m

Transmisso Cleaned: ☒ I N

	UTC	Local
Time Start	2351	
Bottom	2353	
End	2359	

Positional Information

Start Lat: 49 ° 20 ' 53 " N
Lon: 126 ° 34 ' 97 " W

Bottom Lat: 49 ° 20 ' 54 " N
Lon: 126 ° 34 ' 98 " W

End Lat: 49 ° 20 ' 55 " N
Lon: 126 ° 35 ' 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

OXY GRET BOX

Water Properties Group

Rosette Log

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

Grey Box

Cruise ID: 2009-08

Station: LBP 3

Event #: 84

Ship: TULLY

UTC Date (dd|mmm|yyyy): 31 | 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	270	1473	1.745	200	☒ 166	✓	✓									
2	271	1335	1.845	150	☒	✓	✓	✓								
3	272	1485	1.960	125	☒			✓								
4	273	1459	2.148	100	☒											
5	274	1476	2.460	75	☒											
6	275	745	2.611	50	☒											
7	276	1464	3.401	30	☒											
8	277	1478	3.861	20	☒	✓			✓	✓						
9	278	1492	4.476	10	☒				✓	✓						
10	279	1497	4.699	5	☒	✓	✓	✓	✓	✓						
11																
12																
13	277	1134	3.886													
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Yellow

Bottom Depth: 172 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0853	
Bottom	0857	
End	0911	

Positional Information

Start
Lat: 50 ° 3.17 N
Lon: 127 ° 55.44 WBottom
Lat: 50 ° 3.19 N
Lon: 127 ° 55.78 WEnd
Lat: 50 ° 3.06 N
Lon: 127 ° 55.73 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

starting time in program is 1:01 pm

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: LBPS

Event #: 86

Ship: Tully

UTC Date (dd|mmm|yyyy): 31 | 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	280	1298	0.507	B-10	✓ 1270	1	2									In auto O ₂ depth was left @ 5m.
2	281	1316	0.336	1000	✓			X								
3	282	1393	0.292	750	✓			X								
4	283	1402	0.576	500	✓											
5	284	2019	0.747	400	✓											
6	285	1401	1.111	300	✓											
7	286	1392	1.256	250	✓											
8	287	1377	1.588	200	✓	2										
9	288	1300	1.746	175	✓											
10	289	1314	1.889	150	✓											
11	290	3160	2.679	125	✓											
12	291	1491	3.157	100	✓											
13	292	1395	2.783	75	✓											
14	293	690	3.699	50	✓											
15	294	1317	5.061	30	✓											
16	295	1318	5.532	20	✓				2	2						
17	296	1180	6.187	10	✓				2	2						
18	297	1213	6.115	5	✓	↓	↓	X	2	2						
19																
20																
21																
22																
23	9267	1313	1.588	200												
24																

Watchkeeper(s): Yellow

Bottom Depth: 1285 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1047	
Bottom	1107	
End	1146	

Positional Information

Start Lat: 49° 59.97 N
Lon: 128° 00.07 W

Bottom Lat: 50° 00.00 N
Lon: 128° 00.00 W

End Lat: 49° 59.98 N
Lon: 127° 59.95 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: 2009-08 Station: LBP 7 Event #: 89 Ship: TULLY UTC Date (dd|mmm|yyyy): 31 | 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						
1	298	2007	1.286	2000	☒	☒	☒									
2	299	2015	0.543	1500	☒			☒								
3	300	2032	0.380	1250	☒			☒								
4	301	2035	0.247	1000	☒											
5	302	2055	0.228	750	☒											
6	303	2064	0.491	500	☒											
7	304	2087	0.790	400	☒											
8	305	2099	1.343	300	☒											
9	306	3018	1.950	250	☒											
10	307	3034	—	200	☒	2									4307 3038	2.301
11	308	3040	2.351	175	☒											
12	309	3052	3.109	150	☒											
13	310	3055	3.184	125	☒											
14	311	3057	3.443	100	☒		2									
15	312	3075	3.390	75	☒											
16	313	3098	4.983	50	☒											
17	314	3109	5.908	30	☒											
18	315	3124	5.693	20	☒				2	2						
19	316	3164	5.082	10	☒				2	2						
20	317	3171	7.432	5	☒			☒	2	2						
21																
22																
23																
24																

Watchkeeper(s): Blue / Green

Bottom Depth: 2164 m

Transmissio Cleaned: ☒ Y / N

Time	UTC	Local
Start	1409	0709
Bottom	1439	0739
End	1532	0832

Positional Information

Start

Lat: 49 ° 52.34 N

Lon: 128 ° 11.05 W

Bottom

Lat: 49 ° 52.34 N

Lon: 128 ° 11.27 W

End

Lat: 49 ° 52.30 N

Lon: 128 ° 11.27 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

NUTS - GREEN RACK OXY - BLUE BOX (LABELED)

