

Chlorophyll Data Sheet

Cruise: 2019-023

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Dates of Cruise: Late June

Time and date acetone added: 22 Oct 19 235 pm

Analyst: Tamara

Time and date out of freezer: 23 Oct 19 1230 pm

Time analysis started: 11 135 pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.015			
STD			LOW	2-	9.979			
STD			HIGH	4-	54.783			
Blank				6-	-0.016	8-	-0.016	
37	LB02	304	10	1-	63.663	2-	36.666	
36	LB02		10	3-	40.356	4-	23.210	
38	LB02		10	5-	75.346	6-	42.606	
24A	LB01		10	7-	97.166	8-	51.158	
25	LB01		10	1-	37.413	2-	22.420	
43	LB04		10	3-	20.200	4-	12.290	
44	LB04		10	5-	84.922	6-	46.057	
45	LB04		10	7-	186.473	8-	99.115	
46A	LB04		10	1-	302.847	2-	166.616	
18A	JF02		10	3-	44.372	4-	23.340	
22	JF02		10	5-	51.693	6-	27.619	
17	JF02		10	7-	37.577	8-	19.911	
19	JF02		10	1-	51.173	2-	27.872	
40	LB03		10	3-	116.947	4-	61.761	
34	LB02		10	5-	19.324	6-	12.856	
35A	LB02		10	7-	29.375	8-	18.167	
11	Ham59		10	1-	105.888	2-	58.040	
9	Ham59		10	3-	89.261	4-	48.780	
10A	Ham59		10	5-	95.035	6-	52.580	
8	Ham59		10	7-	64.283	8-	35.914	
7	Ham59		10	1-	58.690	2-	33.402	
24A	LB01		10	3-	32.909	4-	21.096	
23	LB01		10	5-	30.358	6-	19.293	
20	JF02		10	7-	53.941	8-	29.373	
Stand-by				1-	0.017			
Std	Low			2-	9.939			
Std	High			4-	54.825	54.210		
Blank	by			6-	-0.016	8-	-0.017	

37	36	38	27A	25	43	44	45
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LB02	LB02	LB02	LB01	LB01	LB04	LB04	LB04
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 4	Bot 3	Bot 5	Bot 5	Bot 3	Bot 3	Bot 4	Bot 5

46A	18A	22	17	19	4	34	35A
CHL	Chl	Chl	Chl	Chl	CHL	CHL	CHL
LB04	JF2	JF2	JF2	JF2	LB03	LB02	LB02
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 6	Bot 7	Bot 11	Bot 6	Bot 8	Bot 1	Bot 1	Bot 2

11	9	10A	8	7	24A	23	20
CHL	CHL	CHL	CHL	CHL	CHL	CHL	Chl
Haro 59	Haro 59	Haro 59	Haro 59	Haro 59	LB01	LB01	JF2
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 11	Bot 9	Bot 10	Bot 8	Bot 7	Bot 2	Bot 1	Bot 9

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Dates of Cruise: La Penouse

Time and date acetone added: 23 Oct 19 11am

Analyst: Tamara

Time and date out of freezer: 24 Oct 19 11am

Time analysis started: 24 Oct 19 1210 pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.016			
STD			LOW	2-	10.304			
STD			HIGH	4-	56.474			
Blank				6-	-0.016	8-	-0.016	
57	LB06	304	10	1-	95.489	2-	52.320	
56	LB06		10	3-	64.481	4-	38.152	
55	LB06		10	5-	28.447	6-	17.774	
54A	LB06		10	7-	19.291	8-	11.933	
53	LB06		10	1-	2.875	2-	2.046	
49A	LB05		10	3-	250.129	4-	135.250	
47	LB04		10	5-	329.752	6-	178.605	
154	LC11		10	7-	4.483	8-	2.382	
153	LC11		10	1-	5.250	2-	2.841	
151A	LC11		10	3-	31.894	4-	19.132	
192	LC08		10	5-	29.537	6-	15.535	
190A	LC08		10	7-	28.486	8-	15.121	
188	LC08		10	1-	19.451	2-	11.418	
187	LC08		10	3-	12.164	4-	7.479	
189	LC08		10	5-	28.409	6-	14.860	
152	LC11		10	7-	9.763	8-	5.400	
155	LC11		10	1-	4.574	2-	2.404	
180	LC09		10	3-	4.973	4-	2.587	
178	LC09		10	5-	4.989	6-	2.621	
177	LC09		10	7-		8-	didn't record Rb	
173	LC09		10	1-	27.687	2-	16.387	
176A	LC09		10	3-	13.319	4-	7.357	
137A	LB16		10	5-	7.208	6-	3.969	
128A	LB15		10	7-	9.280	8-	4.966	
Stand-by				1-	0.017			
Std	Low			2-	10.265			
Std	High			4-	56.061			
Blank	by			6-	-0.015	8-	-0.015	

