

ROSETTE LOG

MISSION ID: 2004-21 STATION: 16 CAST NUMBER: 87 UTC DATE (dd/mm/yyyy): 25 June 2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY			ALK.		CHL	CON	MP4				
1	277	1334	3.737	60	- 155	X												
2	278	1336	3.797	125	- 125	X												
3	279	1352	3.958	100	- 100													
4	280	1353	3.908	75	- 75													
5	281	1397	3.843	50	- 50													
6	282	1344	4.148	40	- 40													
7	283	1350	4.336	30	- 30													
8	284	1398	4.767	20	- 20													
9	285	535	5.527	10	- 10													
10	286	572	5.573	5	- 5	X												
11	287	364	5.577	surf	- 2													
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

SHIP: Vector
ENTERED BY:
CHECKED BY:

Bottom Depth: 161

Cast # down: 87
Cast # up: 87

Time	LOC	UTC
Begin:		07:37
Bottom:		07:42
End:		07:53

START POSITION (GPS)
LAT: 49 57.68
LONG: 125 08.80

BOTTOM POSITION (GPS)
LAT: 49 57.70
LONG: 125 08.83

END POSITION (GPS)
LAT: 49 57.69
LONG: 125 08.77

Comments:

ROSETTE LOG

MISSION ID: 2004-21 STATION: 14 CAST NUMBER: 85 UTC DATE (dd/mm/yyyy): 25 June 2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY				ALK.		CHL	NH4	CO2M			
1	261	657	3.194	bot	✓ 310	x												
2	262	708	3.197	300	✓	x												
3	263	1130	3.435	250	✓													
4	264	1135	3.656	200	✓													
5	265	1136	3.747	175	✓										x			
6	266	1137	3.805	150	✓													
7	267	1176	4.032	125	✓													
8	268	1389	4.133	100	✓													
9	269	1391	3.842	75	✓													
10	270	1393	4.491	50	✓													
11	271	1399	4.851	40	✓													
12	272	1400	4.745	30	✓													
13	273	1407	4.816	20	✓													
14	274	1410	5.295	10	✓													
15	275	1414	7.745	5	✓	x												
16	276	1432	7.530	surf	✓													
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

SHIP: VECTOR
ENTERED BY:
CHECKED BY:

Bottom Depth: 316

Cast # down: 85
Cast # up: 85

Time	LOC	UTC
Begin:		531
Bottom:		539
End:		550

START POSITION (GPS)
LAT: 49 53 01
LONG: 124 59 55

BOTTOM POSITION (GPS)
LAT: 49 53 01
LONG: 124 59 55

END POSITION (GPS)
LAT: 49 52 99
LONG: 124 59 58

Comments:

ROSETTE LOG

MISSION ID: 2004-21 STATION: 12 CAST NUMBER: 83 UTC DATE (dd/mm/yyyy): 25/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL			NUT		TCO		CI3					
							OXY		NH4		ALK		CHL	COH				
1	246	1276	2.651	80+	✓ 352	X												
2	247	1278	2.974	300	✓	X												
3	248	1284	3.393	250	✓													
4	249	1267	3.648	200	✓													
5	250	1325	3.778	175	✓													
6	251	1327	3.959	150	✓								✓					
7	252	1281	4.157	100	✓													
8	253	1324	4.133	75	✓													
9	254	1326	3.819	50	✓													
10	255	1280	3.965	40	✓								✓					
11	256	1238	* crash	30	✓								✓					progen crash add 2 values
12	257	1279	4.613	20	✓								✓	✓				
13	258	1429	7.311	10	✓								✓	✓	✓			
14	259	1248	6.981	5	✓	X							✓	✓	✓			
15	260	1260	6.921	surf	✓ 0.67								✓	✓	✓			
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments: _____

