

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: ST03Event #: 1Ship: TULLYUTC Date (dd mmm yyyy): 17 Aug 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal Store							Temp	Flask Serial #	Value mL · L ⁻¹	
1	1	1	Bot-10	✓ 213	✓	✓	✓							9.4	1213	0.000	H ₂ S
2	2	2	200	✓	✓	✓	✓							9.4	3193	-0.003	H ₂ S
3	3	3	175	✓	✓	✓	✓							9.5	3200	-0.003	H ₂ S
4	4	4	150	✓	✓	✓	✓							9.4	1473	0.070	H ₂ S
5	5	5	125	✓	✓	✓	✓							9.3	1106	0.109	
6	6	6	100	✓	✓	✓	✓							9.1	8063	0.937	
7	7	7	75		✓	✓	✓							9.1	13079	1.170	
8	8	8	50		✓	✓	✓							9.3	3019	2.993	
9	9	9	25		✓	✓	✓							10.0	1128	3.455	
10	10	10	10		✓	✓	✓							11.9	1314	4.120	
11	11	11	5		✓	✓	✓							13.7	3189	5.075	
12																	
13																	
14		6												9.3	3075	0.939	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): SR MRBottom Depth: 225 mTransmisso Cleaned: (Y) N

Time	UTC	Local
Start	2058	1358
Bottom	2102	
End	2119	

Positional Information

Start
Lat: 48 ° 35.58 N
Lon: 123 ° 30.02 WBottom
Lat: 48 ° 35.58 N
Lon: 123 ° 30.00 WEnd
Lat: 48 ° 35.72 N
Lon: 123 ° 30.01 W

Oxygen Info For This Cast

Blank Value: 0.0023 mL · L⁻¹Std Value: 0.7037 mL · L⁻¹*Date Run: 19 08 11Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P1 Event #: 2 Ship: TULLY UTC Date (dd|mmm|yyyy): 18 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl	PH						
1	12			CHL MAX	10		✓		✓	✓						
2	13	94	6.926	5		✓	✓	✓	✓	✓				12.2		
3																
4	LOOP	712	6.920			✓	✓	✓	✓	✓						
5																
6																
7																
8																
9																
10																
11																
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14																
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18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 137 m

Transmisso Cleaned: (Y) N

	Time	UTC	Local
Start		1211	0411
Bottom		1214	
End		1220	

Positional Information

Start Lat: 48 ° 34.45 N
Lon: 125 ° 30.13 W

Start

Bottom Lat: 48 ° 34.43 N
Lon: 125 ° 30.16 W

Bottom

End Lat: 48 ° 34.43 N
Lon: 125 ° 30.16 W

End

Oxygen Info For This Cast

Blank Value: 6.0023 mL • L⁻¹
Std Value: 0.7037 mL • L⁻¹
*Date Run: 19 | 08 | 11
Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: LB08 Event #: 3 Ship: TULLY UTC Date (dd|mmm|yyyy): 18 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	14			Bot-10	☒ 128	☒										DID NOT TRIP
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 137 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1229	0529
Bottom	1232	
End	1234	

Positional Information

Start Lat: 48 ° 25.32 N
Lon: 125 ° 28.50 W

Bottom Lat: 48 ° 25.34 N
Lon: 125 ° 28.48 W

End Lat: 48 ° 25.32 N
Lon: 125 ° 28.45 W

Oxygen Info For This Cast

Blank Value: _____ mL * L⁻¹

Std Value: _____ mL * L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P2

Event #: 4

Ship: TULLY

UTC Date (dd|mmm|yyyy): 18|Aug|2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	DIC	DOC	P14			Flask Serial #	Value mL · L ⁻¹	
1	1	15	Bot-10	105	✓	✓	✓	✓	✓	✓			7.6	3016	1.827
2	2	16	100		✓	✓	✓	✓	✓	✓			7.7 7.8	1247 2061	3.390 3.408
3	3	17	75		✓	✓	✓	✓	✓	✓			7.9	2017	4.532
4	4	18	75		✓	✓	✓	✓	✓	✓			7.9	3177	4.518
5	5	19	50		✓	✓	✓	✓	✓	✓			8.2	3034	5.656
6	6	20	25		✓	✓	✓	✓	✓	✓			8.8	7269	4.391
7	7	21	10		✓	✓	✓	✓	✓	✓			12.1	2047	6.574
8	8	22	5		✓	✓	✓	✓	✓	✓			10.9	1485	6.434
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SR

Bottom Depth: 116 m

Transmisso Cleaned: (Y) I N

Time	UTC	Local
Start	1519	0819
Bottom	1522	
End	1532	

Positional Information

Start

Lat: 48 ° 36.00 N

Lon: 126 ° 0.01 W

Bottom

Lat: 48 ° 35.99 N

Lon: 126 ° 0.00 W

End

Lat: 48 ° 36.00 N

Lon: 126 ° 0.00 W

Oxygen Info For This Cast

Blank Value 0.0023 mL · L⁻¹

Std Value: 0.7037 mL · L⁻¹

*Date Run: 19|08|11

Analyst: PLG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P2Event #: 6/7Ship: TULLYUTC Date (dd mmm yyyy): 18 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy DMS	Nut	Sal	DMS d-t	CHL	APLC	Crng		Flask Serial #	Value mL · L ⁻¹	
1	1	23	100	✓	✓	✓		✓	✓						
2	2	24	75	✓	✓	✓			✓						
3	3	25	50	✓	✓	✓			✓						
4	4	26	40	✓	✓	✓			✓						
5	5	27	30	✓	✓	✓			✓						
6	6	28	25	✓	✓	✓			✓						
7	8	29	20	✓	✓	✓		✓	✓						
8	9	30	15	✓	✓	✓			✓		✓				
9	11	31	10	✓	✓	✓			✓		✓				
10	12	32	5	✓	✓	✓		✓	✓		✓				
11	14	33	0	✓	✓	✓		✓	✓						
12	17	34	MAX 10	✓						✓					
13	10	35	MAX	✓						✓					
14	13	36	5	✓						✓					
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SR (MR)Bottom Depth: 116 mTransmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1626	0926
Bottom	1628	
End	1646	

Positional Information

Start

Lat: 48 ° 36 04 N

Lon: 125 ° 59.97 W

Bottom

Lat: 48 ° 36.04 N

Lon: 125 ° 59.96 W

End

Lat: 48 ° 36.00 N

Lon: 126 ° 0.01 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

1 2 3 4 5 6 7 8 9 10 11

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P3 Event #: 8 Ship: Tully UTC Date (dd|mmm|yyyy): 18 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	37			50												Bottle Soak
2	38			50												
3	39			50												
4	40			50												
5	41			50												
6	42			50												
7	43			50												
8	44			50												
9	45			12												
10	46			12												
11	47			7												
12	48			7												
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 816 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	<u>2104</u>	<u>1404</u>
Bottom	<u>2106</u>	
End	<u>2122</u>	

Positional Information

Start Lat: 48 ° 37.50 N
Lon: 126 ° 20.02 W

Bottom Lat: 48 ° 37.51 N
Lon: 126 ° 19.99 W

End Lat: 48 ° 37.49 N
Lon: 126 ° 19.99 W

Oxygen Info For This Cast

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

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P3 Event #: 9/10 Ship: JPTULLY UTC Date (dd mmm/yyyy): 18 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments			
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	CHL	HPLC	UW OAT					Temp °C	Flask Serial #	Value mL • L ⁻¹
1	3	49	CHL MAX	✓	20		✓			✓	✓						
2	6	50	5	✓		✓	✓	✓	✓	✓				14.8	3190	6.788	
3	1	51	30	✓							✓✓						
4	2	52	20	✓							✓✓						
5	4	53	10	✓							✓✓						
6	5	54	5	✓							✓✓						
7	7	55	0								✓						
8																	
9																	
10		LOOP				✓	✓	✓	✓	✓✓				3187	6.754		
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s): MG MR

Bottom Depth: 816 m
Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2143	1443
Bottom	2157	
End	2218	

Positional Information
Start
Lat: 48 ° 37.495 N
Lon: 126 ° 19.984 W

Bottom
Lat: 48 ° 37.496 N
Lon: 126 ° 19.993 W

End
Lat: 48 ° 37.488 N
Lon: 126 ° 20.008 W

Oxygen Info For This Cast
Blank Value: 0.0023 mL · L⁻¹
Std Value: 0.7037 mL · L⁻¹
*Date Run: 19 | 08 | 11
Analyst: MG

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

3 4 5 6 7

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P4 Event #: 11 Ship: TULLEY UTC Date (dd|mmm|yyyy): 18 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal _{USG}	Chl _{WBC}	NH ₄						
1	56			300			✓	✓	✓							
2	57			200			✓	✓	✓							
3	58			150			✓	✓	✓							
4	59			100			✓	✓	✓							
5	60			75			✓	✓	✓							
6	61			50			✓	✓	✓							
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): _____