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08 Station: 2BP8 Event #: 94 Ship: TULLY UTC Date (dd|mmm|yyyy): 31 | 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						
1	318			2000	☒											
2	319			1000	☒											
3	320			500	☒											
4	321			100	☒											
5	322			50	☒											
6	323			30	☒											
7	324			20	☒											
8	325			5	☒		☒	☒	☒							
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Version: 28 Feb 2008

Transmissometer to be cleaned before each cast, do not use Ammonia products

<http://www.pac.dfo-mpo.gc.ca/sci/osap/projects/waterproperties/>

Watchkeeper(s): Green / Yellow

Bottom Depth: 2070 m

Transmissio Cleaned: ☒ Y / ☐ N

	Time	UTC	Local
Start		1842	1142
Bottom		1916	
End		2000	

Positional Information

Start

Lat: 49° 48.61 N

Lon: 128° 16.79 W

Bottom

Lat: 49° 48.57 N

Lon: 128° 16.92 W

End

Lat: 49° 48.54 N

Lon: 128° 17.05 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: C502

Event #: 103

Ship: Tully

UTC Date (dd|mmm|yyyy): 1 | 06 | 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	327	1298	0.324	1000	✓	✓	✓									
2	328	1316	0.262	750	✓			✓								
3	329	1393	0.616	500	✓			✓								
4	330	1402	1.636	400	✓											
5	331	2019	1.931	300	✓											BUBBLE ON LENS
6	332	1401	2.583	250	✓											
7	333	1392	3.154	200	✓	2										
8	334	1313	3.149	175	✓											
9	335	1300	3.225	150	✓											
10	336	1314	3.234	125	✓		2									
11	337	3160	3.492	100	✓											
12	338	1491	4.885	75	✓											
13	339	1395	6.107	50	✓											
14	340	690	6.681	30	✓						30m	NOT	10m			LID LOOSE
15	341	1318	6.831	20	✓				2	2						
16	342	1180	7.350	10	✓				2	2						
17	343	1213	—	5	✓	✓	✓	✓	2	2						END PT TOO EARLY
18																
19																
20																
21	333	1377	3.222	200												
22																
23																
24																

Watchkeeper(s): BLUE

Bottom Depth: 1902 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1327	
Bottom	1343	
End	1414	

Positional Information

Start Lat: 50 ° 41.31 N
Lon: 129 ° 27.82 W

Bottom Lat: 50 ° 41 28 N
Lon: 129 ° 27 44 W

End Lat: 50 ° 41 28 N
Lon: 129 ° 27 41 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

NUTS - RED RACK

OXY - ORANGE BOX (LABELLED)

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: C504

Event #: 108

Ship: TULLY

UTC Date (dd|mmm|yyyy): 01 | 06 | 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	345	2007	3.170	bottom-10	☒	88	☒	☒								
2	346	2015	3.687	75	☒		☒	☒								
3	347	2032	5.454	50	☒		☒	☒								
4	348	2035	7.037	30	☒		☒	☒								
5	349	2064	7.268	20	☒		☒	☒	☒	☒						
6	350	2087	7.585	10	☒		☒	☒	☒	☒						
7	351	2099	7.658	5	☒		☒	☒	☒	☒						
8																
9																
10	348	2055	7.033	30												
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Green Team

Bottom Depth: 95 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1709	1009
Bottom	1712	1012
End	1720	1020

Positional Information

Start

Lat: 50° 49.19 N

Lon: 129° 12.99 W

Bottom

Lat: 50° 49.19 N

Lon: 129° 12.99 W

End

Lat: 50° 49.17 N

Lon: 129° 12.98 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: 2009-08

Station: CS 06

Event #: 116

Ship: Tully

UTC Date (dd|mmm|yyyy): 2 | 6 | 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	357	1298	5.351	B-10	☒ 56	☒	☒									
2	358	1316	5.388	50	☒	1	☒	☒								
3	359	1393	5.954	30	☒	2	☒	☒								
4	360	2019	5.938	20	☒	1	☒		2	2						
5	361	1401	7.630	10	☒	2	☒		2	2						
6	362	1392	8.337	5	☒	2	☒	☒	2	2						
7																
8																
9																
10	359	1402	5.930	30												
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): BLUE