SHIP: VECTOR
 ENTERED BY: _____
 CHECKED BY: _____

Bottom Depth: 355

Cast # down: 83
 Cast # up: 83

Time	LOC	UTC
Begin:		301
Bottom:		309
End:		325

START POSITION (GPS)
 LAT: 49 43 475
 LONG: 124 40 648

BOTTOM POSITION (GPS)
 LAT: 49 43 54
 LONG: 124 40 73

END POSITION (GPS)
 LAT: 49 43 710
 LONG: 124 40 904

ROSETTE LOG

MISSION ID: 2004-21 STATION: 9 CAST NUMBER: 76 UTC DATE (dd/mm/yyyy): 29/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken													
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13							
							OXY		NH4		ALK		CHL	CDOM	UPEL	PSAT			
1	234	1138	3.427	BOT	✓	160	+												
2	235	1142	3.539	150	✓		+								✓✓				
3	236	1146	3.629	125	✓														
4	237	1428	4.161	100	✓														
5	238	1233	3.827	75	✓					++									
6	239	1237	3.882	50	✓					++									
7	240	1241	4.045	40	✓					++				✓✓					
8	241	1247	4.205	30	✓					++				✓✓					
9	242	1256	4.253	20	✓					++				✓✓	✓✓	✓✓			
10	243	1267	5.499	10	✓					++				✓✓	✓✓	✓✓			
11	244	1273	7.691	5	✓					++				✓✓	✓✓	✓✓	✓✓		bubble on probe
12	245	1274	7.620	surf						++				✓✓	✓✓				
13																			
14																			
15																			
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Comments:

SHIP:
ENTERED BY: *TH*
CHECKED BY:

Bottom Depth: 160

Cast # down: 77
Cast # up:

Time	LOC	UTC
Begin:	6039	
Bottom:	0043	
End:	0055	

START POSITION (GPS)
LAT: 4935.484
LONG: 12428221

BOTTOM POSITION (GPS)
LAT: 4935.467
LONG: 12428195

END POSITION (GPS)
LAT: 4935.433
LONG: 12438066

ROSETTE LOG

MISSION ID: 2004-21 STATION: 6 CAST NUMBER: 69 UTC DATE (dd/mm/yyyy): 24/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY		NH4		ALK		CHL	CO2	HPIC	ph		
1	221	1153	3.741	130.5	✓	182.8	✓											
2	222	1158	3.760	175	✓	175.3	✓											
3	223	1271	3.853	150	✓	150.3												
4	224	1175	4.299	125	✓	125.78												
5	225	1195	4.325	100	✓	100.41												
6	226	1206	4.084	75	✓	75.24			XX									
7	227	1411	3.921	50	✓	50.42			XX									
8	228	1425	4.083	40	✓	40.25			XX				✓					
9	229	1403	4.448	30	✓	30.20			XX				✓					
10	230	1426	4.671	20	✓	20.05			XX				✓	✓	✓			
11	231	1427	8.079	10	✓	10.35			XX				✓	✓	✓			
12	232	1430	7.324	5	✓	5.22	✓		XX				✓	✓	✓	✓		
13	233	1404	6.866	0	✓	0.90	✓	✓	XX				✓	✓				
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP:
ENTERED BY:
CHECKED BY:

Bottom Depth: 194

Cast # down: 69
Cast # up:

Time LOC UTC 22:23
Begin: 22:23
Bottom: 22:28
End: 22:45

START POSITION (GPS)
LAT: 49 30.565 +24 1828
LONG: 124 27.828

BOTTOM POSITION (GPS)
LAT: 49 30.613
LONG: 124 28.53

END POSITION (GPS)
LAT: 49 30.760
LONG: 124 28.132

ROSETTE LOG

MISSION ID: 2004-21 STATION: 3 CAST NUMBER: 67 UTC DATE (dd/mm/yyyy): 06/24/04

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		Cl3						
							OXY			ALK.		CHL	NH4CO3					new oxy values ml/l
1	205	535	2.216	bot	✓ 325	X												2.199
2	206	364	2.312	300	✓	X												2.294
3	207	572	2.552	250	✓													2.530
4	208	1334	3.392	200	✓													3.359
5	209	1336	3.894	175	✓													3.854
6	210	1353	4.155	150	✓								✓					4.110
7	211	1352	4.270	125	✓													4.224
8	212			100	✓													DID NOT FIRE
9	213	1398	4.198	75	✓													4.154
10	214	1344	3.944	50	✓													3.963
11	215	1350	4.049	40	✓													4.006
12	216	1351	4.079	30	✓													4.036
13	217	1319	5.125	20	✓													5.067
14	218	1235	6.956	10	✓													6.871
15	219	1228	7.170	5	✓	X												7.082
16	220	1231	6.936	surf														6.852
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: Vector
ENTERED BY:
CHECKED BY:

Bottom Depth: 325

Cast # down: 67
Cast # up: 67

Time	LOC	UTC
Begin:		1914
Bottom:		1924
End:		1944

START POSITION (GPS)
LAT: 49 26.63
LONG: 124 20.19

BOTTOM POSITION (GPS)
LAT: 49 26.68
LONG: 124 20.29

END POSITION (GPS)
LAT: 49 26.71
LONG: 124 20.48

ROSETTE LOG

MISSION ID: 2004-21 STATION: Z CAST NUMBER: 61 UTC DATE (dd/mm/yyyy): 24/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												NEW OXY VALUES
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13		HPGL				
							OXY					ALK		CHL		CRUM	HA	PHYS
1	190	1399	2.651	bot+10	✓ 276	X												2.629
2	191	1432	2.859	250	✓ 250	X												2.834
3	192	1433	3.727	200	✓ 200													3.689
4	193	1136	3.997	175	✓ 175													3.956
5	194	1391	4.144	150	✓ 150													4.100
6	195	708	4.303	125	✓ 125													4.256
7	196	1393	4.246	100	✓ 100													4.201
8	197	1400	4.309	75	✓ 75											✓	✓	4.263
9	198	1137	3.944	50	✓ 50											✓	✓	3.904
10	199	1434	4.014	40	✓ 40								✓	✓		✓	✓	3.972
11	200	1389	4.139	30	✓ 30								✓	✓		✓	✓	4.095
12	201	657	4.269	20	✓ 20								✓	✓	✓	✓	✓	4.222
13	202	1176	6.850	10	✓ 10								✓	✓	✓	✓	✓	6.767
14	203	1135	7.120	5	✓ 5	X							✓	✓	✓	✓	✓	7.035
15	204	1130	7.043	Surface	✓ 1			✓	✓				✓		✓	✓	✓	6.959
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: VECTOR
ENTERED BY: ms.
CHECKED BY:

Bottom Depth: 276

Cast # down: 61
Cast # up: 61

Time	LOC	UTC
Begin:		1628
Bottom:		1634
End:		1651

START POSITION (GPS)
LAT: 49 24 098
LONG: 124 9 324

BOTTOM POSITION (GPS)
LAT: 49 24 103
LONG: 124 9 292

END POSITION (GPS)
LAT: 49 24 209
LONG: 124 9 270

ROSETTE LOG

MISSION ID: 2004-21 STATION: 27 CAST NUMBER: 58 UTC DATE (dd/mm/yyyy): June 24 2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY			ALK		CHL						
1	174	1270	2.573	Bot	✓	347												
2	175	1228	2.948	300	✓													
3	176	1231	X0.841*	250	✓	3.420												
4	177	1233	3.545	200	✓	3.508												
5	178	1258	3.889	175	✓	3.848												
6	179	1237	4.006	150	✓	3.963								✓				
7	180	1256	4.169	125	✓	4.124												
8	181	1267	4.254	100	✓	4.207												
9	182	1284	4.068	75	✓	4.020							xx					
10	183	1327	3.911	50	✓	3.870							xx					
11	184	1241	4.046	40	✓	4.003							x					
12	185	1247	4.032	30	✓	3.989												
13	186	1273	4.928	20	✓	4.873												
14	187	1274	8.168	10	✓	8.067												
15	188	1276	7.212	5	✓	7.125	x						xx	xx	x			
16	189	1278	7.032	surf	✓	6.947							xy	xy	x			
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments: 7 x 1 day with 4 bottles. * had to enter new oxy values for this and all casts to follow b/c computer crashed & was using old blank standard values. (ST).

SHIP: Vector
ENTERED BY:
CHECKED BY:

Bottom Depth: 347

Cast # down: 58
Cast # up: 58

Time	LOC	UTC
Begin:		1311
Bottom:		1318
End:		1337

START POSITION (GPS)
LAT: 49 19 086
LONG: 123 48 026

BOTTOM POSITION (GPS)
LAT: 49 19 039
LONG: 123 48 082

END POSITION (GPS)
LAT: 49 19 154
LONG: 123 48 144

ROSETTE LOG

MISSION ID: 2004-21 STATION: 39 CAST NUMBER: 55 UTC DATE (dd/mm/yyyy): 24/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY				ALK		CHL	NH4	COM			
1	157	1271	2.846	bot	-	370	X											
2	158	1153	2.871	350	-	350	X											
3	159	1158	2.678	300	-	300												
4	160	1175	3.240	250	-	252												
5	161	1195	3.480	200	-	200												
6	162	1206	3.955	175	-	175												
7	163	1411	4.175	150	-	150								X				
8	164	1425	4.277	125	-	125												
9	165	1426	4.318	100	-	100												
10	166	1427	4.234	75	-	75								X				
11	167	1430	4.185	50	-	50								X	X			
12	168	1403	4.012	40	-	40							X	X				
13	169	1404	4.126	30	-	30							X	X				
14	170	1406	4.393	20	-	20							X	X	X			*some chemicals on rim
15	171	1407	6.656	10	-	10							X	X	X			
16	172	1410	7.260	5	-	5	X						X	X	X			
17	173	1414	6.978	surf	-	0							X	X	X			
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: Vector