Bottom Depth: 1321.75 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0050	
Bottom	0057	
End	0104	

Positional Information

Start	Lat:	48 ° 39.00	N
	Lon:	126 ° 39.96	W



Bottom	Lat:	48 ° 39.00	N
	Lon:	126 ° 39.98	W



End	Lat:	48 ° 38.99	N
	Lon:	126 ° 40.00	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

② Deep Cast

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P4

Event #: 12

Ship: TULLY

UTC Date (dd mmm/yyyy): 19 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations			Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	SAL	DIC	pH	ORP	DOL	Oxy T°	Flask Serial #	Value mL · L ⁻¹	
1	1	62	Bot-10	✓	1315	✓	✓	✓	✓	✓	✓	✓	40	2019	0.551	
2	2	63	1250	✓	1250	✓	✓	✓	✓	✓	✓	✓	42	3043	0.421	
3	3	64	1250	✓	1250	✓	✓	✓	✓	✓	✓	✓	42	2082	0.410	
4	4	65	1000	✓		✓	✓	✓	✓	✓	✓	✓	4.8	657	0.245	
5	5	66	800	✓		✓	✓	✓	✓	✓	✓	✓		1174/2086	—	no water
6	6	67	600	✓		✓	✓	✓	✓	✓	✓	✓	5.9	1477	0.408	
7	7	68	400	✓		✓	✓	✓	✓	✓	✓	✓	6.4	1470	1.093	
8	8	69	300	✓		✓	✓	✓	✓	✓	✓	✓	6.8	1312	1.857	
9	9	70	250	✓		✓	✓	✓	✓	✓	✓	✓	7.5	622	—	no water
10	10	71	200	✓		✓	✓	✓	✓	✓	✓	✓	7.5	1498	2.884	
11	11	72	175	✓		✓	✓	✓	✓	✓	✓	✓	8.2	3084	5.023	POSSIBLE MISTRIIP
12	12	73	150	✓		✓	✓	✓	✓	✓	✓	✓	8.0	2055	3.348	
13	13	74	125	✓		✓	✓	✓	✓	✓	✓	✓	8.3	1337	3.739	
14	14	75	100	✓		✓	✓	✓	✓	✓	✓	✓	8.3	3180	5.008	
15	15	76	75	✓		✓	✓	✓	✓	✓	✓	✓	8.4/8.7	1367/1316	6.343/6.350	
16	16	77	50	✓		✓	✓	✓	✓	✓	✓	✓	9.7	668	6.656	
17	17	78	25	✓		✓	✓	✓	✓	✓	✓	✓	14.6	557	6.386	
18	18	79	10	✓		✓	✓	✓	✓	✓	✓	✓	16.0	715	5.869	
19	19	80	5	✓		✓	✓	✓	✓	✓	✓	✓	16.3	1389	5.854	
20																
21																
22																
23																
24																

Watchkeeper(s): MR

Bottom Depth: 1320 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0132	1832
Bottom	0156	
End	0234	1934

Positional Information

Start
Lat: 48 ° 39 02 N
Lon: 126 ° 39.95 W

Bottom
Lat: 48 ° 39 00 N
Lon: 126 ° 40 00 W

End
Lat: 48 ° 38.98 N
Lon: 126 ° 40.00 W

Oxygen Info For This Cast

Blank Value: 0.0023 mL · L⁻¹

Std Value: 0.7037 mL · L⁻¹

*Date Run: 19 08 11

Analyst: MR

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P4 Event #: 15 Ship: TULLY UTC Date (dd mmm/yyyy): 19 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal						Flask Serial #	Value mL · L ⁻¹	
1	1	81	1300	✓											} L1227
2	2	82	1300	✓											
3	3	83	1300	✓											
4	4	84	1300	✓											
5	5	85	1300	✓											
6	6	86	1300	✓											
7	7	87	1300	✓											
8	8	88	1300	✓		✓	✓	✓							
9	9	89	1000	✓											
10	10	90	1000	✓											
11	11	91	1000	✓		✓	✓	✓							
12	12	92	500	✓											
13	13	93	500	✓											
14	14	94	500	✓		✓	✓	✓							
15	15	95	40	✓											L1227
16	16	96	20	✓											L1227
17	17	97	10	✓		✓	✓	✓							
18	18	98	10	✓											
19	19	99	10	✓											
20	20	100	10	✓											L1227
21															
22															
23															
24															

Watchkeeper(s): MG

Bottom Depth: 1317 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0506	
Bottom	0529	
End	0602	

Positional Information

Start
Lat: 48 ° 39.018 N
Lon: 126 ° 39.995 W

Bottom
Lat: 48 ° 39.998 N
Lon: 126 ° 39.996 W

End
Lat: 48 ° 38.994 N
Lon: 126 ° 39.998 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____/____/____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P4 Event #: 16 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	101						✓	✓	✓							
2	102						✓	✓	✓							
3	103						✓	✓	✓							
4	104						✓	✓	✓							
5																
6																
7																
8																
9																
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19																
20																
21																
22																
23																
24																

Watchkeeper(s): US

Bottom Depth: 1319 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start		
Bottom		
End		

Positional Information

Start
Lat: 48 ° 38.98 N
Lon: 126 ° 39.99 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

① original plan was 40m, 25, 10, 5m. Sampling was modified to 40m, 25m, 20m, 10m. Jun 19 Aug 2011

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P4 Event #: 17 Ship: Tully UTC Date (dd|mmm|yyyy): 19 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	105					1200	✓	✓								
2	106					1100	✓	✓								
3	107					1000	✓	✓								
4	108					900	✓	✓								
5	109					800	✓	✓								
6	110					700	✓	✓								
7	111					600	✓	✓								
8	112					400	✓	✓								
9	113					360	✓	✓								
10	114					250	✓	✓								
11	115					175	✓	✓								
12	116					35	✓	✓								
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 1215 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1538	0839
Bottom	1558	0858
End	1629	0929

Positional Information

Start Lat: 48 ° 39.04 N
Lon: 126 ° 39.94 W

Bottom Lat: 48 ° 39.00 N
Lon: 126 ° 39.99 W

End Lat: 48 ° 39.01 N
Lon: 126 ° 39.97 W

Oxygen Info For This Cast

Blank Value: _____ mL * L⁻¹

Std Value: _____ mL * L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P4

Event #: 18

Ship: TULLY

UTC Date (dd mmm yyyy): 19 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	DM DMS	Nut	Set	DMSP t-d	CHL	MPCC	phyl		Flask Serial #	Value mL · L ⁻¹	
1		117	200		✓	✓		✓							
2		118	175		✓	✓		✓							
3		119	100		✓	✓		✓	✓						
4		120	75		✓	✓			✓						
5		121	50		✓	✓			✓						Open
6		122	40		✓	✓			✓						
7		123	30		✓	✓			✓						MT
8		124	25		✓	✓			✓						
9		125	20		✓	✓		✓	✓						
10		126	15		✓	✓			✓						
11		127	10		✓	✓			✓						MT
12		128	5		✓	✓		✓	✓						
13		129	0		✓	✓		✓	✓						
14		130	MAX 10	34						✓					
15		131	MAX	44						✓					
16		132	5							✓	✓				
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): SR

Bottom Depth: 1320 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1653	0953
Bottom	1657	
End	1718	

Positional Information		
Lat:	48° 38.79	N
Lon:	126° 40.01	W

Start

Lat:	48° 39.00	N
Lon:	126° 40.01	W

Bottom

Lat:	48° 38.99	N
Lon:	126° 40.00	W

End

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

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

1-5, 15, 6, 14, 7-12, 16, 13

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P5 Event #: 19 Ship: TULLY UTC Date (dd|mmm|yyyy): 19 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL • L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH₄ HPLC						
1	133			MAX	☒	36	☒		☒	☒					16.4	
2	134	1313	5.994	5		☒	☒	☒	☒	☒						
3																
4																
5	LOOP2	2051	5.956			☒	☒	☒	☒	☒						
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
ML

Bottom Depth: 2090 m
Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	1940	1240
Bottom	2013	
End	204	

Positional Information
Start
Lat: 48 ° 41.54 N
Lon: 127 ° 09.94 W

Bottom
Lat: 48 ° 41.49 N
Lon: 127 ° 10.00 W

End
Lat: 48 ° 41.51 N
Lon: 127 ° 09.95 W

Oxygen Info For This Cast
Blank Value: 0.0023 mL • L⁻¹
Std Value: 0.7037 mL • L⁻¹
*Date Run: 19 | 08 | 11
Analyst: MLG
* Oxygen blanks and standards should be run daily, if possible

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P6 Event #: 20 Ship: TULLY UTC Date (dd|mmm|yyyy): 19 | 08 | 11

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	135			MAX	☒ 20		☒		☒	☒				
2	136			5	☒		☒	☒	☒	☒				
3														
4														
5														
6														
7														
8														
9														
10														
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17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): MG