57	56	55	54A	53	49A	47	154
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LB06	LB06	LB06	LB06	LB06	LB05	LB04	LC11
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 8	Bot 7	Bot 6	Bot 5	Bot 4	Bot 1	Bot 7	Bot 18

153	151A	192	190A	188	187	189	152
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LC11	LC11	LC08	LC08	LC08	LC08	LC08	LC11
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 17	Bot 15	Bot 12	Bot 10	Bot 8	Bot 7	Bot 9	Bot 16

155	180	178	177	173	176A	137A	128A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LC11	LC09	LC09	LC09	LC09	LC09	LB16	LB15
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 19	Bot 21	Bot 19	Bot 18	Bot 14	Bot 17	Bot 1	Bot 1

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87 spilled w/ ml
acetone

Dates of Cruise: La Perouse

Time and date acetone added: 24 Oct 19 1145am

Analyst: Tamara

Time and date out of freezer: 25 Oct 19 10:30 am

Time analysis started: 11:35am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.019			
STD			LOW	2-	10.030			
STD			HIGH	4-	55.307			
Blank				6-	-0.014	8-	-0.013	
5036A	LOOP	304	10	1-	12.546	2-	7.479	
121	LB14		10	3-4	20.985	4-5	12.835	
122	LB14		10	5-	13.137	6-	7.291	
124A	LB14		10	7-	6.395	8-	3.429	
123	LB14		10	1-	12.990	2-	7.252	
125	LB14		10	3-	6.346	4-	3.393	
107A	LB13		10	5-	7.350	6-	3.976	
106	LB12		10	7-	14.245	8-	7.541	
105	LB12		10	1-	16.098	2-	8.739	
104	LB12		10	3-	41.804	4-	23.239	
103A	LB12		10	5-	32.382	6-	17.913	
102	LB12		10	7-	15.988	8-	9.216	
87	LB11		10	1-	11.671	2-	6.830	
88	LB11		10	3-	22.985	4-	13.121	
89A	LB11		10	5-	23.278	6-	13.312	
91	LB11		10	7-	23.154	8-	13.416	
90	LB11		10	1-	22.751	2-	13.163	
80A	LB10		10	3-	36.917	4-	20.336	
75	LB09		10	5-	10.352	6-	7.310	
76A	LB09		10	7-	24.082	8-	14.970	
77	LB09		10	1-	53.482	2-	30.117	
78	LB09		10	3-	105.307	4-	55.052	
79	LB09		10	5-	127.713	6-	66.049	
64	LB08		10	7-	5.634	8-	4.143	
67A	LB08		10	1	59.497	2	33.771	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

5036A	121	122	124A	123	125	107A	106
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LOOP	LB14	LB14	LB14	LB14	LB14	LB13	LB12
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 1	Bot 14	Bot 15	Bot 17	Bot 16	Bot 18	Bot 1	Bot 15

105	104	103A	102	87	88	89A	91
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LB12	LB12	LB12	LB12	LB11	LB11	LB11	LB11
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 14	Bot 13	Bot 12	Bot 11	Bot 7	Bot 8	Bot 9	Bot 11

90	80A	75	76A	77	78	79	64
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LB11	LB10	LB09	LB09	LB09	LB09	LB09	LB08
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 10	Bot 1	Bot 5	Bot 6	Bot 7	Bot 8	Bot 9	Bot 7

67A
CHL
LB08
2019-023
Bot 10

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Dates of Cruise: La Penrose

Time and date acetone added: 24 Oct 19 3:05pm Analyst: Tamara

Time and date out of freezer: 25 Oct 19 230pm

Time analysis started: 25 Oct 19 3:05pm

49B 20ml

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.018			
STD			LOW	2-	10.011			
STD			HIGH	4-	54.706			
Blank				6-	-0.016	8-	-0.015	
66	LB08	304	10	1-	40.269	2-	24.175	
89B	LB11		10	3-	20.997	4-	12.412	
107B	LB13		10	5-	7.386	6-	3.973	
103B	LB12		10	7-	32.693	8-	18.263	
151B	LC11		10	1-	31.105	2-	18.537	
176B	LC09		10	3-	12.865	4-	7.074	
24B	LB01		10	5-	35.449	6-	22.854	
10B	Har059		10	7-	104.615	8-	55.384	
67B	LB08		10	1-	59.091	2-	32.516	
69	LB08		10	3-	64.057	4-	35.035	
5036B	LC08		10	5-	11.527	6-	6.527	
124B	LB14		10	7-	6.532	8-	3.549	
46B	LB04		10	1-	321.618	2-	168.520	
190B	LC08		10	3-	27.627	4-	14.666	
40B	LB03		10	5-	118.812	6-	62.609	
27B	LB01		10	7-	99.406	8-	50.407	
76B	LB09		10	1-	23.897	2-	14.853	
80B	LB10		10	3-	36.230	4-	19.938	
137B	LB16		10	5-	6.832	6-	3.643	
128B	LB15		10	7-	8.709	8-	4.515	
54B	LB06		10	1-	20.481	2-	13.209	
49B	LB05		20	3-	110.445	4-	60.449	
18B	JF2		10	5-	51.817	6-	27.419	
35B	LB02		10	7-	28.714	8-	18.038	
65	LB08		10	1	23.247	2	14.547	
Stand-by				1-	0.019			
Std	Low			2-	10.044			
Std	High			4-	54.688			
Blank	by			6-	-0.016	8-	-0.014	