ENTERED BY:

CHECKED BY:

Bottom Depth: 380

Cast # down: 55

Cast # up: 55

Time	LOC	UTC
Begin:		0907
Bottom:		0915
End:		0934

START POSITION (GPS)

LAT: 49 09.88

LONG: 123 33.03

BOTTOM POSITION (GPS)

LAT: 49 09.90

LONG: 123 33.00

END POSITION (GPS)

LAT: 49 09.77

LONG: 123 33.10

ROSETTE LOG

MISSION ID: 2004-21 STATION: S2-3 CAST NUMBER: 52 UTC DATE (dd/mm/yyyy): 24/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. m/l	ROSETTE OPERATION		Samples taken													
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		Cl3							
							OXY				ALK.		CHL	NH4					
1	153	1428	4.174	40	✓ 40														
2	154	1138	4.288	25	✓ 25														
3	155	1142	5.398	10	✓ 10														
4	156	1146	7.299	0m/8	✓ 1														
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
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17																			
18																			
19																			
20																			
21																			
22																			
23																			
24																			

Comments:

SHIP: Vector
ENTERED BY: MS
CHECKED BY:

Bottom Depth: 168

Cast # down: 52
Cast # up: 52

Time	LOC	UTC
Begin:		548
Bottom:		553
End:		558

START POSITION (GPS)
LAT: 49 5 008
LONG: 123 20 962

BOTTOM POSITION (GPS)
LAT: 49 5 010
LONG: 123 21 002

END POSITION (GPS)
LAT: 49 4 994
LONG: 123 20 977

ROSETTE LOG

MISSION ID: 2004-21 STATION: 42 CAST NUMBER: 50 UTC DATE (dd/mm/yyyy): 04/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
						OXY				ALK		CHL						
1	138	1273	2.785	bot 10	✓ 320	x												
2	139	1274	2.815	300	✓ 300	t												
3	140	1276	3.180	250	✓ 249.7													
4	141	1278	3.525	200	✓ 200													
5	142	1325	3.814	175	✓ 174.8													
6	143	1268	4.019	150	✓ 150													
7	144	1281	4.167	125	✓ 125													
8	145	1324	4.159	100	✓ 100													
9	146	1320	4.192	75	✓ 75					vv								
10	147	1280	4.159	50	✓ 50					vv								
11	148	1238	4.009	40	✓ 40					vv		vv						
12	149	1279	4.418	30	✓ 29.8					vv		vv						
13	150	1429	4.361	20	✓ 20					vv		vv	vv					
14	151	1298	6.272	10	✓ 10					vv		vv	vv	vv				
15	152	1260	7.214	5	✓ 5	x				vv		vv	vv	vv				
16		no bottle		0	✓ 0					vv		vv	vv	vv				
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: VECTOR

ENTERED BY:

CHECKED BY:

Bottom Depth: 321

Cast # down: 50

Cast # up: 50

Time	LOC	UTC
Begin:		4:04
Bottom:		4:12
End:		4:32

START POSITION (GPS)	
LAT:	49 01.82
LONG:	123 26.19

BOTTOM POSITION (GPS)	
LAT:	49 01.83
LONG:	123 26.08

END POSITION (GPS)	
LAT:	49 01.89
LONG:	123 26.08

ROSETTE LOG

MISSION ID: 2004-2.1 STATION: 46 CAST NUMBER: 45 UTC DATE (dd/mm/yyyy): 23/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
						OXY		NH4		ALK		CHL	CDOM					
1	126	1270	4.048	Bot-10	✓	171	x											
2	127	1228	3.897	150	✓		x											
3	128	1231	4.010	125	✓													
4	129	1233	4.141	100	✓													
5	130	1258	4.156	75	✓													
6	131	1237	4.172	50	✓													
7	132	1256	4.205	40	✓													
8	133	1267	4.425	30	✓													
9	134	1284	4.657	20	✓													
10	135	1327	5.500	10	✓													
11	136	1241	6.541	5	✓		x											
12	137	1247	7.230	0	✓													
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: Vector
ENTERED BY:
CHECKED BY:

Bottom Depth: 176

Cast # down: 45
Cast # up: 45

Time	LOC	UTC
Begin:	1234	
Bottom:	1139	
End:	149	

START POSITION (GPS)
LAT: 48 51 416
LONG: 123 10 774

BOTTOM POSITION (GPS)
LAT: 48 51 462
LONG: 123 10 786

END POSITION (GPS)
LAT: 48 51 638
LONG: 123 10 736

ROSETTE LOG

MISSION ID: 2604-21 STATION: 49 CAST NUMBER: 38 UTC DATE (dd/mm/yyyy): 23/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY		ML		ALK		CHL	CON	HL	MSD		
1	121			20	✓			✓	✓				✓	✓				
2	122			20	✓			✓	✓				✓	✓	✓	✓		
3	123			10	✓			✓	✓				✓	✓	✓	✓		
4	124			5	✓			✓	✓				✓	✓	✓	✓		
5	125			0	✓			✓	✓				✓	✓				
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

SHIP:

ENTERED BY: MO

CHECKED BY: DA

Bottom Depth: 128

Cast # down: 38

Cast # up:

Time	LOC	UTC
Begin:	1555	2255
Bottom:	1558	2258
End:	1604	2304

START POSITION (GPS)

LAT: 48 55.032

LONG: 122 59.556

BOTTOM POSITION (GPS)

LAT: 48 55.044

LONG: 122 59.546

END POSITION (GPS)

LAT: 48 55.081

LONG: 122 59.525

Comments:

ROSETTE LOG

MISSION ID: 2004-21 STATION: 56 CAST NUMBER: 35 UTC DATE (dd/mm/yyyy): 23/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY		N ₂	ALK		CHL	CDV	HPV	ph	yt		
1	107	1428	3.575	307	✓ 216	X												
2	108	1138	3.362	200	✓ 200	X												
3	109	1142	3.416	175	✓ 174.6													
4	110	1153	3.490	150	✓ 150													
5	111	1175	3.701	125	✓ 124													
6	112	1195	3.862	100	✓ 97													
7	113	1206	3.889	75	✓ 76				✓✓									
8	114	1158	4.305	50	✓ 51				✓✓									
9	115	1146	4.366	40	✓ 41				✓✓			✓✓						
10	116	1430	4.494	30	✓ 33				✓✓			✓✓						
11	117	1425	4.624	20	✓ 21				✓✓			✓✓	✓		✓✓			
12	118	1426	4.654	10	✓ 11.4				✓✓			✓✓	✓✓		✓✓			
13	119	1427	4.830	5	✓ 5.5	X			✓✓			✓✓	✓✓		✓✓	✓✓		
14	120	1411	4.981	surf	✓ 1.4				✓✓			✓✓	✓✓					
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: VECTOR
ENTERED BY:
CHECKED BY:

Bottom Depth: 215

Cast # down: 35
Cast # up: 35

Time	LOC	UTC
Begin:		20:20
Bottom:		
End:		

START POSITION (GPS)
LAT: 48 46.37
LONG: 123 18.54

BOTTOM POSITION (GPS)
LAT: 48 46.373
LONG: 123 1531

END POSITION (GPS)
LAT: 48 46.285
LONG: 123 15536

ROSETTE LOG

MISSION ID: 2004-21 STATION: 62 CAST NUMBER: 25 UTC DATE (dd/mm/yyyy): 23/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY				ALK		CHL	CYAN				
1	96	1258	2.929	37-10	✓ 144	x												
2	97	1273	2.948	125	✓	x												-bubble on probe
3	98	1241	2.996	100	✓													
4	99	1247	3.190	75	✓													
5	100	1276	4.328	50	✓													
6	101	1278	4.438	40	✓								x					
7	102	1274	4.482	30	✓								x					
8	103	1325	4.640	20	✓								x	x				
9	104	1268	4.871	10	✓								x	x				
10	105	1281	4.864	5	✓	x		✓	✓	✓			x	x				
11	106	1324	4.875	0	✓ 1.20			✓	✓	✓			x	x				
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP:

ENTERED BY: PA

CHECKED BY:

Bottom Depth: 144

Cast # down: 25
Cast # up: 25

Time	LOC	UTC
Begin:	11:28	
Bottom:	11:31	
End:	11:43	

START POSITION (GPS)