Bottom Depth: 66 m

Transmisso Cleaned: ☒ Y / N

	Time	UTC	Local
Start		0131	
Bottom		0133	
End		0139	

Positional Information

Start
 Lat: 51 ° 00.03 N
 Lon: 128 ° 51.71 W

Bottom
 Lat: 51 ° 00.04 N
 Lon: 128 ° 51.68 W

End
 Lat: 51 ° 00.06 N
 Lon: 128 ° 51.60 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

OK ORANGE BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08 Station: CS09 Event #: 123 Ship: TULLY UTC Date (dd|mmm|yyyy): 02 | JUN | 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	367	1377	2.157	bottom=10	✓ 187?	✓	✓							
2	368	1313	2.141	175	✓			✓						
3	369	1300	2.354	150	✓			✓						
4	370	1314	3.018	125	✓	✓	✓							
5	371	1491	3.983	100	✓									
6	372	1395	5.146	75	✓									
7	373	690	6.142	50	✓									
8	374	1318	7.05	30	✓									
9	375	1180	—	20	✓				✓✓	✓✓				END PT TO EARLY
10	376	1213	—	10	✓				✓✓	✓✓				END T7 TO EARLY
11	377	1466	7.597	5	✓	✓	✓	✓	✓✓	✓✓				
12														
13														
14														
15	370	3160	3.018	125										
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s):
Green Team

Bottom Depth: 197 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0607	2307
Bottom	0611	2311
End	0625	2325

Positional Information

Start
Lat: 51 ° 12.25 N
Lon: 128 ° 27.94 W

Bottom
Lat: 51 ° 12.25 N
Lon: 128 ° 27.93 W

End
Lat: 51 ° 12.24 N
Lon: 128 ° 27.88 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹
Std Value: _____ mL · L⁻¹
*Date Run: ____ | ____ | ____
Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: M 4

Event #: 128

Ship: TULLY

UTC Date (dd|mmm|yyyy): 2 | 6 | 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	385	2007	2.989	B-10	☒ 415	☒	☒									
2	386	2045	3.262	300	☒	☒	☒									
3	387	2032	3.397	250	☒	☒	☒									
4	388	2035	3.542	200	☒	☒	☒									
5	389	2055	3.571	175	☒	☒	☒									
6	390	2064	3.587	150	☒	2	☒									
7	391	2099	3.616	125	☒	☒	☒									
8	392	3016	3.772	100	☒	☒	☒									
9	393	3034	4.320	75	☒	☒	☒									
10	394	3038	4.419	50	☒	2	☒									
11	395	3040	4.323	30	☒	☒	☒									
12	396	3052	4.716	20	☒	☒	☒		2	2						
13	397	3055	5.506	10	☒	☒	☒		2	2						
14	398	3057	5.967	5	☒	☒	☒		2	2						
15																
16																
17																
18																
19	396	2087	3.583	150												
20																
21																
22																
23																
24																

Watchkeeper(s): BLUMEN CREW

Bottom Depth: 430 m

Transmisso Cleaned: ☒ / N

Time	UTC	Local
Start	1259	
Bottom	1307	
End	1328	

Positional Information

Start

Lat: 51 ° 44 58 N

Lon: 128 ° 00 28 W

Bottom

Lat: 51 ° 44 59 N

Lon: 128 ° 00 22 W

End

Lat: 51 ° 44 61 N

Lon: 128 ° 00 14 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

OXY BLUE BOY (LABELED)

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: M3

Event #: 129

Ship: TULLY

UTC Date (dd|mmm|yyyy): 2 | 6 | 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	399	76	3.221	B-10	✓ 340	✓										
2	400	371	3.333	250	✓			✓								
3	401	557	3.510	200	✓			✓								
4	402	559	3.598	175	✓											
5	403	589	3.706	150	✓											
6	404	632	3.809	125	✓											
7	405	1085	3.889	100	✓		2									
8	406	1158	3.939	75	✓											
9	407	1312	4.035	50	✓											
10	408	1365	4.150	30	✓	2										
*11	409	2033	4.312	20	✓				2	2	30m no 20m	Should Be	440	in file - not 410		
12	410	2075	4.743	10	✓				2	2			410	" " Not 8410		
13	411	2092	5.790	5	✓			✓	2	2						
14																
15																
16																
17	488	2014	4.136													
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): BLUGMAN CREW

Bottom Depth: 350 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1407	
Bottom	1414	
End	1433	

Positional Information

Start
Lat: 51 ° 46.22 N
Lon: 127 ° 54.74 W

Bottom
Lat: 51 ° 46.20 N
Lon: 127 ° 54.70 W

End
Lat: 51 ° 46.17 N
Lon: 127 ° 54.43 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