89B

66	111B	107B	103B	151B	176B	24B	10 B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LB08	LB11	LB13	LB12	LC11	LC09	LB01	Haro 59
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 9	Bot 9	Bot 1	Bot 12	Bot 15	Bot 17	Bot 2	Bot 10

67B	69	5036B	124B	46B	190B	40	27B
CHL	CHL	CHL	CHL	CHL	CHL	CHLB	CHL
LB08	LB08	LOOP	LB14	LB04	LC08	LB03	LB01
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 10	Bot 12	Bot 1	Bot 17	Bot 6	Bot 10	Bot 1	Bot 5

80B

76B	CHL	137B	128B	54B	49B	18B	35B
CHL	LB10	CHL	CHL	CHL	CHL	Chl	CHL
LB09	2019-023	LB16	LB15	LB06	LB05	JF2	LB02
2019-023	Bot 1	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 6		Bot 1	Bot 1	Bot 5	Bot 1	Bot 7	Bot 2

65
CHL
LB08
2019-023
Bot 8



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20ml: 586A, 574A, 590,
531A

Dates of Cruise: La Perouse

Time and date acetone added: 28 Oct 19 11:10 am

Analyst: Tamara

Time and date out of freezer: 29 Oct 19 11:55 am

Time analysis started: 29 Oct 19 1:10 pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.018			
STD			LOW	2-	10.159			
STD			HIGH	4-	55.764			
Blank				6-	-0.016	8-	-0.014	
539A	J501	304	10	1-	29.934	2-	17.051	
538	J501		10	3-	25.795	4-	15.219	
531A	CP1		20	5-	60.957	6-	32.107	
519	SS3		10	7-	37.790	8-	21.171	
5160A	LODP		10	1-	48.634	2-	27.324	
515	SS1		10	3-	40.846	4-	23.429	
517	SS1		10	5-	14.211	6-	7.814	
590	38		20	7-	46.813	8-	27.366	
588A	38		10	1-	12.863	2-	8.988	
589	38		10	3-	32.987	4-	20.074	
598	42		10	5-	12.101	6-	8.431	
601	42		10	7-	66.011	8-	38.426	
600	42		10	1-	36.814	2-	22.207	
599A	42		10	3-	26.502	4-	16.266	
597	42		10	5-	7.835	6-	5.848	
573	28		10	7-1	12.133	8-	8.764	
572	CPF1		10	1-	51.514	2-	29.144	
574A	28		20	3-	25.539	4-	15.265	
576	28		10	5-	54.728	6-	30.758	
585	GED1		10	7-	64.495	8-	37.145	
584	GED1		10	1-	16.243	2-	10.451	
583	GED1		10	3-	6.514	4-	5.027	
586A	GED1		20	5-	40.928	6-	23.213	
587	GED1		10	7-	57.331	8-	32.637	
Stand- by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

539A	538	531A	519	5160	515	517	590
CHL	CHL	CHL	CHL	CHL A	CHL	CHL	CHL
JS01	JS01	CHL	SS3	2019-023	SS1	SS1	38
2019-023	2019-023	2019-023	2019-023	Loop	2019-023	2019-023	2019-023
Bot 8	Bot 7	Bot 1	Bot 1		BOT1	Bot 3	Bot 3

588A	589	598	601	600	599A	597	573
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
38	38	42	42	42	42	42	28
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 1	Bot 2	Bot 8	Bot 11	Bot 10	Bot 9	Bot 7	Bot 1

572	574A	576	585	584	583	586A	587
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CPF1	28	28	GE01	GE01	GE01	GE01	GE01
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 3	Bot 2	Bot 4	Bot 9	Bot 8	Bot 7	Bot 10	Bot 11