Bottom Depth: 2546 m

Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	2306	1606
Bottom	2340	
End	0015	

Positional Information

Start Lat: 48 ° 44 633 N
Lon: 127 ° 39.966 W

Bottom Lat: 48 ° 44.590 N
Lon: 127 ° 40.00 W

End Lat: 48 ° 44 591 N
Lon: 127 ° 39 977 W

Oxygen Info For This Cast

Blank Value: _____ mL * L⁻¹

Std Value: _____ mL * L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27

Station: P7

Event #: 21

Ship: JP TOLLY

UTC Date (dd|mmm|yyyy): 20 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄ HPLC				
1	137	1174	5.913	MAX	☒ 50		☒		☒	☒				172
2	138			5		☒	☒	☒	☒	☒				
3														
4														
5	LOOP	622	5.884			☒	☒	☒	☒	☒				17 - I THINK
6														
7														
8														
9														
10														
11														
12														
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16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): MG

Bottom Depth: 2506 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0238	1938
Bottom	0311	
End	0347	

Positional Information

Start

Lat: 48 ° 46.598 N

Lon: 128 ° 09.970 W

Bottom

Lat: 48 ° 46.560 N

Lon: 128 ° 10.013 W

End

Lat: 48 ° 46.61 N

Lon: 128 ° 09.974 W

Oxygen Info For This Cast

Blank Value: 0.0023 mL · L⁻¹

Std Value: 0.7037 mL · L⁻¹

*Date Run: 19 | 08 | 11

Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P8 Event #: 24 Ship: Tully UTC Date (dd mmm yyyy): 20 Aug 2011

Niskin #	Firing #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments		
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal Store	Sal run	Chl a	HPLC	UBC	Flask Serial #	Value mL · L ⁻¹			
1		139	2000		X	XX	X	XX			X		3.8	2019	1.285	
2		140	1500		X	X	X				X		4.0	3043	0.692	BUBBLES
3		141	1250		XX	X	X	X			X		4.7/5.1	2082	0.354/0.404	
4		142	1000		X	X	X	XX			X		5.5	668	0.229	0.0046 B
5		143	800		X	X	X	X			X		5.9	2086	0.225	0.7037 S
6		144	600		X	X	X				X		6.4	1477	0.461	0.14124 THIO
7		145	500		X	X	X				X		6.7	1470	0.752	
8		146	400		X	X	X				X		7.2	1312	1.150	STOP BUBBLES IN DOSIMAT
9		147	300		X	X	X				X		7.9	1498	1.539	RE-RUN BLANKS AFTER EMPTY FLUSH
10		148	250		X	X	X						8.2	3084	1.756	
11		149	200		X	X	X				X		8.7	2055	2.163	
12		150	175		XX	X	X						8.7/8.9	1337	2.183/2.185	
13		151	150		X	XX	X				X		8.9	1367	2.180	
14		152	125		X	X	X						9.1	1316	2.206	
15		153	100		X	X	X		X		X		9.3	557	2.457	
16		154	75		X	X	X		X				9.3	715	4.638	
17		155	50		X	X	X		X		X		9.7	1389	6.295	
18		156	25		X	X	X		XX		X		13.5	3187	6.944	
19		157	10		X	X	X		X		X		16.3	1313	5.915	
20		158	5		X	X	X	X	X				16.6	2051	5.858	
21		159	Max*10	47						XX						
22		160	Max	37						XX						
23		161	5							XX						
24																

Watchkeeper(s): SR

Bottom Depth: 2518 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	0747	0047
Bottom	0818	
End	0910	

Positional Information

Start Lat: 48 ° 48.96 N
Lon: 128 ° 39.98 W

Bottom Lat: 48 ° 49.01 N
Lon: 128 ° 39.97 W

End Lat: 48 ° 49.02 N
Lon: 128 ° 39.99 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL · L⁻¹

Std Value: 0.7037 mL · L⁻¹

*Date Run: 21 AUG 2011

Analyst: MG

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

1-17, 21, 22, 14, 19, 20, 23

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P9 Event #: 26 Ship: Tully UTC Date (dd|mmm|yyyy): 20 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	PH	TEMP					
1	163			CHL MAX	✓ 40		✓		✓	✓						CHANGE LATS/LONGS IN FILE
2	164	622	5.892	5	✓	✓	✓	✓	✓	✓						
3																
4																
5	LOOP3	1174	5.843			✓	✓	✓	✓	✓						
6																
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20																
21																
22																
23																
24																

Watchkeeper(s): BR

Bottom Depth: 2346 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	1336	0636
Bottom	1404	
End	1437	

Positional Information

Start Lat: 48 ° 51.42 N
Lon: 129 ° 9.99 W

Bottom Lat: 48 ° 51.41 N
Lon: 129 ° 9.98 W

End Lat: 48 ° 51.39 N
Lon: 129 ° 10.03 W

Oxygen Info For This Cast

Blank Value: 0.033 mL · L⁻¹
Std Value: 0.7073 mL · L⁻¹
*Date Run: 21 | 08 | 11
Analyst: MLG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P10 Event #: 27 Ship: Tully UTC Date (dd|mmm|yyyy): 20 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken											Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal RUN	Chl a	THL HPLC							
1	165			CHL MAX	☒ 43		☒		☒	☒							
2	166			5	☒		☒	☒	☒	☒							
3																	
4																	
5																	
6																	
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17																	
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21																	
22																	
23																	
24																	

Watchkeeper(s): SR

Bottom Depth: 2642 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1647	0947
Bottom	1719	
End	1751	

Positional Information

Start
 Lat: 48 ° 53.64 N
 Lon: 129 ° 40.02 W

Bottom
 Lat: 48 ° 53.62 N
 Lon: 129 ° 40.01 W

End
 Lat: 48 ° 53.62 N
 Lon: 129 ° 39.99 W

Oxygen Info For This Cast

Blank Value: _____ mL * L⁻¹

Std Value: _____ mL * L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P11 Event #: 28 Ship: JP Tully UTC Date (dd|mmm|yyyy): 20 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal RW	Chl a	NH ₄					TEMP °C	
1	167			CHL MAX	☒	35	☒		☒	☒						
2	168	3193	6.109	5	☒	☒	☒	☒	☒	☒					17.6	
3																
4																
5	LOOP	3200	6.083			☒	☒	☒	☒	☒						
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
MG

Bottom Depth: 2755 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	2008	1308
Bottom	2037	
End	2105	

Positional Information

Start
Lat: 48 ° 56.008 N
Lon: 130 ° 09.982 W

Bottom
Lat: 48 ° 55.997 N
Lon: 130 ° 09.971 W

End
Lat: 48 ° 56.002 N
Lon: 130 ° 09.997 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL * L⁻¹

Std Value: 0.7073 mL * L⁻¹

*Date Run: 21108111

Analyst: MG

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

DMS cast

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P12Event #: 29Ship: TULLYUTC Date (dd mmm/yyyy): 26 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	DMSP DMS	Nut	Sal	DMSP 6-d	CHL	HPLC			Flask Serial #	Value mL · L ⁻¹	
1	1	169	300	✓	✓	✓									
2	2	170	200	✓	✓	✓		✓							
3	3	171	175	✓	✓	✓		✓							
4	4	172	100	✓	✓	✓		✓	✓						
5	5	173	75	✓	✓	✓			✓						
6	6	174	50	✓	✓	✓			✓						
7	7	175	40	✓	✓	✓			✓						
8	9	176	30	✓	✓	✓			✓						
9	10	177	25	✓	✓	✓			✓						
10	12	178	20	✓	✓	✓		✓	✓						
11	13	179	15	✓	✓	✓			✓						
12	14	180	10	✓	✓	✓			✓						
13	15	181	5	✓	✓	✓		✓	✓						
14	17	182	0	✓	✓	✓		✓	✓						
15	11	183	MAX +10	✓						✓					
16	8	184	MAX	✓						✓					
17	16	185	-5	✓						✓					
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s):

MG

Bottom Depth: 3232 mTransmisso Cleaned: Y / N

Time UTC Local

Start 2336 1636

Bottom 2342

End 0007

Positional Information

Lat: 48 ° 58.20 NLon: 130 ° 39.98 W

Start

Lat: 48 ° 58.22 NLon: 130 ° 40.00 W

Bottom

Lat: 48 ° 58.27 NLon: 130 ° 39.98 W

End

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

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Shallow TMR

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27

Station: P12

Event #: 30

Ship: TULLY

UTC Date (dd|mmm|yyyy): 21 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl	NH ₄						
1	186			300			✓	✓								
2	187			200			✓	✓								
3	188			150			✓	✓								
4	189			100			✓	✓								
5	190			75			✓	✓								
6	191			50			✓	✓								
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
NS

Bottom Depth: 2230 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0018	1719
Bottom	0024	1724
End	0031	1731