NUTS - LT BLUE RACK

OXY GREEN BOX (LABELLED)

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08 Station: M 2 Event #: 130 Ship: Tully UTC Date (dd|mmm|yyyy): 2 | 06 | 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	412	668	3.492	8-10	☒	185	☒									
2	413	745	3.612	150	☒			☒								
3	414	1126	3.769	125	☒			☒								
4	415	1134	3.880	100	☒	2									9415 1128	3.880
5	416	1306	3.981	75	☒											
6	417	1335	3.954	50	☒											
7	418	1342	4.141	30	☒		2									
8	419	1459	4.391	20	☒				2	2						
9	420	1464	4.657	10	☒				2	2						
10	421	1476	5.829	5	☒			☒	2	2						
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Version: 28 Feb 2008

Transmissometer to be cleaned before each cast, do not use Ammonia products

<http://www.pac.dfo-mpo.gc.ca/sci/osap/projects/waterproperties/>

OXY - GRAY BOX

Watchkeeper(s): Green

Bottom Depth: 194 m

Transmissometer Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1501	0801
Bottom	1506	0806
End	1519	0819

Positional Information

Start
Lat: 51° 46.47 N
Lon: 127° 53.24 W

Bottom
Lat: 51° 46.46 N
Lon: 127° 53.29 W

End
Lat: 51° 46.47 N
Lon: 127° 53.33 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: 1 | 1 | _____

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: 2009-08

Station: UBC7

Event #: 131

Ship: TULLY

UTC Date (dd|mmm|yyyy): 02 | JUN | 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	422	1477	3.270	bottom-10	☒ 150	☒	☒									
2	423	1473	3.673	125	☒ 125			☒								
3	424	1478	3.980	100	☒ 100			☒								
4	425	1481	4.234	75	☒ 75	☒	☒									9425 1483 4.290
5	426	1485	4.557	50	☒ 50											
6	427	1489	4.626	30	☒ 30											
7	428	1492	5.043	20	☒ 20				☒							
8	429	1497	5.931	10	☒ 10				☒							
9	430	1498	—	5	☒ 5	☒	☒	☒	☒							NOT FAST ENOUGH
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
Green Team

Bottom Depth: 159 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	<u>1711</u>	<u>1011</u>
Bottom		
End		

Positional Information

Start

Lat: 51° 30.07 N

Lon: 127° 49.13 W

Bottom

Lat: ° N

Lon: ° W

End

Lat: ° N

Lon: ° W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

OXY → GREY BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: R1 Z

Event #: 137

Ship: TULLY

UTC Date (dd|mmm|yyyy): 03|06|09

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serjal #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄				
1	431	668	3.411	B-10	☒ 324	☒	☒							NEW SYSTEM / too slow
2	432	745	3.392	250	☒			☒						OLD SYSTEM
3	433	1126	3.385	200	☒			☒						
4	434	1128	3.394	175	☒	2								
5	435	1306	3.450	150	☒									
6	436	1317	3.463	125	☒		2							
7	437	—	—	100	☒									BROKE FLASH
8	438	1335	3.554	75	☒									
9	439	1459	4.582	50	☒									
10	440	1464	5.043	30	☒									
11	441	1473	5.247	20	☒				2					
12	442	1476	5.724	10	☒				2					
13	443	1477	6.141	5		☒	☒	☒	2					
14	444	NO OXYGEN		0			☒							
15														
16														
17														
18	434	1134	3.403	175										
19														
20														
21														
22														
23														
24														

Watchkeeper(s):
BLUMEN CREW

Bottom Depth: 339 m

Transmissio Cleaned: Y / N

Time	UTC	Local
Start	0209	
Bottom	0215	
End	0233	

Positional Information

Start
Lat: 51 ° 31.26 N
Lon: 127 ° 33.56 W

Bottom
Lat: 51 ° 31.28 N
Lon: 127 ° 33.58 W

End
Lat: 51 ° 31.29 N
Lon: 127 ° 33.59 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

NUTS - GREEN RACK

OXY - GREY BOX (LABELLED)

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: RI4

Event #: 142

Ship: TULLY

UTC Date (dd|mmm|yyyy): 03 | JUN | 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	447	76	2.268	bottom-10	☒	290	☒	☒								
2	448	371	2.617	250	☒		☒	☒								
3	449	557	3.195	200	☒		☒	☒								
4	450	559	3.260	175	☒		☒	☒								
5	451	3206	3.284	150	☒											
6	452	1095	0.581	125	☒								*			BAD END PT (too early)
7	453	1158	3.205	100	☒											
8	454	1312	3.526	75	☒											
9	455	1365	4.313	50	☒											
10	456	2014	5.095	30	☒											
11	457	2033	5.406	20	☒				☒							
12	458	2075	5.821	10	☒				☒							
13	459	2092	7.259	5	☒			☒	☒				*			TOP NOT QUITE CLOSED BOTTLE LEAKED
14																
15																
16																
17	450	632	3.262	175												
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Green Team