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Cruise: 2019-023

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Dates of Cruise: Lakemuse

Time and date acetone added: 28 Oct 19 2:20 pm

Analyst: Tamara

Time and date out of freezer: 29 Oct 19 1:16 pm

Time analysis started: 29 Oct 19 2:15 pm

20 ml: 541, 542, 5173A, 544,
546A, 548A, 548B, 560A, 559

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.018			
STD			LOW	2-	10.210			
STD			HIGH	4-	56.208			
Blank				6-	-0.015	8-		
558	22	304	10	1-	17.011	2-	10.970	
559	22		20	3-	53.378	4-	30.529	
560A	22		20	5-	38.532	6-	22.176	
562	22		10	7-	32.120	8-	18.828	
521	SS3		10	1-	48.288	2-	26.490	
525	NLOS		10	3-	36.954	4-	19.804	
5137A	LOOP DE F4		10	5-	37.668	6-	21.790	
543	14		10	7-	52.873	8-	30.275	
570	CPE1		10	1-	18.812	2-	12.319	
548B	12		20	3-5	70.516	4-	40.745	
547	12		10	5-	28.955	6-	18.312	
548A	12		20	7-	74.442	8-	43.249	
550	12		10	1-	39.845	2-	22.584	
524	NLOS		10	3-	43.985	4-	24.040	
546A	14		20	5-	55.531	6-	30.632	
544	14		20	7-	52.827	8-	29.868	
5173A	LOOP		20	1-	26.896	2-	15.672	
542	JS01		20	3-	100.916	4-	51.547	
541	JS01		20	5-	45.882	6-	24.036	
5160B	LOOP		10	7-	50.807	8-	29.138	
520A	SS3		10	1-	42.176	2-	24.728	
516	SS1		10	3-	19.491	4-	10.832	
499	CS024		10	5-	45.367	6-	24.767	
540	JS01		10	7-	48.301	8-	25.986	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

558	559	560A	562	521	525	DRF4 0A	543
CHL	CHL	CHL	CHL	CHL	CHL	CHL A	CHL
22	22	22	22	SS3	NL05	Loop 5137	14
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 8	Bot 9	Bot 10	Bot 12	Bot 3	Bot 3	Loop Bot 1	Bot 1

570	548B	547	548A	550	524	546A	544
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CPF1	12	12	12	12	NL05	14	14
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 1	Bot 2	Bot 1	Bot 2	Bot 4	Bot 2	Bot 4	Bot 2

5173A

5173A	542	541
CHL	CHL	CHL
Loop	JS01	JS01
2019-023	2019-023	2019-023
Bot 1	Bot 11	Bot 10

5160

CHL B

2019-023

Loop

520A	516	499	540
CHL	CHL	CHL	CHL
SS3	SS1	CS024	JS01
2019-023	2019-023	2019-023	2019-023
Bot 2	Bot 2	Bot 7	Bot 9

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Cruise: 2019-023

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Dates of Cruise: lateouse

Time and date acetone added: 28 Oct 19 5:10pm

Time and date out of freezer: 29 Oct 19 3:05pm

Time analysis started: 29 Oct 19 4:15pm

Analyst: Tamara

20ml: 496A, 498, 499, 567

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	25.447	0.018		←
STD			LOW	2-	10.249			
STD			HIGH	4-	56.148			
Blank				6-	-0.014	8-	-0.015	
557	22	304	10	1-	10.673	2-	7.097	
566A	CPE2		10	3-	18.331	4-	11.706	
496A	CS024		20	5-	27.316	6-	15.474	
523	NL05		10	7-	35.314	8-	20.370	
527	SS5		10	1-	19.228	2-	10.544	
528	SS5		10	3-	39.513	4-	22.512	
529	SS5		10	5-	65.301	6-	36.134	
565	24		10	7-	48.082	8-	27.814	
563A	24		10	1-	20.847	2-	12.577	
497	CS024		10	3-	98.053	4-	51.421	
493A	newODAs		10	5-	27.139	6-	15.164	
512	CS09		10	7-	127.819	8-	74.450	
511	CS09		10	1-	97.317	2-	57.659	
509A	CS09		10	3-	40.494	4-	25.149	
510	CS09		10	5-	61.840	6-	36.515	
508	CS09		10	7-	23.939	8-	17.433	
568	CPE2		10	1-	33.720	2-	18.935	
498	CS024		20	3-	43.489	4-	23.374	
495	CS024		10	5-	45.091	6-	25.627	
496	CS06		10	7-	14.085	8-	8.962	
497A	CS06		10	1-	45.198	2-	26.821	
498	CS06		10	3-	83.428	4-	49.357	
499	CS06		20	5-	2	6-		
567	CPE2		20	7-	35.514	8-	20.660	
Stand-by				1-	0.018			missed a sample
Std	Low			2-	10.243			somewhere
Std	High			4-	56.124			on this
Blank	by			6-	-0.018	8-	-0.016	page

557	566A	496A	523	527	528	529	565
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
22	CPF2	CS024	NL05	SS5	SS5	SS5	24
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 7	Bot 1	Bot 4	Bot 1	Bot 1	Bot 2	Bot 3	Bot 3

563A	497	493A	512	511	509A	510	508
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
24	CS024	newODAS	CS09	CS09	CS09	CS09	CS09
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 1	Bot 5	Bot 1	Bot 11	Bot 10	Bot 8	Bot 9	Bot 7

568	498	495	496	497A	498	499	567
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CPF2	CS024	CS024	CS06	CS06	CS06	CS06	CPF2
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 3	Bot 6	Bot 3	Bot 3	Bot 4	Bot 5	Bot 6	Bot 2

Chlorophyll Data Sheet

Cruise: 2019-023

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new batch 90% acetone
made started using
today.