LAT: 48 22 736

LONG: 123 2 557

BOTTOM POSITION (GPS)

LAT: 48 22 729

LONG: 123 2 569

END POSITION (GPS)

LAT: 48 22 698

LONG: 123 2 586

ROSETTE LOG

MISSION ID: 2004-21 STATION: 65 CAST NUMBER: 22 UTC DATE (dd/mm/yyyy): 23/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY		NH4		ALK		CHL	HPIC		CDOM		
1	86	1231	2.771	bot	- 115	X												
2	87	1228	2.854	100	- 100	X												
3	88	1327	3.195	75	- 75													
4	89	1233	3.818	50	- 50													
5	90	1237	4.067	40	- 40								X					
6	91	1256	4.145	30	- 30								X					
7	92	1284	4.932	20	- 20								X			X		
8	93	1267	5.290	10	- 10								X			X		
9	94	1235	5.289	5	- 5	X							X			X		
10	95	1270	5.337	surf	- 1								X			X		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: Vector
ENTERED BY:
CHECKED BY:

Bottom Depth: 25

Cast # down: 22
Cast # up: 22

Time	LOC	UTC
Begin:		8.30
Bottom:		8.34
End:		8.47

START POSITION (GPS)
LAT: 48 15.91
LONG: 123 09.73

BOTTOM POSITION (GPS)
LAT: 48 15.94
LONG: 123 09.66

END POSITION (GPS)
LAT: 48 16.09
LONG: 123 09.29

ROSETTE LOG

MISSION ID: 2004-21 STATION: ADLP CAST NUMBER: 18 UTC DATE (dd/mm/yyyy): 23/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY				ALK		CHL	NH ₄	HPX		COM	
1	76	1403	2.498	BOT-5	✓ 121	X												
2	77	1404	2.655	100	✓ 100	X												
3	78	1406	2.634	75	✓ 75.5									X				
4	79	1407	3.297	* 50	✓ 50									X				* 2ml acid. -particals
5	80	1410	3.408	* 40	✓ 40								X	X				* 2ml acid.
6	81	1414	3.762	* 30	✓ 30								X	X				* 2ml acid.
7	82	1417	3.855	20	✓ 20								X	X	X		X	* bubble sand in line here
8	83	1421	4.875	* 10	✓ 10								X	X	X		X	elect out.
9	84	1424	5.179	5	✓ 4.01	X							X	X	X		X	* 2ml acid particals.
10	85	1422	5.147	surf	✓ 2.7								X	X			X	
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: VECTOR
ENTERED BY: MS
CHECKED BY:

Bottom Depth: 121

Cast # down: 181
Cast # up: 18

Time	LOC	UTC
Begin:		523
Bottom:		528
End:		540

START POSITION (GPS)
LAT: 48 11 048
LONG: 123 17 976

BOTTOM POSITION (GPS)
LAT: 48 14 096
LONG: 123 17 926

END POSITION (GPS)
LAT: 48 14 189
LONG: 123 17 984

ROSETTE LOG

MISSION ID: 2004-21 STATION: 69 CAST NUMBER: 15 UTC DATE (dd/mm/yyyy): 23/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY		NAH		ALK		CHL	CDOM	HPIC			
1	64	1135	2.029	80-10	✓	170	x											
2	65	1397	2.064	150	✓		x			--								
3	66	535	2.071	125	✓													
4	67	364	2.773	100	✓													
5	68	1352	3.332	75	✓					--								
6	69	1353	3.722	50	✓					--								
7	70	1130	✓ 3.517	40	✓					--			--					*not fully titrated*
8	71	572	4.098	30	✓					--			--	✓	✓	✓		
9	72	1398	4.146	20	✓					--			--	✓	✓	✓		
10	73	1334	4.431	10	✓					--			--	✓	✓	✓		
11	74	1336	4.896	5	✓		x	✓	✓	--			--	✓	✓			
12	75		---	0	✓													sample not taken
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments: D.O. Sample # 70 =

SHIP: Vector

ENTERED BY:

CHECKED BY:

Bottom Depth: 170.