Positional Information

Start	Lat: <u>48</u> ° <u>58.21</u> N
	Lon: <u>130</u> ° <u>39.97</u> W

Bottom

Lat: <u>48</u> ° <u>58.20</u> N
Lon: <u>130</u> ° <u>40.01</u> W

End

Lat: <u>48</u> ° <u>58.20</u> N
Lon: <u>130</u> ° <u>40.02</u> 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

DEEP CAST

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P12Event #: 31Ship: TULLYUTC Date (dd mmm yyyy): 21 | AUG | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Temp °C	Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	SAL RUN	DIV	DOC	pH	UBC		Flask Serial #	Value mL · L ⁻¹	
1	1	192	Bot 10	✓	3270	✓	✓	✓	✓	✓		✓	3.5	559	2.286	DEPTH 3216M
2	2	193	3000	✓		✓	✓	✓	✓	✓			2.7	2048	2.224	
3	3	194	3000	✓		✓	✓		✓		✓	✓	2.6	1491	2.826	SAMPLE MURKY SILT? BUBBLE
4	4	195	2500	✓		✓	✓		✓				2.4/2.3	2015/1487	1.844/1.849	
5	5	196	2000	✓		✓	✓	✓	✓			✓	3.3	1465	1.410	BUBBLE
6	6	197	1500	✓		✓	✓		✓			✓	3.5	632	0.697	
7	7	198	1250	✓		✓	✓		✓			✓	4.0	552	0.392	
8	8	199	1000	✓		✓	✓	✓	✓			✓	4.5	1175	0.266	
9	9	200	800	✓		✓	✓	✓	✓			✓	5.1	1496	0.215	
10	10	201	600	✓		✓	✓		✓			✓	5.6	1158	0.310	
11	11	202	500	✓		✓	✓		✓		✓	✓	5.8	1483	0.536	
12	12	203	400	✓		✓	✓		✓			✓	5.9/6.5	1105/1106	0.946/0.945	
13	13	204	300	✓		✓	✓		✓			✓	6.2	620	1.615	
14	14	205	250	✓		✓	✓		✓				6.3	2090	2.471	
15	15	206	200	✓		✓	✓		✓			✓	6.5	1085	3.574	
16	16	207	175	✓		✓	✓		✓				6.9	611	3.842	
17	17	208	150	✓		✓	✓		✓			✓	7.2	1333	4.053	
18	18	209	125	✓		✓	✓		✓				7.5	3121	4.513	
19	19	210	100	✓		✓	✓		✓		✓	✓	7.7	510	5.040	
20	20	211	75	✓		✓	✓		✓				7.8	1295/1296	6.309/6.442	
21	21	212	50	✓		✓	✓		✓			✓	8.5	505	6.942	CHL MAX @ 45
22	22	213	25	✓		✓	✓		✓			✓	9.5	3094	6.739	
23	23	214	10	✓		✓	✓		✓			✓	12.8	3114	6.041	
24	24	215	5	✓		✓	✓	✓	✓	✓			16.5	3198	5.999	

Watchkeeper(s):
MR / MGBottom Depth: 3232 mTransmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0042	1742
Bottom	0144	
End	0303	

Positional Information

Start	Lat: <u>48 ° 58.20</u>	<u>N</u>
	Lon: <u>130 ° 39.98</u>	<u>W</u>
	▼	
Bottom	Lat: <u>48 ° 58.20</u>	<u>N</u>
	Lon: <u>130 ° 39.99</u>	<u>W</u>
	▼	
End	Lat: <u>48 ° 58.16</u>	<u>N</u>
	Lon: <u>130 ° 40.03</u>	<u>W</u>

Oxygen Info For This Cast

Blank Value:	<u>0.0033</u>	mL · L ⁻¹
Std Value:	<u>0.7037</u>	mL · L ⁻¹
*Date Run:	<u>21 AUG 2011</u>	
Analyst:	<u>MG</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: 2011-27 Station: P12 Event #: 32 Ship: TULLY UTC Date (dd|mmm|yyyy): 21 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal <u>UBC</u>	Chl <u>a</u>	NH ₄						
1	216			2000			✓	✓								
2	217			1800			✓	✓								
3	218			1600			✓	✓								
4	219			1400			✓	✓								
5	220			1200			✓	✓								
6	221			1000			✓	✓								
7	222			800			✓	✓								
8	223			700			✓	✓								
9	224			675			✓	✓								
10	225			600			✓	✓								
11	226			400			✓	✓								
12	227			250			✓	✓								
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 3021 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0329	2031
Bottom	0476	2176
End	0505	1005
		2205

Positional Information

Start Lat: 48 ° 58.21 N
Lon: 130 ° 40.03 W

Bottom Lat: 48 ° 58.20 N
Lon: 130 ° 40.00 W

End Lat: 48 ° 58.19 N
Lon: 130 ° 40.02 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P12 Event #: 35 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl	NH ₄	Urb					
1	228			2000												} L122Y
2	229			2000												
3	230			2000												
4	231			2000												
5	232			2000												
6	233			2000												
7	234			2000			✓	✓			✓					
8	235			1000												
9	236			1000												
10	237			1000			✓	✓			✓					
11	238			500												
12	239			500												
13	240			500			✓	✓			✓					
14	241			20												} L122Y
15	242			20												
16	243			20												
17	244			10												
18	245			10												
19	246			10			✓	✓			✓					
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 3230 m

Transmissio Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0735	0035
Bottom	0815	
End	0904	

Positional Information

Start	Lat: <u>48 ° 58.18</u>	N
	Lon: <u>130 ° 39.94</u>	W

Bottom	Lat: <u>48 ° 58.24</u>	N
	Lon: <u>130 ° 40.04</u>	W

End	Lat: <u>48 ° 58.21</u>	N
	Lon: <u>130 ° 39.97</u>	W

Oxygen Info For This Cast

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

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P12 Event #: 36 Ship: JP TULLY UTC Date (dd|mmm|yyyy): 21 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	247			10			✓	✓								
2	248			20			✓	✓								
3	249			25			✓	✓								
4	250			40			✓	✓								
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 3230 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1214	0515
Bottom	1451	0751
End	1451	0751

Positional Information

Start

Lat: 48 ° 58.16 N

Lon: 130 ° 39.88 W

Bottom

Lat: 48 ° 57.89 N

Lon: 130 ° 39.57 W

End

Lat: 48 ° 57.89 N

Lon: 130 ° 39.57 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: 2011 27 Station: P13 Event #: 37 Ship: Tully UTC Date (dd|mmm|yyyy): 21 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄ HPC				
1	250			MAX	☒ 30		☒		☒	☒				
2	251	3034	6.016	5	☒	☒	☒	☒	☒	☒			15.8	
3														
4														
5	LOOP4	3177	6.000			☒	☒	☒	☒	☒			15.8	
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s):
MG

Bottom Depth: 3030 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2034	1334
Bottom	2117	
End	2155	

Positional Information

Start
Lat: 49 ° 2.60 N
Lon: 131 ° 40.02 W

Bottom
Lat: 49 ° 2.60 N
Lon: 131 ° 39.94 W

End
Lat: 49 ° 2.585 N
Lon: 131 ° 40.00 W

Oxygen Info For This Cast

Blank Value: 0.0033 mL · L⁻¹
Std Value: 0.7037 mL · L⁻¹
*Date Run: 21 | 08 | 11
Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P14 Event #: 38 Ship: TULLY UTC Date (dd|mmm|yyyy): 22 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal RUN	Chl a	NH ₄ HPLC				
1	252			CHL MAX	☒	45		X	X	X	X X			FLUORESCENCE BROAD
2	253			5	☒			X		X	X X			DOWN TO 104M
3														NARROW PEAK @ 47M
4														TRAN @ 34
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): MG

Bottom Depth: 3162 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0235	1935
Bottom	0314	
End	03	

Positional Information

Start	Lat: 49 ° 7.42	N
	Lon: 132 ° 40.19	W



Bottom	Lat: 49 ° 7.37	N
	Lon: 132 ° 40.02	W



End	Lat: 49 ° 7.39	N
	Lon: 132 ° 39.96	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

RADIO MARIE ON WAY UP TO PREP ARGO

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P15 Event #: 40 Ship: JP TULLY UTC Date (dd|mmm|yyyy): 22 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal RUN	Chl a	TH ₄ HPLC						
1	254			CHL MAX	30		✓		✓	✓						
2	255	2025	6.100	5		✓	✓	✓	✓	✓				14.4		
3																
4																
5	Loop	3100	6.147			✓	✓	✓	✓	✓						
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 3399 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0813	0113
Bottom	0902	
End	0937	