Dates of Cruise: La Perouse

Time and date acetone added: 29 Oct 19 11:50am

Analyst: Tamarz

Time and date out of freezer: 30 Oct 19 09:55am

Time analysis started: 30 Oct 19 11:05am

20ml: 574B, 586B, 539B, 5173B
546B, 560B, 470

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.020			
STD			LOW	2-	10.391			
STD			HIGH	4-	57.015			
Blank				6-	-0.015	8- -	-0.015	← new box cuvettes
471	CS02	304	10	1-	66.246	2-	36.770	
469	CS02		10	3-	5.064	4-	3.274	
473	CS02		10	5-	51.323	6-	27.248	
472A	CS02		10	7-	63.846	8-	34.779	
470	CS02		20	1-	12.738	2-	7.354	
497B	CS06		10	3-	44.243	4-	25.656	
495	CS06		10	5-	5.252	6-	3.736	
496B	CS024		10	7-	56.110	8-	30.981	
509B	CS09		10	1-	39.762	2-	25.602	
493B	new ODS		10	3-	27.183	4-	15.393	
566B	OPF2		10	5-	18.341	6-	11.564	
571B	OPF1		10	7-	62.599	8-	36.377	
563B	24		10	1-	21.542	2-	12.976	
560B	22		20	3-	37.780	4-	22.821	
546B	14		20	5-	55.625	6-	30.551	
520B	SS3		10	7-	45.421	8-	26.857	
5137B	DRF4 LOOP		10	1-	39.425	2-	22.603	
513B	LOOP		20	3-	24.560	4-	14.156	
539B	ISD1		20	5-	14.266	6-	7.978	
531B	CPE1		10	7-	129.444	8-	66.315	
588B	38		10	1-	11.773	2-	7.860	
599B	42		10	3-	27.507	4-	16.550	
586B	GE01		20	5-	44.708	6-	24.971	
574B	28		20	7-	26.119	8-	15.607	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

471	469	473	472A	470	497B	495	496B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CS02	CS02	CS02	CS02	CS02	CS06	CS06	CS024
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 18	Bot 16	Bot 20	Bot 19	Bot 17	Bot 4	Bot 2	Bot 4

509B	493B	566B	571B	563B	560B	546B	520B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CS09	newODAS	CPF2	CPF1	24	22	14	SS3
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 8	Bot 1	Bot 1	Bot 2	Bot 1	Bot 10	Bot 4	Bot 2

DRF4	573B		531B				
OB	5274B	539B		588B	599B	586B	574B
CHLB	CHL	CHL	CHC	CHL	CHL	CHL	CHL
Loop 5137	Loop	JS01	CHC	38	42	GE01	28
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Loop Bot 1	Bot 1	Bot 8	Bot 1	Bot 1	Bot 9	Bot 10	Bot 2

Chlorophyll Data Sheet

Cruise: 2019-023

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Dates of Cruise: La Perouse

Time and date acetone added: 29 Oct 19 05:10 pm

Analyst: Tamara

Time and date out of freezer: 30 Oct 19 3:40 pm

Time analysis started: " 4:40 pm

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.017	0.017		
STD			LOW	2-	10.273			
STD			HIGH	4-	56.172			
Blank				6-	-0.014	8-	-0.014	
Loop B	CS00	304	10	1-	26.318	2-	14.129	
472B	CS02		10	3-	63.213	4-	33.946	
5189A	LOOP		10	5-	26.817	6-	15.373	
571A	CRF1		10	7-	61.595	8-	36.323	
419	LBP3		10	1-	27.1615	2-	15.056	
420	LBP3		10	3-	16.224	4-	8.710	
447A	CS00		10	5-	11.139	6-	6.947	
448	CS00		10	7-	31.518	8-	18.696	
449	CS00		10	1-	58.907	2-	32.641	
450	CS00		10	3-	39.592	4-	20.986	
451	CS00		10	5-	30.019	6-	15.875	
Loop B	CS00		10	7-	25.317	8-	13.432	
405	LBP5		10	1-	7.817	2-	5.330	
406A	LBP5		10	3-	34.319	4-	19.819	
407	LBP5		10	5-	37.471	6-	21.757	
408	LBP5		10	7-	25.758	8-	14.589	
409	LBP5		10	1-	20.319	2-	11.124	
416	LBP3		10	3-	12.632	4-	8.820	
417	LBP3		10	5-	24.367	6-	14.139	
418A	LBP3		10	7-	89.458	8-	50.384	
350A	LJ05		10	1-	14.050	2-	7.867	
388	LBP7		10	3-	12.730	4-	7.150	
5099A	LOOP LBP7		10	5-	12.271	6-	7.439	
387	LBP7		10	7-	12.628	8-	7.060	
Stand-by				1-	0.016			
Std	Low			2-	10.270			
Std	High			4-	56.004			
Blank	by			6-	-0.015	8-	-0.016	