Cast # down: 15

Cast # up: 15

Time	LOC	UTC
Begin:	217	
Bottom:	222	
End:	235	

START POSITION (GPS)

LAT: 48 15 427

LONG: 123 42 965

BOTTOM POSITION (GPS)

LAT: 48 15 340

LONG: 123 42 874

END POSITION (GPS)

LAT: 48 15 442

LONG: 123 42 643

ROSETTE LOG

MISSION ID: 2004-21 STATION: 72 CAST NUMBER: 12 UTC DATE (dd/mm/yyyy): 22/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
						OXY		NH4		ALK		CHL	CO2	H2O2				
1	51	1399	2.437	Bot-10	✓	183	X											
2	52	1432	2.047	175	✓		X											
3	53	1433	2.127	150	✓		X						✓					
4	54	1136	2.157	125	✓													
5	55	1391	2.278	100	✓													
6	56	708	2.869	75	✓					✓								
7	57	1393	3.370	50	✓					✓								
8	58	1400	3.610	40	✓					✓		✓						
9	59	1137	3.697	30	✓			✓	✓	✓		✓						
10	60	1434	4.345	20	✓				✓	✓		✓	✓	✓				
11	61	1389	4.726	10	✓				✓	✓		✓	✓	✓				
12	62	657	5.846	5	✓		X		✓	✓		✓	✓	✓				
13	63	1176	5.891	0	✓			✓	✓	✓		✓	✓	✓				
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: Vector
ENTERED BY: LIZHE
CHECKED BY: L

Bottom Depth: 183

Cast # down: 12
Cast # up: 17

Time	LOC	UTC
Begin:	23	16
Bottom:	23	21
End:	23	33

START POSITION (GPS)
LAT: 48 18 620
LONG: 124 4021

BOTTOM POSITION (GPS)
LAT: 48 18 618
LONG: 124 4019

END POSITION (GPS)
LAT: 48 18 604
LONG: 124 3992

ROSETTE LOG

MISSION ID: 2004-21 STATION: 76 CAST NUMBER: 10 UTC DATE (dd/mm/yyyy): 22/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY				ALK		CHL	EDOM	WZC			
1	46	90		40	-	40												
2	47	85		25	-	25										X		
3	48	10		10	-	10										X		
4	49	9		5	-	5										X		
5	50	surf		surf	-	1												
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
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19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP:

ENTERED BY:

CHECKED BY:

Bottom Depth: 187

Cast # down: 10
Cast # up: 10

Time	LOC	UTC
Begin:		1931
Bottom:		1936
End:		1944

START POSITION (GPS)

LAT: 46 25.12

LONG: 124 35.75

BOTTOM POSITION (GPS)

LAT: 48 25.18

LONG: 124 35.87

END POSITION (GPS)

LAT: 48 25.25

LONG: 124 36.62

ROSETTE LOG

MISSION ID: 2004-21 STATION: 75 CAST NUMBER: 9 UTC DATE (dd/mm/yyyy): 22/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
						OXY		NH4		ALK		CHL	cdom	HLR	ph	stn		
1	32	1175	2.102	607	✓ 221.75	✓												
2	33	1195	1.957	200	✓ 200.7	✓												
3	34	1206	2.051	175	✓ 174.20													
4	35	1158	2.191	150	✓ 148.11			✓										
5	36	1146	2.369	125	✓ 129.08													
6	37	1430	2.904	100	✓ 101.3													
7	38	1425	2.989	75	✓ 76.20			✓										
8	39	1426	3.880	50	✓ 50.49			✓										
9	40	1427	4.210	40	✓ 40.09			✓				✓						
10	41	1411	4.151	30	✓ 30.16			✓				✓						
11	42	1429	4.558	20	✓ 19.90			✓				✓	✓	✓				
12	43	1431	5.337	10	✓ 10.31			✓				✓	✓	✓				
13	44	1354	5.764	5	✓ 5.12			✓				✓	✓	✓	✓			
14	45	1384	6.248	surf	✓ 0.98		✓	✓	✓			✓	✓					
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

SHIP: Vector
ENTERED BY: DM
CHECKED BY:

Bottom Depth: 220

Cast # down: 9
Cast # up: 9

Time	LOC	UTC
Begin:		18:06
Bottom:		
End:		

START POSITION (GPS)
LAT: 48 28 28
LONG: 124 32 85

BOTTOM POSITION (GPS)
LAT:
LONG:

END POSITION (GPS)
LAT:
LONG:

Comments:

ROSETTE LOG

MISSION ID: 2004-21 STATION: 102 CAST NUMBER: 6 UTC DATE (dd/mm/yyyy): 22/6/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		C13						
							OXY		CHL		ALK		CHL	PHH	CDOM	PHC		
1	18	1403	2.052	Bot-10	✓ 253	✓												
2	19	1404	2.329	200	✓ 199	-												small particles in sample
3	20	1406	2.254	175	✓ 175.7	-									-			
4	21	1407	2.469	150	✓ 150.9													
5	22	1410	2.928	125	✓ 130													
6	23	1414	3.477	100	✓ 101									✓✓				
7	24	1417	3.606	75	✓ 79									✓✓				
8	25	1421	3.400	50	✓ 50									✓✓				
9	26	1422	3.692	40	✓ 41									✓✓				did not sample all at 40 m
10	27	1424	4.057	30	✓ 30									✓✓				-O2 = 2ml acid
11	28	1428	4.448	20	✓ 20.4									✓✓	✓	✓✓		
12	29	1138	5.688	10	✓ 10									✓✓	✓	✓✓		
13	30	1142	5.830	5	✓ 5	✓	✓	✓✓	✓✓					✓✓	✓	✓✓		
14	31	1153	5.483	0	✓ Surf 1.4									✓✓	✓			
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP:
ENTERED BY: MS
CHECKED BY:

Bottom Depth: 253

Cast # down: 6
Cast # up: 6

Time	LOC	UTC
Begin:		1458
Bottom:		1509
End:		1526

START POSITION (GPS)
LAT: 48 30 502
LONG: 124 44 140

BOTTOM POSITION (GPS)
LAT: 48 30 124
LONG: 124 44 299

END POSITION (GPS)
LAT: 48 30 378
LONG: 124 44 908

ROSETTE LOG

MISSION ID: 2004-21 STATION: 59 CAST NUMBER: 2 UTC DATE (dd/mm/yyyy): 22/06/2004

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		Cl3						
						OXY			TEMP	ALK		CHL	BHT	CO2				
1	4	1407	3.235	BOT-5	✓ 240.5													
2	5	1410	3.527	200	✓ 203.98													
3	6	1428	3.752	175	✓ 177.7													
4	7	1424	3.744	150	✓ 151.8													
5	8	1422	3.813	125	✓ 125.3													
6	9	1421	3.896	100	✓ 101.6													
7	10	1417	4.010	75	✓ 75.9								✓✓					
8	11	1414	4.102	50	✓ 51.								✓✓					
9	12	1206	4.121	40	✓ 40.4				✓✓				✓✓					
10	13	1195	4.221	30	✓ 30.1				✓✓				✓✓					
11	14	1142	4.348	20	✓ 19.86				✓✓				✓✓	✓				
12	15	1175	4.717	10	✓ 9.89				✓✓				✓✓	✓				
13	16	1153	4.628	5	✓ 5.08				✓✓				✓✓	✓				
14	17	1138	4.730	surf	✓ .6				✓✓				✓✓	✓				
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		

Comments:

SHIP: Vector
ENTERED BY:
CHECKED BY:

Bottom Depth: 242

Cast # down: 2
Cast # up: 2

Time	LOC	UTC
Begin:	357	
Bottom:	404	
End:	425	

START POSITION (GPS)
LAT: 48 37 91
LONG: 123 14 59

BOTTOM POSITION (GPS)
LAT: 48 37 98
LONG: 123 14 47

END POSITION (GPS)
LAT: 48 38 516
LONG: 123 14 094

ROSETTE LOG

MISSION ID: 2004-21 STATION: SI CAST NUMBER: 1 UTC DATE (dd/mm/yyyy): 21/06/04

Niskin No.	Sample No.	OXY. Flask	OXY. ml/l	ROSETTE OPERATION		Samples taken												
				Sample Depth	Confirmed pressure	SAL		NUT		TCO		Cl3						
						OXY				ALK		CHL						
1	1	1403	?	BOT-5	✓ 16.2	✓												precipitate white / would not read. Anoxic
2	2	1404	5.003	25	✓ 2.5	✓												
3	3	1406	9.138	surf	✓	✓												
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
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21																		
22																		
23																		
24																		

Comments:

SHIP: Vector
ENTERED BY:
CHECKED BY:

Bottom Depth: 16.2

Cast # down: 1
Cast # up: 1

Time	LOC	UTC
Begin:	154	
Bottom:	158	
End:	203	

START POSITION (GPS)
LAT: 48 39 685
LONG: 123 30 080

BOTTOM POSITION (GPS)
LAT: 48 39 680
LONG: 123 30 83

END POSITION (GPS)
LAT: 48 39 708
LONG: 123 30 91