Positional Information

Start
 Lat: 49 ° 12.02 N
 Lon: 133 ° 39.99 W

Bottom
 Lat: 49 ° 12.01 N
 Lon: 133 ° 39.98 W

End
 Lat: 49 ° 12.00 N
 Lon: 133 ° 40.00 W

Oxygen Info For This Cast

Blank Value: 0.002 mL · L⁻¹
 Std Value: 0.7013 mL · L⁻¹
 *Date Run: 22 | 08 | 11
 Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P16 Event #: 41 Ship: TULLY UTC Date (dd|mmm|yyyy): 22 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl	NH ₄						
1	256			300			✓	✓								
2	257			200			✓	✓								
3	258			150			✓	✓	✓							
4	259			100			✓	✓	✓							
5	260			75			✓	✓	✓							
6	261			50			✓	✓	✓							
7	262			40			✓	✓	✓							
8	263			25			✓	✓	✓							
9	264			10			✓	✓	✓							
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 3623 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1512	0813
Bottom	1523	0823
End	1533	0833

Positional Information

Start
Lat: 49 ° 16.99 N
Lon: 134 ° 39.99 W

Bottom
Lat: 49 ° 17.00 N
Lon: 134 ° 40.01 W

End
Lat: 49 ° 17.01 N
Lon: 134 ° 40.02 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

Deep Cast
Rosette Log

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

Cruise ID: 2011-27 Station: P16Event #: 42Ship: TullyUTC Date (dd mmm yyyy): 22 Aug 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								T°	Oxygen Titrations		Comments
			Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal St	SAL RUN	PLC	pH	DOC	UVL		Flask Serial #	Value mL · L ⁻¹	
1		265	Bot-10		3684							✓	2.9	559	2.694	
2	202	266	3500					✓	✓				2.6	2088	2.686	
3		267	3500										2.7	1491	2.707	
4	205	268	3000					✓	✓	✓		✓	2.7	2015	2.427	
5	147	269	2500			✓							3.1 3.5	1487/1465	1.935/1.936	
6	115	270	2000					✓				✓	3.3	632	1.295	
7	62	271	1500									✓	3.8	552	0.535	
8	52	272	1250									✓	4.2	1175	0.318	
9	1175	273	1000					✓				✓	4.9	1496	0.286	
10	1496	274	800					✓		✓		✓	4.9	1158	0.362	
11	1103	275	600			✓						✓	5.4 5.6	1483/1105	0.563/0.559	
12	1403	276	400									✓	5.7	1306	1.454	
13		277	300									✓	6.0	620	2.033	
14		278	250										6.3	2090	2.513	
15		279	200	✓						✓		✓	6.9	1085	3.575	
16		280	175										7.2	611	3.947	
17		281	150									✓	7.4	1333	4.127	
18		282	125										7.6	3121	4.433	
19		283	100			✓						✓	7.7 8.0	510/1218	5.409/6.414	
20		284	75										7.9	396	6.829	
21		285	50							✓		✓	8.5	3094	7.078	
22		286	25									✓	12.7	505	6.482	
23		287	10									✓	14.2	3119	6.132	
24		288	5					✓					14.1	3198	6.121	Leaky, Spout

Watchkeeper(s): SRBottom Depth: 3622 mTransmisso Cleaned: (Y) N

Time	UTC	Local
Start	1547	0847
Bottom	1657	
End	1831	

Positional Information

Lat:	49 ° 16.97	N
Lon:	134 ° 39.97	W

Lat:	49 ° 17.00	N
Lon:	134 ° 40.00	W

Lat:	49 ° 17.00	N
Lon:	134 ° 39.98	W

Oxygen Info For This Cast

Blank Value: 0.002 mL · L⁻¹Std Value: 0.7013 mL · L⁻¹*Date Run: 22 08 11Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P16 Event #: 43 Ship: Tully UTC Date (dd|mmm|yyyy): 22 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal <u>UBC</u>	Chl <u>a</u>	NH ₄						
1	289			2000			✓	✓								
2	290			1800			✓	✓								
3	291			1600			✓	✓								
4	292			1400			✓	✓								
5	293			1200			✓	✓								
6	294			1100			✓	✓								
7	295			1000			✓	✓								
8	296			800			✓	✓								
9	297			600			✓	✓								
10	298			400			✓	✓								
11	299			275			✓	✓								
12	300			130			✓	✓								
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 3623 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1936	1236
Bottom	2026	1326
End	2110	1410 ?

Positional Information

Start
 Lat: 49 ° 16.95 N
 Lon: 134 ° 39.95 W

Bottom
 Lat: 49 ° 17.01 N
 Lon: 134 ° 40.05 W

End
 Lat: 49 ° N
 Lon: 134 ° 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

DMS CAST

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P16Event #: 44Ship: TULLYUTC Date (dd mmm yyyy): 11 AUG 11

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy DMS	Nut	Sal	DMS t-d	CHL	HPLC			Flask Serial #	Value mL · L ⁻¹	
1	1	301	300	✓	✓	✓									PAR ON
2	2	302	200	✓	✓	✓		✓							
3	3	303	175	✓	✓	✓		✓							
4	4	304	100	✓	✓	✓		✓	✓						
5	5	305	75	✓	✓	✓			✓						
6	7	306	50	✓	✓	✓			✓						
7	9	307	40	✓	✓	✓			✓						
8	10	308	30	✓	✓	✓			✓						
9	11	309	25	✓	✓	✓			✓						
10	12	310	20	✓	✓	✓		✓	✓						
11	15	311	15	✓	✓	✓			✓						
12	16	312	10	✓	✓	✓			✓						
13	17	313	5	✓	✓	✓		✓	✓						} SAMPLED B4
14	19	314	0	✓	✓	✓		✓	✓						} DMS.
15	8	315	MAX 10	✓						✓					
16	6	316	MAX	✓						✓					
17	18	317	5	✓						✓					
18	13	318	20x	✓											} 2122Y
19	14	319	20x	✓											
20															
21															
22															
23															
24															

Watchkeeper(s): MCBottom Depth: 3622 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2119	1419
Bottom	2128	
End	2147	

Positional Information

Start
 Lat: 49 ° 17.00 N
 Lon: 134 ° 40.02 W

Bottom
 Lat: 49 ° 16.99 N
 Lon: 134 ° 39.95 W

End
 Lat: 49 ° 17.02 N
 Lon: 134 ° 40.03 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

X 2 3 4 5 6 7 8 9 10 11 12 13 14

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P16 Event #: 47 Ship: TULLY UTC Date (dd|mmm|yyyy): 23 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄	UBC					
1	320			2000	☒											} LIZZY
2	321			2000	☒											
3	322			2000	☒											
4	323			2000	☒											
5	324			2000	☒											
6	325			2000	☒											
7	326			2000	☒		☒	☒			☒					
8	327		1400	1000	☒											
9	328			1000	☒											
10	329			1000	☒		☒	☒			☒					
11	330			500	☒											
12	331			500	☒											
13	332			500	☒		☒	☒			☒					
14	333			40	☒											} LIZZY
15	334			20	☒											
16	335			10	☒											
17	336			10	☒											
18	337			10	☒											
19	338			10	☒		☒	☒			☒					
20																
21																
22																
23																
24																

Watchkeeper(s): MR / MG

Bottom Depth: 3622 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	<u>2014</u>	<u>1714</u>
Bottom	<u>0102</u>	
End	<u>0132</u>	

Positional Information

Start	Lat: <u>49 ° 17.01</u>	N
	Lon: <u>134 ° 40.02</u>	W

Bottom	Lat: <u>49 ° 17.06</u>	N
	Lon: <u>134 ° 40.03</u>	W

End	Lat: <u>49 ° 17.10</u>	N
	Lon: <u>134 ° 40.03</u>	W

Oxygen Info For This Cast

Blank Value:	<u> </u> mL · L ⁻¹
Std Value:	<u> </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

BOTTLE 8 CLOSED AT 1400 BOT 20 IS NOW SAMPLE 327

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27

Station: P17

Event #: 49

Ship: JP Tully

UTC Date (dd|mmm|yyyy): 23 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						OC TEMP	Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	PH ₄ IPLC			
1	342			CHL MAX	53		✓		✓	✓✓			
2	343	3160	6.111	5		✓	✓	✓	✓	✓✓		14.1	
3													
4													
5	LOOP	3188	6.114			✓	✓	✓	✓	✓✓		14.4	
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													

Watchkeeper(s): SR

Bottom Depth: 3659 m

Transmisso Cleaned: Y N

Time	UTC	Local
Start	0905	0205
Bottom	0941	
End	1017	

Positional Information

Start Lat: 49 ° 20.96 N
Lon: 135 ° 39.98 W

Bottom Lat: 49 ° 20.95 N
Lon: 135 ° 39.96 W

End Lat: 49 ° 20.92 N
Lon: 135 ° 39.97 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
Std Value: 0.7018 mL · L⁻¹
*Date Run: 24 | AUG | 2011
Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P18 Event #: 51 Ship: Tudley UTC Date (dd|mmm|yyyy): 23 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal RUN	Chl a	NH₄ HPLC						
1	344			CHC MAX	56		✓		✓	✓						
2	345			5m			✓	✓	✓	✓						
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): SR