LoopB	472B	5189A	571A	419	420	447A	448
CHL	CHL	CHLA	CHL	CHL	CHL	CHL	CHL
CS00	CS02	2013-023	CPF1	LBP3	LBP3	CS00	CS00
2019-023	2019-023	Loop	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 1	Bot 19		Bot 2	Bot 9	Bot 10	Bot 16	Bot 17

449	450	451	LoopA	405	406A	407	408
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
CS00	CS00	CS00	CS00	LBP5	LBP5	LBP5	LBP5
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 18	Bot 19	Bot 20	Bot 1	Bot 15	Bot 16	Bot 17	Bot 18

409	416	417	418A	350A	388	5099A	387
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LBP5	LBP3	LBP3	LBP3	LJ05	LBP07	LBP07	LBP07
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 19	Bot 6	Bot 7	Bot 8	Bot 1	Bot 20	Loop Bot 1	Bot 19

Chlorophyll Data Sheet

Cruise: 2019-023

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Dates of Cruise: La Perouse

Time and date acetone added: 30 Oct 19 11:00am Analyst: Tamar

Time and date out of freezer: 31 Oct 10:55am 20ml: 345, 346A

Time analysis started: 31 Oct 11:25am

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.022			
STD			LOW	2-	10.436			
STD			HIGH	4-	57.098			
Blank				6-	-0.017	8-	-0.013	-0.014
5189B	LOOP	304	10	1-	32.180	2-	19.812	
366A	LJ06		10	3-	10.526	4-	5.642	
384	LB07		10	5-	19.255	6-	11.113	
385	LB07		10	7-	37.391	8-	20.993	
386A	LB07		10	1-	17.306	2-	9.519	
418B	LB03		10	3-	96.962	4-	53.801	
447B	CS00		10	5-	12.162	6-	7.716	
363	LJ06		10	7-	16.114	8-	9.803	
364	LJ06		10	1-	33.451	2-	18.791	
367	LJ06		10	3-	9.927	4-	5.150	
365	LJ06		10	5-	23.317	6-	12.996	
348	LG02		10	7-	39.017	8-	22.693	
347	LG02		10	1-	135.826	2-	76.979	
345	LG02		20	3-	114.150	4-	62.336	
346A	LG02		20	5-	199.595	6-	108.775	
344	LG02		10	7-	12.329	8-	8.618	
337	LG04		10	1-	23.391	2-	13.917	
340A	LG04		10	3-	8.640	4-	4.692	
338	LG04		10	5-	39.171	6-	23.095	
336	LG04		10	7-	10.903	8-	6.562	
339	LG04		10	1-	13.433	2-	7.558	
5084A	LOOP LG06		10	3-	5.737	4-	3.282	
331	LG06		10	5-	5.694	6-	2.976	
330	LG06		10	7-	5.880	8-	3.111	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

5189
CHL B
2013-023
Loop

366A	384	385	386A	418B	447B	363
CHL	CHL	CHL	CHL	CHL	CHL	CHL
LJ06	LBP07	LBP07	LBP07	LBP3	CS00	LJ06
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 16	Bot 16	Bot 17	Bot 18	Bot 8	Bot 16	Bot 13

364	367	365	348	347	345	346A	344
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LJ06	LJ06	LJ06	LG02	LG02	LG02	LG02	LG02
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 14	Bot 17	Bot 15	Bot 7	Bot 6	Bot 4	Bot 5	Bot 3

337	340A	338	336	339	5084A	331	330
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LG04	LG04	LG04	LG04	LG04	LG06	LG06	LG06
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 6	Bot 9	Bot 7	Bot 5	Bot 8	Bot 1	Bot 17	Bot 16