Bottom Depth: 299 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	0505	2205
Bottom	0510	2210
End	0526	2226

Positional Information

Start

Lat: 51 ° 38.93 N

Lon: 127 ° 26.51 W

Bottom

Lat: 51 ° 38.93 N

Lon: 127 ° 26.51 W

End

Lat: 51 ° 38.93 N

Lon: 127 ° 26.52 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

OXY - GREEN BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: SS7

Event #: 147

Ship: Tully

UTC Date (dd|mmm|yyyy): 3 | 06 | 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	464	2007	3.522	B-10	☒ 112											
2	465	2015	3.543	100	☒			X								
3	466	2032	4.329	75	☒			X								
4	467	2035	4.701	50	☒	2										
5	468	2064	4.920	30	☒		2									
6	469	2087	5.117	20	☒				2	2						
7	470	2099	5.440	10	☒				2	2						
8	471	3018	7.403	5	☒	↓	↓	X	2	2						
9																
10																
11																
12	467	2055	4.700	50												
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): BLUE

Bottom Depth: 122 m

Transmisso Cleaned: ☒ / N

	Time	UTC	Local
Start		1049	
Bottom		1053	
End		1102	

Positional Information

Start

Lat: 51 ° 24.58 N

Lon: 127 ° 47.65 W

Bottom

Lat: 51 ° 24.58 N

Lon: 127 ° 47.65 W

End

Lat: 51 ° 24.58 N

Lon: 127 ° 47.66 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

OXY- BLUE BOX

Water Properties Group

Rosette Log

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

Cruise ID: 2009-08

Station: SS 5

Event #: 149

Ship: Tully

UTC Date (dd|mmm|yyyy): 3 | 06 | 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	472	1316	1.862	B-10	☒ 190	2	☒									
2	473	1393	1.887	175	☒	2		☒								SHOULD BE 473 not 4473
3	474	2019	2.307	150	☒	2		☒								
4	475	1392	3.600	125	☒	2										
5	476	1313	4.860	100	☒	2										
6	477	1314	5.936	75	☒	2										
7	478	1491	6.235	50	☒	2										
8	479	690	6.799	30	☒	2	2									
9	480	1180	7.338	20	☒	2			2	2						* Lid Loose
10	481	1488	7.508	10	☒	2		☒	2	2						
11	482	1307	7.494	5	☒	2	☒	☒	2	2						
12																
13	472	1298	1.835	190							190 not 175					SHOULD BE 9472 NOT 473
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): BLUG

Bottom Depth: 201 m

Transmisso Cleaned: ☒ / N

Time	UTC	Local
Start	1433	
Bottom	1437	
End	1451	

Positional Information

Start
 Lat: 51 ° 27 92 N
 Lon: 128 ° 30 02 W

Bottom
 Lat: 51 ° 27 90 N
 Lon: 128 ° 30 01 W

End
 Lat: 51 ° 27 88 N
 Lon: 128 ° 29 98 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: 2009-08 Station: SS3 Event #: 151 Ship: TULLY UTC Date (dd|mmm|yyyy): 03 | JUN | 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	484	76	1.557	bottom-10	☒	☒	☒									
2	485	371	1.637	250	☒			☒								
3	486	557	2.073	200	☒			☒								
4	487	559	2.511	175	☒	☒	☒									
5	488	3206	5.329	150	☒											OVER TITRATE (on average)
6	489	1085	3.913	125	☒											
7	490	1158	3.926	100	☒											
8	491	1312	5.351	75	☒											
9	492	1365	6.216	50	☒											
10	493	2014	7.681	30	☒											
11	494	2033	7.414	20	☒				☒							
12	495	2075	7.577	10	☒				☒							
13	496	2092	7.477	5		☒	☒	☒	☒							
14																
15																
16																
17	487	632	2.564	175												
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): Yellow

Bottom Depth: 291 m

Transmisso Cleaned: ☒ N

Time	UTC	Local
Start	1855	
Bottom	1901	
End	1918	

Positional Information

Start Lat: 51 ° 15.04 N
Lon: 129 ° 21.36 W

Bottom Lat: 51 ° 15.05 N
Lon: 129 ° 21.32 W

End Lat: 51 ° 15.03 N
Lon: 129 ° 21.36 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