Bottom Depth: 3818 m

Transmisso Cleaned: ☒ Y ☐ N

Time	UTC	Local
Start	1454	0754
Bottom	1549	
End	1647	

Positional Information

Start Lat: 49 ° 26.01 N
Lon: 136 ° 40.00 W

Bottom Lat: 49 ° 25.99 N
Lon: 136 ° 40.02 W

End Lat: 49 ° 26.01 N
Lon: 136 ° 39.97 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27

Station: P19

Event #: 52

Ship: JP Tully

UTC Date (dd|mmm|yyyy): 23 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄				
1	346			CHL M2 x	✓ 55		✓		✓	✓				
2	347	668	6.136	5	✓	✓	✓	✓	✓	✓		13.7		
3														
4														
5	Loop	2686	6.092			✓	✓	✓	✓	✓				
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): MG

Bottom Depth: 3909 m

Transmissio Cleaned: (Y) / N

Time	UTC	Local
Start	2304	1604
Bottom	2336	
End	Aug 24 0009	

Positional Information

Start	Lat: <u>49</u> ° <u>29.99</u>	N
	Lon: <u>137</u> ° <u>40.02</u>	W

Bottom	Lat: <u>49</u> ° <u>30.02</u>	N
	Lon: <u>137</u> ° <u>39.96</u>	W

End	Lat: <u>49</u> ° <u>30.02</u>	N
	Lon: <u>137</u> ° <u>39.97</u>	W

Oxygen Info For This Cast

Blank Value:	<u>0.001</u> mL · L ⁻¹
Std Value:	<u>0.7018</u> mL · L ⁻¹
*Date Run:	<u>24</u> <u>08</u> <u>2011</u>
Analyst:	<u>MG</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: 2011-27 Station: P20 Event #: 55 Ship: TULLY UTC Date (dd|mmm|yyyy): 24 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄	U _{OC}					
1	348			2000												CHL max @ 50m
2	349			2000			✓	✓			✓					
3	350			2000												
4	351			1000												
5	352			1000			✓	✓			✓					
6	353			1000												
7	354			500												
8	355			500			✓	✓			✓					
9	356			500												
10	357			10												
11	358			10			✓	✓			✓					
12	359			10												
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): KG / SR

Bottom Depth: 3946 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	<u>0649</u>	<u>2347</u>
Bottom	<u>0720</u>	
End	<u>0801</u>	

Positional Information

Start
 Lat: 49 ° 33.97 N
 Lon: 138 ° 40.00 W

Bottom
 Lat: 49 ° 33.99 N
 Lon: 138 ° 40.02 W

End
 Lat: 49 ° 34.00 N
 Lon: 138 ° 39.99 W

Oxygen Info For This Cast

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

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

Shallow TMR

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P20 Event #: 56 Ship: TULLY UTC Date (dd|mmm|yyyy): 24 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation			Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒	Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	360			300				✓	✓								
2	361			200				✓	✓								
3	362			150				✓	✓								
4	363			100				✓	✓								
5	364			75				✓	✓								
6	365			50				✓	✓								
7	366			40				✓	✓								
8	367			25				✓	✓								
9	368			10				✓	✓								
10																	
11																	
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22																	
23																	
24																	

Watchkeeper(s):
NS

Bottom Depth: 3946 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1456	0756
Bottom	1507	0807
End	1521	0821

Positional Information

Start
Lat: 49 ° 33.99 N
Lon: 138 ° 40.10 W

Bottom
Lat: 49 ° 33.99 N
Lon: 138 ° 40.12 W

End
Lat: 49 ° 33.99 N
Lon: 138 ° 40.13 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

③ DEEP CAST

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P20

Event #: 57

Ship: TULLY

UTC Date (dd mmm/yyyy): 24 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	SAL	DIC	DOC	pH	UDC	Flask Serial #	Value mL · L ⁻¹	
1		369	Bot -10	4024								x	2.5	559	2.988
2		370	3500					x	x				2.6	2088	2.863
3		371	3500			x					x		2.4	1491	2.849
4		372	3000		x			xx				x	2.5	2015	2.512
5		373	2500				TT						27/29	1467/632	1990/1962
6		374	2000					x				x	3.0	1465	1.290
7		375	1500									x	3.4	552	0.582
8		376	1250									x	3.5	1175	0.351
9		377	1000					xx			x	x	4.0	1496	0.343
10		378	800			x		x				x	4.5	1158	0.404
11		379	600		x							x	4.9	1485	0.561/0.581
12		380	400									x	5.4	1306	1.253
13		381	300									x	5.7	620	1.790
14		382	250										5.9	2090	2.162
15		383	200									x	6.3	1085	2.925
16		384	175										6.5	396	3.220
17		385	150									x	7.0	611	3.829
18		386	125			x							7.1	1333	4.178
19		387	100								x	x	7.3	3121	5.449
20		388	75		x								7.4	510	6.790/6.785
21		389	50									x	8.4	3094	7.205
22		390	25									x	12.7	505	6.333
23		391	10									x	13.5	3119	6.176
24		392	5					x					13.4	3198	6.161

Watchkeeper(s): SR

Bottom Depth: 3946 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1549	0849
Bottom	1700	
End	1833	

Positional Information

Lat: <u>49 ° 33.97</u>	N
Lon: <u>138 ° 40.05</u>	W

Start

Lat: <u>49 ° 34.12</u>	N
Lon: <u>138 ° 40.24</u>	W

Bottom

Lat: <u>49 ° 34.02</u>	N
Lon: <u>138 ° 40.01</u>	W

End

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹

Std Value: 0.7018 mL · L⁻¹

*Date Run: 24 108 2011

Analyst: HG

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

④ Deep TMR

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P20 Event #: 58 Ship: TULLY UTC Date (dd|mmm|yyyy): 24 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	393			2000			✓	✓								
2	394			1800			✓	✓								
3	395			1600			✓	✓								
4	396			1400			✓	✓								
5	397			1200			✓	✓								
6	398			1100			✓	✓								
7	399			1000			✓	✓								
8	400			800			✓	✓								
9	401			600			✓	✓								
10	402			400			✓	✓								
11	403			240			✓	✓								
12	404			130			✓	✓								
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 3946 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	1935	1236
Bottom	2016	1316
End	2101	1401

Positional Information

Start Lat: 49 ° 33.98 N
Lon: 138 ° 40.04 W

Bottom Lat: 49 ° 33.99 N
Lon: 138 ° 39.99 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

DMS cast

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P20

Event #: 59

Ship: TULLY

UTC Date (dd mmm yyyy): 24 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy DMS	Nut	Sal	DMS P L-d	CHL	HPLC			Flask Serial #	Value mL · L ⁻¹	
1	1	405	300	✓	x	x									PAR ON
2	2	406	200	✓	x	x		x							
3	3	407	175	✓	x	xx		x							
4	4	408	100	✓	x	x		x	x						
5	5	409	75	✓	x	x			x						
6	7	410	50	✓	x	x			x						
7	9	411	40	✓	x	x			x						
8	11	412	30	✓	x	x			x						
9	12	413	25	✓	x	x			x						
10	13	414	20	✓	xx	x		xx	x						
11	15	415	15	✓	x	x			x						
12	16	416	10	✓	x	x			x						
13	19	417	5	✓	x	x		x	xx						
14	21	418	0	✓	x	x		x	x						
15	8	419	MAX+10	✓						xx					
16	6	420	MAX	✓						xx					
17	20	421	5	✓						xx					
18	10	422	40	✓											} L122Y
19	14	423	20	✓											
20	17	424	10	✓											
21	18	425	10	✓											
22															
23															
24															

Watchkeeper(s): MG

Bottom Depth: 3946 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	2107	1407
Bottom	2115	
End	2138	

Positional Information

Start	Lat: 49 ° 33.97	N
	Lon: 138 ° 39.99	W
Bottom	Lat: 49 ° 33.98	N
	Lon: 138 ° 39.99	W
End	Lat: 49 ° 34.00	N
	Lon: 138 ° 39.97	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

1 2 3 4 5 16 6 15 7 18 8 9 10 19 11 12 20 21 13 14

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27

Station: P21

Event #: 60

Ship: LP Tully

UTC Date (dd|mmm|yyyy): 25 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal Run	Chl a	NH ₄ HPLC					TC	
1	426			CHL MAX	☒ 36		☒		☒	☒						PAR OFF
2	427	2019	6.199	5	☒	☒	☒	☒	☒	☒				13.9		STARTED REC NIVE TOO SOON
3																
4																
5	LOOP	3043	6.250			☒	☒	☒	☒	☒						
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MG

Bottom Depth: 3940 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	0220	1920
Bottom	0247	
End	0319	