Chlorophyll Data Sheet

Cruise: 2019-023

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Dates of Cruise: Laperouse

Time and date acetone added: 30 Oct 19 4:00pm Analyst: Tamar

Time and date out of freezer: 31 Oct 19 2:30pm 20ml: 239A, 238A

Time analysis started: 31 Oct 19 3:40pm

3.05L
delete extra {3.121}
from end of
previous date

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	3.05L {3.121}		0.019	
STD			LOW	2-	10.315			
STD			HIGH	4-	56.294			
Blank				6-	-0.014	8-	-0.016	
239A	L001	304	20	1-	253.846	2-	132.200	
238A	L001		10	3-	14.592	4-	8.239	
327	L006		10	5-	32.607	6-	19.228	
303A	L009		10	7-	9.974	8-	5.137	
243A	L002		10	1-	103.916	2-	53.869	
5055A	L008		10	3-	54.587	4-	29.653	
298	L011		10	5-	8.141	6-	4.296	
296	L011		10	7-	22.342	8-	12.763	
295A	L011		10	1-	19.983	2-	12.008	
238A	L001		20	3-	160.792	4-	83.861	
234A	L001		10	5-	54.821	6-	29.535	
276A	L008		10	7-	16.339	8-	9.252	
275	L008		10	1-	24.461	2-	14.290	
278	L008		10	3-	6.463	4-	3.562	
232A	L001		10	5-	13.425	6-	9.046	
197A	L006		10	7-	19.673	8-	11.691	
258A	L006		10	1-	61.073	2-	32.688	
256	L006		10	3-	1.103	4-	7.268	
216A	L004		10	5-	9.264	6-	5.877	
252	L004		10	7-	40.314	8-	23.339	
251A	L004		10	1-	54.254	2-	30.991	
226A	L002		10	3-	58.405	4-	32.127	
249	L004		10	5-	24.281	6-	15.416	
248	L004		10	7-	21.378	8-	14.643	
297	L011		10	1	10.655	2	5.939	
Stand-by				1-	0.018			
Std	Low			2-	10.284			
Std	High			4-	56.134			
Blank	by			6-	-0.015	8-	-0.017	

239A	328A	327	303A	243A	5055A CHL	298	296
CHL	CHL	CHL	CHL	CHL		CHL	CHL
LD01	LG06	LG06	LG09	LD02	2019-023 Loop	LD11	LD11
2019-023	2019-023	2019-023	2019-023	2019-023		2019-023	2019-023
Bot 3	Bot 14	Bot 13	Bot 1	Bot 2		Bot 19	Bot 17

295A	238A	234A	276A	275	278	232A	197A
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LD11	LD01	LC01	LD08	LD08	LD08	LC01	LC06
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 16	Bot 2	Bot 6	Bot 14	Bot 13	Bot 16	Bot 4	Bot 4

258A	256	216A	252	251A	226A	249	248
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LD06	LD06	LC04	LD04	LD04	LC02	LD04	LD04
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 6	Bot 4	Bot 7	Bot 5	Bot 4	Bot 6	Bot 2	Bot 1

297
CHL
LD11
2019-023
Bot 18

Chlorophyll Data Sheet

Cruise: 2019-023

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Project Name: lakehouse

Time and date acetone added: 31 Oct 11:20 am

Time and date out of freezer: 01 Nov 19950 am

Time analysis started: 01 Nov 19 11 am

Analyst: Tamar

20ml extraction volumes:

3466, 246, 245, 240,
239B

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.020			
STD			LOW	2-	10.262			
STD			HIGH	4-	56.834			
Blank				6-	-0.014	8-	-0.015	
5099B	LBP07 LBP 304	10		1-	12.575	2-	6.922	
406B	LBP5	10		3-	31.964	4-	17.600	
386B	LBP07	10		5-	17.707	6-	9.774	
350B	LJ05	10		7-	13.088	8-	7.174	
366B	LJ06	10		1-	9.647	2-	5.048	
346B	LG02	20		3-	202.546	4-	108.664	
340B	LG04	10		5-	8.828	6-	4.855	
5084B	LG06 LBP	10		7-	5.454	8-	2.950	
328B	LG06	10		1-	14.580	2-	8.147	
303B	LG09	10		3-	10.798	4-	5.624	
295B	LD11	10		5-	20.997	6-	12.512	
276B	LD08	10		7-	16.029	8-	8.887	
258B	LD06	10		1-	58.347	2-	30.105	
251B	LD04	10		3-	48.044	4-	26.679	
246	LD02	20		5-	239.875	6-	122.522	
245	LD02	20		7-	279.326	8-	146.603	
244	LD02	10		1-	265.137	2-	132.465	
243B	LD02	10		3-	102.487	4-	51.661	
299	LD11	10		5-	7.688	6-	4.004	
242	LD02	10		7-	31.718	8-	18.031	
240	LD01	20		1-	203.332	2-	103.980	
329	LG06	10		3-	9.478	4-	5.218	
239B	LD01	20		5-	221.237	6-	114.563	
279	LD08	10		7-	6.265	8-	3.316	
259	LD06	10		1	32.468	2	16.615	
190	LC02	10		3	15.257	4	9.318	
Stand-by				1-				
Std	Low			2-				
Std	High			4-				
Blank	by			6-		8-		