Positional Information

Start
 Lat: 49 ° 37.97 N
 Lon: 139 ° 40.03 W

Bottom
 Lat: 49 ° 37.90 N
 Lon: 139 ° 39.94 W

End
 Lat: 49 ° 38.00 N
 Lon: 139 ° 39.98 W

Oxygen Info For This Cast

Blank Value: 0.001 mL · L⁻¹
 Std Value: 0.7018 mL · L⁻¹
 *Date Run: 24 | 08 | 2011
 Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P22 Event #: 61 Ship: SP TULLY UTC Date (dd|mmm|yyyy): 25 | AUG | 11

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments	
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal RUN	Chl a	TEMP HPLC					
1	428			CAL MAX	74		✓		✓	✓✓					
2	429			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): SR

Bottom Depth: 3923 m

Transmisso Cleaned: ☒ Y / N

Time	UTC	Local
Start	0724	0024
Bottom	0802	
End	0841	

Positional Information

Start Lat: 49 ° 41.86 N
Lon: 140 ° 40.09 W

Bottom Lat: 49 ° 41.98 N
Lon: 140 ° 40.07 W

End Lat: 49 ° 41.96 N
Lon: 140 ° 39.90 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P23 Event #: 62 Ship: Tully UTC Date (dd|mmm|yyyy): 25 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken						Comments	
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal RUN	Chl a	TH HPLC	T		
1	430			CHLMAX	73		✓		✓	✓			
2	431	657	6.177	5m		✓	✓	✓	✓	✓		13.1	
3													
4													
5	LUP	2082	6.188			✓	✓	✓	✓	✓		135	
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													

Watchkeeper(s): SR

Bottom Depth: 4026 m

Transmisso Cleaned: (Y) / N

Time	UTC	Local
Start	1304	0604
Bottom	1340	
End	1418	

Positional Information

Start
 Lat: 49 ° 46.03 N
 Lon: 141 ° 39.90 W

Bottom
 Lat: 49 ° 46.01 N
 Lon: 141 ° 40.06 W

End
 Lat: 49 ° 46.00 N
 Lon: 141 ° 40.01 W

Oxygen Info For This Cast

Blank Value: 6.0017 mL · L⁻¹
 Std Value: 0.7015 mL · L⁻¹
 *Date Run: 27 | OK | 2011
 Analyst: MG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27

Station: P24

Event #: 64

Ship: TULLY

UTC Date (dd|mmm|yyyy): 25 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ✓ Pressure	Oxy	Nut	Sal	Chl a	NH ₄	HALE	DIC	PH			
1	432			2000	✓							✓✓	✓✓			
2	433			2000	✓							✓✓	✓✓			
3	434				✓							✓✓	✓✓			
4	435				✓							✓✓	✓✓			
5	436				✓							✓✓	✓✓			
6	437				✓								✓✓			
7	438				✓											
8	439				✓											
9	440				✓											
10	441				✓											
11	442				✓											
12	443				✓											
13	444				✓											
14	445				✓											
15	446				✓											
16	447				✓											
17	448				✓											
18	449				✓											
19	450				✓											
20	451			2000	✓											
21	452			2000	✓											
22	453			2000	✓											
23	454			MAX	✓	45	✓		✓		✓✓					CHL 12-131 MAX 24-84
24	455			5	✓		✓		✓		✓✓					

Watchkeeper(s): MG

Bottom Depth: 3966 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	1914	1214
Bottom	1951	
End	2033	

Positional Information

Start	Lat: 49 °	50.23	N
	Lon: 142 °	40.02	W

Bottom	Lat: 49 °	50.21	N
	Lon: 142 °	40.00	W

End	Lat: 49 °	50.17	N
	Lon: 142 °	40.02	W

Oxygen Info For This Cast

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

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P25 Event #: 65 Ship: IP TULLY UTC Date (dd|mmm|yyyy): 26 | AUG | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken								Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal RUN	Chl a	TH ₄ HPLC			K _{OC}	
1	456	3043	6.231	CHL MAX	☒	50	☒		☒	☒				
2	457			5			☒	☒	☒	☒			133	
3														
4														
5	4009	2019	6.246				☒	☒	☒	☒				
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														TRIP AT 2005 TO ✓

Watchkeeper(s): MLG

Bottom Depth: 3885 m

Transmisso Cleaned: ☒ Y / N

	UTC	Local
Time Start	0049	1749
Bottom	0116	
End	0146	

Positional Information

Start Lat: 50 ° 0.02 N
Lon: 143 ° 36.27 W

Bottom Lat: 49 ° 59.98 N
Lon: 143 ° 36.28 W

End Lat: 49 ° 59.99 N
Lon: 143 ° 36.25 W

Oxygen Info For This Cast

Blank Value: 0.0017 mL · L⁻¹

Std Value: 0.7015 mL · L⁻¹

*Date Run: 27 | 08 | 2011

Analyst: MLG

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P35 Event #: 66 Ship: JP TOLLY UTC Date (dd|mmm|yyyy): 26 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL · L ⁻¹	Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Chl a	NH ₄						
1	458			CHL MAX	✓	50	✓		✓	✓✓						
2	459	2086	6.197	5	✓		✓	✓	✓	✓✓			13.1			
3																
4																
5	LOOP10	669	6.232				✓	✓	✓	✓✓						LG COOPERON IN SAMPLE
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): MG

Bottom Depth: 4126 m

Transmisso Cleaned: (Y) N

Time	UTC	Local
Start	0530	2230
Bottom	0606	
End	0646	

Positional Information

Start

Lat: 49 ° 59.99 N

Lon: 144 ° 18.12 W

Bottom

Lat: 49 ° 59.99 N

Lon: 144 ° 18.19 W

End

Lat: 49 ° 59.99 N

Lon: 144 ° 18.19 W

Oxygen Info For This Cast

Blank Value: 0.017 mL · L⁻¹

Std Value: 0.7015 mL · L⁻¹

*Date Run: 27 | Aug | 2011

Analyst: MG

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

UBC east

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27

Station: P26

Event #: 67

Ship: TULLY

UTC Date (dd mmm/yyyy): 26 Aug 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken			Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal	Flask Serial #	Value mL · L ⁻¹	
1	1	460	1000							} L122Y
2	2	461	2000							
3	3	462	2000							
4	4	463	2000							
5	5	464	2000			✓	✓	✓		
6	6	465	2000							
7	7	466	2000							
8	8	467	1000			✓	✓	✓		
9	9	468	1000							
10	10	469	500							
11	11	470	500			✓	✓	✓		
12	12	471	500							
13	13	472	120							} L122Y
14	14	473	80							
15	15	474	40							
16	16	475	40							
17	17	476	20							
18	18	477	10							
19	19	478	10							
20	20	479	10							
21	21	480	10			✓	✓	✓		
22	22	481	10							
23										
24										

Watchkeeper(s): SR

Bottom Depth: 4224 m

Transmisso Cleaned: Y/N

Time UTC Local

Start 1005 0305

Bottom 1044

End 1132

Positional Information

Start Lat: 50 ° 0.04 N

Lon: 145 ° 0.00 W

Bottom Lat: 50 ° 0.02 N

Lon: 145 ° 0.05 W

End Lat: 49 ° 59.95 N

Lon: 144 ° 59.92 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

SHALLOW TMR

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P26 Event #: 69 Ship: TULLY UTC Date (dd|mmm|yyyy): 26 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal UBC	Chl a	NH ₄						
1	482			300			✓	✓								
2	483			200			✓	✓								
3	484			150			✓	✓								
4	485			100			✓	✓								
5	486			75			✓	✓								
6	487			50			✓	✓								
7	488			40			✓	✓								
8	489			25			✓	✓								
9	490			10			✓	✓								
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s):
NSBottom Depth: 4225 m

Transmisso Cleaned: Y / N

	UTC	Local
Time Start	1545	0845
Bottom	1600	0900
End	1609	0909

Positional Information

Start
Lat: 49 ° 59.99 N
Lon: 144 ° 59.97 WBottom
Lat: 50 ° 00.02 N
Lon: 144 ° 59.98 WEnd
Lat: 49 ° 59.99 N
Lon: 145 ° 00.00 W