5099B	406B	386B	350B	366B	346B	340B	5084B
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LBP07	LBP5	LBP07	LJ05	LJ06	LG02	LG04	LG06
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Loop Bot 1	Bot 16	Bot 18	Bot 1	Bot 16	Bot 5	Bot 9	Bot 1

328B	303B	295B	276B	258B	251B	246	245
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LG06	LG09	LD11	LD08	LD06	LD04	LD02	LD02
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 14	Bot 1	Bot 16	Bot 14	Bot 6	Bot 4	Bot 5	Bot 4

244	243B	299 300	242	240	329	239B	279
CHL	CHL	CHL	CHL	CHL	CHL	CHL	CHL
LD02	LD02	LD11	LD02	LD01	LG06	LD01	LD08
2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023	2019-023
Bot 3	Bot 2	Bot 20	Bot 1	Bot 4	Bot 15	Bot 3	Bot 17

259	196
CHL	CHL
LD06	LC06
2019-023	2019-023
Bot 7	Bot 3

Chlorophyll Data Sheet

20ml extraction volumes:

Cruise: 2019-023

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50556

Project Name: Lepenur

238B

Time and date acetone added: 31 Oct 19 3:10 pm

Time and date out of freezer: 01 Nov 19 1:05 pm

Time analysis started: 01 Nov 19 2:05 pm

Analyst: Tamar

Sample #	Station	Vol filt	Vol acet		Rb		Ra	Comments
Stand-	by			1-	0.018			
STD			LOW	2-	10.325			
STD			HIGH	4-	56.469			
Blank				6-	-0.015	8-	-0.017	
50556	LD08	304	20	1-	26.349	2-	14.339	
197B	LC06		10	3-	21.079	4-	12.473	
198	LC06		10	5-	32.789	6-	18.965	
200	LC06		10	7-	68.422	8-	36.772	
199	LC06		10	1-	55.064	2-	30.704	
219	LC04		10	3-	97.456	4-	52.045	
218	LC04		10	5-	67.084	6-	35.889	
217	LC04		10	7-	39.431	8-	21.381	
216B	LC04		10	1-	10.467	2-	6.667	
215	LC04		10	3-	9.094	4-	6.167	
257	LD06		10	5-	39.836	6-	21.915	
228	LC02		10	7-	73.360	8-	39.962	
250	LD04		10	1-	71.687	2-	39.270	
224	LC04		10	3-	8.084	4-	5.376	
225	LC02		10	5-	12.525	6-	8.105	
226B	LC02		10	7-	57.813	8-	31.216	
223	LC02		10	1-	9.065	2-	6.061	
231	LC01		10	3-	10.572	4-	7.401	
260	LD06		10	5-	31.937	6-	16.671	
232B	LC01		10	7-	13.000	8-	8.754	
233	LC01		10	1-	17.159	2-	11.095	
234B	LC01		10	3-	56.452	4-	30.755	
237	LD08		10	5-	8.024	6-	4.336	
235	LC01		10	7-	74.962	8-	39.698	
237	LD01		10	1	80.992	2	43.001	
238B	LD01		20	3	165.772	4	85.294	
Stand-by				1-	0.018			
Std	Low			2-	10.326			
Std	High			4-	56.346			
Blank	by			6-	-0.017	8-	-0.016	

5055B

CHL

2019-023

Loop

197B

CHL

LC06

2019-023

Bot 4

198

CHL

LC06

2019-023

Bot 5

200

CHL

LC06

2019-023

Bot 7

199

CHL

LC06

2019-023

Bot 6

219

CHL

LC04

2019-023

Bot 10

218

CHL

LC04

2019-023

Bot 9

217

CHL

LC04

2019-023

Bot 8

216B

CHL

LC04

2019-023

Bot 7

215

CHL

LC04

2019-023

Bot 6

257

CHL

LD06

2019-023

Bot 5

228

CHL

LC02

2019-023

Bot 8

250

CHL

LD04

2019-023

Bot 3

224

CHL

LC02

2019-023

Bot 4

225

CHL

LC02

2019-023

Bot 5

226B

CHL

LC02

2019-023

Bot 6

223

CHL

LC02

2019-023

Bot 3

231

CHL

LC01

2019-023

Bot 3

260

CHL

LD06

2019-023

Bot 8

232B

CHL

LC01

2019-023

Bot 4

233

CHL

LC01

2019-023

Bot 5

234B

CHL

LC01

2019-023

Bot 6

277

CHL

LD08

2019-023

Bot 15

235

CHL

LC01

2019-023

Bot 7

237

CHL

LD01

2019-023

Bot 1

238B

CHL

LD01

2019-023

Bot 2