Oxygen Info For This Cast

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

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

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P26Event #: 70Ship: TULLYUTC Date (dd|mmm|yyyy): 26 Aug 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments	
			Target Pressure	Confirmed Pressure	Oxy	Nut	Sal RUN	DIC	Alk	DOC	pH	UOC		T°	Flask Serial #	Value mL·L ⁻¹		
1	1	494	Bot-10	✓	4315		x x						x		2.5	559	3.195	
2	2	495	4000	✓			6		x				x		2.4	2088	3.174	
3	3	496	3500	✓			x x					x			2.4	1491	2.974	
4	4	497	3000	✓			x x	x					x		2.4	2015	2.567	
5	5	498	2500	✓		x	x x								2.6/2.8	632/552	2.007/1.990	
6	6	499	2000	✓			x x						x		2.8	1465	1.330	
7	7	500	1500	✓			x x						x		3.2	1175	0.616	
8	8	501	1250	✓			x x						x		3.4	1218	0.451	
9	9	502	1000	✓			6	x					x		3.7	2090	0.495	
10	10	503	800	✓			x x						x		4.1	1085	0.571	
11	11	504	600	✓			6					x	x		4.5	3198	0.653	
12	12	505	400	✓			6						x		5.0	3188	1.116	
13	13	506	300	✓		x	x x						x		5.0/5.2	510/620	1.575/1.584	
14	14	507	250	✓			6								5.2	1333	2.103	
15	15	508	200	✓			x x						x		5.2	3121	2.660	
16	16	509	175	✓			x x								5.4	3094	3.028	
17	17	510	150	✓			x x x x						x		5.6	505	3.535	
18	18	511	125	✓			x x					x			5.6	3119	5.758	
19	19	512	100	✓			x x						x		5.7	3100	7.033	
20	20	513	75	✓		x	x x								5.9/5.8	396/611	7.061/7.082	
21	21	514	50	✓			x x						x		7.2	622	7.285	
22	22	515	25	✓			x x						x		12.6	3193	6.251	
23	23	516	10	✓			6						x		12.8	3200	6.259	Yellow Box
24	24	517	5	✓			x x	x							12.7	1473	-6.271	Vent no holding Top Valve Open

Watchkeeper(s): SRBottom Depth: 4226 mTransmisso Cleaned: (Y) N

Time	UTC	Local
Start	1627	0927
Bottom	1747	
End	1932	

Positional Information

Start
Lat: 49° 59.96 N
Lon: 144° 59.96 WBottom
Lat: 50° 0.01 N
Lon: 144° 59.97 WEnd
Lat: 50° 0.11 N
Lon: 145° 0.12 W

Oxygen Info For This Cast

Blank Value: 0.0017 mL·L⁻¹Std Value: 6.7015 mL·L⁻¹*Date Run: 27 Aug 2011Analyst: MG

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

DMS + ONA 1

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P26Event #: 71Ship: TULLYUTC Date (dd|mmm|yyyy): 26 | Aug | 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken										Oxygen Titrations		Comments
			Target Pressure	Confirmed Pressure	Oxy DMS	Nut	Sal phyto	CHL	HPLC		OW Dxy	OW ONA	OW DIC	OW SAC	Flask Serial #	Value mL · L ⁻¹	
1	1	518	300	✓		x	xx										
2	2	519	200	✓		x	x										
3	3	520	175	✓		x	x										
4	4	521	100	✓		x	x		x								
5	5	522	75	✓		xx	x		x								
6	6	523	50	✓		x	x		x								
7	8	524	40	✓		x	x		x								
8	10	525	30	✓		x	x		xx								
9	12	526	25	✓		x	x		x								
10	13	527	20	✓		xx	x		x								
11	15	528	15	✓		x	x		x								
12	16	529	10	✓		x	x		x								
13	18	530	5	✓		x	x		x								
14	22	531	0	✓		x	x		x								
15	9	532	MAX=10	✓					xx								
16	7	533	MAX	✓					xx								
17	19	534	5	✓			xxx		xx								
18	11	535	30	✓									x				
19	14	536	20	✓									xx				
20	17	537	10	✓							xx	xx	x	x			DIANE
21	20	538	5	✓							xx	xx	x	x			
22	21	539	0	✓							xx	xx	x	x			
23																	
24																	

Watchkeeper(s): MGBottom Depth: 4226 mTransmisso Cleaned: (Y) / N

Time UTC Local

Start	2100	
Bottom	2112	
End	2132	

Positional Information

Start	Lat: <u>49</u> ° <u>59.95</u> N
	Lon: <u>144</u> ° <u>59.93</u> W

Bottom	Lat: <u>49</u> ° <u>59.98</u> N
	Lon: <u>144</u> ° <u>59.99</u> W

End	Lat: <u>49</u> ° <u>59.97</u> N
	Lon: <u>145</u> ° <u>06.04</u> 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

1 2 3 4 5 6 16 7 15 8 18 9 10 19 11 12 20 13 17 21 22 14

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P26 Event #: 72 Ship: Tully UTC Date (dd|mmm|yyyy): 26 | Aug | 2011

Niskin #	Sample #	Oxygen Titrations		Rosette Operation		Samples Taken										Comments
		Flask Serial #	Value mL * L ⁻¹	Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Chl	NH ₄						
1	540			2000			✓	✓								
2	541			1800			✓	✓								
3	542			1600			✓	✓								
4	543			1400			✓	✓								
5	544			1200			✓	✓								
6	545			1100			✓	✓								
7	546			1000			✓	✓								
8	547			900			✓	✓								
9	548			700			✓	✓								
10	549			500			✓	✓								
11	550			185			✓	✓								
12	551			130			✓	✓								
13																
14																
15																
16																
17																
18																
19																
20																
21																
22																
23																
24																

Watchkeeper(s): NS

Bottom Depth: 4226 m

Transmisso Cleaned: Y / N

Time	UTC	Local
Start	2157	1421
Bottom	2235	1535
End	2333	1633

Positional Information

Start Lat: 50 ° 00.01 N
Lon: 145 ° 00.02 W

Bottom Lat: 50 ° 00.00 N
Lon: 145 ° 00.01 W

End Lat: 50 ° 00.09 N
Lon: 145 ° 00.12 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

ONAN 2

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: P26

Event #: 73

Ship: TULLY

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

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken								Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal		OW DIC	OW DOC			Flask Serial #	Value mL · L ⁻¹	
1	1	552	250	✓						xx					PAR ON
2	2	553	200	✓						xx					
3	3	554	150	✓						xx					
4	4	555	125	✓						xx					
5	5	556	100	✓						xx					
6	6	557	75	✓						xx					
7	7	558	50	✓						xx					
8	8	559	30	✓					x	xx					CHLMAX 44
9	9	560	20	✓					x	xx					
10	10	561	10	✓					x	xx					
11	11	562	5	✓					xx	xx					
12	12	563	0	✓					x	xx					
13															
14															
15															
16															
17															
18															
19															
20															
21															
22															
23															
24															

Watchkeeper(s): MG

Bottom Depth: 4225 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	<u>2342</u>	<u>1642</u>
Bottom	<u>2351</u>	
End	<u>0003</u>	

Positional Information

Lat:	<u>50</u> ° <u>0.08</u>	<u>N</u>
Lon:	<u>145</u> ° <u>0.21</u>	<u>W</u>

Start

Bottom

Lat: 50 ° 0.04 N
Lon: 145 ° 0.02 W

End

Lat: 50 ° 0.01 N
Lon: 144 ° 59.98 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

Mooring ONA-1 CID 100 m

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: PA005

Event #: 75

Ship: TULLY

UTC Date (dd mmm yyyy): 27 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken							Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy UW	Nut	Sal UW		UW ONA			Flask Serial #	Value mL · L ⁻¹	
1	1	564	10	☒	xx		x		xx					CIL MAX 50M
2	2	565	5	☒	xx		x		xx					
3	3	566	0	☒	xx		x		xx					
4														
5														
6														
7														
8														
9														
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15														
16														
17														
18														
19														
20														
21														
22														
23														
24														

Watchkeeper(s): MG

Bottom Depth: 4188 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0150	1850
Bottom	0153	
End	0157	

Positional Information

Start

Lat: 50 ° 8.10 N

Lon: 144 ° 48.92 W

Bottom

Lat: 50 ° 8.09 N

Lon: 144 ° 48.95 W

End

Lat: 50 ° 8.10 N

Lon: 144 ° 48.93 W

Oxygen Info For This Cast

Blank Value: _____ mL · L⁻¹

Std Value: _____ mL · L⁻¹

*Date Run: ____ | ____ | ____

Analyst: _____

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

Mooring ONAR 2, CTD to 500 m.

Water Properties Group

Rosette Log

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

Cruise ID: 2011-27 Station: PA005

Event #: 76

Ship: TULLY

UTC Date (dd mmm yyyy): 27 AUG 2011

Firing #	Niskin #	Sample #	Rosette Operation		Samples Taken			Oxygen Titrations		Comments
			Target Pressure	Confirmed ☒ Pressure	Oxy	Nut	Sal	Flask Serial #	Value mL · L ⁻¹	
					OW		OW			
1	1	567	10	☒	xx		x		xx	CHLOR 44M
2	2	568	5	☒	xx		x		xx	
3	3	569	0	☒	xx		x		xx	
4										
5										
6										
7										
8										
9										
10										
11										
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13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										

Watchkeeper(s): MG

Bottom Depth: 4188 m

Transmisso Cleaned: ☒ Y / ☐ N

Time	UTC	Local
Start	0240	1940
Bottom	0250	
End	0303	

Positional Information

Lat:	50 ° 8.09	N
Lon:	144 ° 48.84	W

Start

Bottom

Lat: 50 ° 8.16 N
Lon: 144 ° 48.88 W

End

Lat: 50 ° 8.12 N
Lon: 144 ° 49.00 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